

ST. XAVIER'S COLLEGE (AUTONOMOUS) KOLKATA DEPARTMENT OF COMMERCE



# YOU XVI 2022

<u>A PEER REVIEWED</u> JOURNAL

# RECKONING

INTERVIEWS BY :

KARAN THAPAR | BOMAN IRANI | MANISH MALHOTRA | ABHINAV BINDRA | DUTEE CHAND ANAND GROVER | ANIL KAKODKAR | USHA UTHUP | MONTEK SINGH AHLUWALIA

A XAVIER'S COMMERCE SOCIETY ENDEAVOUR



Aaron Gerard Daniel



Arihant Jain



Iccha Kankani



Meghan Ann D'Souza



Raj Kabra



Aayushi Maskara



Ayush Mehra



Ishika Poddar

Muskan

Jain

Reet

Nahata

Vanessa

Chung



Ayush

Naman Agarwal







Bafna



Wajiha Tuz Zehra



Abhimanyu Kakrania



Bhagwan Parnani



Keshav Harlalka



Nikhil Kumar Agarwal



Roshani Toshniwal



Veer Mundhara



Yash Haralalka



Aniket Poddar



Diksha Gulgulia



Madhav Poddar



Nimisha Bothra



Saksham Dalmia



Vidhi Saraogi



Yash Sanghvi





Aniruddha Sureka

Esheta



Dugar

Giraj Agarwal



Megh Gupta





Shah



Vishal























REV. DR. DOMINIC SAVIO, SJ PRINCIPAL



REV. FR. JOSEPH KULANDAI, SJ VICE PRINCIPAL (MORNING)



REV. FR. PETER AROCKIAM, SJ VICE PRINCIPAL (EVENING)



DR. AMITAVA ROY ASSOCIATE PROFESSOR AND DEAN (MORNING)



DR. SOHELI GHOSE ASSISTANT PROFESSOR AND DEAN (EVENING)



DR. SUMONA GHOSH ASSOCIATE PROFESSOR



DR. ARUP KUMAR MITRA ASSOCIATE PROFESSOR



PROF. SUBIR SRIMANI ASSISTANT PROFESSOR



DR. SAMRAT ROY ASSISTANT PROFESSOR



PROF. SHOUVIK SIRCAR ASSISTANT PROFESSOR



PROF. CHANDRIMA BANERJEE ASSISTANT PROFESSOR



PROF. KAUSHIK CHATTERJEE ASSISTANT PROFESSOR



PROF. RAMIT KUMAR ROY ASSISTANT PROFESSOR



PROF. RINITA DAS ASSISTANT PROFESSOR



PROF. SARODIYA DUTTA ASSISTANT PROFESSOR



PROF. SHAUNAK ROY ASSISTANT PROFESSOR



DR. JAYITA BIT ASSISTANT PROFESSOR



DR. TUHINA MANNA ASSISTANT PROFESSOR



DR. TAPALINA BHATTASALI ASSISTANT PROFESSOR



DR. SOURAV TARAFDER ASSISTANT PROFESSOR



# 

ISSN: 2347-6222

# RECKONING



XAVIER'S COMMERCE SOCIETY

### **CREDITS**

#### PATRON

#### EDITORIAL ADVISORY BOARD

Rev. Fr. Joseph Kulandai, SJ – Vice Principal, Dept. of Commerce (Morning). Rev. Fr. Peter Arockiam, SJ – Vice Principal, Dept. of Commerce (Evening). Dr. Amitava Roy – Dean, Dept. of Commerce (Morning). Dr. Soheli Ghose – Dean, Dept. of Commerce (Evening).

#### EDITORIAL AND REVIEWER BOARD (STAFF)

Dr. Partha Pratim Ghosh, Dr. Atish Prosad Mondal, Dr. Amitava Roy, Dr. Saswati Chaudhuri, Dr. Shivaji Banerjee, Dr. Samrat Roy, Prof. Soumi Bhattacharya, Dr. Arup Kumar Mitra, Dr. Sourav Tarafder, Dr. Madhu Agnihotri, Dr. Debanjana Dey, Prof. Saptarshi Ray, Dr. Jayita Bit, Dr. Soma Nath, Prof. Souvik Sircar, Prof. Rinita Das, Prof. Saradia Dutta, Prof. Chandrima Banerjee, Prof. Koushik Chatterjee, Prof. Ramit Roy, Prof. Shaunak Roy, Dr. Tapalina Bhattasali, Dr. Tuhina Manna, Dr. Soheli Ghose, Dr. Sreemoyee Guha Roy, Dr. Anulekha Banerjee, Dr. Sanjib Kumar Basu.

Dr. Vaneeta Patnaik (WNUJS), Dr. Anjan Ghosh (Indian Institute of Engineering Science and Technology, Shibpur), Dr. Mohua Banerjee (IMI, Kolkata), Dr. Kumarjit Mandal (Department of Economics, CU), Dr. Sanjay Mukherjee (IIM, Shillong), Dr. Bibek Raychowdhury (Indian Institute of Foreign Trade), Prof. Arabinda Bhattacharya (Department of Business Management, CU), Dr. Ananda Mohan Pal (Department of Business Management, CU), Mr. Malay Mitra (Tata Consultancy Services, Kolkata), Dr. Debrupa Pal (Narula Institute of Technology, Kolkata), Dr. Sunil Karforma

#### EDITORIAL BOARD (STUDENTS)

Anjali Dugar, Meghan Ann D'Souza, Muskan Jain, Pratham Mittal, Ronit Sanghai, Vanessa Chung, Yash Sanghvi.

MANAGING EDITOR

### **JOINT EDITORS-IN-CHIEF**

#### FINANCE COMMITTEE

Aniket Poddar, Aniruddha Sureka, Anjali Dugar, Arihant Jain, Ayush Mehra, Ayush Tharad, Bhagwan Parnani, Diksha Gulgulia, Esheta Rathi, Giraj Agarwal, Iccha Kankani, Ishika Poddar, Ishprit Singh Batra, Keshav Harlalka, Madhav Poddar, Manavi Agarwal, Megh Gupta, Meghan Ann D'Souza, Muskan Jain, Naman Agarwal, Nikhil Kumar Agarwal, Nimisha Bothra, Pranay Mukherjee, Pratham Mittal, Raj Kabra, Reet Nahata, Ronit Sanghai, Koshani Toshniyal, Saksham Dalmia, Shinjini Sengupta, Tanisha Shah, Vanessa Chung, Vasisth K Bafna, Veer Mundhara, Vidhi Saraogi, Vishal Mishra, Wajiha Tuz Zehra, Yash Haralalka, Yash Sanghvi.

Published by the Department of Commerce, St. Xavier's College (Autonomous), Kolkata. Copyright in the Journal belongs to the Department of Commerce, St. Xavier's College (Autonomous), Kolkata. Copyright in of Commerce, St. Xavier's College (Autonomous), Kolkata. Copyright in individual articles belongs to the authors who have asserted their moral rights ©2022. No part of this publication may be reproduced or transmitted in any form without the prior written permission of the publishers. Information contained in this journal has been obtained from sources believed to be reliable. However, neither the Department of Commerce, St. Xavier's College (Autonomous), Kolkata nor its contributors guarantee the

accuracy of or completeness of any information published here, and shall not be held for any errors or omissions.

Youthink is a free-distribution journal. NOT FOR SALE. Feedback and suggestions are welcome at: youthink.editor@xavcomsociety.com

### CONTENTS

MESSAGES	04
EDITORIAL	08
FEATURE	
SPACs: IPO Buster or Reverse Merger Evolution? Aniruddha Sureka	09
<b>To Be or Not to Be?</b> Sankalp Ghosh	15
The Paradigm of Change Inflicted upon the Art Market through Non-Funglible Tokens Anant Kedia and Reet Nahata	24
An Overview of Consumer Behaviour towards Casual-Dine Restaurants and its Influencing Factors Soham Chakraborty	29
INTERVIEWS	
MR. ABHINAV BINDRA	37
MR. ANAND GROVER	41
DR. ANIL KAKODKAR	46
MR. BOMAN IRANI	52
MS. DUTEE CHAND	61
MR. KARAN THAPAR	66
MR. MANISH MALHOTRA MR. MONTEK SINGH AHLUWALIA	69 72
MS. USHA UTHUP	72
GUEST ARTICLES	
What Critics of Insolvency and Bankruptcy Code Get Wrong about the Recovery Model? Dr. Hemant Kumar Manuj	81
Investing in a Win-Win Association: Family Businesses and the Start-Up Ecosystem Dr. Tulsi Jayakumar	85
<b>Growing Inequality and Why is it of Concern?</b> Dr. Nisigandha Bhuyan	88
BEYOND	
A Study on Behavioural Finance in Investment Decisions of Investors and Financial Market Prof. Soumi Bhattacharya and Varnika Lohia	92
Effects of Branding and Sales Promotion on Indian Consumer Buying Behaviour: An Explorative Study Dr. Sumana Guha and Kabir Raj Arora	100
Actualizing a Relationship Model between Anthropomorphic Communication and Product Evaluation Samuel S Mitra	107
<b>'Do Not Mind That You Are Taken' - A Case Study</b> <b>on the Hostile Takeover of Mindtree</b> <b>by Larsen &amp; Toubro</b> Prof. Saptarshi Ray and Sumedha Banerjee	113

An Analytical Study of Investments: With an Empahsis on IPOs Prof. Ruby Mary Notts and Garima Khanna Paradox of Indian Financial Mechanism	123	Performance of Banks in Disbursement and Recovery of Agricultural Credit: A Comparative Analysis Prof. Shirsendu Roychowdhury and Dattatreya Dutta		
Rev. Fr. Joseph Kulandai, SJ and Suraj Dhanawat		PROJECTS		
<b>The Progression and Integration of</b> <b>Genome Sequencing in India</b> Prof. Arpita Dey and Ishika Gupta	141	Cognitive Analysis of the Elusive Retail Investment: An Empirical Study Based in India Dr. Soma Nath and Aditi Pareek	258	
A Study on the Application of Behavioural Finance in Analyzing Investor Behaviour Prof. Saptarshi Ray and Ruchika Chandak	150	<b>Consumer Behaviour Towards a Cashless Economy</b> <b>in India - Special Reference to Kolkata</b> Dr. Madhu Agnihotri and Rohit Patwari	270	
Investigating the Determinants of Stress among Teachers of Christian Schools Rev. Fr. Joseph Kulandai, SJ	162	The Sensory Customer - A Study on the General Awareness of Sensory Marketing in Cafes and Restaurants in Kolkata	279	
Exploring the Determinants of Workplace Spirituality among Teachers of Jesuit Schools: Insights from Kolkata Rev. Fr. Peter Arockiam, SJ	168	Dr. Tridib Sengupta and Krish Madhogaria Impact of Minimalistic Advertising on Consumer Behaviour and Brand Perception Prof. Aparajita Hembrom and Avani Mohta	285	
ASCENT	_	Electronic Overload: Is Your Screen Time Affecting Your Mental Health?	298	
An Exploration of the Copious Factors Affecting Investment Decisions among Indian Individual Investors Dr. Joyita Banerji and Tanay Goel	173	Prof. Arpita Dey and Ansu Bagri A Study on How Social Media Affects the Behaviour of the Consumers Dr. Sourav Tarafder and Dewans Gopalka	307	
Growth Prospects of Electric Vehicles in India Prof. Sourav Das and Jahnvi Bayanwala A Study on the EdTech Industry:	181 188	<b>Changing Nature of Consumer Behaviour Reshapes</b> <b>Retail Garment Shops: A Study Based in Bihar</b> Prof. Santa Ghosal and Mahima Kumari	318	
The Future of Education Prof. Hanzala Awais and Aarushi Saraf	100	A Study on the Nature of Environmental Kuznets Curve in the Context of Four East Indian States	327	
Unified Payments Interface (UPI): The Game Changer Dr. Sreemoyee Guha Roy and Murli Agarwal	201	for the Period 2013-2019 Prof. Shirsendu Roychowdhury and Avinaba Sarkar		
Escalation of Non-Performing Assets in the Banking Sector Impedes Growth and Prosperity of that	210	Deglobalization and its Impact on Indian Economy Prof. Anirban Ghosal and Ankit Kumar Singh	335	
Sector and the Overall Economy: An Analytical Study Dr. Sumana Guha and Anirudh Shah		PROFESSOR'S DESK	242	
Tea Industry in India - Study on Goodricke, Gillanders Arbuthnot and Company Limited, Mcleod Russel, Jayshree Tea and Industries	218	Talent Analytics: A Game Changer for Organizations Dr. Tapalina Bhattasali	342	
<b>Limited and Bengal Tea and Fabrics Limited</b> Dr. Tuhina Manna and Yashish Doshi		Whether Competitor Collaboration During Pandemic Amounts to Anti-Competitive Conduct under the India Competition Law	348	
Examining the Relation between Productivity and Working Hours in the Education Sector Prof. Aparajita Hembrom and Marissa Anne Sum	229	Prof. Oyndrila Ganguly Role of Communication Language in Business	355	
An Empirical Approach to the Potential Valuation of LIC	235	Dr. Madhu Agarwal Agnihotri and Prof. Arkajyoti Pandit	2.55	
Dr. Joyita Banerji and Ashutosh Jaiswal		LOOKING BACK	362	
India under Pandemic: A Study on Factors	241		365	
Influencing Purchasing Decisions of Bicycle		FUN SECTION	367	
Dr. Arijit Ghosh and Harsh Prakash Nahata		ADVERTISEMENTS	368	

#### Message | PRINCIPAL





# "

It is every student's introspection of one's mortal self that serves as a source to the highest form of experiential learning, thus serving the purpose of evolution, spiritual conditioning and unprejudiced awakening

"

### Rev. Dr. Dominic Savio, SJ Principal St. Xavier's College (Autonomous), Kolkata

#### "Tradition is not the worship of ashes but the preservation of fire."

St. Xavier's College (Autonomous), Kolkata has always believed in and stood for the enhancement and development of each and every individual involved with the institution. Being a frontier that is aimed at making education a pathway to success, it continues its pursuit in moulding each student's destiny by unravelling their latent potential. Since its inception, it has always been devoted to excellence within and beyond the classroom. It is this practical worldview, imparted by an array of extracurricular activities, that shapes Xaverians into well-rounded personalities with foresight and compassion, which are vital in achieving their aspirations.

As the representative body of the Department of Commerce, the Xavier's Commerce Society has been the touchstone of excellence and expertise. In constant pursuit of its motto of Dreams, Development and Destiny, the society has expanded its horizons to give everyone a chance to enhance, grow and evolve. Youthink Volume XVI is the foremost representation of its commitment towards intellectual discourse, novel ideas, and progressive solutions to multi-faceted societal problems.

I commend the editorial board for choosing Reckoning as the theme, thus bearing testimony to its eminence as the highest form of truth. To be able to anticipate the reverberations of one's endeavours is a unique distinction possessed by a few. Here, at St. Xavier's College (Autonomous), Kolkata, it is every student's introspection of one's mortal self that serves as a source to the highest form of experiential learning, thus serving the purpose of evolution, spiritual conditioning and unprejudiced awakening. The hard work of everyone associated with this edition, which has culminated into such insightful articles, strengthens my conviction that the sixteenth edition will be reckoned with for ages to come.

The sixteenth edition of Youthink is the culmination of the efforts, aptitude and acuity of all those who have, in any manner, been associated with it. Youthink would not have been able to uphold its legacy without the tireless support of Rev. Fr. Joseph Kulandai SJ, Vice Principal, Department of Commerce (Morning) and Rev. Fr. Peter Arockiam SJ, Vice Principal, Department of Commerce (Evening), along with the priceless guidance of Dr. Amitava Roy, Dean, Department of Commerce (Morning) and Dr. Soheli Ghose, Dean, Department of Commerce (Evening). I would like to express my gratitude to the professors who constituted the reviewer board for their advice and support. I sincerely applaud the Professor-in-Charge, Prof. Shaunak Roy, the Managing Editor, Dr. Sumona Ghosh, the Editorial Board of Youthink and the student body of the Xavier's Commerce Society. Lastly, to all those who contributed and added value to the journal, their insightful work will inspire generations. I wish the team of Youthink Volume XVI the very best as it adds another, very riveting chapter, to this impeccable legacy.

J. Janon

Rev. Dr. Dominic Savio, SJ

### Message | VICE PRINCIPAL (DEPARTMENT OF COMMERCE, MORNING)





### "

When this journey of life ends, it is this change that one looks back upon, embracing the indiscretions and transgressions finally laid bare, which induces one to reckon the purpose which gives life its meaning.

"

### Rev. Fr. Joseph Kulandai, SJ Vice Principal (Morning) St. Xavier's College (Autonomous), Kolkata

The world often demands a change in the age-old perceptions that confine its progress. The necessity of this change arises from the fact that these perceptions, if given a chance to thrive, can prove to be a deterrent to required evolution and reform. It takes courage, vision and allegiance towards the greater good to bring about this revolution. When one moves forward on this journey, they imprint a legacy with the hope that it would act as a beacon for generations to follow. And when this journey of life ends, it is this change that one looks back upon, embracing the indiscretions and transgressions finally laid bare, which induces one to reckon the purpose which gives life its meaning.

St. Xavier's College (Autonomous), Kolkata has established itself as a premier institute for fostering a passionate pursuit for academic and intellectual excellence, promoting the strong commitment of character towards society and inspiring inventiveness in all endeavours. We have always encouraged our students to strive for excellence and to work relentlessly to bring about the required change in our society. We aim to instill a sense of competence, compassion, resilience and responsibility in our students, by providing them with a platform full of diversified opportunities to explore new possibilities. The Xavier's Commerce Society has constantly motivated students to capitalize on their skills and employ them beyond the walls of the classroom. This very essence has been highlighted in their endeavour, Youthink, which allows students and experts to undertake the initiative of voicing their views by traversing different spheres of the corporate world like finance, entrepreneurship, global affairs, economy, et al.

I would like to commend the Youthink Editorial Board for throwing light on an indispensable truth and giving prominence to an important aspect of existence through their theme. Motivating students to embrace the unorthodox, Youthink envisions to stimulate innovation and ingenuity in students, encouraging them to reach new standards. I would like to express my appreciation for all the professors and guests whose insights add indispensable value to this journal.

The launch of the sixteenth edition of Youthink bears testimony to the hard work and dedication of the students of the Xavier's Commerce Society, who perpetually strive towards redefining the impossible by surpassing impediments and setting new benchmarks for themselves. They have continued to develop as individuals who persevere to uphold the pillars of leadership and responsibility.

I wish Youthink Volume XVI the very best as it inspires students to delve deep into themselves and transcend conventional perceptions, while aspiring to achieve their ambitions. It gives me immense pride and satisfaction to congratulate the Editorial Board for publishing a journal that is reflective of the true spirit of a Xaverian and upholds the values of St. Xavier's College (Autonomous), Kolkata.

May God bless you!

Rev. Fr. Joseph Kulandai, SJ

### Message | VICE PRINCIPAL (DEPARTMENT OF COMMERCE, EVENING)





# "

The rationale behind all evolution lies in the resolve to persevere and break all barriers, empower what's ahead, and accomplish what's invaluable.

"

### Rev. Fr. Peter Arockiam, SJ Vice Principal (Evening) St. Xavier's College (Autonomous), Kolkata

Evolution has been the cornerstone of development for the world, the origin of which lies in the resolution and persistence of humankind to transcend the odds and discover what lies ahead. The never-ending quest for knowledge and the will to explore new possibilities has ignited the determination to discover, control and conquer. The rationale behind all evolution lies in the resolve to persevere and break all barriers, empower what's ahead, and accomplish what's invaluable. Holding on to our values while also embracing change is the essence of effective education, and Youthink captures the spirit of evolution and blends it into a paradigm of wisdom and proficiency.

The Xavier's Commerce Society sets an exemplary archetype of how consistency, combined with undeterred diligence, gives way to unimaginable accomplishments, expanding horizons, and transforming oneself by obtaining unparalleled experiences. Their vision is to provide the students of St. Xavier's College, a platform to express their opinions on vital matters by presenting well-researched articles that shape readers' perspectives and shed light on new topics, thus bringing about a positive change in the society. The journal displays the power of knowledge, which directs the readers towards a more developed outlook and brings about a more practical transformation of distinct domains based on facts and thesis.

The sixteenth edition of Youthink, 'Reckoning', is the rightful successor to 'Allegiance' and transcends the legacy that has been bestowed upon it over the years. Each of the articles which constitutes this volume is a representation of the exemplary cognitive abilities of the contributors, which have facilitated them in bringing forward novel ideas and poignant opinions. These articles seek to add value for the readers on matters that hold significance in the modern geopolitical era. The varied, and even contrarian opinions presented in the journal, would shape public discourse and lead to the betterment of the society.

As Youthink continues to represent a culmination of diverse thoughts, I am delighted to see the sixteenth edition of the annual journal uphold the principles that the Xavier's Commerce Society strives to live by. The society has been the flag bearer and stalwart in providing the students with a variety of experiences, thus enabling their holistic growth. With the impressive interviews from luminaries and a wide range of articles, Youthink has been able to create an indelible impact on the minds of the readers. I would extend my warmest gratitude to everyone who has been associated with this journal and hope that it has been an enriching experience for all those involved.

May all your valuable inputs bring desired outcomes. God bless you all!

Rev. Fr. Peter Arockiam, SJ

### Message | MANAGING EDITOR





# "

The legacy of an empire which has been created by the predecessors, sets the tone and acts as a foundational stone for the generations to come.



### Dr. Sumona Ghosh Managing Editor Youthink Volume XVI

"Truth is truth to the end of reckoning."

Legacy is fundamental to what it is to be human and giving and receiving of the same can evoke, all at once, the entire spectrum of basic human emotions. The legacy of an empire which has been created by the predecessors, sets the tone and acts as a foundational stone for the generations to come. Allegiance, conviction, transcendence and resilience are the core pillars of an institution's ability to prosper and flourish. As one treads on the path of victory, he confronts hurdles, ambiguity and paradoxes. During such turbulent times, when there is a conflict raging between ethics - which guide one's actions, and consciousness - which arises from one's intellect, reckoning plays a quintessential role in aiding mankind to combat uncertainty in pursuit of nobility. Reckoning, like a mirror, reveals one's true identity, imparting us with the power of righteousness, to liberate us from the constraints of oblivion and indecision. The roots of excellence and enlightenment, engraved within Youthink, continually strive to surpass the conventional and establish a fruitful learning experience for all its readers.

In the journey of introspection, it is important for one to embrace the truth, because only when one reckons with themselves, will they uncover their true purpose of life, which will act as a source of guidance in their future endeavours.

Youthink is an initiative that gives a framework for students at the institution as well as many other educators throughout the country to share their opinions on thought-provoking instances. It provides an individual with the opportunity to shed light on current world developments, with the aim of providing valuable knowledge. It encapsulates the generation's values and their desire to become leaders of a better world. True success is based on holistic development, in which the youth can take advantage of the opportunities presented to them, and Youthink has continually proven to be the ideal platform for it.

As we unveil Youthink Volume XVI, I would like to express my deepest gratitude to the faculty and administration for their essential expertise and enduring commitment, which has been the catalyst for our advancement, year after year. I admire the diligence of the Joint Editors-In-Chief, Aleya Ghosh and Saksham Dalmia, and the entire Editorial Board of the sixteenth edition for consistently pushing the boundaries and setting new benchmarks with each passing year.

Youthink Volume XVI: Reckoning would not have seen its fruition if it had not been for the unwavering support of Rev. Dr. Dominic Savio, Principal, the constant supervision of Rev. Fr. Joseph Kulandai, SJ, Vice Principal, Department of Commerce (Morning) and Rev. Fr. Peter Arockiam, SJ, Vice Principal, Department of Commerce (Evening) and the constant encouragement from Dr. Amitava Roy, Dean, Department of Commerce (Morning). I would also like to thank Dr. Soheli Ghose, Dean, Department of Commerce (Evening), for her guidance.

The first morning of creation writes what the last day of reckoning shall read. With immense credence and belief in my heart, I proudly present to you the sixteenth edition of Youthink.

Sumona Ghoch

Dr. Sumona Ghosh

### Message | JOINT EDITORS





### Aleya Ghosh and Saksham Dalmia Joint Editors-in-Chief Youthink Volume XVI

"You cannot disown what is yours. Flung out, there is always the return, the revenge, perhaps the reconciliation. There is always the reckoning."

For every high there is a low, for every victory there is a defeat and for every action, there is a reckoning. As was rightly said, 'With great power there must also come great responsibility' and while our deeds and beliefs may differ, we have to face the truth all the same. Whether that truth stems from a legacy bygone, or our own decisions, we must have the resilience to do what's right, and achieve redemption, for that is the only way home. The very idea of reckoning is subjective; for some, it might be the endgame, and for others, it is an eternal path, where every step brings a new resolution. Yet, at the final hour, it is our allegiance to the cardinal principles - ones that we hold for ourselves, and ones that form the virtues of society. As the space-time continuum postulates, the fabric of our existence is timeless. And yet, amidst this inconceivable realm, each of us manages to be different. We owe that to our experiences, and how we reckon with them.

As the world around us evolves at an unprecedented rate, Youthink strives to be a leading ground of change as we continue to provide a platform to reflect upon these developments through novel perceptions and discourse. The sixteenth edition of Youthink seeks to transcend the scope of traditional knowledge and encourages detailed and analytical thinking, the spirit of which is shown in articles in the Feature Section, which analyze the new age financial tools and their relevance, one of the most heated issues in international geopolitics and the effects of consumer behaviour to a business. The Beyond, Ascent and Projects Sections highlight Xaverian's along with their professor guides, wherein they critically examine a host of topics across various disciplines. These include in-depth exploration of the market transformations and the applications of behavioural finance, the implications of recent economic policies as well as the way forward, and the metamorphosis of the education industry.

The Professor's Desk section puts forth ingenious observations and highlights the varied dynamics of the corporate world, both within the organization and outside with articles on topics like Talent Analytics, Competitor Collaboration and the Competition Law, as well as the Role of Communication Language in Business. We are also grateful to have insightful Guest Articles from Dr. Hemant Kumar Manuj, Associate Professor in Finance, SPJIMR, Dr. Tulsi Jayakumar, Professor of Economics at SPJIMR, and Dr. Nisigandha Bhuyan, Associate Professor at IIM(C).

Every year, the 'Interviews' section of the journal immerses the reader in the enthralling world of many revered luminaries from around the world. This year, we bring forth the interviews of nine exceptional personalities from diverse domains - Mr. Abhinav Bindra, Mr. Anand Grover, Dr. Anil Kakodkar, Mr. Boman Irani, Ms. Dutee Chand, Mr. Karan Thapar, Mr. Manish Malhotra, Mr. Montek Singh Ahluwalia and Ms. Usha Uthup.

We would like to express our heartfelt gratitude to Rev. Dr. Dominic Savio, SJ, Principal, Rev. Fr. Joseph Kulandai, SJ, Vice-Principal, Department of Commerce (Morning), and Rev. Fr. Peter Arockiam, SJ, Vice-Principal, Department of Commerce (Evening), for their sustained encouragement and blessings. We are grateful to Dr. Amitava Roy, Dean, Department of Commerce (Morning), and Dr. Soheli Ghose, Dean, Department of Commerce (Evening), for their constant support in our endeavours.

Our Managing Editor, Dr. Sumona Ghosh, has been a constant source of motivation and reassurance, without whom this journey would not have been possible. We would also like to express our gratitude towards the Editorial Board comprising Anjali Dugar, Meghan Ann D'Souza, Muskan Jain, Pratham Mittal, Ronit Sanghai, Vanessa Chung and Yash Sanghvi.

Finally, we would like to thank the students of St. Xavier's College for their continued support as readers and contributors towards Youthink.

Welcome to Youthink Volume XVI: Reckoning.

Aleya Ghosh Aleya Ghosh

S. Dalmia Saksham Dalmia



66

For every high there is a low, for every victory there is a defeat and for every action, there is a reckoning

"



(11

In a world where financial disasters have a cascading effect on global economies, removing this systemic risk is what the centralized authorities should focus on.

# **SPACs: IPO Buster or Reverse Merger Evolution?**

Aniruddha Sureka Department of Commerce (Morning)

### ABSTRACT

Special Purpose Acquisition Companies (SPACs) are blank cheque companies that raise money from investors for the sole purpose of acquiring an operational company. Though SPACs have been around for decades, the financial manoeuvre has gained traction over the last few years. Although some call it an evolution to the reverse merger, its usage guidelines are still not very clear, and the regulatory bodies are rampantly working on it. Investors completely bank on the management and founders, and even though generating post-merger returns is highly unlikely, redeeming shares premerger can generate decent returns for them. In this article, we find out the boom and bust of the reverse mergers, reckon how they planted the seeds of their own demise and figure out why SPACs have overcome all regulatory hurdles to surpass the book-building process to become a more prevalent process. We also analyze whether SPACs is a new-age financial bubble, or will it sustain its operations over the years to come.

**KEYWORDS:** Company, Public, Merger, Investors, Shares, Investment Banks.

### WHAT IS A SPAC?

Special Purpose Acquisition Company (SPAC) has disrupted the traditional book-building IPO process, which private companies used, to go public. So, what are these companies? They are shell companies that have no commercial operations, and which go public through a regular IPO process. They have 24 months to acquire or merge with a fully operational company.

### STRUCTURAL AND OPERATIONAL COMPOSITION OF SPACs

When going public, SPACs hire investment banking firms to underwrite their issue of common stocks and warrants. The process is a lot easier and faster



#### FEATURE

than that of a traditional Initial Public Offering (IPO) since the bankers do not need to value the company or carry out due diligence. Usually, a SPAC is listed at \$10 per share. This \$10 per share pricing has no underlying value and is a hypothetical figure.

Big-ticket investors, industry veterans, and celebrities are the ones who typically form a SPAC. Those involved in the formation of a SPAC are called the 'sponsors'. They also receive 20 per cent of the shares of the SPAC as a fee called a 'promote' or 'founder shares' at a heavily discounted price.

The sponsors then go on a roadshow to find investors who are willing to invest in the company. Empirically, close to 85 per cent of the company's equity paid-up capital is purchased by institutional and anchor investors. The remaining stake is diluted in a public issue that lists the SPAC on the bourses. Similar to the Draft Red Herring Prospectus issued by companies during an IPO, the SPAC management team also files a prospectus. However, this prospectus does not contain any financial or company statistics rather just the vision and the acquisition plan of the management team. Hence, when retail investors are subscribing to the issue, they are essentially betting on the company's management rather than the company. Figure 1 gives a brief overview of how a SPAC is formed and wounded up.

### WHAT MAKES SPACs SO SPECIAL?

IPO is not the only process that has been prevalent over the years as a means for private companies to go public. A few companies have also gone public through Direct Listing and Reverse Merger. Companies that do not want to dilute their existing shares and do not have the financial strength to hire underwriters are the ones that usually raise capital through a direct listing. While in a reverse merger a private company acquires a publicly listed company. In a way, SPACs are an evolution to the reverse merger process of going public.

What is common in all the methods of raising capital is high regulatory compliance and legal scrutiny that makes the process very lengthy. Moreover, these companies are under-priced by the investment banks. This typically means that the companies are leaving money on the table. The three major reasons for this are:

**Investment Bankers' Monopoly:** Since investment bankers have a monopoly over underwriting shares, they under-price the shares. Investment bankers are

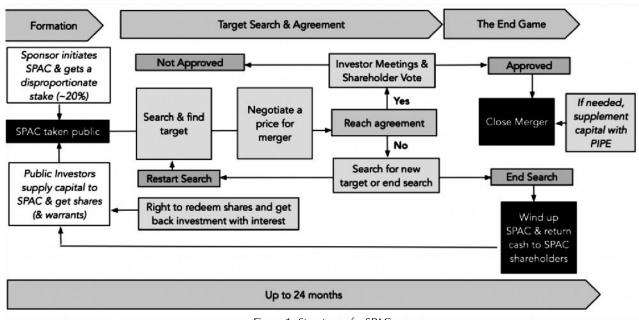


Figure 1: Structure of a SPAC (Source: aswathdamodaran.blogspot.com)

obligated to guarantee a certain number of shares, this means if any outstanding number of shares go unsubscribed it stays in the books of the investment bank thus blocking their capital.

**Information Asymmetry:** Huge information asymmetry exists during an IPO. The investors are buying into a relatively unknown business. Even though there are disclosure requirements that the companies have to adhere to, there remains a huge information asymmetry.

**Insider-Outsider Theory:** This theory assumes that under-pricing is the best strategy given the asymmetry. If the shares are under-priced, the insiders will buy them

### 2021's SPAC merger count has already more than doubled from last year

Number of SPAC mergers (pending and completed), 2016 - 2021 YTD (as of Q2'21)

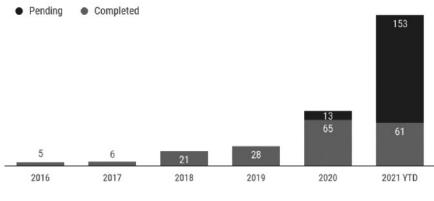


Figure 2: Growth of SPACs over the Past Five Years (Source: cbinsights.com)

because they know it's true. The outsiders will buy assuming it to be the fair value. Hence, when the shares rise to match their fair valuation both parties gain from it.

The growing redundancy, increased costs, and high regulatory scrutiny are a few things that have inculcated a question of whether it is the right way of raising interest-free capital. This is where the SPAC phenomenon has risen. Now, SPACs have been in existence since the late 80s and early 90s. Predominantly, the reverse merger method was more prevalent in the 1990s where they saw a steep rise in the number. They were then outgrown to their existence due to larger market participation, overheated markets, and more scrutiny from the Securities and Exchange Commission, planting the seeds of its own demise. Since then, one may find very few reverse mergers or SPAC deals taking place. However, in 2019, SPAC dealings saw a huge rise. More than 50 per cent of the companies went public through SPAC deals. In 2020, there were around 254 filings that rose close to \$74 billion. Up until now, in 2021, there have been 359 SPAC filings garnering a combined \$95 billion. As seen in Figure 2, out of the 254 filings that were placed in 2020, 65 stood completed and 13 pending. However, quarter two of 2021 alone has seen

61 completed SPAC mergers and 153 pending SPAC deals.

### HOW DOES A SPAC ACQUISITION TAKE PLACE?

Though SPACs have been around for decades, the financial manoeuvre has gained traction over the last year - with highprofile investors such as Bill Ackman's Pershing Square Tontine Holdings Ltd., Chamath Palihapitiya's Social Capital Hedosophesia Holdings Corp. raising billions of dollars from investors. Buzzfeed, Taboola, 23andMe are a few companies that have gone public through this process.

The money raised from the IPO is put in a blind trust where it is further invested in interest-bearing risk-free short to medium term investment vehicles. The shareholders can redeem their shares until the acquisition is finalized. After the SPAC has been established, the management team goes on a hunt for target companies. There are no restrictions on the type of 'target company', although many founders highlight their target industry in the prospectus. Once a company has been identified, a letter of intent is issued to the shareholders stating the terms of the deal. The

### FEATURE

shareholders have the opportunity to vote for the acquisition, which gives them some recourse if a sponsor chooses a company they don't like. Once

using a Private Investment in Public Equity (PIPE) transaction. Figure 3 shows how the SPACs have performed post-merger. They have been divided into

	Three-Month		Six-Month		Twelve-Month				
	All	HQ	Non-HQ	All	HQ	Non-HQ	All	HQ	Non-H(
Mean Return	-2.9%	31.5%	-38.8%	-12.3%	15.8%	-37.6%	-34.9%	-6.0%	-57.3%
Median Return	-14.5%	-4.6%	-46.9%	-23.8%	-15.9%	-43.0%	-65.3%	-34.6%	-66.3%
Mean Return (Excess over IPO Index)	-13.1%	25.1%	-53.0%	-33.0%	0.4%	-63.1%	-47.1%	-11.8%	-74.6%
Median Return (Excess over IPO Index)	-32.8%	7.1%	-52.1%	-43.2%	-31.0%	-56.3%	-56.5%	-54.8%	-89.9%
Mean Return (Excess over Russell 2000)	-1.3%	37.5%	-41.9%	-10.9%	22.5%	-41.0%	-21.5%	9.7%	-45.7%
Median Return (Excess over Russell 2000)	-16.1%	16.9%	-47.2%	-17.5%	-2.4%	-57.0%	-44.9%	-36.3%	-55.0%
N SPACs	47	24	23	38	18	20	16	7	9

Figure 3: Post-Merger SPAC Returns (Source: corpgov.law.harvard.edu/)

approved, the 'de-spac' process begins. Generally, the initial SPAC corpus is not enough to finance the acquisition. Here, the sponsors can ask institutional investors and private investors for additional money two categories High Quality (HQ) and Non-High Quality over a span of three months, six months, and twelve months.

Poturos to S	PAC Investors from SPAC M	orgore: Modian Paul	aturor.	1
Returns to 3		Raw Median Returns	leturns	
	High Quality Sponsors	Other Sponsors	All SPACS	
3 months	-4.60%	-46.90%	-14.50%	
6 months	-15.90%	-43.00%	-23.80%	
1 year	-34.60%	-66.30%	-65.30%	
Returns to SPAC Inves	stors from SPAC Mergers: M	edian Excess Returns	(over IPO index)	
	Median E	xcess Return over Russ	sell 2000	
	High Quality Sponsors	Other Sponsors	All SPACS	
3 months	16.90%	-47.20%	-16.10%	
6 months	-2.40%	-57.00%	-17.50%	
1 year	-36.30%	-55.00%	-44.90%	
Returns to SPAC Invest	ors from SPAC Mergers: Me	dian Excess Returns (	over Russell index)	
	Median	Excess Return over IPC	) Index	
	High Quality Sponsors	Other Sponsors	All SPACS	
3 months	7.10%	-52.10%	-32.80%	
6 months	-43.20%	-56.30%	-17.50%	
1 year	-56.50%	-89.90%	-44.90%	
All Si	PACS: Average versus Mediar	Returns in 6 months		
	Three Months post-merger Six Months post			nerger
	Median	Average	Median	Average
Raw Return	-14.50%	-2.90%	-23.80%	-12.30%
Excess over IPO Index	-32.80%	-13.10%	-43.20%	-33.00%
Excess over Russell 2000	-16.10%	-1.30%	-17.50%	-10.90%
Sponsors are classified into high	quality based upon investment si	ze, history and past perfo	rmance.	

Figure 4: Returns to SPAC Sponsors Post-Merger

(Source: aswathdamodaran.blogspot.com)

The shares are redeemable at the time the merger is proposed. So if SPAC investors don't like a proposed merger, they get back their full investment plus a very high return. At the time of offering shares to potential investors, SPAC founders offer a very high rate of return to attract investors to subscribe to their issue. This rate of interest becomes a selling point for the shareholders. Most shareholders make an exit to their investment at the time the merger is proposed to book profits that would otherwise be uncertain post-merger. The primary source of poor post-merger performance is dilution built into the circuitous two-year route they take to bring a company public. Along the way of finding a target, SPACs give shares, warrants, and rights to parties that do not contribute cash to the merger. This includes the sponsors and other interested third parties. When the merger is proposed, the sponsors offer shares and warrants to Private Investors (PIPE) to fund the merger. While the existing shareholders have preemptive rights to keep their stakes in the company intact by infusing more capital, empirically most shareholders have already backed out. Hence, even though the price of each share is purportedly worth \$10, there is approximately \$6.67 in cash and \$3.33 in dilution overhanging in the merger. This cost is ultimately borne by the shareholders. If the merger goes successful, the sponsors are the biggest winners. Figure 4 shows median returns and median excess returns over Russell 2000 that the sponsors generate.

### **SCOPE IN INDIA**

Blank-cheque companies have gained huge traction globally in recent years. However, its prevalence in India remains questionable as Indian laws prevent it from being operational. For instance, the company law states that any company that does not have an operational business within a year of its incorporation is under the law required to be wound up. Moreover, according to the Securities and Exchange Board of India Act, only companies with at least 300 million in net tangible assets and 150 million of pre-tax profit can be listed on the Indian Stock Exchange. Therefore, until amendments are made to the various acts governing the investment and company incorporation process, the likeness of SPACs being a way to go public remains sceptical. Since these companies have gained so much traction, more and more start-ups are considering this route of going public by listing in the overseas markets. Hence, there has been an emerging requirement for regulated SPACs in India as well, to facilitate and ease the listing of start-ups. Else, they may seek the foreign route for a public listing, making India a hub for subsidiaries rather than start-ups. On the other hand, we can have a separate Act to govern the implementation of SPACs in India so as to facilitate the establishment of this structure in the future.

### DOES A SPAC BUBBLE EXIST?

Currently, it is difficult to identify whether or not a SPAC bubble exists. For the time being, the procedure appears to be legitimate. The companies are going public, no fraudulent instances have been discovered, and the entire system is running smoothly. In terms of structure, there are still a lot of unsolved problems that the Securities and Exchange Commission needs to address. But given that it is a relatively new concept with limited economic impact, the chances of it becoming a bubble are slim, at least for the time being.

### BRINGING IT ALL TOGETHER: RECKONING THE VIABILITY OF BLANK-CHEQUE COMPANIES

As we near the end of our discussion on SPACs, I would like to state the obvious - change is inevitable, the IPO process has been prevalent for as long as financial systems have aggregated towards investor protection. However, they are starting to become obsolete for investors. In a world where financial disasters have a cascading effect on global economies, removing this systemic risk is what the centralized authorities should focus on. SPACs are just the beginning of a more decentralized system of doing things. The markets have been heated since September 2020, after the world partially recovered from the pandemic. That was one of the reasons SPACs found so much limelight. The longdrawn overhaul of blank cheque companies stands corrected to supersede the book-building process. The need is to generalize them and launch a systematic framework for their functioning.

### REFERENCES

- 1. https://www.policyholder.gov.in/Indian\_Insurance\_1. https://www.nytimes.com/2021/08/30/business/dealbook/s pac-lawsuits.html
- 2. https://www.cbinsights.com/research/report/what-is-a-spac/
- 3. http://aswathdamodaran.blogspot.com/2021/06/the-riseof-spacs-ipo-disruptors-or.html
- https://www.sec.gov/oiea/investor-alerts-andbulletins/what-you-need-know-about-spacs-investorbulletin
- 5. https://www.mossadams.com/articles/2021/05/tax-issuesand-considerations-for-spacs
- https://www.reuters.com/business/exclusive-us-secfocuses-bank-fee-conflicts-it-steps-up-spac-inquirysources-2021-0713/#:~:text=SPAC%20sponsors%20 typically%20pay%20banks,upon%20completion%20of%2 Othe%20merger.
- 7. https://hbr.org/2021/02/the-spac-bubble-is-about-to-burst
- 8. https://corpgov.law.harvard.edu/2020/11/19/a-sober-lookat-spacs/

- 9. https://www.managementstudyguide.com/why-do-iposget-underpriced.htm
- https://www.thehindubusinessline.com/businesslaws/regulatory-challenges-for-spacs-in-india/ article34124252.ece
- 11. https://www.spglobal.com/marketintelligence/en/newsinsights/latest-news-headlines/tech-and-spacs-secregulation-could-result-in-fewer-but-better-spacs-64000801
- 12. https://www.investopedia.com/terms/s/spac.asp
- 13. https://ecgi.global/sites/default/files/working\_papers/ documents/klausnerohlroggeruanfinal.pdf



(11

Exploited by the colonizers, ravaged by slavery, divided as per foreign interests, and left off when the need dissipated the trail of Africa's history has been pitiful.

# To Be or Not to Be?

Sankalp Ghosh Department of Commerce (Morning)

### ABSTRACT

Africa had always been considered the antithesis of civilization by the Europeans, also referred to as 'the heart of darkness', in the words of Joseph Conrad. Centuries of external neglect, internal strife and vested interests have torn open gashes into this cradle of humankind. Exploited by the colonizers, ravaged by slavery, divided as per foreign interests, and left off when the need dissipated - the trail of Africa's history has been pitiful. However, the turn of the twenty-first century brought along with itself another scramble for Africa, with the nations of the world fighting for influence and stake in it. How did this come about and where does this lead? Can we expect to see Africa commanding significant geopolitical influence by this century?

**KEYWORDS:** Africa, Neo-Colonialism, Extremism, Debt, Vested Interests, Corruption.

### COLONIZED

During the majority of the nineteenth and twentieth centuries, Africa had been colonized for the benefit of foreign powers. European powers ransacked their colonies and took advantage of their mineral deposits to further the growth of their lands, thus pushing their colonies into the nadir of poverty. A similar trajectory followed in Africa. They divided the continent into bizarre political regions, as per the Berlin Conference of 1884, without taking the natives or their opinions into consideration (see Figure 1).

It was only in the mid-twentieth century, after the creation of the United Nations, that Africa was given her independence.

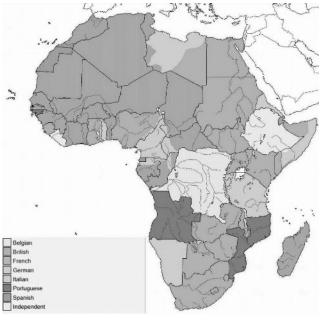


Figure 1: Map of African Colonies (1913) (Source: Wikipedia)

### GEOGRAPHY

Geography can make or break a civilization. One of Africa's major issues to this day is its unforgiving geography. It stretches from Morocco in the north, having a Mediterranean climate, to South Africa in the south, experiencing Tropical climate, thereby stretching from 37°N to 35°S latitudes. The Sahara Desert, at the north, occupies around 31 per cent of Africa's land. The shortage of fresh water in the heart of the continent is another factor that has added to Africa's woes. Furthermore, the continent possesses a variety of climatic types, with countries sharing borders passing through those climates (see Figure 2). This creates a lot of problems for expansion and growth for each country as a whole.

Asia is a good example of the contrary. Despite being the largest continent on the planet, it faces a distinct boundary of climatic types, each of which corresponds to a powerful contemporary region - arid Gulf regions became the Middle Eastern countries, polar tundra regions became Russia, temperate grasslands became China, the cold desert regions became Mongolia and tropical monsoonal regions became India (see Figure 3).

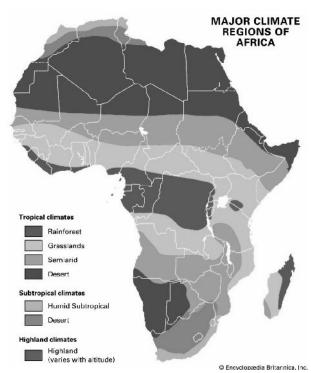


Figure 2: Political Map of Africa Superimposed on the Climatic Map of Africa (Source: Encyclopaedia Britannica, Inc.)

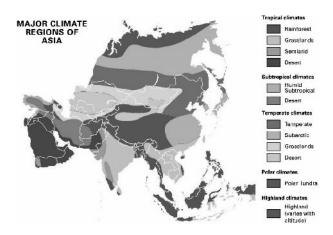


Figure 3: Political Map of Asia Superimposed in the Climatic Map of Asia (Source: Encyclopaedia Britannica, Inc.)

### To Be or Not to Be?

This powerplay occurs because climate influences geography, which in turn influences the culture and lifestyle of people. The similarity in lifestyle makes the people of a particular region face similar problems, strive for similar solutions to those problems, and ultimately prosper together cohesively.

For Africa, their political boundaries overlap haphazardly with their climatic regions, making a single country face antipodal climatic conditions through the expanse of their region, thus being a driving force towards division and making uniformity in life as well as finding solutions to problems impossible. insurgency that amounted to the breaking up of the Sudanese state into two, based on tribal and ethnic divisions, is a prime example of this.

Another issue in Africa is that of extremism. Poor management of the country's economy, lack of development, and insurgencies coalesce together to become the perfect breeding ground for radicalization. An important fact to take cognizance of is the religious identity of the African continent (see Figure 5). The northern regions consist of Muslims, due to the influence of the Middle East, whereas the south primarily consists of Christians.

### TERROR AND MACHTPOLITIK

Upon taking a closer look at Africa's ethnicities and tribes (see Figure 4), we find another reason for division. After colonialism ended, African leaders insisted upon maintaining their colonial political boundaries, as per the Cairo Conference of 1964 held by the Organization of African Unity, which led to increasingly difficult challenges for the governments of the countries. A sense of togetherness binds people towards a common goal, which is something that the African countries lack. Each tribe wages wars with the other, giving rise to grave insurgencies and political upheavals. The Sudan-South Sudan conflict - an



Figure 4: Political Map of Africa Superimposed on the Tribal Identity of the African People (Source: Harvard University, 2002)



Figure 5: Religious Identity of Africa along with its Political Borders (Source: PBS Learning Media)

The start of radicalization began in Northern Africa - in Algeria, in the year 1992. The Algerian army staged a coup to resist the Islamic Salvation Front (ISF) from winning the country's first democratic elections. A faction of separatists and insurgents from the ISF came together to take down the Algerian government. They went southwards and took refuge in the deserts of northern Mali, wherein they swore allegiance to the Al-Qaeda and called themselves the Al-Qaeda in the Islamic Maghreb (AQIM). Travelling southwards towards Nigeria, the AQIM helped establish Boko Haram. This Islamist radical organization had one goal to push forward their agenda of radicalization deep into the African mainland. Despite being ousted from Nigeria with French assistance, they grouped in the nearby Lake Chad region, which is one of the poorest regions of the world. It is a part of the Sahel, i.e., a band of Sub-Saharan Africa stretching from the Atlantic Ocean in the east, to the Red Sea in the west (see Figure 6). Arid, hot and humid, the people of the Sahel are the most economically vulnerable in the world. This is where Boko Haram radicalizes people to commit crimes in exchange for sustenance. They are responsible for some of the horrors that have shaken Africa in the past - the Grand Bassam shootings which killed several expatriates, the kidnapping of school boys and girls and brainwashing them into becoming suicide bombers, the Ouagadougou attacks in the French and other European embassies, and so on.

Their ideology started spreading far and has led to the establishment of more such groups, which include the Ansar-ul-Islam, the Islamic Movement of Nigeria, the Nusrat-al-Islam, and so on. The reason behind the success of such groups in Africa is simple: 'Faith is the strongest in an empty stomach'.

Furthermore, politics and in-fighting amongst African countries have deteriorated the situation. The

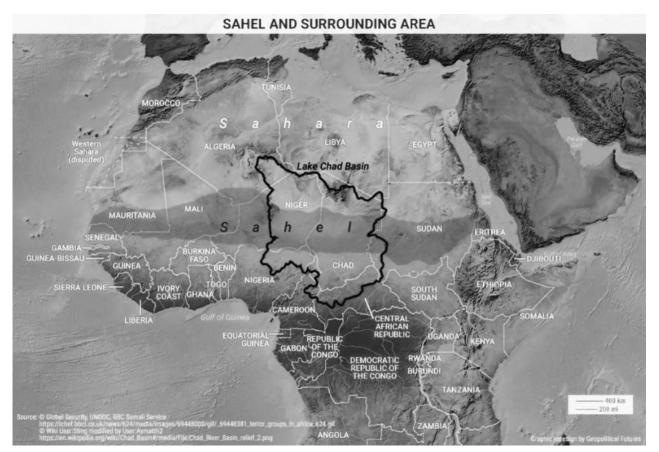


Figure 6: The Sahel Region on the African Political Map (Source: Global Security, UNODC, BBC Somali Service)

Moroccan-Algerian tensions emerging from the Spanish acquisition of Western Sahara and its subsequent independence in 1975, the Grand Ethiopian Renaissance Dam (GERD) and the ongoing tensions with Egypt and Sudan concerning the White Nile, the civil clashes between the blacks and whites of South Africa and the border disputes between Eritrea and Ethiopia, as well as Tanzania and Malawi, are issues that present huge challenges to the economic development and stability of the region, i.e., the three Trans-Mediterranean Trade Corridors Europe plans to build into Africa, namely, the West Africa-Western Europe Corridor through Morocco, the East Africa-Eastern/Central Europe Corridor through Egypt and the Central Maghreb Corridor through Algeria.

### NEO-COLONIALISM

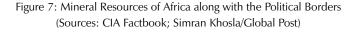
Africa has huge deposits of natural resources, but does not have the infrastructure to harness the power of these resources (see Figure 7). Africa's slower development has made it inevitable for the governments of the countries to resort to overdependence on the natural resources and agriculture to earn revenue. Other avenues of income generation have not been discovered and utilized simply because there has never been enough money in the hands of the government to invest in manufacturing and services exports. However, this has had an overwhelmingly negative domino effect on their economies.

Due to the overdependence of natural resource exports, the governments have been at the mercy of

#### FEATURE

global demand-supply mechanisms to generate competitive prices at the global markets. Ever since the fall of prices of primary commodities in the 1970's, the revenue earned has been decreasing substantially. Further, African debt has increased ten-fold in the same time period. This has led to huge fiscal deficits and economic instability throughout major regions of the continent. Yet another factor in this domino is the effect of population pressure. The countries of Africa have witnessed a boom in population - more than what the land could sustain. This has led to a population surge in the cities in order to find non-farm work and thereby provide sustenance. This has given rise to less time being devoted to the fields and the subsequent utilization of environmentally harmful forms of chemicals being used in order to extract more from the soil to earn revenues. Hence, what remains is a vicious cycle - overdependence on agriculture leading to excessive chemical appliance, thereby leading to worsening soil fertility and ultimately concluding in





economic instability, which gives rise to meagre investment in industries; necessitating overdependence on natural resources for revenue and exploitation of its environment.

Several countries have established economic relations with Africa, namely, Israel, India, China, the European Union (EU) and the United States (U.S.). However, such deals have always been made for vested interests of the above-mentioned countries.

- 1. Israel: Benjamin Netanyahu, the ninth Prime Minister of Israel, met with African leaders for the first time in 50 years, promising economic help in the form of solar and agricultural technologies, in exchange for votes against Palestine in the UNGA. When Senegal co-sponsored a resolution against illegal Jewish settlements in the West Bank, Netanyahu cancelled the Mashav Drip-Irrigation project.
  - 2. EU: The EU promised billions of dollars in sustainable investment in Africa so that it could get access to Africa's 1.3 billion strong market and could counter China's evergrowing influence in the region.
  - **3. India:** India has made various deals with Africa, including scholarships, healthcare assistance, credit lines, and so on, to deal with China's cheque-book diplomacy.
  - 4. U.S.: The U.S.-Africa relations date back centuries. Initially off to a rocky start due to African enslavement and mistreatment across the Atlantic, the two blocs started amicable dialogue from the end of the nineteenth century. The U.S.' initial partners in Africa were limited to the semiautonomous Egypt, Ethiopia and its old colony of Liberia. However, at the turn of the twenty-first century, the strategic ties between the U.S. and Africa deepened with the help of the passing of the African Growth and Opportunity Act, 2000 (AGOA) during Bill Clinton's presidency as well as the development of the African Continental Free Trade Area (AfCFTA). These made

strides towards advancement of the entire continent. The AGOA helps African countries boost their exports in agricultural sectors to the U.S. with almost zero customs and tariffs and without any need for reciprocity. This has generated huge revenues for the African countries, and helped lift a sizeable portion of the people from poverty due to the creation of jobs. However, this too had an expiry date. Despite having been

renewed two times in the past, it has been cracking under opposing pressures of the parties. For the U.S., Africa is a huge, untapped market, which due to AGOA, they have not been able to tap into. For the Africans, their development initiatives and expectations of growth have not capitalized the way they thought it would have. Such a strain is creating a vacuum in Africa which other countries and blocs are more than willing to occupy. Despite that, the United States still remains the second-largest investor in the continent. Much remains to be seen as to how their relations persist after the AGOA terminates in 2025. The U.S. now considers Africa to be its trade battleground with China, for power and

5. China: China is the leading investor in Africa (see Figures 8 and 9).

influence.

Currently, China has been funding infrastructure projects, giving loans, and setting up foreign direct investment taps and more in the form of loans. It has built the continent's longest railway line, connecting Ethiopia and Djibouti, a standard gauge railway link between Nairobi and Mombasa, as well as the African Union headquarters in Addis Ababa. China's vested benefits in these undertakings are exponential. It

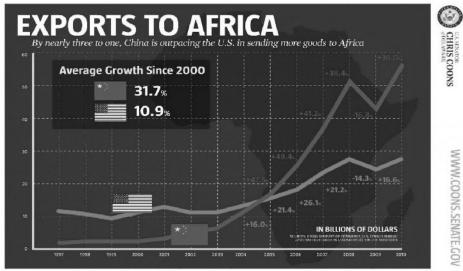


Figure 8: U.S. vs. China - Trade with Africa (2000-2010) (Source: www.coons.senate.gov)

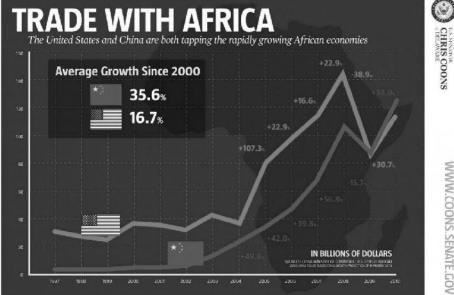


Figure 9: U.S. vs. China - Export to Africa (2000-2010) (Source: www.coons.senate.gov)

gets geopolitical influence, cheap labour, as well as allies in world forums. Several African countries already use the Chinese Yuan. Moreover, it has developed an off-shore military base in Djibouti, in the Horn of Africa.

In July 2019, 22 nations co-signed a letter to the United Nations Human Rights Council (UNHRC) expressing grave violations in human rights conditions of the Uyghur Muslims living in the Chinese province of Xinjiang. A couple of days later, a list of 37 countries; which later increased to 50, co-signed another letter to the UNHRC, stating their trust and faith in the policies of the People's Republic of China (PRC) and asked the 'relevant countries to refrain from employing unfounded charges against China', as per UNHRC statements (see Figure 10). The majority of the signatories to the second letter were Muslim majority countries of Africa, who turned a blind eye to the 'Muslim brotherhood' and supported the PRC despite there being ample evidence to the contrary of what they believed. This goes to show China's geopolitical hold on Africa.

This presents to us a familiar story - China's policy of debt traps. China has already been quite successful in implementing and benefitting from its Belt and Road Initiative (BRI). If the majority of the African continent becomes China's, it would become impossible to pass any resolution against it as 54 votes of the African continent would bail it out, thus gaining itself diplomatic immunity. This is bringing about a wave called neo-colonialism. It echoes the words of John Adams, 'There are two ways to conquer and enslave a nation. One is by the sword. The other is by debt'.

The 22 Signatories to the July 8 "First Letter"	The 50 Signatories to the July 12 "Second Letter"		
Australia	Algeria	Nepal	
Austria	Angola	Nigeria	
Belgium	Bahrain	North Korea	
Canada	Bangladesh	Oman	
	Belarus	Pakistan	
Denmark	Bolivia	The Philippines	
Estonia	Burkina Faso	The Russian Federation	
Finland	Burundi	Saudi Arabia	
France	Cambodia	Serbia	
Germany	Cameroon	Somalia	
Iceland	Comoros	South Sudan	
Ireland	The Congo	Sri Lanka	
	Cuba	The Sudan	
Japan	Democratic Republic of Congo	Syria	
Latvia	Djibouti	Tajikistan	
Lithuania	Egypt	Togo	
Luxembourg	Equatorial Guinea	Turkmenistan	
The Netherlands	Eritrea	Uganda	
New Zealand	Gabon	United Arab Emirates	
Norway	Iran	Uzbekistan	
	Iraq	Venezuela	
Spain	Kuwait	Yemen	
Sweden	Laos	Zambia	
Switzerland	Mozambique	Zimbabwe	
United Kingdom	Myanmar	Palestinian Authority	

### CONCLUSION

Africa has many challenges in front of it. However, it has just as many opportunities that it can capitalize on. It is the youngest continent in the world, with a huge number of people falling within the working bracket. It also has a very cheap labour cost, thus becoming a viable place for outsourcing businesses. Six out of the ten fastest-growing economies are African. Rwanda and Nigeria are showing sustained economic growth and

Figure 10: Signatories to the Two Letters Signed to the UNHRC (Source: UNHRC)

potential. Education of the young workforce is helping African economies export services and limit imports of know-how, thus improving the economy qualitatively and quantitatively. However, Africa must choose its allies judiciously, because just like the nineteenth century, there is a (neo) colonial scramble for Africa, from which Africa has nothing to gain.

### REFERENCES

- https://en.wikipedia.org/wiki/Colonisation of Africa 1.
- https://www.britannica.com/place/Asia/Climate 2.
- https://www.britannica.com/place/Africa/Climate 3.
- 4. https://www.nationalgeographic.org/encyclopedia/africaphysical-geography/
- 5. https://www.theatlantic.com/international/archive/2012/ 09/the-dividing-of-a-continent-africas-separatistproblem/262171/
- 6. https://www.pbslearningmedia.org/resource/sj14-socreligmap/world-religions-map/
- https://geopoliticalfutures.com/africas-sahel-strategy-7. containment/
- https://worldbulletin.dunyabulteni.net/world/mapping-8. africas-natural-resources-h191272.html
- 9. https://blog.oup.com/2014/05/15-facts-on-africanreligions/

- 10. https://www.jpost.com/Israel-News/Politics-And-Diplomacy/Jerusalem-orders-to-cancel-all-aid-programsto-resolution-co-sponsor-Senegal-476421
- 11. https://www.dw.com/en/eu-investment-in-africa-europeracing-to-catch-up/a-45500068
- 12. https://www.brookings.edu/testimonies/us-trade-andinvestment-in-africa/
- 13. https://www.ibef.org/news/india-promises-us-10bn-line-ofcredit-to-africa
- 14. https://knowledge.wharton.upenn.edu/article/chinasinvestments-in-africa-whats-the-real-story/
- 15. https://jamestown.org/program/the-22-vs-50-diplomaticsplit-between-the-west-and-china-over-xinjiang-andhuman-rights/
- 16. https://www.vox.com/2015/11/10/9698574/africadiversity-map
- 17. Wenjie Chen, David Dollar and Heiwai Tang (August 2015): https://www.brookings.edu/wp-content/uploads/ 2016/06/Why-is-China-investing-in-Africa.pdf#:~:text= China's%20investment%20in%20Africa%20includes%20so me%20large%20deals,and%20the%20private%20compan y%20Zhejiang%20Huayou%20Cobalt%2C%20in

**FEATURE** 





With the formulation of blockchain technology and smart contracts, the art industry has seen a revolutionary change.

# The Paradigm of Change Inflicted upon the Art Market through Non-Fungible Tokens

Anant Kedia Department of Commerce (Morning)

Reet Nahata Department of Commerce (Evening)

### ABSTRACT

In this protean world, technology has become the basis of all development and the 'mother of all inventions'. With the formulation of blockchain technology and smart contracts, the art industry has seen a revolutionary change. The digitized version of art is not restricted to canvas anymore. The introduction of Non-Fungible Tokens (NFTs) has changed the landscape of the art market, with Ethereum having appropriated cash payments and bank transfers. Is the rapidly emerging online art market here to persist in the long term, indicating that the shift is permanent? The article seeks to critically analyze the shift in the nature of the art industry, quantifying the change with the help of relevant parameters and highlighting fundamental subjects covering the valuation and operation of NFTs to contemplate the sustainability of the market.

**KEYWORDS:** Art Market, NFT, Sales, Smart Contracts, Ethereum.

### ESSENTIAL DETERMINANTS OF THE MARKET

### What are NFTs?

Non-fungible tokens are unique digital assets existing on a blockchain currency that give the buyer exclusive ownership rights. The data is stored in a digital ledger and is noninterchangeable. To verify proof

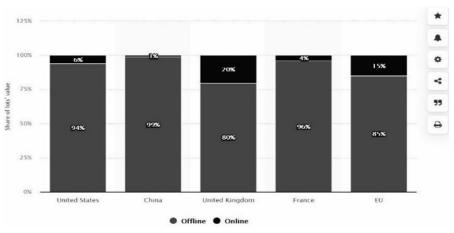
of ownership, NFTs can be used to represent easilyproducible items such as GIFs, photos, audios, videos, et al., while utilizing blockchain technology.

### Foundational Pillars of the Industry

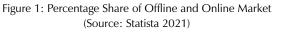
A \$60 billion industry, honed and chiselled by the pointed yet flair wings of talented visionary professionals and the home galleries of devoted enthusiastic art connoisseurs, the global art market is the place of trading commodities, services, and works of art. This industry is fuelled by the likes of eons of revolutionary creators and collectors, who have, since the birth of the 20th century, discovered a common ground for exchange.

### The Market

Supply and demand are not the sole driving factors of the market. It is an amalgamation of the past monetary value of the work, the authenticity of the artist, the usability of the collector, and the value on the prediction market. The beauty of the market is such that the producer does not originally create the piece with the intention of selling it off to a noteworthy collector. An aficionado buys what is soothing to his/her eyes, irrespective of the monetary value of the work, and the middlemen exploit both the parties by camouflaging and suppressing the details of the transaction.



### Offline Sink, Online Float



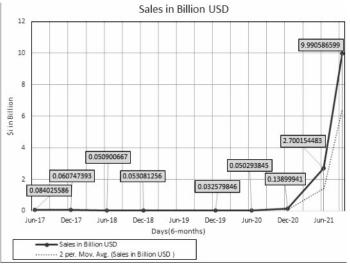
A 22 per cent fall in the offline art market pushed the sales down from \$64.4 billion in 2019 to \$50.1 billion in 2020. To survive, art dealers ramped up their IT spending rapidly. Gallery expenditures were being journaled as Online Viewing Room expenditure. Expenses on art fairs decreased in accounting, from 26 per cent of galleries' overall costs in 2019 to 16 per cent in 2020. Looking at the figures, online sales have more than doubled, showcasing sales worth \$12.9 billion in 2020, having increased from \$6 billion in 2019, thus, indicating a 16 per cent to 25 per cent.

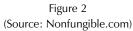
### Analysis of Revenue from Sales (see Figure 2)

A remarkable epitome of this change is the transmogrification of the contemporary art forms into the crypto art market. This surging market comprises digital artworks, which are authenticated and converted into Non-Fungible Tokens (NFTs) - unique identification assets stored in blockchains.

From just \$13.7 million in the first half of 2020, NFTs

have witnessed overwhelming sales of \$2.5 billion in the first half of 2021, elucidating that the digitalization of the industry is veritably perpetual.





The buyers of NFTs are more than double the number of sellers, thus illustrating a salient imbalance. The fact that 53,198 buyers were reported as compared to the 18,429 sellers, is indicative of the major interest in the fresh NFTs being listed by upcoming entrants. This asymmetry is also a depiction of the current holders, who are unwilling to get rid of the holdings, thus generating scarcity in the market.

### THE SHIFT FROM MATERIAL TO DIGITAL AUCTIONS

### **Comparative Growth of NFTs**

The digitalization of art has started to cast a shadow on the traditional products showcased at auction houses. Contrasting between the highest-priced works of NFT and non-NFT, the latter seems to be gradually catching up. The highly disputed work of Leonardo Da Vinci, 'Salvator Mundi', is the most exorbitant painting ever sold in the history of auctions, at a price of \$450 million in 2017. Whereas, the highest-selling NFT, i.e., 'The First 5000 Days', created by a recognized digital artist, Beeple, was recently sold for \$69 million. Taking only a few months to reach such volumes of sales, auction houses have started to accept the convention of NFTs, owing to its expected burgeoning future.

### Volume of Sales

The exchange volume of NFTs has skyrocketed in the year 2021, with even popular celebrities hopping on the bandwagon. As of September 2021, the average number of NFTs sold (both primary and secondary) shot up to 94,500 (see Figure 3) over 30 days. With a proliferation of approximately 300 per cent in six months, the propagation of NFTs is yet to reach its peak in the international market.

The inception of NFTs at major auction houses like Christie's and Sotheby's has jump-started the evolution of the industry. The primary ace up the sleeve of crypto art is a smart contract, which allows

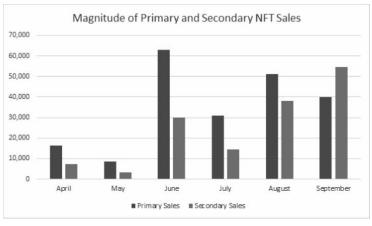


Figure 3 (Source: Statista, 2021)

the abolition of duplication and forgery of both historic and contemporary pieces, thus giving the exclusive art collectors a sense of premiere ownership of the product. Along with the duplication predicament, the focus is equally highlighted upon upcoming artists instead of just commercializing the established ones.

### VALUATION AND OPERATION

The primary foundation of collecting and buying art used to be influenced by the world of marketable

renaissance artists. This historic factor has been replaced by a much more social factor. With time, art has become a representation of the recent past and future societal matters. Hence, the seller has also evolved the valuation techniques.

### **Factors Impacting Valuation**

The dealers' pricing procedures and programmes are very different while pedalling in NFTs. The four key principles evaluating the value of an NFT are mainly categorized as - the Utility of the NFT, History of Proprietorship, Future Projection of the NFT Value, and the Liquidity Premium. These four factors determine the value that is to be listed on the market for the initial disbursement.

The 'utility factor' is the capitalization of the NFTs in the market. The alternative usage of just one NFT counts for utilization. An NFT is held by a sole proprietor at one point in time. However, the ownership can easily be transferred with a new NFT entry into the ledger. Hence, 'historic ownership' plays a key role in value settling and demand generation. Valuation is highly driven by the 'projected cash flows'. Speculation is a mere but trivial part of human nature, driving future prices in the forward market. As a digital asset, it is needless to say that NFTs are prone to similar market driving forces as any regular financial product. A higher 'liquidity premium' immediately indicates a higher

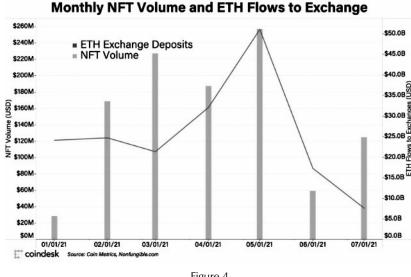


Figure 4 (Sources: Coin Metrics; Nonfungible.com)

valuation of the NFT. NFTs having a larger trade volume are eyed more by investors, which in turn, makes them stellar and speculative in nature.

### **Fundamental Operation**

Breaking down the operative process of an NFT, the digital asset has an extremely complicated, yet intelligible mechanism. Having each NFT listed as a unique asset on the cryptocurrency blockchain, ownership remains exclusive with a recording of the transaction on the blockchain ledger. Majorly associated with the Ethereum blockchain, the use of smart contracts facilitates the exclusive and unique ownership rights of the tokens. Smart contracts, a state-of-the-art feature, are considered to be the most powerful attribute that makes Ethereum the leading cryptocurrency that is exchanged while dealing with NFTs (see Figure 4).

### SUSTAINABILITY

Is this the future of the art industry, or just another bubble?

### FACETS OF THE NFT MARKETSPACE

**1. Collectors versus Speculators:** The development of smart contracts has demonstrated these

contracts as catalysts in the bubblelike secondary market in NFT marketplaces like Opensea and Rarible, in the first half of 2021, where speculators had recorded peak volatility in the secondary market (in terms of liquidity). The collectors are rather resistant and rightly so - they believe that this surge is temporary, the CryptoArt Market is a bubble, it is a speculator-driven market, and that the true authenticity of owning a collectible lies in scarce availability. To keep the industry breathing, maintaining a balance between both is paramount.

- 2. Price Indetermination and Copyright Issues: Determinants for the surging prices are highly obscure. At this stage, the market space is too nascent to be correctly valued. Correlating this to the 'dot-com' bubble back in the 2000s, once the 'weeding out' effect filters the trend, the refined value-based companies will determine the correct valuation. A buyer must conduct thorough research before investing, otherwise, they might end up facing serious Intellectual Property Rights charges. Renowned photography platforms, like Deviant Art, are being used by fraudsters to steal and tokenize some of these images and sell them on NFT market spaces.
- 3. Employment Generation: From communityowned NFT trading houses like Rarible to awardwinning start-ups like Veristat, which authenticate and certify digital assets, a plethora of start-ups have emerged in the industry, illustrating indispensable growth. Opening streams of participation, the NFT marketspace has created employment for unknown artists. The unique feature of granting the original artist a commission every time an NFT is resold has also been applauded by many. Viewing NFTs as a valuable investment prospect, a major percentage of the speculators and collectors are millennials, indicating the acquaintance of the demographic with the sector, thus depicting the longevity of the industry.

According to a survey done by Art Basel, most dealers and collectors were extremely affirmative about the impact of NFTs, as it has had a magnifying effect on gathering attention from people of different age groups, who have an interest in art and collectibles among a wider ambit of collectors. However, with the advent of a new technology that demonstrates a steep change in the scenario of an entire industry, comes expectations, speculations, experimentations, and a few scams. Generating real use-value for buyers, sellers, auction houses, art galleries, dealers; spawning employment, attracting millennials, and enhancing the blockchain technology, NFTs are judiciously estimated to persist in the art finance environment, with growing demand and growth of modern art. Deemed to be the dealers of the future, it can be said that even after the weeding out of the hype, NFTs are here to stay.

### REFERENCES

- Art Market Mid-Year Review, 2021: https://d2u3kfwd 92fzu7.cloudfront.net/The\_Art\_Market\_Mid\_Year\_Review \_2021.pdf
- 2. Collectors Art Market Report, 2019: https://www.artsy.net/ article/artsy-editorial-collectors-art-market-2021-report
- 3. Economic Times: https://economictimes.indiatimes.com/ magazines/panache/the-worlds-priciest-painting-salvatormundi-may-be-a-leonardo-da-vinci-afterall/articleshow/82047189.cms?from=mdr
- 4. New York Times: https://www.nytimes.com/2021/02/24/ arts/design/christies-beeple-nft.html
- 5. Reuters: https://www.reuters.com/technology/nft-sales-volume-surges-25-bln-2021-first-half-2021-07-05/
- 6. Statista: https://www.statista.com/statistics/1235228/nft-art-monthly-sales-volume/



# (11

There are two major factors that have the most influence over consumer behaviour; the explicit factor quality, and the implicit factor -

price.

# An Overview of Consumer Behaviour towards Casual-Dine Restaurants and its Influencing Factors

Soham Chakraborty Department of Commerce (Morning)

### ABSTRACT

There are various factors that would influence the decision of a customer to not only choose to spend their money at a restaurant once, but also to keep spending their money, thus converting into a repeat customer. In this study, factors like the price of the food, quantity of the food, quality of the food, ambience of the restaurant and staff behaviour have been taken into account. By and large, these are the five main factors that help a customer form his/her decision to spend money in a restaurant. This study will illustrate the extent to which these factors influence the same. The study will also illustrate various behavioural traits of consumers, including the changes during the pandemic.

**KEYWORDS:** Restaurant, Price, Quality, Ambience, Spending, Consumer, Behaviour.

### INTRODUCTION

This study was conducted to understand the factors that affect consumer decisions with respect to Casual-Dine restaurants. Here, three restaurants are also taken into account, whose data will be used in order to further determine and illustrate the factors. For the sake of convenience, they will be called a 'business entity', when referred to as a collective in this paper. In order to avoid skewed results, all data in this study, apart from the consumer

data, is of FY 2019-20, unless otherwise mentioned. Inclusion of data related to FY 2020-21 will reflect abnormal inferences due to the COVID-19 pandemic. The restaurants in question were already achieving pre-COVID level of sales in Q1 of 2021. Further, after the second wave has passed and a vaccination drive is in effect, 70 per cent of pre-COVID level of sales are being achieved, and thus, the pandemic can be classified as an anomaly in the long run. In order to completely understand the data and its inferences, differences between types of eateries have to be known:

### **RESEARCH OBJECTIVES**

The primary objectives of this paper are:

- To gain an insight on the behavioural trends of consumers and their influencing factors towards Casual-Dine Restaurants.
- To map the spending pattern of consumers in relation to their occupation.
- To infer the effect of digitalization of services of restaurants on the consumers.

Basis	Fine-Dine	Casual-Dine	QSR
Price	High	Moderate	Low
Ambience	Posh	Laid-Back	Bare Minimum
Target Audience	Upper Class	Middle Class and Students	Millennials and Gen Z
Service Speed	Maximum Time	Moderate Time	Minimal Time
Examples	Mainland China	Chowman	KFC

### RESEARCH METHODOLOGY

This paper makes use of two kinds of data primary and secondary data. Primary data related to consumer behaviour is sourced through the usage of a

 Table 1: Differences Between Types of Eateries

### LITERATURE REVIEW AND RESEARCH GAP

According to Parsa et al., 2012, customers in both upscale and quick service restaurants are willing to spend more if the restaurants' resources are focused on attributes that are appropriate for that segment.

It has to be noted that the above conclusion is in relation to Fine-Dine and Quick Service Restaurants (QSR). There are virtually no research papers specifically on this topic. There are various papers on consumer behaviour towards restaurants in U.S./UK and consumer behaviour towards QSRs in India. However, there are no papers that have Casual-Dine Restaurants as the research topic. We cannot equate the consumer behaviour of Indians with that of westerners as the differences in taste, cuisine and expectations are such that they cannot be reconciled. Further, observations made in papers related to Fine-Dine Restaurants and QSRs would majorly be inapplicable in the context of Casual-Dine Restaurants, as there are stark differences in what a consumer expects from each of them, along with them having completely different target audiences.

questionnaire, and the responses to each question are analyzed to provide a conclusive inference. Primary data, called 'restaurant data', is procured from the audited financial statements of the restaurants.

The number of respondents of the consumer (primary) data is 200, and all age groups and occupations are equitably represented. Convenience sampling has been used for the consumer data, in accordance with the business entity's target audience. Further, the data collected is solely applicable in the context of Casual-Dine Restaurants, as the respondents were made adequately aware of the same.

Secondary data retrieved from the staff and management of the business entity have also been used. Hence, observation research has also been employed.

All the data collected is used to draw conclusions and also provide either data-centric or observational bases for those conclusions.

#### LIMITATIONS OF THE STUDY

The researcher has tried to mitigate the limitations as far as possible by the usage of secondary data. However, for the sake of disclosure, the following are the primary limitations of the study:

The number of respondents is 200. Compared to the number of people frequenting Casual-Dine restaurants, the sample size is quite small.

Data of FY 2020-21 is ignored, since it would not reflect true and normal consumer behaviour because of the COVID-19 pandemic.

Primary data on 'Effect of Digitalization' is somewhat skewed, due to its collection during the COVID-19 pandemic, wherein use of digital media was at an all-time high.

#### DATA COLLECTION AND ANALYSIS

This section will include the responses to the questionnaire. The insights of the senior management of the business entity have helped in a better understanding of the consumer data. However, inferences on the analysis of data have been made independently.

#### Frequency of Eating from a Restaurant:

The collected data indicates that most respondents are willing to eat from a Casual-Dine restaurant on a weekly basis. Taking in inputs from the management, the data appropriately reflects the behaviour of their consumers. Most customers visit the restaurants on a weekly basis, mostly on Friday nights and weekends. Further, the composition of the customers is:

- Daily: Very rarely does a customer dine out on a regular basis.
- Fortnightly and Once a Month: Joint families, working professionals and young businesspersons.
- Weekly: Student groups, nuclear families and couples.

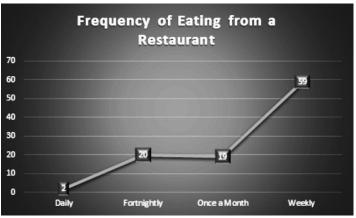


Figure 1: Frequency of Eating from a Restaurant (Source: Primary Data)

#### Amount Spent in a Month:

Restaurant data indicates that the average per order sale is 826. Since most respondents order weekly, the average amount collected by the restaurant would be 3,304 (826 x 4 weeks). This figure concurs with the figures extracted from the consumer data, which show that the maximum percentage of respondents spend between 2,000 and 3,000 in a month. The variance of 304 is due to certain factors like increase in spending during festive seasons, customers falling outside the bracket of 2,000 to 3,000, and overperformance of the business entity.



Figure 2: Amount Spent in a Month (Source: Primary Data)

#### **Preferred Time of Respondents:**

The consumer data here concurs with the restaurant data wherein the maximum volume of sales takes place

FEATURE

during dinner. Unsurprisingly, dinner is the preferred option, since that is the time frame post the traditional nine-to-five office timings. Further, there is also a rush during lunch in the hotter months of May and June. This is because salaried employees tend to rush to A.C. restaurants in order to beat the midday heat. Since this visit is unplanned by the customer, the bill amount is less than the average, but the restaurants' collection increases due to the volume of customers. It is to be noted that 'Breakfast' has received no response. This is because people either prefer eating breakfast in places that exclusively serve breakfast food or skip breakfast and take an early lunch - brunch.

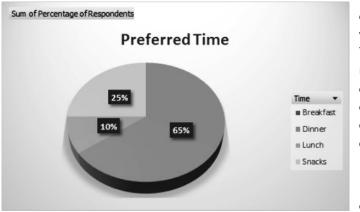


Figure 3: Preferred Time of Respondents (Source: Primary Data)

#### Preferred Cuisine of the Respondents:

Consumer data reflects that Indian cuisine is the most preferred with Chinese and Continental equally

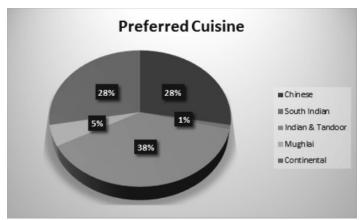


Figure 4: Preferred Cuisine of Respondents (Source: Primary Data)

preferred. The business entity's data also concurs. With the popularity of eateries like Arsalan and Aminia, it is shocking to see that only 5 per cent of the respondents preferred Mughlai. However, this can be satisfactorily justified by the business unit's management. In Mughlai, consumers majorly prefer one dish, Biryani. The reason is that it in itself, is a complete dish. The consumers get rice, meat and egg for a fixed price, and are assured that they will be satiated. Since Biryani takes an extremely long time to cook, restaurants offering multiple cuisines often cook or half-cook the Biryani in the morning and dispatch it throughout the day. However, the aforementioned eateries specialize in

Biryani and run as 'One-Dish Restaurants'. This ensures that the main item on their menu, Biryani, would be a constant item in every customer order. This enables them to keep preparing Biryani on a roll-over basis, assuring that it will be sold out in the day itself and hence, enabling them to provide the customers with relatively fresh Biryani. As a result, customers deciding to eat Biryani choose such eateries over Multi-Cuisine Casual-Dine Restaurants.

It is also observed that Indian and Chinese are ordered by larger groups, while Continental is ordered by smaller groups, irrespective of the customers' age. This behaviour can be attributed to the very nature of the cuisines; Indian and Chinese

are easy to divide among people, while it is extremely difficult to equitably divide Continental in a group.

### SPENDING PATTERN IN RELATION TO OCCUPATION

### Spending Pattern of Self-Employed Respondents:

The data here indicates the spending pattern of respondents who are 'self-employed'. There are three blocks:

• ₹0 to ₹1,000 - Low earning freelancers, new businesspersons and businesspersons with low profits.

- ₹ 2,000 to ₹ 3,000 Decent earning freelancers and established businesspersons earning decent profits.
- ₹ 5,000 and above People earning high profits.

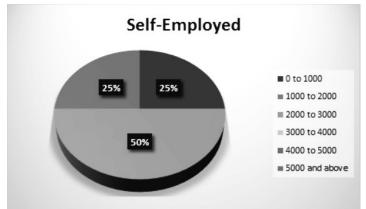


Figure 5: Spending Pattern of Self-Employed Respondents (Source: Primary Data)

Alternatively, this also exhibits the mindset of selfemployed people; conservative, moderate and liberal.

#### Spending Pattern of Salaried Employees:

The data here reflects that the upper limit of spending is ₹ 3,000, with the majority of the respondents spending in the bracket of ₹ 2,000-₹ 3,000. With respect to the business entity, most salaried employees are part of nuclear families and as such, they frequently visit the restaurants on a weekly or fortnightly basis, on weekends. The lack of respondents in the higher brackets indicates that newly placed employees and



Figure 6: Spending Pattern of Salaried Employees (Source: Primary Data)

employees with a mid-range salary frequently visit Casual-Dine Restaurants the most.

#### Spending Pattern of Unemployed Respondents:

On analyzing the data, it becomes evident that when unemployed, consumers are almost always supported by an earning member in the family. Objectively speaking, a family with a sole earning member who is now unemployed, would not be spending even the bare minimum on things other than necessities, much less on restaurants. Therefore, by process of elimination, and taking into account the demographics of the city, we can state that the respondents are either recent graduates or housewives. The spending pattern can be explained as:

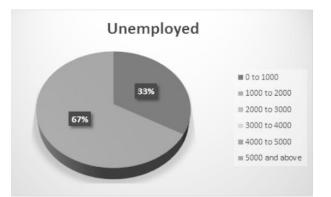


Figure 7: Spending Pattern of Unemployed Respondents (Source: Primary Data)

• ₹0 to ₹1,000 - Recent graduates who are cash strapped and housewives from conservative households.

₹4,000 to ₹5,000 - Recent graduates who have an abundance of cash and housewives from liberal households.

#### Spending Pattern of Student Respondents:

Given the fact that students are the most experimentative, it is expected that their spending pattern will be diverse. Almost 90 per cent of the respondents stay below the limit of ₹5,000, which exhibits their tendency of not spending an exorbitant amount of money in

Casual-Dine Restaurants. Interestingly, however, significant percentages of the respondents spend above ₹2,000 a month, which indicates that they are not only well financed by their families, but have active social lives. Restaurant data concurs with the above point, indicating that the frequency of students visiting the business entity exceeds the quantity of food ordered. Further, when the quantity of the food ordered is high, the students are usually in a group, which results in a low per-student bill contribution.

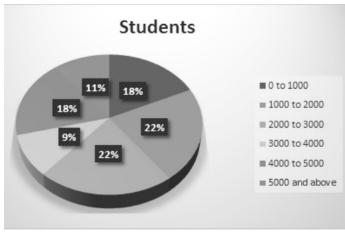


Figure 8: Spending Pattern of Student Respondents (Source: Primary Data)

### MAJOR FACTORS AFFECTING CONSUMER DECISIONS

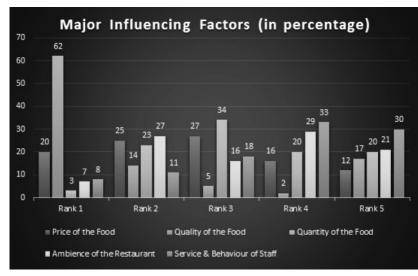


Figure 9: Major Factors Influencing Consumer Decisions (Source: Primary Data)

According to consumer data, the quality of food is the most important factor by far. It was expected that the price of food would also be among the top contenders in Rank 1, but the degree to which consumers prefer quality over price is extreme.

There is very little difference between price, ambience and quantity in Rank 2. This implies that once the basic demand of quality is fulfilled:

- 1. consumers either want the price to be reasonable, or
- 2. want the ambience to be welcoming, or
- 3. want the quantity of the food to justify the higher price, since these respondents would have placed price after Rank 2.

In Rank 3, the quantity takes a clear lead. It implies that unless you're serving gourmet food, customers expect a certain quantity of food which would not only justify the price, but also satiate them.

In Ranks 4 and 5, the service and behaviour of the staff come into effect, indicating that after all the baser needs are met, the majority of the consumers give importance to how well they're taken care of by the staff and how politely their issues are dealt

with. Being in the lower ranks, it also shows that customers are willing to wait for a longer period of time for their food, if the food itself makes up for it.

If the data is analyzed on a macro level, it can be understood that price holds a considerable percentage in the higher ranks, even though it is not outrightly the majority in any. Combined with the business unit's observations, it can be inferred that price acts as an implicit factor rather than an explicit one. Consumers of Casual-Dine restaurants, even though they might not actively pay attention to price, do subconsciously keep a track of it. This argument can be further strengthened by referring to Figure 2. Figure 2 shows that the cumulative majority of the customers spend between ₹ 1,000 and ₹3,000 a month, a fairly conservative range by all standards, which does not reconcile with the data in Figure 9. Further, with reference to the section on the 'Type of Menu Card' in this project, a major reason given by customers to prefer physical menu cards is being able to see and compare the prices more easily. Theoretically speaking, as depicted by Figure 9, if price was a factor that consumers did not actively think was as important as quality, ambience, et al., the total amount spent in a month would be much higher.

Hence, we can say that there are two major factors that have the most influence over consumer behaviour; the explicit factor - quality, and the implicit factor - price.

#### EFFECT OF DIGITALIZATION

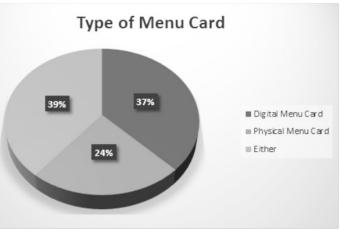
#### Types of Menu Card:

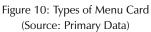
Consumer data indicates that some customers prefer digital menu cards over physical menu cards, with the majority being indifferent to the type of menu card provided. However, restaurant data indicates otherwise, i.e., customers heavily prefer physical menu cards. Further, on being offered digital menu cards, customers still tended to make the conscious and deliberate choice of choosing the physical one.

The variance in the consumer data can be attributed to its collection during the COVID-19 pandemic. Subconsciously, respondents might have chosen digital menu cards, given the prevalent media environment.

The restaurant concurs with this analysis. According to them, for a very brief period, customers enquired about digital menu cards, but that quickly died away and most customers preferred physical menu cards, for a number of reasons, the main ones being:

- 1. Ability to glance at all the prices quickly.
- 2. Ability to read more text with one glance.
- 3. Larger text on the menu card than on their phones.
- 4. The physical feel of a menu card in their hands.
- 5. The 'annoying' act of swiping and scrolling on the phone when deciding the order.





#### Mode of Consumption:

The consumer data shows that both the options are almost equally subscribed for. The high percentage of respondents opting for the 'Ordering Online' option shows that customers are no longer solely dependent on going out to a restaurant to eat such food. The rise of online food delivery apps, coupled with the discounts provided by them in order to gain market share from their rival apps, have enabled customers to make this switch. However, this data is somewhat overstated since most restaurants, other than ghost or cloud kitchens, do not clock anywhere near 40 per cent in online sales. Further, the data was collected during the COVID-19 period, when there was an unnatural rise in online orders. However, since offline orders fell, this rise in online orders was simply the replacement and not a trend. This inference is backed by the fact that restaurants across the country clocked in an abnormal number of customers visiting their premises when the lockdown was lifted during festivities. In general, customers go out to restaurants for a change of scenery, the ambience, and to avoid the hassle of cleaning up afterward.

Looking at the business entity's data, we see online orders accounting for 15 per cent of the total sales. Even after considering the skewness of the consumer data, it is clear that the business entity is underperforming in online sales. The entity should take relevant steps in order to promote their presence on online delivery apps.

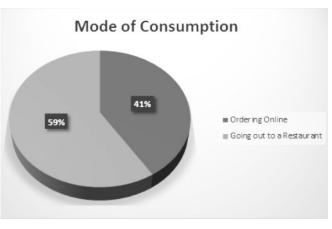


Figure 11: Mode of Consumption (Source: Primary Data)

#### CONCLUSION

Given the findings of the project, the researcher draws the following conclusions:

• The business entity should allocate a budget towards online marketing in order to build an online presence. Social Media Marketing should be done in an integrated manner wherein all the three units are represented. This would help establish a consolidated brand.

- Consumers are sensitive towards the topic of price, but it is still one of the most important factors.
- With respect to the digitization of services, consumers are temporarily swayed towards gimmicks/fads which might not be long-lasting and wear out soon.
- Consumers tend to dine out in festivals even if that means longer waiting lines and a drop in food quality due to pressure on restaurants.
- Consumers prefer a decent ambience that makes them feel comfortable but does not make them feel out of place.
- The occupation of the consumer makes a drastic impact on the amount spent when compared to age.
- There are two major factors that have the most influence over consumer behaviour; the explicit factor quality, and the implicit factor price.



# MR. ABHINAV BINDRA

Olympic Gold Medalist and Businessman

Taken by the Editorial Board

- YT: You spent a lot of the formative months of your career training in Germany, living alone and testing your wits against some of the best shooters in the world. What was the reason behind the same? Do you think that the athletes who train abroad turn out to be more proficient because of the exposure they receive?
- A lot of expertise and the technology I received AB: access to was, and still is, relatively unheard of in India. I was fortunate enough to travel to Germany and the USA to hone my skills. While I know that many things played a part in my success both in India and abroad, the time I spent training and utilizing the Global Best Practices did give a new facet to my training. Through the Abhinav Bindra Foundation Trust, I have championed the cause of providing accessibility, affordability and availability of such Global Best Practices to the Indian grassroots athletes. These are facets of training that enhance an athlete's performance and help them get that one per cent edge over others which can be the difference during elite competitions.
- YT: There are instances in which an athlete's performance is affected due to certain factors that are beyond their control. This happened to you when the unstable wooden flooring had cost you a medal in Athens in 2004. How did you cope with this incident, where your hard work was denied fruition by reasons beyond your control?
- The 2004 Athens Olympics was an extremely AB: low point for me. I had a very disappointing score in the finals after what I believe was the best I had ever shot. I found out later that the tile under me at the arena was loose, which can have a serious impact in a sport that requires complete accuracy. I was extremely upset and even considered quitting the sport. However, after a lot of introspection, I decided to train even harder and moulded myself to be perfect on an imperfect day. I wanted to be prepared for every possibility and did not want to leave anything to chance. I trained after that with a loose tile in my range, I even booked a marriage hall and designed it as an arena to give myself a better feel for the final competition. The most important thing I learnt along the way is that nothing

matters more than honesty to the work that you do, and ensuring that you have done everything you could to succeed. The process is all that matters and following it without worrying about external factors is what helped me get better as an athlete as well as a person.

- YT: In the year 2005, you suffered from a prolonged injury because of which you had to stop practicing for almost a year. How did you ensure that you maintained positivity and that you didn't go out of practice during that time? How difficult was it for you to make a comeback after recovery?
- AB: Physically, it was tough, yes. Coming back from an injury is never easy, since you have to realign every movement and it takes time to get back to full throttle. But my mind had recovered from the disaster of Athens 2004. The thought of redemption drove me and even though my back was in constant agony, I decided to not go for surgery, instead opting for intense rehabilitation in Germany. The pain did reduce me to tears sometimes, it was unforgiving but I did everything I could, spending five to six hours a day with a physio, trying to balance and strengthen my muscles, and alternating between exercise and therapy. It was draining but I learnt to dig deep, which is a very important lesson for any champion. As a professional athlete, you have to sometimes live with injuries and that means missing training. I too coped with it.
- YT: In shooting, even the slightest of errors can affect the results of the sport significantly. In addition to this, there is an immense pressure that follows in representing your country at the international stage. How did you remain calm and maintain precision under such circumstances?
- AB: It is very important to immerse yourself in the process and only worry about things that are under your control. It is obviously not as easy as it

sounds and some people are able to do it much earlier while others, like me, take time. Accepting the pressure of competing so that you can use your mind and energy on other things is the first step. The pressure can then drive you forward rather than hold you back. Once you accept pressure, it helps you perform better and gives you that little bit of edge to do your best.

- YT: Many athletes, including you, have stressed on the importance of sports psychologists in India. Do you think that athletes, who focus on fitness and health considerably, being vocal about it can contribute immensely towards destigmatizing mental illness? With the aspirations and effort involved in striving for success, what are the issues that athletes sometimes face in regard to mental health and what, according to you, can be done to help those who experience this?
- I would recommend that as a first step, we need AB: to understand that athletes are not superhumans. They are like any other person they feel overwhelmed, face the sadness of rejection heavily and are prone to a variety of competition related stress. This is the mindset that sets the foundation for becoming advocates of athlete mental health. Whether it is a simple affirmation, a friendly chat, or just simply being there, each of these small gestures help build trust and a comfort level that will help an athlete open up to you, just like anyone else. It is important to make an athlete aware of what they are facing as well, many may be oblivious to why they feel the way they do. Grounding them in their strengths, and encouraging them to work on their weaknesses is an important and integral part. Moreover, we need to make them aware that winning and losing is not the measure of their success. Winning medals is great but it is not everything and it should not be the only aim in your life. These conversations may seem rather insignificant in a vacuum, but these are the building blocks to help athletes through dark

times, reduce the stigma associated with mental health, and even find a way to see this permeate into the society that we live in.

- YT: Having obtained a Bachelor's Degree in Business Administration from the University of Colorado, you have not only performed exceptionally well in sports but also in academics. What advice would you like to give to young athletes, who, considering the time and effort that is required in this field, choose to drop out of education to focus on fulfilling their dream? What, according to you, can be done to ensure that these aspiring athletes from all around the country have access to education?
- AB: Education is extremely important for an athlete, considering they do not really have another option to fall back upon in case things do not work out in professional sport. Additionally, after retiring from sport at a relatively young age of say 40, most athletes do not have any other career option and are entirely dependent on the pension they receive. Of course, some might not find it easy to balance both but it makes practical sense to pursue both in some form at least. What can also be done is to opt for courses that will help them in the sporting ecosystem, something they are already passionate about. That is what we have been trying to do through the Abhinav Bindra Sports Medicine and Research Institute, which is a one of its kind institutes bridging the gap between Indian healthcare and the sporting ecosystem. Currently, there are bachelors and masters level programmes with an aim to achieve excellence by bringing Global Best Practices to Indian healthcare and sports medicine.
- YT: A key initiative for your outreach to Indian sports is through the Abhinav Bindra Foundation, a non-profit initiative where athletes are provided access to the latest

sports technology and physical training for free. Considering your significant contribution in this field, what in your opinion is it that we lack in terms of technology and what can the government do in this regard to provide a boost to the sportspersons of the country?

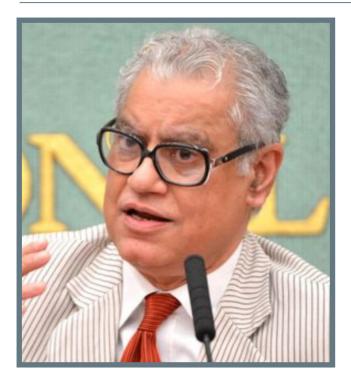
- There is no doubt that champions have to be AB: built through systems and processes; governments and sports authorities have a huge role to play in helping build those systems. The technological advancements in the sporting ecosystem are the need of the hour and it is imperative that we as a sporting nation stay at par with the Global Best Practices, if we want to keep building on our success in the Tokyo Olympics and Paralympics 2020. Look at the example of Odisha, the infrastructure they have implemented in partnership with various stakeholders to assist athletes through various High-Performance Centers. They did not achieve this overnight, instead they identified the need to build from the grassroots through state-wide talent identification programmes, and are now reaping the rewards with numerous athletes bringing glory to the state and the nation.
- YT: In your autobiography, 'A Shot at History: My Obsessive Journey to Olympic Gold', you have mentioned that the sports with significant commercial advantage are prioritized over other sports as they are held more frequently and thus, provide the sportsperson with innumerable opportunities to prove themselves. Considering this situation, do you think that the Olympics should be held more frequently so as to give athletes more opportunities? Also, what can be done to ensure that these sports receive the required support from the administrators?
- AB: Comparing the Olympics with commercial sport is not fair since it is a stage which comprises many

sports and different categories of events under those sports. For example, the Tokyo Olympics 2020 had athletes from 50 sporting disciplines competing in 339 different events. Some of those sports like badminton or tennis or football are more commercially viable than other sports. That is because their sporting federations or authorities have built a strong structure with relevant tournaments attracting audiences and viewers. All landmark sporting events are held after every four years. An alternative solution is to promote the less popular sports and make them more accessible and less niche. Neeraj Chopra won a Gold in javelin throw, but how popular is his sport compared to cricket or football or basketball? So, yes, these sports require support from the administrators, require funding and definitely require a proper cycle of tournaments to bring them to the eyes of the public.

- YT: Your journey to the pinnacle of success has been a source of inspiration for millions of Indians; the students of St. Xavier's College (Autonomous), Kolkata, are no different. What message would you like to give to them?
- AB: I believe that regardless of how you choose to pursue success, as a student, an athlete, a businessman or an employee in any industry, make sure to be perseverant and always be ready

Mr. Abhinav Bindra

to learn. The landscape is changing rapidly around the world and it is yours for the taking as long as you stay dedicated and focused on what you do. More important, however, is to always look at the bigger picture. It is a cliche but also the most important truth that everyone should accept - failure is not a setback. Failure, in fact, is a crucial step to success. You are bound to fall short sometimes even though you worked immensely hard for something. It is completely okay. Learn from it, reassess and restart. For example, only a minuscule percentage of the athletes win medals in the Olympic Games. That does not mean the majority of us are failures and should stop trying. Believe in the process, give your best. That is the only controllable factor, your only success. The result will come sometimes early and sometimes, a bit later.



# MR. ANAND GROVER

Lawyer and Legal Activist

Taken by the Editorial Board

- YT: Brain drain has been a major problem for India as we have seen a large number of students pursue education abroad and eventually settle there. Having been born in Kenya and educated in England, what were your thoughts behind your move to India and what do you think can be done to address the rampant migration of personnel from India?
- AG: I had stayed in India between the time we were in Kenya and England, for various reasons, which was only from 1965 to 1966. After that, we left for England. I came back to India later because I felt that I should do something useful for the country and try to change the situation for the betterment of the people here. I had this vision because there is a lot of poverty and a lot of difficulties for the ordinary people here, in terms of the rights of women, rights of the lower caste, worker, et al. Therefore, I thought that I would be able to do much better in India than in England.

I think the reason for brain drain is partly the lack of opportunities of employment in India, along with the lure of a better lifestyle, for which nobody can be blamed. I don't think anyone can be castigated for wishing to and yearning to have a better lifestyle, whether they be from the rich or the poor. But I think that an important educational element in our country should involve inculcating the idea of service within people. Certain lawyers whom we see on television earn a lot of money; in fact, most lawyers do. But a lot of my work is free and I am happy with that. I feel that I do a lot of service that helps people, and that the attitude of service and actually giving to the people is something that has to be inculcated among students and the society at large. Moreover, I have been a teacher for a really long time and have even done a diploma in education in England. I started teaching in a school when I came back to India because that is what I wanted. Infact, I got a call from NLU Odisha asking me to teach there and I accepted, without even thinking about the money, because I want students to learn from what I have experienced. I also teach at Georgetown in Washington every year. While the money they pay is a lot by Indian standards, they value the quality of work a lot, which enforces a system that I think is good, both for marks and merit.

Therefore, I think that brain drain is an effect of the lack of opportunities of employment. We need to ensure that employment opportunities are available, which is, unfortunately, dependent on the government and the economic model it adopts. As we have seen during COVID, the lockdown had a devastating impact on many industries. For example, 30 per cent of the hotel industry has been completely closed down. On the other hand, in other countries, they are putting in a lot of money to make sure that there is a revival. So, people cannot be blamed for brain drain. Either money, or some sort of other value system, has to be converted into an opportunity.

To add on to all this, there is also a huge issue of bureaucracy in India that people have to fear. A lot of people want to come back to India, but where do they work if they want to do something good? They do not have many opportunities, which is something that needs to be provided to them. Anybody who is prepared to help, should be welcomed.

- YT: Picking on your idea that there is nothing wrong with expecting a good standard of living, a lot of people migrate towards the field of corporate law because it provides a lucrative career path. What made you choose to serve the society through human rights activism and human rights law over the monetary path?
- AG: When I was a student in England, I was an activist as well as the Deputy President of the student's union at the University of Surrey. For me, working for corporations was not very attractive. In fact, a lot of my friends who went into the corporate world do not want to do that work anymore because they do not get the same work satisfaction. Moreover, a lot of corporate lawyers now want to do Public Interest Litigation so that they can be seen helping the poor.

It is difficult to only do public interest work, except for some very rich people who have wealth in their families. But for me, it was necessary to combine both commercial and public work. In fact, I believe that if one wants to be a lawyer, one needs to do commercial work as well in order to actually gain considerable experience in the field. Doing work in the public interest for free and providing legal aid to people who are poor gives me a lot of satisfaction. When we had set up the Lawyers' Collective to make sure that there are people who can do good work, we were attacked for the issues we took up, but we were prepared to face those attacks. Even if government agencies come after us, we are prepared to stand up for who we are.

When it comes to activism, you cannot let yourself down or let your work be squandered just because people think otherwise. People are pushed by their own morals. We did a lot of social work from 1981 to 1998, when we received funding, and we continue to do such work even today, even when we do not have funds. The HIV-AIDS unit, with me as its Director, drafted the HIV Bill and got it through. Moreover, Indira Jaising was the Director of the Women's Right Initiative, and they got a very important domestic violence law passed in the parliament. We even went ahead to subsidize a lot of free work that is done for people. Even today, I still donate what I earn to a lot of charitable organizations even though I do not earn as much as other lawyers do. I think that lawyers in my position are quite comfortable as compared to others, but I do not have any complaints about not earning money from other work. I am quite happy and I love my job so much that I can spend 24 hours on it and enjoy it. Besides, I have ways of balancing work with other things.

- YT: On the 11th of December, 2013, the Supreme Court ruled against decriminalizing homosexual activity, a case in which you had been at the forefront for many years. How did you deal with such a huge setback?
- AG: I believe that if justice is on your side, you have to fight and you will not lose. After having to go through a lot of difficulties, you will win eventually. On the day of that judgement itself, I decided that we would file a review petition, a curative petition, and that we would keep the fire burning, which is exactly what happened.

I was there when we filed the petition in 2001; it was me and my colleagues' idea in the Lawyers' Collective to file this petition against Article 377 in the Delhi High Court through the Naz Foundation. I had come to the conclusion that Article 377 was a sin and was used to blackmail the LGBTQ+ community. When we took up this case, we consciously used the way the media was playing out the whole thing in order to break down the stigma against same-sex relationships. Moreover, India, in the early ancient period, did not have this sort of prejudice. It was only with the colonization by the British and the law imposed by them in 1871, that this practice came into being. We had a completely different history and culture but unfortunately, we imbibed British culture through Article 377. So, even with what happened on 11th December 2013, I knew that we were on the right side. I wrote multiple articles in the press at that time and gave innumerable reasons as to why the judgement of the Supreme Court was wrong. I used all the criticism on my command because it was, morally and ethically, a wrong judgement.

- YT: You have been working to promote the right to physical and mental health with the United Nations Human Rights Council. In your opinion, what steps can be undertaken to address the epidemic of mental health issues, especially amongst the student community?
- AG: Mental health issues affect everyone in their life at some point or the other. It is just like any other ailment and I have been through it as well. So, we should actually accept it as a part of our normal life. When one feels distressed because of some reason and cannot deal with it, they need friends, family and peers to support them. So, the job of friends and family is to say that we are there for you, you can come out of it. All that's required is the necessary support.

At a later stage, one might also need medical help. Due to the exorbitant costs, only rich people can go to a psychologist or psychiatrist. But what about the poor people? There's nothing available for them. A vast majority of people are under mental strain today because of COVID-19. These issues are also faced by people belonging to the LGBTQ+ because of the constant conflict that is going on in their minds from having to live two separate lives, publicly and privately. All these people who are suffering from these issues require proper counselling.

When I was a student, we had peer counsellors in our college who would help people, under the guidance of a professional counsellor. This can be implemented by anyone in whichever college they are in, so that they can help their fellow students. I think that if people, instead of talking about what they can do, go ahead and actually help out others in need, they can do anything anywhere, no matter what.

- YT: You were the Special Rapporteur of the UN on right to health from 2008-2014 and have extensive knowledge about public health systems. Is there any country whose response to the pandemic was commendable and praiseworthy? What do you feel about India's response?
- AG: There are two basic facets in the question. Firstly, I think that the general public health infrastructure has been extremely important in dealing with the pandemic, and we can see the difference between Kerala, which has a good public health care infrastructure, and other states. I will not mention them but you can see it for yourself, because Kerala has actually been investing in healthcare for nearly seven decades now. They have been able to deal with things better. Similarly, those countries that have good public health care infrastructure, public health meaning government-funded, are able to cope with things better. The difference between Maharashtra, Kerala and Bihar is so clearly evident because of the money that is spent by Kerala. The healthcare system in Kerala is so good that a lot of people from the Middle East came to be treated there with the confidence that they will be treated well. Can one mention any other state in our country which had that kind of experience? No.

Similarly, some people ran to the U.S. and England. The U.S. treated COVID very differently from their normal response. Of course, there is Obama healthcare now and the Biden administration is trying to push public health care from the primary health infrastructure to the tertiary structure, but even there, for example, they realized after the first wave that vaccines must be made available fast. They actually put in a lot of money in key purchase agreements to give the vaccine manufacturers a head start to develop and manufacture the vaccines. This made the U.S. a capitalist economy behaving like a socialist country, which is a good thing, and that is why they succeeded in getting vaccination for so many people, or in fact everybody, at least everyone I have talked to. The people in the U.S. are very happy and do not have to worry about whether they are going to get the vaccine. They just have to wait for their turn as the government is pushing the number of vaccines up as quickly as possible. And what did we do? It is very sad that firstly, we have never been able to anticipate any pandemic, including the Spanish Flu of 1918 to 1920, where India had the largest number of dead people, i.e., 18 million. When we experienced the second phase, they said that they could not anticipate the wave or its extent. But certainly, not only should they have anticipated it, but they should also have taken precautions. Everyone was saying that the pandemic was over and that COVID had been conquered with India showing the way. Everyone went to sleep except for some states. Chhattisgarh and Kerala ensured that they at least adopted the necessary measures required to tackle the next wave, which is why they did not have as big a problem as Delhi did. In Delhi, the Central Government and the State Government are fighting with each other but, in my opinion, both of them are at fault. India, in my opinion, has retrogressed. For example, we had to pay for the vaccines, but we never paid pre-purchasing prices to the Serum Institute or Bharat Biotech or any other company. Moreover, why restrict the manufacturers to only two when the entire population needs to be vaccinated? We ignored the advice of experts who told us that the second wave was coming. The state elections, Kumbh Mela, and a lot of other things led to the surge of the second wave of the pandemic. Unfortunately, a lot of people have to pay for this throughout their lives, which is a sad thing. Currently, it is better to expect the third wave than to not expect it, because it is people's lives that are being dealt with. So, I think that we have not played well, especially in the second wave and all the reasons that I have stated are what I am going to argue in the Supreme Court when the matter comes up.

Fortunately, Moderna is not insisting on the Intellectual Property Rights reckoned in the beginning. The government should pick it up and make sure that the children between the age of twelve to eighteen get it immediately, because they need to go to school. They have been out of school for a year and a half already. Their lives are being ruined in terms of mental health, which we were talking about earlier. They need to go to school and be with their friends. They need to be vaccinated.

- YT: There are a total of 43.90 million cases pending in courts at various levels in the country. This problem is coupled with the lack of judges. What is the social cost of the resultant delays in delivering the verdict?
- AG: There is indeed a lot of delay, especially in criminal cases. People are often unable to get bail, having to spend years in jail, and even if they are acquitted, there is no accountability - they do not get any compensation. The state of the system is very bad and unfortunately, work is concentrated on the High Courts and Supreme Court. All the work should, on the other hand, be concentrated on the lower courts, because there are so many cases in the High Court currently that it cannot deal with all of them. Moreover, we need judges as well as lawyers to be competent. Another problem is that adjournments in these courts are given for the asking. I have had so many problems with lawyers, but I do not take adjournments and I am extremely proud of that. There is a reason we have clocks; one needs to work properly from 10:30 A.M. to 5:00 P.M. every day, but whether it be judges or lawyers, people do not work. With people not willing to work for five hours and

adjournments being up for the asking, these delays take place. There are, however, some lawyers and judges who work hard, but that is a minority.

Besides, there are a lot of cases against the government. The government keeps on filing appeals, not concerned whether they win or lose. The lawyers are also there to make money and they continue to file these appeals. They should be put to heavy cost, but this is not happening. There are no damages that may actually deter a person from going to court for a wrong case. There are even some frivolous Public Interest Litigations (PILs) that should be dismissed with huge costs, such as ₹ 50,000 or ₹ 100,000, which is not happening. Even though there are a lot of genuine cases, we can get rid of a lot of others.

- YT: Privacy has a bearing on the lives of every individual and thus, the recognition of a fundamental right to privacy was a landmark decision. However, in today's day and age, social media applications are indispensable, but raise multiple concerns in regards to privacy. With the ongoing tussle between such companies and governments globally, what solution can be reached?
- AG: I think that rules of the Ultra Vires Act are beyond the Act and are constitutionally invalid. However, even the big companies are sometimes playing truant. Governments welcome them when they are in the governments' favour, and attack them when they go against them. There should be a proper system that should be administered impartially and transparently. But today, things do not happen like that. The law must, first of all, be constitutionally valid, fair, just and reasonable. Secondly, this should also apply for the administration procedure.

If one wants to go to the government to adjudicate, under the IT Rules, one has to first file a complaint, for which they need to have a grievance officer under the rules. After the complaint is made, an internal group adjudicates systems like videos and television systems. There are a lot of companies that appoint their own chosen person to become the judge, who plays the role of the adjudicator or the mediator. After that, the complaint goes to the government department. Why does it go to a government department? It should go to court, but it does not, which is a problem. According to us, the law does not talk of any rule like that, so why should it be made? Moreover, companies themselves do not follow the procedures of data privacy, and the major problem right now is that, despite the Puttaswamy and the Aadhar cases, there is no Data Protection Act. How many years has it been? It has been two years and the Act, still on the anvil, has not seen the light of the day. So, at the moment, all of us are doing without any data privacy or protection.

- YT: As an eminent lawyer and activist whose contributions to society are unmatched, is there any message which you would like to convey to the students of St. Xavier's College (Autonomous), Kolkata?
- AG: I think that students should look forward, with passion, to a career that they want to pursue and that complements their beliefs. They should believe in what they are doing. If they do not enjoy or believe in what they are doing, they should not do it. At the same time, if they are passionate about their work and believe in it, they should never give up their fight. Everyone meets a lot of hurdles, whether it be in their career or their personal life, but one should never give up. Everyone should have their own value system which, in my opinion, is in the constitution to a large extent. But at a personal level, I feel that this value system should have to do with treating each person with dignity and respect. My advice for the students is for them to break down their barriers and get to know each other in whatever they do, always keeping in mind the respect and dignity of the other person. One should never treat any other person with indignity.



- YT: Throughout your life, you have led different projects of national importance, be it the development of India's Pressurized Heavy Water Reactor Technology or the demonstration of the nuclear submarine power pack technology. Emphasizing on the importance of leadership in today's generation, do you have any suggestions to help the youth of today develop this skill?
- AK: The question, in my opinion, is not restricted to youth or rather the new generation. It is actually a much wider domain including the impact of the academic institutions one has been a part of and the grooming received in one's family that are vital in the formation of the various traits. Leadership is an innate skill that is to be further cultivated and honed, and must be acquired organically within one self rather than being spoon-fed. Instead of making individuals face intense pressure, we should pose a challenge to young minds and offer them the liberty to come up with their own solutions. It is critical to instill desire and support them to do so, as well as to provide or rather create a safe environment and setting in which they can develop their leadership qualities fairly. It is not an instant outcome, but rather one that develops over time. Given that today's youth is far better equipped than previous generations as a result of

## DR. ANIL KAKODKAR

### Indian Nuclear Physicist and Mechanical Engineer

Taken by the Editorial Board

their exposure to technology and new ideas, mentors must supply them with sound advice rather than holding them back. Every individual has the ability to bring out the best leader in them with the right guidance, resources and environment.

- YT: Over the years, you have held significant positions such as the Director of the Bhabha Atomic Research Centre and the Chairman of the Atomic Energy Commission, which has helped India earn significant achievements. Is there any specific incident or decision that you recall which has been the most gratifying for you?
- AK: Yes, there have been numerous instances that have been quite rewarding. The Dhruva Project began in the1970s. I was young and fortunate then to be given an opportunity to work on such an important mission. It is fairly common for people to replicate and imitate projects that have already been accomplished by others. The bigger the project, the more likely that it would be copied. This is so because, we cannot over look the risk that comes with it. When an individual is placed in a position of responsibility, he must ensure that one makes the best and most appropriate choice and puts in all efforts to succeed and not simply copy something that has

been done in the past, which is a common tendency because no one wants to be held responsible for a failure. So, when I was hired for the project, the first thing I asked for was confirmation that I will be given enough freedom to implement my own ideas since I did not want to blend in with the crowd and follow the beaten track even where better choices were available. With the assurance, I was gratefully given a lot of support and encouragement.

A large project is an integrated activity in which multiple elements must work together. It makes no sense to combine concepts that are incompatible with one another. When I first started, there were people in different departments at my level, and it was really difficult to persuade them about the practicality of my ideas. When you are interacting with people of your own age, it is easier, but when you are put in a situation where you have to work with somebody ten years older than you, it is challenging. For a duration of four to five years, it was a continuing uphill battle to convince them and gain their trust as the project took shape. I was able to convince my colleagues most of the time after describing the advantages and merits that we may have by following my ideas. However, there have been times when my seniors have threatened me, indicating that I wouldn't be spared for the ideas I have been pursuing that were not to their liking. Now that I think about it, I am pretty content with the choices I have made. It is essential to have the courage to make the right decisions, which must also be examined on a sound basis. For you to succeed, you must do thorough evaluations. If you succeed, you will have support, but if you fail, you will have no one to console you. This was a very early occurrence in my profession, and the independent decisions I took have undoubtedly enriched me and made me more confident about my work.

YT: When India first stepped into the field of atomic energy, it lacked resources compared to the other nations in this field. However, since then, technology has come a long way. Having worked in this field your entire life, how has India's progress been through this entire journey?

Non-cooperation, distractions, and embargoes AK: have all hampered India's nuclear energy effort. When we were discussing a sensitive subject like atomic energy, we knew we were being watched by the rest of the world. In terms of bigger geopolitics, India has always pursued peaceful decisions but had kept its options open because we, as a country, lacked a nuclear security umbrella. Regardless of how many countries were covered by a nuclear umbrella, they were all members of a bloc. We followed the policy of Non-Alignment and we had always a very strong peaceful orientation of our policy. We had to, however, ensure our security by ourselves. This led to a lot of skepticism and high demands in technological development.

> Nuclear explosions were once thought to be useful for peaceful purposes, there were international conferences organised on peaceful nuclear explosions, but after India did a peaceful nuclear explosion in 1974, the rules seemed to shift. However, India has been pursuing breakthroughs in the realm of atomic energy in a very comprehensive manner. The peaceful side of atomic energy was widely regarded as a part of the program, but when India followed suit, the term 'peaceful nuclear explosion' vanished from the international lexicon. As a result, the embargo and other restrictions were tightened even more. India, however, continued to make progress against all odds, and our technology, such as the power reactors which we created for energy, are credited with setting world records for continuous uninterrupted operation in terms of city. It has demonstrated such uninterrupted operations for more than a year a large number of times, with some lasting nearly three years. So, yes, we have accomplished a great deal.

> The scarcity of Uranium in the Indian landmass was the next difficulty we faced. As a result, an aggressive exploration program was launched. We persuaded the world that by failing to provide us with appropriate resources, they cannot prevent us from strengthening our security, but rather delaying our power program will have a significant impact on global level. If we continue to use coal for energy, instead of Uranium, carbon emissions will sky rocket, endangering the Earth. Similar arguments were used to persuade people, and we eventually

realized the International Civil Nuclear Cooperation, which enabled sourcing of Uranium for civilian power production while preserving our strategic autonomy for national security. So, it's been a difficult path thus far, but now we should be able to go forward much more expeditiously.

- YT: Your work on the Dhruva reactor, among many other projects, is an example of how people should not be deterred by the opinions framed by people around them. In the present day and age, with the world becoming increasingly smaller, how do you think people should move towards achieving their dreams and not get distracted by the criticism they face?
- AK: This is a vital question to address. A huge sheep mentality exists in our society. If one person takes on a task, others will soon follow, and the number will eventually snowball. It's funny how most people forget what the core mission was in the first place. They're only aware that someone might have started this, and all they have to do now is to follow the form. I believe it is important for a person to realize and comprehend what the basic purpose is, in the first place. One needs to ponder- Will my action actually have a positive impact on the people who will be engaged in the mission? The next step is to devise a wellthought-out plan of action and to visualize the final shape that we expect our actions will lead to.

There were people in Dhruva who couldn't see visions of such a large project being implemented so well since they had not seen anything similar to this before. In this instance, we should accept the challenge and develop appropriate ways to meet it successfully. One of the difficulties I have had was deciding which technology to use. We are frequently swayed by those who have a personal motivation for endorsing a particular strategy.

Vendors usually propagate technological strategies that would allow them to sell their products. However, one should be able to assess the value or the liability that would accrue in the short and long run, as a result of choices being made. The basis for decision-making should be well-structured, with the ability to assess the benefits and draw backs. People nowadays are more daring and open-minded, which allows them to experiment without being swayed by lobbyists. There will always be those in your vicinity who will try to cast doubt on your decisions and question your abilities, attempting to dissuade you from following the road you have chosen. But, in the end, it is our selfconfidence and persistence that allows us to make and implement our own decisions.

- YT: Having observed the functioning of IIT Bombay closely as the Governor of the institution, do you think that there is a vast difference between institutes like Harvard and IIT? What are the areas in which we can improve?
- AK: I would like to address a few elements here. A major difference is the mindset of common Indians vs common people in countries where universities such as Harvard are located. When it comes to the education system, especially when it comes to higher research and study in technology, the progress that takes place in institutions necessitates the collaboration of multiple people with diverse capabilities, which is not so prevalent in India. In the United States, for example, there are places where university students participate in and contribute to big programs involving multi-disciplinary work that is carried out as coordinated research projects. Creating a system like this necessitates the creation of an ecosystem. IITs have begun to create such ecosystems, and the results have been impressive. If we focus on the ranks of a discipline like Electrical Engineering from IIT Bombay, the number will be about 50. We are not on the same level as Harvard, which is ranked among the top four or five universities. Our institutions may become the greatest in the country, but they have not yet achieved global recognition. When we compare our institutions to Harvard, a few things stand out - the Indian mentality.

If people's mindset is not in the right place, the ones in charge of the institution, including the external funding sources and stakeholders, will have a negative impact on its operations. There have been century - old institutions that have maintained and improved their excellence. However, if the human minds within and outside the institutions are not enlightened enough and the peer processes become ineffective, the institution will begin to degenerate, as many Indian institutions have. IITs, fortunately, do not fall under this category. They're always expanding. The only disadvantage is that IITs are smaller and less comprehensive than Harvard. IITs are mostly focused on technology, whereas Harvard also provides a more comprehensive knowledge environment, including humanities and liberal arts programs.

Nonetheless, I have witnessed IIT Bombay's ranking increase significantly during the last decade. We must continue to develop the institutions and provide them with high-quality facilities, as well as other incentives for students. Infrastructure, Institution, Incentive, and Technology are the four areas that must be prioritized in order to achieve excellence and compete with Harvard and Stanford. We have our Indian Institute of Science in Bangalore, and the IITs are performing well, but we still have a long way to go before they can go to the top level globally. So, number one, we need to change our cultural perspective, and number two, we need to allow these institutions to grow holistically and large enough to manage trans disciplinary challenges and difficulties, which I believe will happen eventually.

- YT: Your work on the development of higher education in India has inspired a lot of people. What do you think is the future of higher education in India and what are the changes required in the education system to achieve it? In this context, what are your thoughts on the New Education Policy 2020 and how, in your opinion, will it prove itself to be instrumental?
- AK: I believe education is the most important factor in taking India forward and that applies to education at all levels, right from the early childhood education to the highest level of education and research. However, this requires plenty of resources and unfortunately, we are not deploying. In many countries there are norms on what fraction of GDP should be spent on education, healthcare, etc. In India as well, there are norms but we are deficient in terms of the meeting it and we are not spending enough on

education and healthcare. The second aspect is that education flourishes only when there is autonomy. If we make things binding on teachers and try to dictate in micro-management terms with regards to the curriculum, way of teaching and marking, then eventually it would lead to a factory assembly model of education which is bound to fail. We must allow individuals to create their own learning space, consistent with their respective aptitude and help them to explore their potential with suitable guidance and the required mentoring. At times, there could be multiple answers to a particular question and I think we should encourage children to debate with their peers and allow that discussion between students as this is the very essence of learning. However, in modern times, education is only restricted to books and theoretical knowledge. I believe we should rather take up a more holistic approach to learning and evolve mentoring ecosystem.

On the other hand, for example, previously we had the National Curriculum Framework which was adopted and the thought was that the teacher will observe and support students through comprehensive continuous evaluation and then wherever the student is doing well, we encourage the child to go faster, wherever there are difficulties or child is not doing so well, we provide some additional attention and help the child to pick up but do not fail the child in the exam. In my opinion, we require teachers to pay attention to individual students in the class and have a liberal approach of treating children differently in terms of helping them. I believe, what has really happened is that the number of students in a class are so many that we forget about giving individual attention. Many a times, teachers may not even remember the names of all children in the class. So, carrying out this comprehensive continuous evaluation is a far cry, particularly in the rural areas. The Human Resource Ministry then had a major meeting with the Education Ministers of States and they concluded that they would conduct an examination for evaluation in between and detain student where necessary. I believe this decision was right because that is the ground situation and we cannot be just idealistic and completely unaware of the ground situation

although in theory this was a retrograde step.

Children face fierce competition as they aim to get into good professional colleges. The coaching class culture has also flourished as a result, on one side. On the other hand, we are not able to make efforts to make sure whether the concepts of children are clear or not? Are they interested in that or are they interested in something else? Do they have a choice at all? There are issues on that and I think the important aspect is that we need to liberalize education, we need to create different kinds of choices for students, that match the opportunities around. Teachers have to become facilitators and mentors rather than following the old Macaulay era learning processes. We need to carry out things in a manner, where on one side we reduce the pressure of competition and on the other side we create more choices for children so that they can explore career options according to their aptitude and choices. We need to think how we can create space for the resources of the private sector in more holistic education rather than serious distortions that have got created by the coaching class culture.

In my opinion, the New Education Policy 2020 is a very well written and thought policy which aligns with my ideologies. The National Curriculum Framework also seemed to be an effective policy but was not executed well. The framework of NEP 2020 is not the problem, but its effective implementation is a major task. So, the New Education Policy will deliver dividends, provided it is implemented in at he right manner. I hope that we achieve the desired goal and this policy proves to be instrumental in bringing about the required change.

- YT: India is one of the four nations of the UN, which has never signed the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). Do you think that the treaty still maintains any practical significance in the modern geopolitical scenario and do you see India ever being a part of it?
- AK: We have always considered the Non-Proliferation Treaty (NPT) to be discriminatory and so we did not sign it. The fact, however, still remains that because of the NPT, the total number of countries that possess nuclear

weapons has been contained. India has conducted itself in a very responsible manner all along. While India has to be responsible enough to safeguard her own security, India's policy has been total universal non-discriminatory nuclear disarmament for a long time and I think it will still continue.

However, I think we must accept that the NPT has contained the number of countries which possess nuclear weapons and to that extent it has done its role. I am not sure if India will become a part of NPT or not. Certainly, India is now a nuclear weapon state. NPT has its own definition of a nuclear weapon state which talks about having done a nuclear weapons test before a particular date. So, just for admitting India, will they modify that clause of the treaty or will they take India in spite of it? Making India an exception for NPT is a far-fetched idea but at the same time we have, for example, the Civil Nuclear Corporation, which has opened civil nuclear trade making an exception for India. Therefore, we are able to deploy nuclear energy for peaceful civilian application in larger measures. I hope sooner or later we become a member of the NSG to start with. So, that is the first step which should be taken. There are also talks about India finding a place as a permanent member of the Security Council and in a way, it also has a correlation with it being a nuclear weapon state. So, at the moment, I think we should work towards becoming a member of NSG.

- YT: You have continued to remain passionate about your work, publishing multiple research papers and your own book in 2019. What has kept you motivated in a day and age where people take the route of retirement?
- AK: I always enjoy whatever I do. For example, I don't get tired when I am working. If we are engaged in an activity which we truly enjoy then we will not end up getting bored of it. So, even at this age, whatever I do, I simply enjoy and hence there is a lot of happiness that I derive from the same. It drives me to contribute to something good, something of benefit to the society and to the nation as a whole. It motivates me and allows me to keep doing work without getting tired.

- YT: Your contributions in the nuclear development of the country have been unequivocal, for which you have received prestigious awards at various stages in your career, including the Padma Vibhushan. How important a role do you think awards play in motivating individuals in the world of science?
- AK: Yes, awards do play an important role. However, I have never worked for awards as it has never made a big difference to me whether an award has come my way or not. I consistently do my work, but generally one can say that awards are important. Now, if somebody else gets an award and I don't, then I don't feel unworthy or sad but happy for the person who has won the award. Infact, when I am a part of a big project, people say that after the project gets completed and everybody gets into a very jubilant mood. That is something that does not happen with me either. As soon as my job is completed, I check that everything is satisfactory and move on to the next work because if we have done things right, it has to give results. While working, I derive joy because every time there is a challenge, I overcome that challenge and I learn something new. So, that is what drives me and not awards but I do still accept that awards in general are important in motivating individuals and not just in the world of science but in every field. I mentioned earlier as well that at the national level, one of the four key parameters is incentive. So, awards are important but for me they have not made any difference.
- YT: Sir, you have your own theory of 'self-reliance' for India. According to you, how important is it for India to be self-reliant when it comes to atomic energy in specific and as a country in general. How do you think India can go about achieving this goal?
- AK: Self-reliance to me is creating a framework where the country will never become vulnerable. We can develop whatever we are in need of and pursue a particular path or direction autonomously, ensuring that we will not become vulnerably dependent on others. Vulnerability can come out of competition, tendency to exploit and jealousy on part of others, but selfreliance means that it should never be allowed to set in. This is the principle which we follow in

atomic energy and I think this is the same principle which we should follow for the country as a whole because after all, we are living in an interdependent world and if we decide to do every small thing on our own, then we will get trapped in being uncompetitive and might lose track of the bigger opportunities and doing great things. There is a school poem which says that for the want of a nail, the shoe was lost and ultimately the kingdom was lost. This should not be allowed to happen and we must understand the entire dynamics around us in the current contemporary interdependent world. We must also understand the supply chain to make sure that we make the most competitive product to dominate the marketplace. At the same time, we must remain aware of the fact that a disruption in the supply chain can actually create a big jolt to whatever we are trying to do. Hence, this in my opinion, is the correct approach to self-reliance.

- YT: Having overcome challenges every step of his way, you are someone who has consistently proved that nothing is impossible. As a person with unparalleled experience, what message would you like to pass on to the students of St. Xavier's College (Autonomous), Kolkata?
- AK: Firstly, I would say that one needs to trust himself. Secondly, learning is a lifelong process, it is not that an individual is learning only to pass an examination. One must take interest and initiative in everything that goes on around and the process of learning should continue even when one passes out of a good college. Thirdly, rather than blindly chasing the path which others have followed, I think we should go through a deep soul-searching as to what is it that we like to do and which way can we make the largest positive impact on our neighborhood, society and country. We need to find a way through which we can return the best to the soil from where we emerged. If we prepare ourselves well and have enough confidence to create an opportunity out of every adversity, by using our learning process, then there will be no reasons as to why anyone of us cannot be successful. I have full faith that all of you will achieve success in your endeavors for which I would like to wish you all good luck.



# **MR. BOMAN IRANI**

### Indian Actor and Voice Artist

Taken by the Editorial Board

- YT: Right from your debut, your screen presence and meticulous acting has been appreciated by critics and audiences alike. Across the past two decades you have played several roles and many of them are remembered by the masses even today. In your opinion, does the distinguishing factor between a role that is unnoticed and one which creates a mark on the audience, lie in the writing of the character or, the way an actor performs and executes it on screen?
- BI: This might get a little complicated in the answer but I will say that there are two things that an actor can do, one is to act badly, which is not paying attention and the other is to do his best. Now, we are assuming that an actor will do his best and put all his heart and soul into the role. Let us consider that the writing is weak and somehow the actor manages to put up a good performance then good luck to him for being honest to his work. However, if the writing is good, there are a lot of things that will happen. The first thing is that the acting will be much more organic. The acting will be far more

layered no matter how much histrionics you add to that moment. You can decide to perform, in spite of a weak writing and people might appreciate a good performance but no one is really paying attention. On the other hand, if the writing is strong, everybody is paying attention including the actor, the character, and the audience. Now you may turn around and say, how does that work? It is very simple. Everything finally comes and sits on the head of the writer. A director can direct as much as he wants, he can make the actors give their best, a cinematographer can shoot the best frames but if you are not engaged in the story, in what the story is trying to say, in the journey of the character, you can act your skin off but no one is really registered. The moment you are engaged in the story, the audience notices everything.

If I, as an audience, am disengaged in the story, I am only noticing when the actor is showing histrionics and that is not what acting is all about. Acting is to understand the journey of the character, to understand what he wants, what his obstacles are and will he achieve what he wants to achieve at the end or fail, fail miserably, spectacularly but try and audiences are looking at that. They are not saying 'Oh, how natural is the acting!'. You can act naturally and make it look so organic and charming but nobody is paying attention because they are not looking at the journey of the character. So, what is the journey of the character, who is writing that? An actor cannot write it. A writer graphs the journey of the character and sometimes the actor has to pick up that journey or rather recognize that journey from somewhere. Once that happens, the audience notices you, critics notice you, it touches you and you empathize with it and without empathy, you can act all you want, nobody really cares.

- YT: Having purchased a camera in the early stages of your life, you made an earning by selling sports pictures at low prices and went on to become the photographer for Adajania and the Norwegian boxing team. Considering that even in contemporary society, pursuing creative art forms are not incentivized enough, what according to you can be done to overcome these archaic perceptions and encourage the youth to undertake them?
- BI: According to me, there are two different things. One is monetary incentive, for which one must look at other people who have made it in a career of creativity and say, 'If he can make it, even I can make it'. I don't need someone to tell me that you will get a job soon after you pass out of photography college or acting college, if there is such a thing. That is never going to happen in the creative field and it is very subjective. The other part I can pay attention to, is what happens with the family. That is, I think, a problem that may exist is whether you want to be creative or you want to be a doctor. Somebody may turn around and say, we have a family of lawyers, why do you want to be a doctor? So, you say that being a doctor is such a respectable profession, why should I not be a doctor? I am not generalizing this but families tend to have the word 'parampara' within their vocational

history. No Irani will ever be a make-up artist or no Irani will ever be a dancer, says who? So, that problem can never be solved unless parents from a very early age are made to understand that anything creative is as respectful as any other job. When you look at the industry, I cannot tell you the number of people who were IT graduates or worked in the business or bankers, and are now directors because that is what they always wanted to do. Now who is to blame for that? Is it the father or the mother or the uncle? I don't know. The point is that it is upto the individual eventually whatever he/she does. I can incentivize it and say that when you come out of college, you will get a job as a photographer or as any other creative professional. However, I don't think it is a good idea at all because creativity has its own little way of organically spreading and individualizing the person's art form. He becomes an individual, he cannot be part of a system which has been incentivized. That is my take on it and I might be wrong, however, it is about what people term as respectable vocation that comes in the way.

We can look at somebody like Shiamak Davar. He comes from a whole lineage of educationists and both his father and mother are lecturers at MIT. However, Shiamak Davar wanted to be a dancer and he went ahead. Who incentivized him? Absolutely no one. Say, someone wants to be an actor but there is no company that hires actors and we need to understand the fact that creativity is a very individual pursuit. Either I like your art form or I don't and it boils down to how badly an individual wants to be an actor, a photographer, a make-up artist, a hair stylist or anything else for that matter. An individual who wants something very badly, I think it is only about awareness and the right mindset. Look at somebody like Ritesh Deshmukh. He comes from a family of politicians but his family supported him. He might turn around and say, 'I don't want to do politics, I want to be a writer'. What were they going to do? You need to have the support within the core of the family for whatever you want and if not, then you have to take a call ahead and say 'No, I am sorry, I am going ahead and doing it anyway'. In any case, you should know what you want ahead of life. I feel that it does take some individuals to be the beacon of light for a lot of other individuals. There was a very famous photographer named Homai Vyaravalla, one of the best women Indian press photographers. She has been behind all the popular photographs of Pandit Nehru, and we are talking about the 1930s and 1940s. A woman photographer, going out there and jostling between crowds. When a young girl sees or gets to know about it, it becomes an inspiration for her. So, are we looking for inspiration? Because for me that is also incentivizing in its own way. So, it is up to a lot of people who go out and do what they have to do. Otherwise, we will just be saying the government does not support us, we will just sit and complain, and the game is over. The moment you say that we do not have a support system, what are we going to do? You need to understand that it is individualism and creativity is a very unique individual pursuit. If you look at my simple career, sure my mother encouraged me but there were a whole lot of other people who would say, and they still tell me, why did you close that wafer shop? Even today people say what happened to golden wafers, you shut it down? Yes, I did as I was a little distracted being an actor and pursuing a career in acting because at the end of the day it is just about being yourself and doing whatever you love to do.

- YT: Before entering the Indian film industry, you began your on-screen career by playing roles in advertisements. Considering that the advertisement industry worked out in your favour and you found profound success in both these industries, according to you, what role does the advertising industry play with respect to acting as a gateway for aspiring actors?
- BI: I don't know if the advertising industry acts as a gateway for the film industry. I would say that advertising helped me big time because I learned how to face the camera, I learned my

techniques, I learned my tools and I learned how to develop a new character every day. Let us put that aside for the time being. In my opinion, the gateway to acting is theatre. Even if you are the most handsome man in the whole wide world, if you don't have screen presence or you don't know how to act, it is very difficult to make it, especially today. So, advertising helped me. It made the face a little familiar but it became an added advantage because I was doing theatre parallelly. 'Join advertising and you will become a great character actor' is the worst piece of advice I can give you, to be very honest. First day when I went for the movie shoot, I was not green horn. When I went there, I was aware of what the set looked like. I knew what was to be done when the camera rolls and what the clappers do. It just warms you up. It is a training ground but it is not a gateway, let there be no disillusionment about this fact. Advertising is a good way to make money, to get used to the technique and mechanics of studio work, but theatre discipline is the best way to learn acting. I had done about 14 years of theatre before I did my first film. So that actually helped me understand character development, rehearsal process, building a character, and making a graph. Advertising made me warm up to the studio, a familiarity in an unchartered territory or something like that. I did a lot of advertisements and it helped me create characters because of what happened in advertising during that period. Advertising was all about the good-looking model, the perfect body, the perfect face and perfect everything and people like me just walked in at that point of time. There were a couple of advertisement film makers who did not use the model and his clothes alone to sell their goods. They sold reallife characters, the everyday man and every man's problem became the problem of the consumer. So, I became every man and I started doing advertisements that were funny, that were relatable, that were not clotheshorse. I was competing against the Milind Somans and Arjun Rampals but I learnt how to develop characters. Who is this guy? Where does he come from? What does he want? What are his strengths and

weaknesses? Every day, I would take that very seriously, make it a developmental process, and use acting chops to deliver characters but once again I am saying, it is not a gateway to becoming an actor, it can help.

- YT: Generally perceived as one of the most difficult roles, comedy is a genre in which you have played characters on screen which are loved by the audience even today. According to you, why do most of the actors find it difficult and what makes you so good in the same?
- BI: I will try to tell you about comedy as a genre. I have a personal philosophy about doing comedy in the movies, unlike theatres. There have been many instances in which I have done roles where I just play true to the character and I don't play thinking whether at that point, the audience will laugh or not because I will never know the answer. On the other hand, if I am doing theatre, I know that there is a punchline and I deliver the punchline and the audience does not laugh, then it becomes clear that I didn't do justice to that punchline. However, in cinema, I never know. What I then do is that I take the pressure off me and just stay true to the moment like I should have done. Theatre gives you immediate feedback. If the audience doesn't laugh at a punchline, don't be upset, there will be another chance. However, if you are not true to the character, you derail your whole rhythm when you try to make people laugh. Stay true to the moment in real time, stay true to the character in a real situation and react to it. That is it. To turn around and say 'I am going to make them laugh', is nothing but putting a lot of pressure on yourself. So, in cinema, I don't put that pressure on myself. Most people make mistakes in comedy by trying to make people laugh. There is a big distinction there. Either you try to make people laugh or you stay true to the character and nine times out of ten, if you stay true to the character, true to the moment, true to the ridiculous situation that you are in, people will laugh. But if you say, 'I am here to laugh and make people laugh', they are not going to laugh.

The pressure to make people laugh is the death of comedy. Enjoy yourself and people will definitely laugh. If you are not enjoying it, they will also not enjoy it. So, it is as simple as that. Don't try to be funny, don't try to be emotional either. If it is truthful, cry. If it is not truthful, don't cry. If it is truthful and the tears are not coming, never mind. Just do not say they cannot see my tears. They will feel, if you feel. They will not feel it if they see the tear. So, the pressure to make people cry, the pressure to make people laugh, remove it. True to the moment, true to the situation is all that you need to do. Are you trying to impress the other person? If yes, then you are not true to yourself. Simply, I am not saying that you should not care, you should care, but about the truthfulness of the moment and nothing else.

- YT: You have, through your venture known as 'Spiral Bound', conducted more than 300+ screenwriting sessions, teaching and training people of all age groups about this nuanced art. What inspired you to take a step in the direction of imparting knowledge about screenwriting to people across the globe?
- BI: Spiral bound came about a couple of years ago when I launched my company Irani Movietone. I wanted my company to be launched with a certain belief system and I truly believe that everything that comes out of our good movies, including our script, great direction, great acting, great cinematography, great editing and great music can sell it upto a point. So, I was writing a script and halfway through the writing process I said I have got to start learning how to write. I got to learn as a student, no matter how late in life because I have been a little bit of a late bloomer myself. So, I started learning and befriended a guy who was an Oscar winning writer who started teaching me the few nuances of script writing. I had a reasonable amount of knowledge and that knowledge was in my head and there were lots of young writers who used to call me up asking for advice on certain projects that they were working on. Over the years, I have always shown interest in the process of

writing and the importance of writing, the one thing that you cannot make a movie without. So, I decided to say that there are writers in this country but maybe there are not enough writing teachers around. There are just a few writing teachers, Mr. Anjum Rajabali being one of them and my respects to all the writing teachers I know. However, considering the shortage of writing teachers, I started sharing my knowledge with young writers who came with the scripts where they don't know why it is not working and discussing the general things. So, when I launched the company, I flew down this writer instead of having a big bash party or a grand gala launch and arranged a workshop. So, I invited every student who was in the area, from Mumbai, from Pune, from Xavier's institute, TII, everywhere. Come down and you can share the genius of my friend Alex Dinelaris who wrote the film 'Birdman'. I had great plans of taking it forward but the pandemic broke out and it did something else which was quite astonishing, it gave us time. We had lots of time in our hands and lots of frustrated people who couldn't go to work. So, when that happened, I decided to start conducting workshops, free of charge, because I think everybody needs it. If you go to America, there are 500 institutes of writing workshops, short ones, long ones, one-year, two-year, and even degree courses. I said we must share and it started with four students, next day there were 10, the next day there were 25. This number seemed to be the cap but now we have got around 300-400 who just signed in and we conduct the workshops which have been successful as far as learning is concerned. So, it is very important for me to understand that if I want to exist in a business that I benefit from, there will be a point in time when I will have to give back. A business will thrive only if there is excellent work coming up on a higher percentage level. So, the good movie percentage level has to go up. How does that happen? Good writing. So, I think I have identified that and it is a big hill to climb but we are working on it every single day. It is a part of my belief system that if you want your business to thrive, hits are one thing but the success of a

good film is even more important. Money is important for the success of a good film because you will then spawn a whole generation of good writers, good actors, good directors, and good cinematographers. Hits actually depend upon the start system but now hits will start depending on good movies and how do you make good movies? Sometimes a movie is a hit whether good or bad and sometimes bad movies become hits. I don't hold grudges because some of my bad movies have become hits but that is not the point. The point I am trying to make is that if the industry has to grow exponentially, we have got to make good films that are also hits and those good films can only happen with good writing.

- YT: Being a recognized name in the film industry, you launched 'Irani Movietone', your own production house, in 2019. What was it that motivated you to start your own production house? How is your responsibility and role as a producer in a project different from when you are the part of a project as an actor?
- BI: I keep it the same and I say this proudly. I do not speak well of myself very often. I will say this today and I am saying this not because I want to brag but because this is something I live by. According to me, the job of an actor and the job of a producer are the same because we are making the same movie. He is not making another movie and I am not making another movie. So, if I do not support the producer as I would expect the producer to support me, how are we going to make a good movie? I am, as an actor doing a five-day job or a ten-day job, it is exactly the same as that of the producer. We are just in different departments but we are all producers of the film. I truly believe that if I am thorn in the flesh of a producer, how will we ever make a good movie? So as an actor, I am a producer. On the other hand, as a producer, I am not just the person who would put it all together but I am someone who is interested in making a good movie and I expect the support of all the actors, all the technicians, and everyone who is involved in any way. So, as a producer or as an

actor, if everyone is not happy on the set, I think it reflects in the outcome. As an actor, my responsibility is the same as that of a producer. I believe that and I am proud of it. It is the only thing that I will brag about.

The first part of your question, I kind of already answered. I wanted to make a movie of my own with the idea that I may have issues with the fact that this story is not mine so how can I assert my stories on someone else's vision. Have your own vision, write your own movie and make it yourself so that no one can tell you that 'No sir, thank you, as an actor you gave me this idea but I am making the film'. I respect the director and the makers of the film. I may contribute, he may take my suggestions, he may love it and still not use it because it is his film. So, I am a little fed-up and frustrated in the sense that I have a lot of ideas of my own and a way to work on my own, which encouraged me to make my own film. So, that prompted me to launch my own production house.

- YT: The general consensus of a majority of Bollywood actors is that theatre as a medium has made a huge impact on their lives, as they had been associated with theatre in the past. Having been a part of theatre roles since your school days, how important a role do you think has it played in your life and your art?
- BI: There are a handful of actors who are huge stars and they are blessed. They have got something in them to actually step on to the screen, and very few people have that quality. Sharukh Khan and Salman Khan are one of the kinds who possess this quality. On the other hand, there are some people who don't have that quality. So, you will never know whether you have that quality or not until you reach that hallmark. Salman, Shahrukh or for that matter Akshay or even Ranbir, they just step on the screen and undoubtedly, they have the ability to electrify. Everyone does not have that God's gift. Shahrukh is the most charming person you will ever meet, where did he learn that from? Did he go to a school of charming? Of course not. He

has it and it is part of his being. It certainly gives him the edge. Actors like Anupam Kher, Paresh Rawal, Naseeruddin Shah, Om Puri, all these great people, they are fun and they have all been through the theatre process. Somebody like Naseeruddin Shah continues to be dedicated towards the theatre process. Whether their films are hits or flops or whether they have that charm, I don't know but they will always work till the end of time. Why? Because they have got acting chops, and where did it come from? From a theatre process, from a process of foundational theatre that will never leave them. People may not even recognize, but whatever I have learnt, I have learnt on the job. Imagine taking away theatre periods from their life, they will be different people altogether. There are so many actors out there who work for years and after a point they choose to work as per their requirements. Whenever they want, they can put up the hand and say I am available and they will get work simply because of their theatre experience. I think theatre has inspired me enough to say that there will be a time when the circle will be complete only when I go back to the theatre. Movies are shot sporadically, so you can shoot the third last scene of the film on the day one of shooting. How do you graph that? It is very difficult but if you are a theatre actor, you will understand that graph. 'Do you know what you are feeling at that moment?' Theatre will teach you that. Theatre will teach you how to graph a role, it will teach you how to live in a moment, and to understand that there is a technique to it. While in cinema, it becomes that much more difficult because it is shot sporadically. Theatre has played a huge part in my life, it made me a little more fearless. I never ever hide behind the fact that there is a possibility of a retake. I always go on to a set thinking that there is only one take and there is an audience sitting over there. If I think that there is always an option to retake, I will not give my hundred per cent. If somebody I know wants five retakes, then I use that again as a rehearsal process but if you don't do it like the final shot, there will always be a lack. The momentum of doing something is different when you think that you have another shot at it. You don't have another shot of it, that is the attitude you should have. If you think that you are going to work every morning knowing that you are going to get your salary at the end of the month, you do relax a bit. But if you think that everyday if I don't do this my salary won't come today then you will always have your sleeves on. It is the famous scene from the movie Dark Knight where Batman is in the well and he can escape from the well if he wants to, and there are prisoners down there in the caves below the well. There are a lot of prisoners that are stuck there for life because there is one big leap that you have got to take to grab the top of the well. And he broke his back and then he did another attempt but every time you know he would fall there would be a rope that would stop him from crashing to death. He spoke to an old man over there about why he can't make that final jump; the other man tells him that it is because you know you have a life line, you know that you are not going to die. If you remove that life line and you jump that final jump that you are missing, you will make it. He then goes up, climbs and makes that final jump and he grabs it. Similarly, when one does act, if one says that 'I have got a second take', it is exactly like that rope in the movie which was meant to help the character survive.

- YT: People often fail to notice the hard work and perseverance which is involved in the journey of a self-made star like you. Given that the nature of the industry is such that there is no well-defined path to get a break, how difficult is it for an actor to make a mark in the industry without any prior connections?
- BI: Nobody is supposed to know how much hard work you have put in, that is not their problem. Are you displaying hard work or are you displaying a character? You are portraying your character that people should love. You are not supposed to say that look at the hard work that I did behind it, you will love it even more when you just focus on portraying the character. You are not doing anyone any favours by doing just that. If you say that nobody realizes the hard

work, it is absolutely alright. The audience is not supposed to judge your character for the hard work you have put in but for what they see onscreen.

I think that this whole idea of connections is a little overblown between us. What connections did Shahrukh Khan have? What connections did Akshay Kumar have? What connections did Irrfan Khan or Anupam Kher have? What connections did I have? There are as many people who are so unconnected with the industry and are making it out there. For that matter, even Deepika or Priyanka, and you name it, where is the connection? It is just that the ones that are connected do get a shot, but even from that lot, only the best ones survive. There is a point where even your father will not be able to produce films for you because it is eventually about money and return on investments. If I am going to take someone for the sake of taking someone who is connected, I can do it once, twice, or even the third time but eventually I will forget about it even if it were for my own son. Only the ones that have a spark would survive, who have got something in them. Of course, there are so many people even in the unconnected, who don't have a spark and are surviving, good luck to them. But to say that you will only succeed through connections, is a lazy way of thinking for the unconnected ones. In whatever you do, whether you are in the industry, whether you are in an airline business or whether you are in any business, you will be connected to a point to someone. All the names that I mentioned of Mithun Chakraborty, Naseeruddin Shah, Anupam Kher, Paresh Rawal, Akshay Kumar, Shahrukh Khan, Ranveer Singh, what connection did they have and the ones who are connected will get work because they are working hard and they are good. So, don't be lazy and hide behind the fact that I am not connected and I have already lost the battle. You lose the battle the moment you accept that it is a reality, it is not a reality, which is something I would say. People are looking for talented people, it is a business at the end of the day and in that business the connected ones do not fuel the business. How am I connected to the industry? Tell me. I am a Parsi from South Bombay and everybody thought that he doesn't know how to speak in Hindi. My Hindi has got a little Parsi tone but I decided to work towards it. I played a Punjabi in the third film and tell me how that works and where the connection is? You want to make it work; you have to deal with your own problems. The biggest problem will be that you will not get a chance because the other person has got a chance, there will always be another person getting a chance in whatever you do, whether it is a job in a small organization or otherwise. The other guy is getting a chance but if he doesn't do well, he will be thrown out. If you are good, they will come hunting for you in Siberia, Al Pacino said.

- YT: In the Indian movie industry, the investors have a significant say in how any project is executed, and they sometimes make the directors and actors do things differently which in turn restricts their creative ability. Being a producer yourself, how do you maintain this balance between giving the creators adequate freedom, and at the same time, tweaking a few bits to ensure commercial success as well?
- BI: Everybody has an opinion, actors will have an opinion, producers will have an opinion, financiers will have an opinion, the editor will have an opinion but you need a good director to turn around and say, 'I like that opinion' or 'I don't like that opinion'. There will be this constant fight between the person who has got the courage to stick by what he wants to do, and develop a name through which his word will be law. It takes time in creative decision making but I will tell you this, that a good director will listen to everybody's ideas. The stupidest guy on the planet may come up with the best idea on that given day. You will listen to it and might consider it but creativity, eventually, is a money-making enterprise. If it is an art film then it is a different thing but if somebody is putting in so much money, they will think that if they go down this route, they will lose money. You will have to

value that producer's input, fight it out. Either convince him or get convinced, there are just two ways to do that and there are people who have survived with the courage of their conviction. Nobody knows anything, so you might as well listen to other people and make a decision yourself. People who don't know much should try to be silent. However, the fact still stands that sometimes a good idea can come along when they speak.

- YT: You have been associated with various nonprofit organizations and are involved in different social work programmes. Considering that you hold an important position in the society, how crucial do you think is your role in uplifting the socially downtrodden and spreading awareness about the same in the society?
- BI: I think when I became an actor, I thought being an actor was about acting but I was wrong. It is about lots of other things as well. It gives you a voice. It gives you the power to spread awareness. It also gives you the ability to find resources for people who are not self-sufficient. I know there are so many industrialists who do many things but they may not be in a position to stand up against something wrong and say why don't you do this instead? However, when an actor takes a stand, people listen to him/her a little harder. So, one must use that influence, one must leverage that power and voice. I think being an actor, this should be a part of your job profile. As far as I am concerned, I am not sure how much I do but I do as much as I can.

I think that once you have a voice and influence, it becomes your responsibility to use it well in order to bring about the desired change. I don't know how much one can promote oneself, but if you promote yourself then make sure that the promotion of yourself in turn has a promotion of a cause. Whatever it may be, it could be a blood donation or an organ donation camp, it could be related child labour, whatever be it, but the more you are known the more you should use it for other things as well. Your movies are going to be made, your people are going to come and watch, how much will you fuel the fame? You have to fuel awareness and I think we are in a good position to fuel awareness, to spread it and work for a cause.

- YT: Your enthusiasm towards excelling in numerous fields and making a name in the industry, despite all odds, has inspired a lot of people; the students of St. Xavier's College (Autonomous), Kolkata are no different. What message would you like to give to them?
- BI: Every person must have two kinds of wants in his/her life. If you do not want anything out of life, then I have nothing to say. There is a cosmic want. One says that I need to do this in life and I will feel, not successful but fulfilled if I have satisfied that want of myself. I want to go on stage, I want to represent India in cricket, I want to be a doctor, I want to climb Mount Everest. It can be anything. So, there are two kinds of wants. One is external want, which relates to a clear-cut goal which is in front of me, which would define the life that I will have from this moment onwards. Someone who does not have a want is a person who has not much to look forward to. If you do not have something to look forward to, then why should I look forward to you? So, you are alienating yourself the moment you turn around and say that 'I do not have a want which is external'. Then, on the other hand, there is an internal want which comes little later in life, when you realize that in the process of achieving my want, I have comprehended a lot about myself as a human being and I have got certain feelings inside me that I need to fix. This probably is more important than the external want. This is your real need. If you fix your need, which is your internal want then there is a good chance that your external want will also get satisfied. If you only achieve your external want, suppose you become an actor and you go on-stage but you are not a nice guy, you have stabbed over a lot of people, you neglected your family, you neglected your parents, you turned to being a

compulsive liar and money became more important than the art itself, then you have got to fix that all first because only then can you find what is called 'the pursuit of true happiness'.

Coming back to the two wants that I have already mentioned, one is an external want which is a goal that you can see. It could be in the form of a trophy; it could be in the form of any kind of achievement which everybody can see. The internal want, on the other hand, is something what we call a need. You need to do that or you need to be so and so to be a successful person. Suppose, you want to make \$50 million and you have done it. Now what? What happens to your internal want? What happens to your soul? You have got to fix that also and it can be something that is very simple. I think you really need to pay attention to your internal want at a certain point of time. If you only pay attention to your external want then it is going to be a very facile and hollow life, and a hollow victory. So, all young people who say 'I am interested and I want to do this', but at this point in your careers and life, the internal want will not serve this purpose of yours. You will realize at a certain point in your lives, my young friends, that there is an internal want which is called the need. Eventually, you need to change and that change will give you true happiness. It is a little philosophical and it is not careeroriented, whatever I told you.

In order to be successful, you just need to have a desire and a fire to succeed. With that, will come the passion. With that, will come the hard work. With that, will come people who turn around and say, support that person. You will definitely succeed, no questions about it. Mike Tyson said that 'I do not believe in talent. Some people, they have talent, it is good, it helps when you have talent. As long as you have a lot of determination and willpower, that is all you need. You have to have the will to win'. However, I have another philosophy, which is, pay attention to your internal need because that is more important. It is the best advice that I can give to you all.



- YT: Children from rural areas are often afraid to dream big due to the heavy burden of poverty weighing them down. What inspired your dream to become an athlete and represent the nation all around the world?
- DC: My elder sister, Saraswati Chand, was also an athlete who was passionate about sprinting. Because of our financial position, she was the one who encouraged me to pursue the same sport. We come from a family that could not even afford covering the cost of our schooling. The reason I started running was so that I could get a job under sports quota and could help my family monetarily. I devoted myself to working hard in the sport so that I could earn medals on various national and international platforms. I was fortunate enough to receive tremendous support from my sister and my family, who were truly confident of my potential.

However, my journey has been fraught with hurdles. I could not afford a pair of running shoes, could not get the proper nutrition, and could not find any trainer to guide me because our village did not even have a field. I began practicing in the

# MS. DUTEE CHAND

### Olympic Athlete and National Champion

Taken by the Editorial Board

streets and adjacent water bodies. People in our immediate vicinity attempted to stop me in the guise of 'traditions', claiming that a girl jogging in the streets is to be despised. As a result, I had to go to practice at 4 A.M., when no one could see me, so that I could continue improving. Obviously, poverty has been a significant disadvantage. Moreover, people's judgement has become something I have become used to, by now. I have faced a lot in my life, but I am convinced that if one has the pure determination to succeed, they can overcome any obstacle that comes in their path.

- YT: Your sister, Saraswati Chand, has been a source of inspiration for you, who herself was a state level runner but went on to take up a government job. What made you pursue athletics further and not go on the same tracks as your sister did?
- DC: When I was young and a novice at the sport, my elder sister, having considerable experience as an athlete, instructed me about the basic exercises that are required to keep one going. She

explained to me the sport's requirements as well as what should and should not be done. These helped me perform exceptionally well, and as a result, I was admitted to the Sports Hostel of Odisha in 2006. I was offered a complimentary diet and free coaching, which was funded by the government and helped me improve my game even more. I won my first medal in 2007, and I was recognized as the National Champion every year after that until 2010. Not long after that, I was recognized by the National Camp and had to move to Patiala. My college, KIIT University, was extremely supportive and assisted me financially as well. Eventually, I was able to represent my country in the Asian Games, Olympics, and other tournaments, returning home with more than 15 medals. Hence, my sister has played a crucial role in my initial development and has been an inspiration throughout.

- YT: You stated that you started doing track events in the hope of getting a job under Sports Quota in the future. What importance do you think such reservations play in the country where children, especially from rural areas do not have the access to education as other children do?
- DC: Before 2016, athletes were not adequately supported and sports was not even regarded as an adequate and relevant profession by our society. However, currently, we have a wide range of facilities in every district and village to help every player. Parents are usually hesitant about encouraging their children to pursue athletics, because they want their children to continue with academics and obtain a respectable job in order to support themselves. Families that cannot afford education, on the other hand, want their children to participate in sports. Sports quotas, reservations as well as other amenities are, in my opinion, a true source of motivation and incentives. This is because the parents believe that if their children perform well, they will be able to find a job via sports quota and become financially selfsufficient.

- YT: At a very tender age of seven, you started to help with the earnings of your family and took up responsibilities that no child is mentally capable of. Talking about it now, do you think that your career could have gone a different direction if you did not face these challenges in your journey to become an athlete?
- DC: My family consists of six sisters and a brother, along with my parents. Our father, because of his low monthly income, could not sustain all of us on his own. He worked in a clothing industry and was paid ₹200 per month. These circumstances led our mother to often send us to work with our father. We were given simple chores in the workplace that could have been done by children. To help and support my family, I practiced running, while working part-time in the workplace. I could have spent more time on my game if I had the advantage of financial security. However, I am grateful to sprinting because if I had not enrolled in it, I would not have moved on to represent my country in a foreign land, and would have continued working in the same factory.
- YT: When you began running, you did not have any equipment or even a pair of shoes to run through the streets of your village, which caused you to suffer a lot of injuries in your childhood. Did this ever make you consider slowing down? How did you not let it reduce your will to become an athlete?
- DC: Yes, I did not have any equipment or a pair of shoes. I did not even own a pair of slippers at that time, so the idea of having shoes seemed farfetched. People generally have several sets of indoor and outdoor slippers, but I had to walk barefoot. As a result, I suffered from severe injuries and cuts. But these were ineffective in halting me, and I continued to sprint through the streets. When I was in the sixth standard, I was given the opportunity to own a pair of shoes. However, up until that moment, I had become accustomed to running barefoot. It took me a year to figure out

how to put them on and run with them. We always had competitions on the grounds, and racing barefoot did not bother me because I was used to sand. Although it was tough for me to acclimatize when I had to compete in tournaments that had rubber flooring, I became acquainted with how it functioned over time by spending time on a lot of practice sessions wearing them.

- YT: You have mentioned that as you were running in the sand in your childhood, people would often demotivate you and try to bring you down by saying that there is no future in athletics and you will gain nothing by it. Do you think that this backward mindset of the nation still exists even after various athletes have won on the international stage, and what do you think can be done to destroy this stereotype?
- DC: I believe that the dynamics changed after the 2016 Olympic Games in Rio de Janeiro, Brazil. Back when I was a child, there was no media or press. As a result, many lacked knowledge about sports and were unwilling to participate. However, the media today is covering the impact of sports in one's life. A lot of conferences that are held for the Commonwealth Games are broadcasted on television, along with information regarding the same being printed in newspapers. People have begun understanding how the government rewards players with prize money, jobs, and sponsorships.

The Indian government has implemented a number of initiatives, including the Khelo India Scheme, the Reliance Foundation, and the Target Olympic Podium Scheme (TOPS). These programmes help athletes with their nourishment and training. To state an example of the same, rubber grounds were once only found in major cities such as Bangalore and Delhi, but they are now found in practically every state, including places like Bhubaneswar and Punjab. Several colleges are also building these grounds, indicating that there has been significant progress.

- YT: You were brought up in a family of six sisters and one brother and were given the responsibility of contributing to the family income through athletics. People often complain about having a less pay structure in this field and that the government should be giving more support to athletes. Do you think that is the reason that the government cannot support as many Olympians and athletes as other nations? What steps can the government take to ensure future athletes do not have to face all the hardships you did?
- DC: As an athlete, I can attest to the fact that the Indian government goes to great lengths to encourage athletes. The Indian government, in fact, supports athletes and sportspersons more than foreign governments. Athletes elsewhere have to cover their own expenses for training and club membership. On the contrary, here, children are provided free training along with other fundamental necessities. Many players, such as Mary Kom, have received training in foreign countries, with the costs being borne by the government. Players having won an international medal are guaranteed a Class 1 post and the government assigns them to respectable and wellknown positions. Hence, the government has been truly supportive of the holistic development of the players in our nation.
- YT: In 2013, you enrolled in the KIIT University to study law. Even after becoming a national champion at a very young age, your motivation to learn and grow did not stop. What importance do you think education holds in the life of an athlete and what made you want to pursue law even after having become a successful athlete?
- DC: The agenda behind educating myself is to get information regarding the happenings in the world. On the other hand, sports helps me in staying fit, as well as making a name for myself. This is why I have ensured that these two things go hand-in-hand. There are people who study with

63

the aim of getting a job, getting admission in a renowned institution such as IIT, becoming an architect, or any other reason for that matter. I, on the other hand, studied law so that I could remain updated on whatever is happening in the society. Moreover, I pursued sports because of my talent in this field and because of the support that my college provided for the same.

Education, without a doubt, is important in every athlete's life, because when they go to different nations to represent their country, they will have to meet and interact with new people and discuss different matters, for which adequate knowledge is required and can be only fulfilled by education.

- YT: You have broken the 36 years of silence of a woman's participation in the Olympics sprint. As a person who had to go through and overcome so many obstacles, what do you think is the foremost thing that got you where you are now? In this regard, what message would you like to give to the women of the country?
- DC: There are a lot of events in the Olympics like tennis, wrestling, boxing, shooting, and various others. Even for athletes, there are different events like discus throw and shot put, along with different types of running, like 100-meter, 200-meter, 1500-meter, et al. When it comes to 100meterand 200-meter sprints, qualifying is, in itself, extremely difficult. When I participated in the Olympic sprint as the first woman in 36 years, the qualifying mark was 11.30. It is only when I qualified by beating this mark that I could participate.

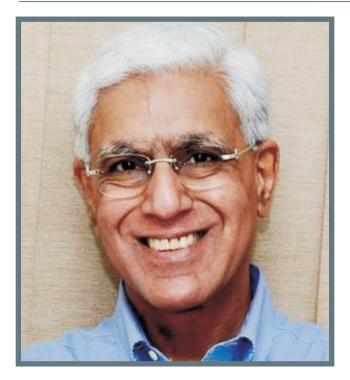
There was a time when, whoever used to stand first or second in the country, could participate in this sport. It does not happen like that now and participation has become immensely tough. I am privileged to have got the opportunity of representing my country in the Olympics two times, which has only happened due to my hardwork and the support I have received from a lot of people. I would like to tell everyone that if they perform and play well, they will receive support, whether it be from the Government or any other private entity. However, if one is lazy and refuses to work hard, they will not be able to attain success no matter how much support they receive.

- YT: Every runner is determined, hardworking and trains to the core of their bodies to come out as an extraordinary athlete. Yet there are many instances where people do not make it to the top of the ladder. What do you think separates a top athlete like yourself from the thousands of others who have the same pursuit?
- DC: Firstly, sports cannot be a career option for every child. Those who have the required talent or receive the adequate support are the ones who do well in this field. One's performance in any sport varies, depending on these factors. Everyone who wants to pursue sports should work hard for it, but should also give importance to education at the same time. It is when one feels that their performance in sports has been consistently good that they can gradually start giving more importance to sports as a career. At the same time, if one is not able to do well in sports, they need to give more importance to education and studying. But these two things need to go hand-in-hand so that one can have both the options to choose a career in. Through education, one can gain knowledge and get the opportunity to work for the society by getting a job in a particular sector. On the other hand, sports can help one make a name for themselves, receive financial support, and get a job. Thus, a career can be made in either and one should give importance to both of these things.
- YT: In the 2019 Summer Universiade in Naples, you became the first Indian to win a 100m gold medal in a global event. How does it feel to be the torchbearer for millions of Indians who have the same dream and what importance does this feat hold to you?

- DC: I felt extremely proud when I achieved this feat as at that point of time, I was representing millions of Indians. When I stood at the first position on the podium and listened to the Indian national anthem play, it was a great moment for me. On that day, I felt that I had done something in sports and that I had received the fruit of all the dedication and hard work put in by me. Not only was I feeling immensely happy, but I was also very proud of myself.
- YT: In one of your interviews, you stated that you want to join politics after retiring from your track career. What is it that motivates you to join politics and what changes do you want to introduce to the system once you have joined?
- DC: According to me, 'politics' is just a term. Politicians are those who work for the betterment of the nation. If you look at my life, I have been working for myself, my family, my village and my nation since my very childhood. Considering that I have been working for the country for such a long time, I will definitely take up the opportunity of doing more for the society if I get such a chance in the future. This is why I want to join politics, so that I get the power that is required to help people in the society and bring about a significant change. I am focused on sports right now, but I want to join politics after retirement so that I can help the poor people who want to join sports by providing them with the required support. I will focus on identifying talent in local and rural areas across the country and provide them with proper training by

setting up institutes in such places. Although this is what I want to do, I am still playing now and I haven't planned everything properly in this regard.

- YT: The zeal inside you to always achieve something better is commendable and your passion has been a source of inspiration for millions around the country; the students of St. Xavier's College (Autonomous), Kolkata are no exception. What message would you like to give to them and all the young athletes taking their first steps on the track?
- DC: I would advise everyone to study hard and participate in sports at the same time. Education is important so that one becomes knowledgeable and sports is important for one's fitness. Nowadays, people don't focus on fitness, and all they do is study. They solely focus on studying for many years and later worry about the fact that they have become unfit. This is why I would advise all the athletes and players in the college to study as well, and all the other students to focus on sports as well. It is not necessary for someone to take part in sports to represent the country. They can also do so to maintain fitness and will gradually see an increase in their stamina and power. When this happens, they can win medals in competitions that they participate in, making themselves and the country proud.



## MR. KARAN THAPAR

Indian Journalist, News Presenter and Interviewer

Taken by the Editorial Board

- YT: You were the president of the Cambridge Union, which is a society focusing towards debating and free speech. In contemporary times, where importance is being given to discussion of different opinions, how vital are such institutions in upholding these values?
- KT: The Cambridge Union is over 200 years old. Obviously, debating societies are ipso-facto dedicated and predicated upon free speech and freethinking, but at the end, it is a debating society, and that is its main function. It is about at least 15 years older than its Oxford junior equivalent, and what it does is invite people to discuss subjects so that young college students, who have an interest in debating are able to do so.

Often when you're debating, you are asked to propose or oppose a motion, it is not necessarily your personal belief and your personal opinion. You're simply arguing a case. It is the fun of debating that draws people to the Union, and you debate regardless of whether you personally believe it or not. You're not actually pronouncing to the world your personal beliefs. It may be, and they may well on some occasions be the case, but that is not always the case in any debating society anywhere in the world.

- YT: When you had been offered a job at the Times, you decided to discontinue D.Phil at Oxford University. Having studied an array of subjects at graduate and undergraduate level, what drew you to take up journalism, when you could have easily pursued more lucrative careers?
- KT: I stopped my D. Phil at Oxford because I was offered a job by the Times, and I knew if I didn't take up the job that the Times was offering, they wouldn't keep it open for me. At the time I thought, wrongly as it turned out, that I would be able to finish writing up my D. Phil thesis but obviously that was wrong. My job took over my time, and as months turned into years, my distancing from the D. Phil thesis also meant that my interest in finishing it had begun to diminish. Then you get so taken up in your career that you no longer think of yourself as a D. Phil student or an academic. You become more journalistic in your thinking, attitude and aptitude and less scholarly. Then, you suddenly discover one day, three-four years down the road, that you have changed and become a different person. The importance of finishing a thesis that was so prominent and predominant in your life four years earlier, no longer is and that is what really

happens. I suppose the truth is that events and opportunities overtook me.

- YT: Journalism, as a profession, has been facing criticism as a section of the population believes that it has begun enforcing its opinion on the general public. Is there any truth in this perception? If there is, what do you think is the reason behind it and how can constructive change be brought about?
- KT: This depends upon which journalist you're talking about, or which paper you're talking about. I don't think a single broad sweeping statement is true for every paper and every journalist, so that is the first point to make. Secondly, by and large, news reports tend to be objective in the sense that the facts they're citing are truthful and not made up. But the facts they cite may be selective and that is another matter because sometimes, the full compendium of facts make a different impression to the one that you choose to pick upon. So, selectivity can also introduce bias, but that is not necessarily the same as being untruthful or making things up; that is a second sort of problem.

But if opinions come through in op-ed pages, then that is perfectly understandable because that is what op-ed pages are meant for. By and large, I would be reluctant to come up with a general sweeping statement to brush all journalism aside because that would be wrong, it would be mistaken and fully misleading.

- YT: You returned to India in 1991 and have since interviewed a host of politicians and continue to do so even today. Over these 20 years, have you noticed any particular change in the nature of politicians towards the press and media?
- KT: Well, over the years that I have been interviewing politicians, I think they've become savvier. They're more aware, and they're also better instructed by their colleagues on how to handle interviews and perhaps specifically, how to handle difficult and aggressive interviews. Therefore, no longer do you have politicians like one did in the 80s, who would say, time and time again, 'Don't say anything about Rajiv Gandhi!', which is a very silly

and shallow way of handling questions about the Prime Minister. Today, they're infinitely more thoughtful about their response.

However, and this is very important, they've acquired a new bad habit, which wasn't so prevalent in the 80s and 90s or even the early 2000s. That bad habit is to refuse to give interviews to people who you think will give you a tough time. The challenge of handling that interview is altogether done away with, because you've already decided that you won't give them an interview and that is a terrible practice because this is just contempt for people trying to hold you to account; it suggests also, subliminally, that you don't know how to respond to the questions they ask. It also shows that you're not willing to be made accountable, which politicians should and must be.

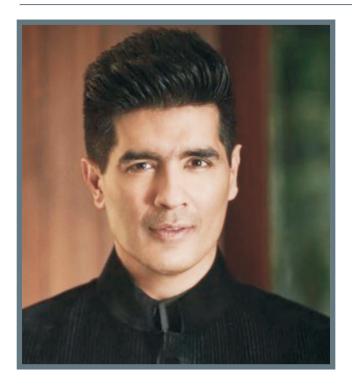
- YT: You interview people from many different domains and fields of expertise which range from economics to biology and in order to question them, you have to be as adept at the subject as them. How do you prepare for the interviews, particularly those which do not fall within your area of knowledge?
- KT: 90 per cent, if not all of the interviews I do, do not fall within my area of knowledge; that would be the case with any interviewer on any television channel, and what you have to do is to research, reasonably comprehensively and widely. What you need to do after that is discuss the structural strategy of the interview with your colleagues, and then devise questions that ensure that you get in that direction. A lot is learnt through experience and understanding of the task that you're doing. But I would say, the most important thing for any interviewer is to know the subject fairly well and to have read reasonably comprehensively around it. You are an interviewer and you can never know as much as the people you're interviewing. They're experts, you're not, and you must bear that in mind. You must've done a certain amount of strategic structured reading, so that you're aware of what they're likely to say, and if there's a need to counter, you know how to counter it. That is a part of the process of research, and, more importantly,

part of the process of structuring and discussing with your colleague about the interview.

- YT: Your book, Devil's Advocate, reveals many riveting incidents of your professional life which were previously unknown to the public. While writing such accounts, how do you decide what can be revealed while still being within the bounds of professional ethics, particularly when a few of the instances might not cast your guest in a good light?
- KT: I simply chose those which I thought were interesting, both to me as an author, as well as to what I presumed would be the case for the audience or the readership, and wrote about them. The fact that, sometimes, people that I am writing about may not emerge in a good light was not a major concern because as long as I was telling the truth, it didn't matter too much to me. Obviously, I was not asked to malign or hurt people, and I ensured that didn't happen. But, if telling the truth meant that sometimes they were depicted in a light that was not as favourable as they would want, well, that is just a fact of life.
- YT: At a time when everybody is using social media to increase their reach and interaction with the audience, you are not on any social media platform at all. Does this aversion to social media entail a conscious rationale or, is it merely a personal choice?
- KT: It is definitely a personal choice. The reason being I don't see the need to broadcast my views on every subject to everyone, and I don't understand why people would be interested in them. Secondly, Twitter only gives you 290 odd characters, and there are many subjects on which abbreviating your views to 290 characters is not just to simplify it, but makes it rather simplistic and distorted. So, for both those reasons, I see no need to be on social media.

I wrote columns for papers, and if people want to know what I think of certain matters, they can read the columns. I sit for interviews, so you can get a sense of my thoughts about these subjects from the questions asked, but not a lot, because remember, my questions don't reflect my viewpoint - they reflect the job I'm doing, which is to often play the devil's advocate to someone else.

- YT: The creation and propagation of fake news is becoming a serious problem for India as a society, leading to several rumours and misconceptions. As one of the senior journalists in the country, what steps do you and the media fraternity at large take to keep the emergence and propagation of fake news in check?
- KT: Basically, when it's a matter of fact you try your best to clarify and make accurately sure that those are the correct facts. There is very little that I take from WhatsApp because I'm not on social media, so I don't go to people's Twitter accounts to find out what happened. I tend to rely on newspapers, television channels and on first-hand accounts of what has happened and, as often as possible, give source material so that I can say where I have got it from. I do not get my facts from Twitter or social media.
- YT: Over the years, your words have had a considerable influence on society; the students of St. Xavier's College (Autonomous), Kolkata are no different. What message would you like to give to them?
- KT: I would say to all the students in any country, at any time, be yourself. Never be shy or scared about expressing an opinion. If it's wrong - fine, so what? It's not the end of the world. One learns through one's mistakes but have the confidence to say what you believe. At the same time, have the willingness to keep your eyes and ears open and adjust your thinking as the surrounding circumstance changes. Be open to new ideas and stand up for your beliefs. If you believe that someone else is being wronged, stand up for them. There is no point in believing someone has been wronged and keeping quiet about it because that's the easy way of seeking cheap popularity for yourself. That is a coward's position. So, be true to yourself and be proud of it and be confident about it. Thus, when the world changes, you must change as well.



### MR. MANISH MALHOTRA

Indian Fashion Designer, Entrepreneur and Filmmaker

Taken by the Editorial Board

- YT: As someone who started his journey in the fashion designing industry with minimal knowledge and training, you have emerged as one of the most accomplished fashion designers in India. Having worked in this dynamic industry for such a long period of time, how did you manage to develop your skills while applying your creativity in different projects?
- KT: Browse and observe, interact with the young generation about their needs and aspirations. It can be challenging to keep up, but what keeps me going is my curiosity towards this ever-changing world of trends and still infusing my bit of individuality to their taste.
- YT: You have, from a very young age, been passionate about fashion designing, because of which you chose a career in the fashion industry over your established family business. Given the uncertainty of success in pursuing an art, how did you gather the courage to pursue fashion designing when you had a well-planned future already laid out for you?

- KT: Well, art can help alleviate uncertainty. Of course, there is no guaranteed solution to overcome obstacles, so I chose to take as much advice from artists and designers as I deemed fit. I learnt on the go. I took every opportunity to observe and learn from it, and my passion took me forward. We all have different circumstances and ways of approaching artistic practice, and in the end, only you can decide what is best for you.
- YT: As the world grows smaller because of social media, our lifestyles are being influenced by the best of all cultures. When it comes to bridal couture and wedding collections, how do you think the fusion of Indian and western silhouettes is influencing fashion designing today?
- KT: Today, both men and women want contemporary styles and vintage charm to blend. I believe fusion wear leaves ample room for getting as creative as one can be with their choice of clothes. It allows the person to break away from the norms. Our designs cater to such demands and need to have a heavy western and Indian influence in one outfit.

But then, when it comes to traditional as well, I have always believed that we should keep the tradition intact where we celebrate our age-old crafts and embroideries and give a modern twist with our cuts.

- YT: You played a key role in the 'Behind the Mask' campaign which aims to assist the artisans and craftsmen who lost their livelihood during the pandemic. As a member of both the Bollywood and the fashion industry, do you think that these artisans and craftsmen do not get the deserved recognition? What can be done to supplement their craft by the government and the society alike?
- KT: We have been working with local artisans for decades now. Mijwan Welfare Society is an NGO which is very close to my heart, where I work with Shabana Azmi and Namrata Goel to empower women who produce some of the most beautiful chikankari work for the Manish Malhotra brand. I believe that we are in a position where we should listen to their voices, build on their strengths and think out of the box. They preserve our age-old crafts and hone their skills for years. Therefore, we should collectively address that and help them in every possible way to encourage and support them.
- YT: Your work involves dealing with several highprofile clients and understanding what they exactly want. After almost 15 years of the launch of your label, which now has an established brand name, do you think that interpersonal skills are a necessity in the fashion industry so that one's craft can be used effectively to meet the needs of the client?
- KT: In absolutely any industry, confidence is important even when you lack validation. Optimism works even when you feel low and defeated and most importantly, love and passion for what you do will always show in your work which people will recognize and appreciate. All of this helps you to

strike the right conversations where you will find

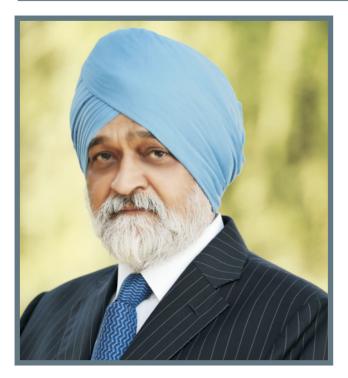
Mr. Manish Malhotra

yourself talking about subjects that will flow naturally, hence enhancing your interpersonal skills. Of course, when that happens, it automatically helps you develop this skill further, gradually understanding the needs of your audience.

- YT: Fashion is always evolving, morphing, and transforming and thus, it is very important to keep up with the trends and be mindful of the changing environment. In instances wherein your personal views are contrary to the existing trends, how do you maintain objectivity and take initiatives against your intuition for the benefit of the organization?
- KT: Every day comes with a new trend, something more fun and exciting than yesterday, and it is so natural to go where everyone else is going. But I am very well aware of my traits, goals and prioritize them over everything else. Also, I have been known to work with my intuition, so no matter what the trend is, if I am not feeling it, I am not succumbing to it just because everyone is. For me, I choose to create my own.
- YT: When you design costumes for a movie, the work has to be done keeping in mind the demand of the script. In such instances, are the costumes designed solely based on the storyline or do you try to incorporate the current trends in those designs too? In the latter scenario, how do you ensure that these trends blend perfectly with the storyline?
- KT: The script is very important when it comes to movies. You cannot have someone look glamorous if the character they are playing is a simple one. The style of the character helps the audience understand the story better because not only do they see them act the character but they also see them look the part which makes it convincing. So, I have always stuck to the character, no matter what the on-going trends are.

- YT: For an already established brand in the fashion industry, creating trends is more important than catering to the existing ones. Having already established a brand name for your label, do Bollywood movies play a significant role in helping market the brand and its new collections or are these projects merely a source of generating revenue?
- KT: The fashion in movies has always influenced our real life. All of the looks that I created on screen, turned into some of the most iconic looks for the audience. Whether it is Kareena Kapoor in 'Kabhi Khushi Kabhie Gham' and 'Jab We Met' or be it Priyanka Chopra and Deepika Padukone's sarees in 'Dostana' and 'Yeh Jawaani Hai Deewani', and many more. Till date, we have requests from clients to replicate the look for them which is a big compliment and for which, I am grateful.
- YT: You have become more than a destination for timeless Indian fashion and your creation spans across broad spheres of Bollywood, styling, diffusion and everlasting bridal and customized designs. What message would you like to give to the students of St. Xavier's College (Autonomous), Kolkata to motivate them to pursue their dreams?
- KT: Work hard, stay focused and learn to love whatever you do. I truly believe that if you love what you do, you will never feel like it is work. Be passionate and driven and at the end of it all, never give up.

#### INTERVIEW



### MR. MONTEK SINGH AHLUWALIA

### Indian Economist and Civil Servant

Taken by the Editorial Board

- YT: At the age of 28, you took charge of the Income Distribution Division in the World Bank's Development Research Centre. Having been the youngest Division Chief in the World Bank's bureaucracy, how important do you think is the role of youth in bureaucratic jobs?
- MSA: All bureaucracies have younger people. The real issue is - do younger people get promoted rapidly to management positions? I think there is a huge benefit of having a sprinkling of younger people at higher levels. However, for this to happen, you have to get away from seniority as a dominant factor in promotions. That's not easy in the government sector though it is easier in the private sector.
- YT: You were the first Director of the Independent Evaluation Office at the IMF. What, according to you, were the major flaws in the IMF which led to the establishment of such an office?
- MSA: The Independent Evaluation Office (IEO) was created in the aftermath of the East Asian crisis of 1997 where the IMF was perceived to have failed to identify the buildup of vulnerability

preceding the crisis and also made the wrong recommendations for solving the problem when it arose. The IMF's remedies worked quite well in Korea but not in Indonesia. In some ways, Malaysia, which departed from the IMF mantra by introducing capital controls did quite well. The IMF's failures were analyzed in a report produced by the IEO when I was the Director.

- YT: You resigned from your role at the IMF to take up responsibilities as the Deputy Chairman of the Planning Commission. What motivated you to take up this new challenge and make a switch from the international platform to serve the country?
- MSA: In 2004, it was too good an offer to take up the role of the Deputy Chairman of the Planning Commission as a part of the government in New Delhi and I had no hesitation resigning from the IMF position. I had always wanted to contribute to policy-making in India. This is the reason why I returned from the World Bank in 1979 as well. The invitation to return as the Deputy Chairman was a godsend, and I had no hesitation in accepting it.

- YT: You were the Commerce Secretary when the 1991 reforms were undertaken which opened up India to the entire world. Recently, there has been a wave of Deglobalization which has been driven by the European nations and persisting trade wars. Retrospectively, is there anything that India could have done differently in going about these reforms and what do you think is the reason behind the emergence of the diminishing interdependence?
- MSA: I do not think that the deglobalization we have seen in recent years is the result of anything we did. We were absolutely right to open up in 1991. In fact, we should have done it much earlier. We got a lot of benefit from what we did in 1991. However, we have not gone far enough. We still have very high rates of import duties as compared to other countries and we have raised these in the past four years. I personally think this is a mistake. The current deglobalization reflects the nervousness of developed countries facing competition from developing countries, most of all from China. Since China is also seen as a threat to their global supremacy, this is an added factor underlying the retreat from globalization in the West. However, we should not conclude that the days of open trade are over and go back to protectionism ourselves. In fact, the nervousness about China creates opportunities for India because in the search for non-Chinese dominated supply lines, we could play a major role. But for this, we need to have a more open approach.
- YT: There have been several arguments as to whether the Indian economy is doing well in the current scenario. Having served as an Advisor to the Ministry of Finance and having been a part of the Planning Commission, what are your views when you look at the state of the economy right now?
- MSA: According to me, we face three problems. First, we were hit by the pandemic in 2020 and we are still battling it. This was bound to depress growth

in 2020-21 though it is arguable whether we could have done better. Other countries did not have as sharp a slow down as we did. Second, the pandemic is not the only problem. Our growth rate had begun to slow down even before we entered the pandemic. India witnessed a very high growth averaging about eight percent upto 2011. The economy then slowed down in the last three years. There were many reasons for this and I refer you to 'Backstage: The Story Behind India's High Growth Years' for a detailed analysis but it was undoubtedly a slowdown and inflation was also high. Then, there was a new promise of a return to double digit growth and for the first three years until 2017-18, growth did improve but thereafter, it slowed down. In the last year, before the pandemic, growth was only four percent. This raises the third issue. Once we recover from the pandemic, will we go back to the high growth experience or simply get back to the tepid growth of four to five percent which we saw before the pandemic? The answer to this question depends in part on what we do and in part also on how the world economy performs. I think we can assume that by the end of the current year we will be back to the prepandemic situation. We need to think about the policies and economic reforms needed to stimulate high growth.

- YT: The Prime Minister of India laid down the target of making India a \$5 trillion economy by 2024-25. What, in your opinion, is the roadmap to achieving this optimistic economic goal?
- MSA: The 2024-25 target is obviously not feasible now in the light of the pandemic. Our objective should be to get back to seven plus per cent growth from 2022-23 onwards. I cannot go into all the policy issues we have to address in this interview but you will get an idea of the main issues from Backstage, as I mentioned before, which provides some indication of the agenda ahead. To that, we must now add, combating climate change. It is a big agenda.

- YT: Your book takes the reader on a journey through India's reforms while also advocating for the dire need for new economic reforms. You have also mentioned how corruption is emerging as a barrier to growth. What are the necessary actions that can be taken to eradicate the same?
- MSA: Corruption is a problem in all countries. There are many international indices of corruption and India is not among the worst. It comes out somewhere in the middle. The usual characterization of corruption is that of a process in which government action is subverted to the benefit of individuals either outside the government or inside. In other words, bribes are paid by individuals to get government officials to act in their favour, or are simply extracted by government officials for their own benefit by raiding individuals and denying them what is otherwise their due. This type of corruption has to be handled by action on many fronts. The laws and rules under which people must operate should be clear and processes of the government decision-making should be as transparent as possible. Enforcement of laws should be strong and the legal machinery once started should also take its course quickly. The judiciary should be independent and should command the trust and respect of the general public. These are general requirements valid for all countries. They do not guarantee that there will be no corruption. However, a system that is strong on all these fronts will have less corruption.

A second aspect of corruption is the link to election funding. It is no secret that elections in India typically involve huge expenses much beyond the levels specified by the Election Commission. The need to collect such resources also encourages corruption. This, again, is not just a problem in India. It is there even in developed countries. Much of the debate about rising inequality in the U.S. is fueled by the belief that the growing concentration of wealth enables 'money power' to manipulate government decisions in its favour. Business is seen to be closely linked to election funding. Here again, the only solution one can think of is more transparency in the mode of election funding and an electorate that is aware and knowledgeable.

- YT: You have worked in the highest echelons of the World Bank, the IMF and the Indian government. Which of these roles did you find the most challenging and what is the reason behind it?
- MSA: I have absolutely no doubt that it was my stint in government from 1985 onwards which has been the most challenging. I learnt a lot from my international assignments but if you are interested in policy-making, you can only do it in your own country.
- YT: As a person with considerable experience and one who has made the best use of education to achieve great things in life, what message would you like to give to the students of St. Xavier's College (Autonomous), Kolkata?
- MSA: This is the most difficult question you have posed. I would only say that you should look inwards and decide what you really want to do and then do it with all dedication. Whatever you do, you should be ready to work hard towards it and not look for guick rewards. Also, remember that your life will be full of greater uncertainty. So, do invest in yourself constantly and be ready to be flexible in adjusting to changing circumstances. I fear replication of older success stories is not helpful because the world is changing rapidly. Most of the jobs which you think are attractive today, may not be there twenty years from now. But the general advice is that one must do what one wants to do and work hard at it; that is good advice in my view.



### MS. USHA UTHUP

Indian Playback Singer

Taken by the Editorial Board

- YT: During your childhood, you had been surrounded with the thought that your voice was not fit for music and now you have emerged as a singing sensation in the country, without any formal training. Considering that you decided to enter the music industry in the 1970s, at a time when pop wasn't looked upon much as a music genre in India, what has your journey been like?
- UU: My journey of 51 years has been a wonderful one and I really don't make sensational copies or have any hard luck story. The reason why it has been so, is that I was lucky to come on at the time when it was the prerogative and the privilege of the so-called Anglo-Indians to sing at the nightclub. When you say pop culture, as far as I am concerned, this whole misconception is there about what pop is. It is just the short form of popular. So, whatever is popular is pop music. So popular music is what I was singing and what I am singing now is also popular music. All the people in the films also were singing only pop music and people didn't want to call it that because they felt, or the misconception was that only English music could be pop and only fast music could be pop.

I think I came on at a time when people really thought of a nightclub as a bad place to go to. I wouldn't say bad, not such a nice place to go to as it was only frequented by men. But, by the time I came onto the scene, people started feeling that it was okay to do so, because of the kind of image that I had, wearing a saree, 'bindi' and flowers in my hair, totally 'gharelu' (homely), girl next door kind of image that I had, the people just accepted me. The women in the audience were and still continue to be my biggest support because they have always felt that they could relate with me. Soon the nightclub became a place or, wherever I was singing became a place where everybody was coming in. Not just the men in the family but the wives, the children, everybody. It became a family kind of thing and it was considered okay. But I don't agree with the fact that pop music was ever looked down upon. It was not considered, that is true. Good girls, coming from good families didn't really go into a nightclub and sing. So, considering all that change brought on, my journey has been really fantastic.

There have been lots of ups and downs and highs and lows, like there are in anybody's life.

Sometimes the highs were more, sometimes the lows were more, but it has been a great journey and the reason for my journey being so good, is to be Indian. My audience and my family were a really good infrastructure of support. The family, the audience, the musicians, and, of course, God above made my journey really fantastic and all the people that I met during my journey, have really made it good and exciting. But, let me also tell you that I never decided, never thought, that I would become a singer, leave alone pop or a nightclub singer. I never ever thought it would happen, but it did.

- YT: When you entered the music industry you had no internal connections or prior acquaintances. Lack of social media back then implied even fewer means to gain popularity at that time as compared to the present scenario. How difficult was it for you to make a name for yourself on such a scale and what inspired you to keep going throughout?
- UU: As I mentioned before, I do not have any hard luck stories to give of struggles and things like that. And yes, considering that I had no godfather or godmother in the film industry or any industry, how difficult was it for me you ask? How have I stuck it out so long? I stuck it out for so long because I think one thing led to another. I come from a time when there was no electronic media and there was only the print media. So, in the print media, whoever caught me at shows, wrote about me and people read about me. They wrote about me in the newspapers and the magazines. Word of mouth and the print media have always been the strongest element. And so, slowly the word started going around about a girl who is really good and different, so let's go and listen to her. The reason why I have lasted so long, is because I have really not made compromises on the way I look, or on the fact that I am 100 per cent who I am. What you see is what you get and it has always been like that.

- YT: You made your acting debut back in 2006 and later on made appearances in many Bollywood and Tollywood movies, like 'Pothan Vava'. What inspired you to opt for acting in the industry where you had already established yourself as a renowned singer?
- UU: What inspired me was the fact that I realized very early in my life, the intoxication or the appreciation that I get from the audience is what really makes me tick. My whole world revolves around music and love and which is why I say I believe in music and love. And when I started getting that from the audience, it really spurred me on and that has been my biggest inspiration. But if you say what has been my inspiration to sing, I would definitely say I come from a very musical family. My two elder sisters, Indira and Uma, were musically inclined, they were the original Singing Sami Sisters and so there was music all around me. My influences have been great, but my singular inspiration has been the radio. Radio salons and channels like Voice of America, BBC, Vivid Bharti - wherever I got good music, I listened to it as a child. So, in school also, even though I was not given a place in the choir, it didn't stop me from enjoying music or listening to music. So, I think the inspiration has really been my audience and as I always say music is cyclic. What you give to them always has to come back to you and with no expectations, unashamedly I sing and give my everything because for me love and music makes the world go round. And as far as I'm concerned, music is not my business, communication is. So, I'm always trying to see how better I can communicate with all of you and so with that, I keep practicing how to communicate with you. For me, a song is a song. I don't believe that there is anything bigger than that. I do believe that the song is always bigger than the singer. So, all these things inspired me when I realized how important it was to communicate my song or, communicate the lyrics of my song or, the tune of the song or just communicate with my audience and once I achieved that communique, every day I'm practicing that, every moment of my life I

am practicing how to communicate better with you. That has been my inspiration, how to keep on going at it and how to reinvent myself, reboot, rediscover, revisit and try to do things better than I did the previous moment. That is my inspiration.

For me music and acting, really are not something very different. My acting is really an extension of my music, everything that I feel in my music. So, I got the opportunity, first of all, when I acted with Amitabh Bachchan in 'Bombay to Goa', then I did a part with Shashi Kapoor and Aparna Sen in 'Bombay Talkies' and also appeared with Kamal Hassan. But, of course, 'PothanVava' was really the icing on the cake. I have done a lot of Bengali work also, like Bengali films and serials, and I feel that music and acting are not so distinct. However, it is different because you have to do so many takes, but for me acting is very important.

- YT: In recent years, we have seen a trend of remakes of old retro music in Bollywood. What are your views on this recent shift in trend and do you think that these remakes are faithful to the ideas and melody of its original form?
- UU: In my time nobody called it a remix. Nobody has an original song to sing when you start your singing, or at any time. If you want to sing a song, surely it is not going to be your own unless you make the song originally, and I have always made every song my own. Whatever you sing, whatever is out in the universe is yours, it's for you to sing. We never called it a remix, we just called it our own version, or as it was called in the western world, an interpretation of a song. So, I am not saying that all remixes or all interpretations are very good but, I will never say that all remixes are bad. I think it is very good because the old tunes are preserved and brought in front of the youth today, which they would have otherwise missed. There are a lot of songs which they would have never heard because they were extinct.

There are so many beautiful tunes, Rabindra Sangeet and music in the universe. Music is cyclic, so the old songs are called retros, because everything old keeps coming back. It has to come back. Hence, everything can't be called a remake, it is a version. If I sing a version of a particular song, it doesn't have to be a remake. I am not on the same page as the people who call it a remake. Nobody changes the tune, only the treatment is changed and if the treatment is changed, but you are faithful to the original melody and lyrics, it is a good thing. I think it is fantastic. It is one way of preserving the old tunes.

- YT: Over the years, you have judged several Indian music reality shows. On many occasions, we have seen very young children being forced into stardom by their parents, or the toll of popularity and fame falling upon an individual who is not ready for it, eventually leading to their failure. In your opinion, what role do music reality shows play in the careers of budding musicians?
- UU: This is a matter that often comes into discussion. I think reality shows are, if you have to grade them on a scale 1 to 10 according to what is good and what is bad, I would definitely say that reality shows have been great in exposing the talent that India has and bringing it to the forefront since there was no other exposure. Now with reality shows, everybody who has got some talent has come on to the scene and I think that is wonderful. Reality shows are great, otherwise we would've missed the talent that we have in our country, and they wouldn't have gotten the exposure. This is on the upside and I think I would say 9 out of 10 for the upside.

However, on the downside, people are saying that it isn't as good as there is a lot of politics, and there are a lot of things which are scripted. People are so negative in thinking all sorts of things about reality shows but as I said on that scale, I would probably put it down to maybe 4 out of 10. It's not good for one reason and that is the pressure put on the children, especially by the parents, that they have to win and be better than somebody else. This is not a healthy competitive spirit. However, it doesn't matter because the good outweighs the bad. It also shows children how to practice well and gives them all a chance to really look into their mind and see if they really want to do this or not.

- YT: You have worked with great music directors of different eras like Late R.D. Burman, A.R. Rahman, Salim-Sulaiman and many others. How do their ideologies to music and production differ? Is there any particular incident that you recall which has left a longlasting impact on your life and career?
- UU: Everybody has their own ideas of how to present certain music and how to sing a particular song. The kind of impact that people have had on me has been immense and I think that I'm not here to judge their ideologies but I would definitely say that it has been great working with some of the legends of the industry like for example - R.D. Burman, Shankar Jaikishan Ji, Laxmikant-Pyarelal Ji. I have worked with Anu Malik and Anand-Milind, as well as with their father Chitragupt Ji. I have also worked with A.R. Rahman and Vishal Bhardwaj and Bappi Lahiri and of course the King of Music- Ilaiyaraaja Sir from the south. It is fantastic that one gets an opportunity to work with them and all of these people have had a great impact on me. The impact is that each song that has been a hit has given me 365 or 755 shows. I am still doing the shows with the songs Shaan, Hari Om Hari and Ramba Ho and I'm still getting by because of that. I think I am nobody to talk about their ideologies because I never knew all of them personally. Yes, R.D. Burman I know very well, I know most of them very personally but never got into the ideology that they follow. But the thing that is definitely there is that music brings people and the world together and has shrunk the world. So, I would definitely say that the impact they have had on me, especially the people I have worked with, more than the others, would be the fact that I am always open to learning from them and I am happy to learn.

I have done a whole series of children's work like country rhymes and working with the Pilot brothers has been a learning experience for me. I see everything I do as a learning experience and musically, it has been a great impact on my life. Ilaiyaraaja Sir and R.D. Burman have been huge impacts in my life.

Everytime you work with the smallest, or the youngest of music directors, anybody who gives you a song to sing, there is so much to learn. So, for me, my greatest ideology has been to keep your ears and your hearts open all the time because there is so much to learn. Whether the person is a young person, or an elderly person, it really doesn't matter. The point is that you must be open to different methods, different approaches for the same goal and the goal is, of course, to make music so that people would love it. I think for me the most important thing is that you must allow somebody to make an impact on you and they have all been very impactful. You learn different methods of saying certain words, certain notations, everything put together. They have all had an impact on me because I have always been open to learning.

- YT: You have been in the industry for more than 50 years and have witnessed the evolution of music over time with the introduction of countless genres in the Indian music industry. What is your opinion of the modern trend of music in India, with the takeover of hip hop and the large-scale use of auto-tune software's?
- UU: As far as I am concerned, technology has brought about precision into our music. Technology has brought about improvement of being able to separate music and the different instruments. It has helped us a lot, and it is unrecognizable. When I say unrecognizable, I am saying you cannot really pinpoint that this is good because it has been done through technology. There are so many ways you can sample great sounds of big artists, like the drum samples of somebody and the guitar samples of somebody else and then compose a tune based on that. That is wonderful

and I don't think there is anything wrong with that. I am also not totally against autotune. Yes, there are people who are not serious about it and that is not nice. When they sing the song and they leave it to the sound engineer and ask them to fix it or do the autotuning, then that is something I am not for; I am totally against it. But nobody is perfect. So, if there is a little mistake and you have the facility of an auto tuner then it is good. It is good for the people who depend on that, good for the sound engineer to know that he has a facility for doing this. Thus, autotuning is good where the whole song is fantastic and maybe just half a note somewhere or half a word has gone a little flat or sharp, then at that time, autotuning is good. I don't think everything about it is bad.

However, what is bad about autotuning is that nowadays everybody seems to think that they are good at music and sing whatever they want to and get it auto-tuned. I think if it is used carefully and used sparingly, it can be of aid to the final production. But, when someone is singing completely out of pitch and out of scale, and then fixes everything in production with autotune, then it is bad.

As far as hip-hop goes, if someone tries to say that it is a western type of music or, it has been there for time immemorial, don't forget that there are only eight notes and every song is a combinationpermutation of that. So, as we become more and more a part of the world, slowly there will be influences coming in from everywhere and that is natural and there is nothing wrong with that. If you take all the good things from outside, that is all right.

- YT: The mass consumption of music implies that its production involves multiple actors, whose sole motive is to ensure its commercial success. As an artist, how does one balance creative freedom with the temptation of fame and popularity?
- UU: You know this has been an age-old discussion and, as I have said before, to discuss this question you will definitely need more than just one

column in the journal. But as far as I'm concerned, these two are connected. If you're in the entertainment business, isn't it a fact that you are a creative person and you create so that maybe, at the back of your mind, although that's not your priority, you gain popularity and fame? Somewhere in your subconscious, isn't it that you create something for people to appreciate? You create, but the temptation, as you say, the temptation to get fame and popularity makes you compromise on the quality then that, of course, is not good. If one forgets about the creativity, sensitivity and the sensibilities of a good composition just because they want to get famous and popular, that's not true. But, if there is a point where you are so bothered about being popular and famous that you make compromises on creativity, then that is bad, which I don't agree with. There should be absolutely no compromise on your creativity, but definitely, creativity, fame and popularity are all linked.

- YT: Historically, pop culture in India has always been related and restricted to Bollywood music. However, recent times have seen a rapid growth in independent music, with local bands and artists thriving and releasing multiple albums. With their rapid rise and popularity amongst the youth, do you think that it has risen to become a competition to the Bollywood music industry? What impact do you think this will have on Bollywood?
- UU: I believe that this view, that the pop culture of India has been based on Bollywood music, is false. India has always had independent music. It was called private music in those days and it's only in India where you have movie music and non-movie music. In the western world, it's just music. Any film that had more than one or two songs was called a musical but in India, every film is a musical because you have so many songs. This was especially true in the olden days, where there were a minimum of five to six songs. But parallelly, there existed independent music, as you call it now. These days, everything is coming to light and people know about it. There was a time when it was just categorized as Bollywood

and Private. So, anything that was non-Bollywood would be considered independent and there was, even previously, a big industry of independent music. But I think that as long as people are pumping in unreal amounts of money into the music of Bollywood, independent, or so-called private music, will never stand a chance. But it should never stop people from creating. You cannot create with the sole thought that you want to get into a movie. Why? Why does the benchmark have to be a film song or getting into Bollywood, that's not the benchmark at all? You could be doing wonderful independent or private music. However, it does not mean for one minute that it can ever overthrow Bollywood music because Bollywood music is there to stay and so is independent music. Hopefully, it'll run parallelly and both will be successful. It was successful, and it will still be successful. But, if you are thinking of the money that can come out of it, as long as there are people to pump in a lot of money into Bollywood, independent music doesn't stand a chance, in terms of the kind of money that can be made out of a Bollywood film.

- YT: Throughout your career, you have taken up projects in seventeen Indian languages and eight foreign ones. In a country where regional and religious diversity is prominent, what role does music and language play in uniting the people?
- UU: I have always said this and I firmly believe that music is the one medium which binds the people all around the world together and specifically the people of India. I definitely belong to this aspect because a Punjabi song of mine might be as popular in Kashmir and in Punjab, and Gujarat and Assam as it is in the South of India. They don't understand the language but bond with it and that is the true essence of unity in diversity because music knows no barriers of caste, colour, creed, language, gender, sex, age. It is admirable how music can bond people, and I truly believe in it and that is why I am, from inside, a happy person because I believe and I have the courage to face my conviction, that

unity in diversity is hundred per cent proven through music. The people of India have proved way beyond doubt that a song is a song, it doesn't matter who has sung it before. It also proves beyond doubt that music goes beyond everything else, beyond every language and I think language really has bound people together and music is the greatest binder.

- YT: Your dedication and contribution towards the Indian music industry has been a great source of inspiration for the country, and the students of St. Xavier's College (Autonomous), Kolkata are no different. What message would you like to pass on to them?
- UU: I have been a part of St. Xavier's ever since I can remember. My whole family has been from St Xavier's College in Mumbai and here as well. So, the one message I can give is that the song is always bigger than the singer. Music binds and music brings people together. In times of the pandemic, we have gone through a lot, lost so many loved ones, the one thing that has really seen me through all this, besides love, is the fact that I have music. Without music it would have been impossible for me. Infact, I have done more recordings during the pandemic than ever before. And for this I have to say thank God. If you knew who was walking with you, you would never be afraid.

My message would definitely be, believe in yourself, have the courage to face your own convictions. and dream. Dream big because if you don't dream big you won't be able to achieve anything. I think it's wonderful to be able to dream so big that at least, if you shoot for the moon, you will get to the stars or even the treetops. If you don't have a dream then how will you make a dream come true? Keep dreaming and be true to yourself. And remember, no matter what happens, never give up. Hang in there and things are going to be okay. In the meantime, stay safe, stay well, alert, strong, cheery and happy and spread a smile around everywhere because that's what we need, really optimistic people. God Bless!



The IBC has provided us with a framework that allows a market determined process for distribution of the firm value between creditors and shareholders.

# What Critics of Insolvency and Bankruptcy Code Get Wrong about the Recovery Model?

#### Dr. Hemant Kumar Manuj

Associate Professor in Finance Area S. P. Jain Institute of Management & Research (SPJIMR) Mumbai

#### ABSTRACT

The banking sector is one of the prime sectors of the Indian economy. The poor performance of financial institutions, increase in the value of nonperforming loans over the years, and delay in the debt resolution process have become great concerns for these institutions, especially in India. To combat these issues Insolvency and Bankruptcy Code was introduced in 2016. The purpose of the bankruptcy law was to do away with the existing complex and fragmented legislation and offer an economically viable solution by consolidating existing laws to create a single code for bankruptcy and insolvency. However, the adoption of the code was met with a barrage of criticism. It was susceptible to a wide range of interpretations, with critics focusing on two central concerns. These include large write-offs of loans by the banks and unjustified losses to the stakeholders. Any such belief or statement, however, was not supported by facts. The article aims to capture the true essence of the code and to dispel common misconceptions about the same.

KEYWORDS: Insolvency Code, Banks, Creditor, Interest, Debt.



YOUTHINK • 2022 • Vol. XVI

#### INTRODUCTION

The Insolvency and Bankruptcy Code (IBC) has completed five years. Critics of the IBC have focussed mainly on two issues: a) large write-offs of loans by the banks; and b) undue losses to stakeholders like employees and minority shareholders. On both these issues, fears and allegations that the IBC has been a failure, are not supported by facts or rationale. Let us see why these are misplaced beliefs.

#### LARGE WRITE-OFFS OF LOANS BY BANKS

The job of creditors is to generate a return in exchange for the risk arising from the disbursement of loans. So, unless it is too high, loss on loans is not an unusual incident. There are two dimensions of analyzing if the magnitude of loan loss is too high. One is to measure the amount of loss in proportion to the amount of investment, often known as credit cost. This helps us understand whether the creditor is undertaking a profitable lending business vis-à-vis alternative uses of capital. The other dimension is to check if the creditor's particular approach for recovery of dues helps in a lower loan loss.

Most critics focus on the second dimension, that is, whether the IBC is a better recovery mechanism compared to others like Debt Recovery Tribunal (DRT) or Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002. This is a fair question to ask.

Before answering this, however, one should note that the role of IBC begins with the admission of a corporate debtor into the IBC process. The efficiency of recovery should be measured by the value recovered post the insolvency resolution process as a proportion of the enterprise or liquidation value of the corporate debtor at the time of admission into IBC. Often, analysts use book value of debt as the denominator, which is misleading. The real value of debt is usually significantly lower than its book value by the time the IBC process begins.

Now, let us look at some data. As per the Reserve Bank of India (RBI)'s Report on Trend and Progress of Banking in India 2019-20, as a percentage of claims, scheduled commercial banks have recovered 45.5 per cent of the amount through the IBC for the financial year 2019-20. This is higher than the recovery under other modes and legislations such as the Lok Adalats, DRTs, and the SARFAESI Act, 2002.

Here is another metric. As cited in the March 2021 report of the Insolvency and Bankruptcy Board of India (IBBI), the final realization by the claimants, as a proportion of the liquidation value (at the time of admission to the IBC process), ranged from 115 per cent to 387 per cent for nine out of 12 large accounts in the first set of insolvent corporate debtors. While the comparative figures for the other modes of recovery are not available with the author, it is reasonable to infer that recoveries under the IBC would be higher than under other modes.

Thus, any belief that the IBC has not performed better than the erstwhile mechanisms of recovery is not supported by facts. It is also not a surprising conclusion since the process followed under the IBC is more market-driven and faster than others.

This does not mean that the recovery process through the IBC is perfect. The code needs refinement on multiple aspects. Just like other mechanisms, the IBC too operates in a corporate and legal system, which suffers from major systemic deficiencies. Our legal processes are slow, and many of our corporate laws and policies promote adverse behaviour. It is worth pondering how the value of the assets of a defaulting corporate debtor deteriorates so fast as to leave little value for the creditors, by the time any recovery mechanism begins. Unless these issues are corrected, the IBC, in itself, cannot lead to dramatic results.

#### UNDUE LOSSES TO OTHER STAKEHOLDERS

The stated objective of the IBC is maximization of value of assets of corporations (under insolvency), to promote entrepreneurship, availability of credit, and balance the interests of all the stakeholders.

In the case of solvent firms, the maximization of the value of assets benefits the shareholders, and in insolvent firms, it benefits the creditors. This means that at any given point of time, the objective benefits only

one class of financiers. So, balancing the interests would mean one class sacrificing its rightful interests for the benefit of the other. Why would any stakeholder voluntarily suffer a loss in a commercial and free market scenario?

The framework of corporate finance is well understood and adopted by the stakeholders when a firm is clearly solvent or insolvent. However, a firm is definitively solvent or insolvent only in legal terms. In the opinion of the capital markets, there is also a grey area. Capital market participants assign a probability to every legally solvent firm becoming insolvent and every legally insolvent firm becoming solvent again.

Let us say that a firm, D, has just been admitted as being insolvent by the National Company Law Tribunal (NCLT). For the markets, there is still some hope for D's recovery and it becoming 'more' solvent. This is evident from the fact that the shares of legally insolvent firms also quote at non-zero values. However, this also often leads to irrational expectations in the minds of certain stakeholders, partly out of ignorance on the difference between hope and legal right. Legally, a shareholder should expect zero value till the creditor is fully repaid. But markets survive on hopes and hence, the shareholder expects some value for their shares. This divergence leads to anomalies that are, at times, exploited.

Suppose company D has assets worth ₹ 120 going into the resolution process. The claims to the assets stand at ₹ 100 for the creditors (including all classes) and ₹ 20 for the shareholders. The creditors receive multiple proposals to recover their outstanding dues of ₹ 100 from D and finally choose the best one. The proposer, P, offers to bring in cash, ₹ 50, out of which it pays off ₹ 40 to the creditors, who accept a loss of ₹ 60 on their investment. The remaining ₹ 10 is used by P to buy fresh shares issued by D at an issue price, as per the proposal.

After resolution, the market price of the shares settles at a level such that the value of all outstanding shares is ₹15. The old shareholders hold shares worth ₹5, thereby suffering a loss of ₹15 on their existing investment. The new shareholders holding ₹10 worth of shares just bought the company. The new value of debt, after write-off of ₹60, is ₹40. The value of the firm is therefore ₹ 55 -- divided between the creditors (₹ 40), the old shareholders (₹ 5) and the new shareholders (₹ 10). Any gain to any one stakeholder must mean a loss to one or more of the other stakeholders.

As we observe in this case, the older shareholders suffer a loss in the value of their shares, if the market price of the shares fall during the process of resolution. This is often raised as an issue affecting the interests of minority shareholders. However, two facts must be kept in mind:

- 1. Shareholders have no residual claim in an insolvent company, which is unable to pay its creditors in full. If the firm D had actually become fully insolvent, the shareholders would have lost their money completely, and not partially. So, whatever value the shareholders own is only on account of hope that the new promoter will take the company away from insolvency.
- 2. Shareholders were, ex-ante, aware of the dues owed by their company D to the creditors. They also knew of the poor state of business. Yet, they stayed with their stake in the company and therefore it has been a conscious decision to hold the shares, which led them to take the risk of insolvency, and potentially lose money.

#### A BALANCING ACT

The lack of awareness of the retail, or small, shareholders is cited as a reason for offering them a better deal in the resolution process. This is a weak argument in many ways.

First, there is little data to show that retail shareholders are irrational or have been duped by some party against their wishes. The latter is simply a case of cheating and the accused party should be charged to compensate the losing shareholders.

Second, if the retail shareholders are being compensated, they should also be willing to share their profits in case of any gains. But that does not happen.

Third, as shown in the above example, gains to one party can come only at the cost of another. Typically,

creditors are expected to cede some of their share to other stakeholders. But that is neither fair nor justifiable. Creditors have, ex-ante, been promised a fixed amount of repayment. Any use of pressure, post resolution, to reduce creditors' share would amount to a dilution of the primacy of contract.

Fourth, any artificial interference to influence the market-based process of determining the values of the firm, the debt, and the equity would lead to issues of moral hazard. If any class of market participants begin to believe that their returns have a significant upside but the risks are limited through support systems, they will participate beyond their risk appetite and game the system. We have seen such examples of losses to retail shareholders, including the default by the Unit Trust of India (UTI) on its flagship US-64 bond units and recently in the case of AT-1 bonds of Yes Bank.

Fifth, we should recognize the creditors as well as shareholders as the rightful providers of capital. If any one set of financiers is treated against the fundamental principles of markets and financing, that set of financiers will lose some incentive to provide finance to the firms. Unless it is desired as a macro-objective to reset the balance between the financiers, we should make our markets even more efficient and let them determine the expected returns and the risk levels for each set of the former. Let us also evaluate the case of the employees who operate under employment contracts. In this case, changing the distribution norms under the waterfall mechanism under Section 38 of the IBC is an option worth examining. However, this should be preceded by a consideration as to whether employees are to be treated as superior to the creditors with regard to settlement of dues. There are trade-offs involved in such a decision. However, once it is decided either way, any temptation by the policy makers or courts to award ad-hoc benefits to either party should be resisted.

To sum it up, the IBC has provided us with a framework that allows a market determined process for distribution of the firm value between creditors and shareholders. The market process should be understood by all parties, and not be disturbed for the benefit of a limited set of stakeholders. It has further provided a waterfall mechanism for distribution between the creditors/shareholders and other stakeholders. This should be open for deliberations in view of the larger objectives, but not disturbed in an ad-hoc manner.

Article Credits: The Print

#### REFERENCES

- https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/ 0RTP2020\_F3D078985540A4179B62B7734C7B445C9.P DF
- 2. https://www.ibbi.gov.in/uploads/publication/2021-05-29-204331-atxcy-3363461de858b06bfa1afdbf13151b90.pdf



### 111

Where there is a decline in entrepreneurial zeal across generations, investing in startups could help keep the enthusiasm alive in the next generation.

55

# Investing in a Win-Win Association: Family Businesses and the Start-Up Ecosystem

#### Dr. Tulsi Jayakumar

Professor, Economics and Chairperson, Centre for Family Business & Entrepreneurship S. P. Jain Institute of Management and Research (SPJIMR), Mumbai

#### ABSTRACT

India has been witnessing an emerging start-up ecosystem along with an already existing and established trend of family businesses. Amidst an unprecedented funding spree for Indian start-ups across sectors, it is important that these two ecosystems go beyond merely co-existing and find ways to come together and blend their operations. As these start-ups seek to grow and diversify, they look for various alternative sources of raising capital to sustain in the long run. With strong foundational and huge invested capital, family businesses can look forward to investing in such start-ups, so as to induce financial gain and give rise to innovation, at the same time fulfilling their social objectives. This article seeks to analyze the intricacies of such an interaction that can serve as an impetus for the growth of the Indian economy.

**KEYWORDS:** Start-Ups, Funding, Family Businesses, Investment, Ecosystem.

India has emerged as the third largest start-up ecosystem in the world after the United States and China, with 50 start-ups achieving unicorn status by

2021. While the start-up ecosystem in India looks exciting, one of the key crunches that the system continues to be facing is that of access to free-flowing, stable funding. Start-ups have access to at least seven types of funding. These include Personal Investment, 'Love' money, Venture Capital, Angels, Business Incubators and Accelerators, Government grants and subsidies and Bank Loans. While each of these has its own role in funding start-ups, they may not have the ability or the willingness to provide start-ups the kind of support required to prevent the latter from burning out. This is where the family business ecosystem, together with family offices associated with such businesses play a role.

While all family businesses would have been start-ups at some point of time in the literal sense of the word, the two are far from being similar. Other than the ownership structure, family businesses differ from startups in terms of age (with start-ups typically being 5-7 years old), size (with start-ups being worth hundreds of millions of dollars or very little) or even the sectors in which they are present (with start-ups being the earlystage companies in the tech and innovation sector). However, the critical difference between the two is in terms of the mindsets governing the two, which define certain aspirations and approach. Thus, family businesses represent patient capital- a mindset which seeks to sustain families in business across generations, with organic growth over a long period of time. Startups, on the other hand, represent disruptive innovation capital; they are set up with the aspiration to do something different, disruptive and grow large quickly.

India, with its third largest number of family-owned businesses in the world comprising 85 per cent of all Indian companies, 111 family business companies of \$839 billion total market capitalization and its third largest start-up ecosystem, can take the lead in providing valuable lessons to the world from the coming together of the two ecosystems. The externalities resulting from such interactions go beyond the more obvious availability of funds to one participant and financial returns to the other participant in this interaction.

The family business ecosystem and family offices offer a potentially rich source of support for the start-up eco-

system, including, but going beyond mere funding. Typically, such investments are led by the younger generation who wish to partake in the hustle of a startup, but without losing themselves in the nitty-gritties of running a new venture. Members of the family business ecosystem may either invest in their individual capacities as angel investors, join with other likeminded individuals from family businesses as coinvestors through Special Purpose Vehicles, form venture capital funds or use their family offices for such investments. Family offices represent the investment vehicles for family businesses, especially for families which have sold their businesses. Instead of distributing the wealth among the family members, these may be held in a family office, which invests these funds on behalf of families.

I found that family offices and family businesses currently look at the start-up ecosystem as comprising a very small proportion of their overall investment portfolio, typically not more than 10-15 per cent of overall investments other than in the family business. The volume of investment in individual start-ups, usually, is a well-planned strategy, as testified by Ankit Kedia, former promoter of Manjushree Technopack, a family business which was divested to Advent International in 2018. Any investment between ₹ 500,000 and ₹ 2,500,000, according to Ankit, is done by him in his personal capacity as an angel investor, investment between ₹ 2,500,000 and ₹ 35,000,000 is handled by the family-promoted Venture Capital Fund, Capital A, and all investments in the start-up ecosystem beyond this amount are handled by the family office comprising analysts and experts to deploy the family wealth.

I found that family business investments in the start-up system are governed by a host of complex factors. One critical factor, however, is the family vision and values, which determines areas into which family wealth would or would not be invested. For instance, many family businesses, which find it inappropriate to enter businesses involving liquor or meat, would not fund start-ups involving these taboo areas either. Again, family businesses may not invest in areas where high valuations prevent them from gaining and retaining a stake in the business. The patient financial capital which family businesses are associated with provides three additional types of capital to the start-up ecosystem. Research in the family business domain has documented the family business pursuit of non-financial socio-emotional wealth goals, besides financial goals. Family members, in their role as angels or backing family offices, can then be expected to bring significant Emotional Quotient (EQ) Capital to the start-ups, besides the Intelligence Quotient (IQ) Capital. They could work together with founders of start-ups- help keep them on track with both their rational and emotional needs.

Family businesses also provide Network Capital to startups, introducing to them their own domestic and global networks and opening doors to the start-ups' multiple needs in various stages. Another important form of capital is Engagement Capital. Vineet Mittal, a family business scion from Surat and an entrepreneur himself, cites an instance of such engagement capital. A start-up funded and supported by his family business required access to factories to come up with their innovative offering aimed at disrupting the skilling industry. Such access was made possible through his family business investors who were already into manufacturing. It would have been impossible for other forms of start-up funding to guarantee such engagements. Family businesses too, gain from investing in start-ups. Besides high financial returns, start-ups provide family businesses the window to the latest innovations and technology in industry. Family businesses may not have the time and acumen to come up with such innovations themselves. Where there is a decline in entrepreneurial zeal across generations, investing in start-ups could help keep the enthusiasm alive in the next generation. Startups also represent a growth mindset, which may benefit certain fixed mindset family businesses. Next generation members may also learn from the grit, creativity, and culture of innovation that start-ups represent. They too gain network capital from such interactions.

Family business investment in the start-up ecosystem then promises a win-win to both parties. More than anything else it comes with a promise of 'Nation First, Always First'.

Article Credits: Entrepreneur (India) magazine

#### GUEST ARTICLE



(11

The expansion of inequality on various levels of society has led to the creation of unjust social composition which is unfeasible in the long run.

# Growing Inequality and Why is it of Concern?

Dr. Nisigandha Bhuyan Associate Professor, Business Ethics Group Indian Institute of Management Calcutta (IIMC)

#### ABSTRACT

The expansion of inequality on various levels of society has led to the creation of unjust social composition which is unfeasible in the long run. The views of different scholars throw light upon the varied aspects and factors which affect the attainment of basic human rights. Through the price gouging of indispensable goods and services, succeeding the aftermath of Hurricane Charley, the idea of 'free choice in a free market' has been summarized to be a liberal myth. Actualization of real egalitarianism materializes on confluence of possibilities, privileges and resources. Subsequently, reasons behind liberty turning into a condition of unfreedom in a free-market economy have been elucidated. This article delves into understanding the origin and implications of increasing inequality.

**KEYWORDS:** Justice, Individual Freedom, Inequality, Unfreedom.

#### WHAT IS INEQUALITY?

Going by the moral standards every human being is of equal worth in at least some basic sense. This equality of worth of human beings is emphasized in the seminal works of almost all the philosophers from Hobbes, John Locke, Jean-Jacques Rousseau, Immanuel Kant, to John Rawls. Inequality is more of a socio-economic phenomenon and is based on a social order of hierarchy of human beings ranked according to tangible worth (e.g., rich or poor) and contingent features (e.g., fair or dark complexion). Inequality is referred not so much to distribution of goods as to relations of superior and inferior persons. Often, inequality becomes the basis of inflicting violence on inferiors, excluding them from social life, treating them with contempt, and forcing them to obey and remain loyal and docile without questioning the authority of their so-called superiors. This sort of social arrangement eventually leads to not only inequalities in the distribution of freedoms, resources, and welfare but is also unsustainable.

#### WHY EQUALITY MATTERS?

Egalitarianism ought to reflect a generous, humane, cosmopolitan vision of a society that recognizes individuals as equals in all their diversity. Diversity should never be utilized as a means of discrimination and subjugation. Therefore, egalitarianism emphasizes on institutional arrangements that enable the diversity of people's talents, aspirations, roles, and cultures to benefit everyone and to be recognized as mutually beneficial.

In Nicomachean Ethics, Aristotle states that justice is the highest of all virtues because it is concerned with not just the good life or happiness of the self but also of the other. The ethical principle of justice allows another to seek what one seeks for oneself. In other words, justice aims at eliminating inequalities, social, cultural and arguably, economic. It is interesting that Aristotle while extolling justice, justifies slavery (in the form that it existed in ancient Greece) on the grounds that slavery is justified if someone is servile by inclination but slavery can be overturned by this very justification since the institution has always been characterized by widespread dissatisfaction.

#### **IDEOLOGICAL NUANCES**

Libertarians, in the likes of Friedrich Hayek, assert that freedom (individual freedom) is the highest human value and it can be ensured under two conditions: of free market, and institution of private property. However, Michael Sandel, in the opening paragraph of his book, 'Justice: What's the right thing to do?' broaches two controversies that rocked America in the first decade of the 21st century and that points to the greatest follies of free market capitalism. One example is of price gouging of essential goods and services following the destruction wrought by the Hurricane Charley in Florida, in 2004. In the wake of the devastations to life and property and infrastructure caused by the Hurricane Charley, the residents of Florida were shocked to discover that they were being forced to exorbitant sums for basic commodities such as fuel, and drinking water; and for services like clearing of uprooted trees from their roofs, and motel-rooms. This sudden, steep hike in the prices of basic goods and services created a public outrage against what they viewed as 'greed' of the service providers, who were trying to profit on public misery, following a natural disaster. The defenders of price gouging, on the other hand, insisted that the hike of prices is a part of the freemarket mechanism as it serves as an 'incentive' for goods and service providers to ensure the availability of services in areas hit by the hurricane. Besides, in a free market, they argued, the price of a good reflects the level of its demand, and thus, there was nothing unnatural about price gouging. Sandel wonders at this juncture how can people who have been deprived of access to basic necessities of life by a natural calamity be considered as making free choices in a free market when they have to pay up huge sums for daily necessities? He opines that price gouging is something akin to 'extortion', and hardly does it reflect 'free choices' made by the buyer and the seller in a free market. Thus, through this attempt to illustrate that the idea of 'free choice in free market' is a libertarian myth, Sandel begins his critique in 'Justice: What's the right thing to do?' of libertarianism, which attempts to minimize the significance of the communitarian 'common good', and replace it with 'individual freedom'.

Amartya Sen, in his book 'Development as Freedom', however, does not contest that individual freedom is inviolable rather argues that for the attainment of that freedom, the individual needs 'primary goods' (John Rawls) i.e., the means for pursuit and attainment of the goals of the individual accompanied by capabilities. The problem with the concept of primary goods is, according to Sen, its insufficiency to explain the role of additional factors for effective utilization of the basket of primary goods. Those factors primarily include 'capabilities' which are necessary for the utilization of the goods. For instance, if two young girls, one in France, and another in rural Assam, aspire to be astrophysicists, then the Rawlsian notion of primary goods would only state the importance of access to good science education for the girls; the science education is the primary good here. But it fails to take into account the lack of capability in rural Assam in the form of gender discriminations. Primary goods must be, therefore, accompanied and supplemented by capabilities.

Sen airs the view that freedom is both the end and the means of development. This observation calls for critical examination of the concepts of freedom and development, and for their re-conceptualization. Two crucial concepts in Sen's theory are 'functionings' and 'capability'. He defines capability as 'alternative combinations of functionings that are feasible for her to achieve', and the notion of functioning, in turn, stands for, 'the various things a person may value doing or being'. It is but natural that Sen defines capability 'as a kind of freedom: the substantive freedom to achieve alternative functioning combinations.'

Sen, thus, defines capability as freedom, or more specifically, as a substantive freedom. The difference between formal and substantive freedom is that the former is far more extant in most democratic societies but the latter is not something that most people enjoy. To illustrate the distinction between formal and substantive rights or freedom, Sen brings forth two terms of Marx: formal freedom (of workers in capitalist system of production), and the substantive unfreedom (of the serf under feudalism). Sen assumes that Marx was an admirer of the 'formal freedom' granted to the worker under capitalism to sell his labour, and states that formal freedom is necessary but not a sufficient condition for substantive freedom.

#### **ARGUMENTS FOR EQUALITY**

If equality is to be the governing principle in this distribution/allocation, then the question arises, what is the principle of equality aimed at? Barry points out that one school of thought – the libertarian, who are sometimes called liberal as well – emphasizes that equality should aim at equality of rights alone. Barry – along with thinkers like Amartya Sen, Rawls and Michael Sandel – on the other hand, maintain the inefficacy of equality of rights, unless accompanied with

equality of opportunity and of resources. At this juncture, Barry brings attention to the conceptual differences between the notions of rights, opportunities, and resources. Rights signify the lack of a prohibition. For instance, if I have a right to education, it simply means that I cannot be prohibited or hindered from attending a school. Rights are therefore very significant and yet they are not sufficient in ensuring that the individual can exercise the right. For that to happen, rights need to be accompanied by opportunities. Equality of opportunities can be said to exist if the individual subject has the choice of alternatives; for instance, I had the choice of going to a private, elite school or to a government school but I chose the latter. But if I had no option but to attend the government-run school despite my awareness that it has very poor infrastructure, then the right to education would do little to empower me in the absence of the opportunities. Finally, rights and opportunities both need to be supplemented with resources, which ought to be, according to Barry, equitably distributed. True social justice, therefore, in the schemata of Barry, is attained only when there is a convergence of rights, opportunities and resources.

#### **CASE IN POINT**

A formal right to freedom in a free-market economy cannot actually guarantee any freedom to the individual participants; rather it leads to a condition of unfreedom for the majority. There are basically two disparate reasons as to why this formal right/freedom turns into a condition of unfreedom in a free market economy. First one is the flaw in the notion of free market which is like what Michael Sandel pointed out. Second one is the flaw in the design of the institutions of free market like what Joseph Stiglitz pointed out.

To establish the first reason let us discuss a case. Driven by the extreme poverty in her country, Noie sold a kidney for \$3,000. This sum far exceeded her local monthly pay as a cocoa farm worker and provided essential financial support for herself and her family. The question then is: is this a condition of freedom? If a priority value is placed on free choice, Noie should be free to choose to sell her own kidney. However, is such a choice really 'free' when her life circumstances are so desperate that she appears to have no other viable alternative (and thus, no real 'choice')? If Noie must provide for herself and has the ability to do so by selling her kidney, does the market process serve as an efficient (and ethical) intermediary? The kidney case in example or the womb of a surrogate mother are examples to draw our attention to the actual condition of unfreedom and the deficiencies of formal rights/freedom. The formal freedom to bear any result for the individuals must get translated into substantive freedom by converging with opportunities and resources. This would never be possible under the condition of a free market unless it is supplemented with widespread welfare measures of the state.

For the second reason of unfreedom, let us turn to Joseph Stiglitz. Stiglitz, in his book 'Globalization and its Discontent', pointed out that that the global institutions like the IMF and World Bank which was originally instituted with a purpose to establish equality and parity between developed and developing country and eradicating poverty and inequality are actually working only for the benefit of the richest 1 per cent of corporate owners of every country (where liberalization is adopted as an economic policy). He argues that these global institutions actually facilitate the following:

- 1. Outsourcing of industries to poor countries where labour is cheap and environmental and safety regulations are low thereby, making huge profit but at a huge cost to the environment and people.
- 2. The corporations get intellectual property protections making it impossible for people in the bottom of the pyramid to access even basics like health care and medicines.
- 3. These multinationals get state sponsored subsidies while global regulations prohibit such facilities to people/labour in poor countries. Stiglitz gives the example of how the United States cotton subsidies have driven down the global prices of cotton which in turn lead to starvation of cotton farmers in India and Africa.

These MNEs pay low taxes and often get tax cuts. Stiglitz asks, who should pay more tax? And the answer is obviously those who earn more or make huge profits. But that is not the case and

corporates always get tax cuts as a policy measure

5. Rising income inequality and huge concentration of wealth and monopolization of the market.

to encourage entrepreneurship.

6. In spite of all the benefits that the large corporations take, they cause recession and economic downturn even when their CEOs are paid exorbitant amounts in the name of efficiency and talent.

Essentially, the growth is not sustainable and the price of development is too high to be repaid. Stiglitz argues that the global institutions must work to the benefit of all and not just for the accumulation of wealth by the richest billionaires who are now planning space travel where the resources are already exhausted and human species are moving towards a possible extinction due to extreme climatic conditions and more regular pandemics.

#### REFERENCES

4.

- 1. Aristotle, Ross, W. D., & Brown, L. (2009). The Nicomachean ethics. Oxford: Oxford University Press.
- 2. Barry, Brian (2005) Why Social Justice Matters, Cambridge, MA: Polity.
- 3. Fukuyama, Francis (1992). The End of History and the Last Man. New York: Macmillan, Inc.
- 4. Hayek, F. A. (1994). The road to serfdom. Chicago: University of Chicago Press.
- 5. Sandel, Micheal (2010). Justice: What's the Right Thing to Do? London: Penguin Books Ltd.
- 6. Sen, Amartya, 1933-. (2000). Development as freedom. New York: Anchor Books.
- Stiglitz, J. E. (2018). Globalization and its discontents revisited: anti-globalization in the era of Trump. New York: W.W. Norton & Company.

#### BEYOND





11

Behavioural finance is a very important subfield of finance which combines psychology and economics to explain why and how investors act and how they take investment decisions in the market.

# A Study on Behavioural Finance in Investment Decisions of Investors and Financial Markets

Prof. Soumi Bhattacharya Assistant Professor Department of Commerce (Evening)

Varnika Lohia Department of Commerce (Evening)

YOUTHINK • 2022 • Vol. XVI

#### ABSTRACT

This paper focuses on the study of behavioural finance in investment decisions of investors and how they make choices and what drives their decision making in the financial market. The crux of this study tries to understand the effects of psychology of investors and financial markets. It focuses on explaining why investors often lose their self-control while making decisions or they act against their own interest and make decisions based on bias or dependency on someone rather than facts or statistics. The aim of this study is to determine the presence of certain fundamental issues in the investment decision-making process, which are guided by various psychological biases. Further, this paper informs us about the various types of heuristics and concepts which are used within behavioural finance which is tested against a set of data collected in Ahmedabad and sees whether behavioural bias is present in decision making of individuals across various types (sex/age/occupation).

**KEYWORDS:** Behavioural Finance, Heuristics, Behavioural Biases, Investors, Decision Making, Financial Market, Psychology of Investors, Investment Bias, Hypotheses, Over-Confidence.

#### INTRODUCTION

The field of finance is more or less related to making investment decisions, working capital decisions, dividend decisions and fund allocation decisions, whereas, the field of economics relates to the basic problems of what a person should produce, how much they should produce and for whom they should produce. In the same way, the field of behavioural finance deals with problem-solving activities as well as decision-making.

Although for years and years, economics and finance have been used for decision-making and investment decision activities and they always take into account the rationality of the investor and the buyer. However, with the help of behavioural finance, we get a deeper knowledge about how investors make their decisions and sometimes, how they take these decisions irrationally. Mark Twain once divided the world into two categories: those who have seen the Taj Mahal, the famous Indian monument, and those who have not. Investors may be seen to be in the same boat. There are two types of investors: those who are aware of India's investment opportunities and those who are not.

There are many studies and proofs which show how the market works and how it operates to take investment decisions. They explain the dynamics of investment decisions and the rules to apply while making these decisions. The rules are very plain, but investors find it difficult to apply these because sometimes, they tend to focus more on returns than the application and adherence to protocols. Due to the inefficiency of the investors in applying the rules, they sometimes overtrade, buy and sell at the wrong time, leading to arbitrage in the market, that is, riskless profit, allowing their emotions to overrule their consciousness and logic along with misjudging and miscalculating the probability of making a gain from that investment.

Getting psychology into the picture, we regard this as heuristics. As the evidence of psychology coming to play in decision-making and emotions playing a vital role in determining the validity of the project kept on increasing, behavioural finance received a greater acceptance in the upcoming world. Despite them having disagreements and rivalry regarding the timing, place and the reason psychology influences investment decisions, Daniel Kahneman, the 2002 Nobel Prize winner in Economic Sciences, and experimental economist Vernon Smith are considered pioneers in the field of behavioural finance. Adam Smith, who is considered the father of modern economics, stated that there was an insight into human psychology that developed into behavioural finance today.

The economic and financial theories generally say that individuals act rationally and the process in which the individuals make their decisions involves them taking into account all the information available in the market. Not only do they take the past trends and history into account but also their peer reviews and resort to research work in order to make informed decisions. But this is, in fact, not the most important obstacle that an investor faces in making investment choices. A majority of an investor's profits or losses can be traced to his/her decision-making ability. Even the most influential and well-educated investors were affected by the 2008 subprime crisis, when the speculative bubble had burst, demonstrating that something was profoundly wrong with the system and in the traditional models of rational market behaviour.

In order to compare the old and new methods, traditional finance assumes that people process data approximately and correctly and that they are guided by reason, logic and independent judgement. Behavioural finance recognizes that people use an imperfect rule of thumb to determine the process. Also, people's emotions and herd instincts play a very important role in influencing decisions. Prices are generally pushed by investors to unattainable levels in upward and downward directions.

The aim of this study is to determine the presence of certain fundamental issues in the investment decisionmaking process, which are guided by various psychological biases. Psychological variables, according to behavioural economists, affect investment decisions. They argue that a greater understanding of individual investors' behavioural biases is essential for today's investment decisions. Many economists, on the other hand, conclude that conventional models can be applied to decision-making and therefore dismiss the idea of irrational behaviour. In this context, it seems important to investigate whether behavioural factors affect a portfolio investor's decision-making process or not.

After understanding what behavioural finance means, we will, in brief, learn about behavioural finance concepts and the factors that are involved in it.

#### **BEHAVIOURAL FINANCE AND INDIA**

- 1. Behavioural economists have recently discovered the effectiveness of a new class of policies known as 'nudge' policies. Nudge policies subtly encourage people to engage in desired behaviours while maintaining their freedom of choice.
- 2. According to Nudge theory, people need reminders and constructive reinforcements to maintain socially acceptable behaviour.

- 3. According to the Organization for Economic Cooperation and Development, behavioural perspectives are used by more than 202 government agencies around the world.
- 4. Nudge policies are exemplified by the following examples:
- To improve tax enforcement in India, citizens may receive a variety of text messages explaining how their taxes affect public services.
- To reduce the number of children who drop out of school in underprivileged communities, parents may be informed about the average income gains from their children staying in school for an extra year.
- To encourage people to save more, they may be given specially built savings accounts.

#### LITERATURE REVIEW

- 1. (Nichlas Barberis, 2002): It is claimed in this research paper that some financial phenomenon can be plausibly explained using models in which some agents are not completely logical. This limits to arbitrage, which contends that it is impossible for rational traders to reverse the dislocations induced by less rational traders; and psychology, which catalogues the various types of deviations from rationality.
- 2. (BIRĂU): This article introduces behavioural finance as a modern approach to capital market research. The study of the impact of psychological influences on the evolution of financial markets is known as behavioural finance.
- 3. (Andrea Masini, 2012): Renewable energy (RE) technology investments are becoming increasingly popular as a way to boost growth and speed up recovery from the recent financial crisis.
- 4. (Mangee, 2017): The relevance of psychological factors for aggregate stock price volatility is examined using econometric evidence in this paper. To that end, the Net Psychology Index (NPI), a new indicator of stock market sentiment based

on information from Bloomberg News' end-of-day stock market surveys, is subjected to a battery of multivariate empirical analyses.

- 5. (Kevin Brady, 2018): A majority of big stock price swings aren't followed by publicly accessible data. What other data do investors use to determine the price? Investors depend on reference points and private information signals, according to the authors.
- 6. (Kahneman and Tversky, 1979): They presented a paper on the criticism of expected utility theory, in which they empirically discovered that people undervalue the results that are only probable in contrast to those that are definite. They threw the prospect theory out of the window, assigning value to gains and losses rather than final properties, and replacing probabilities with decision weights. In 1981, they introduced the concept of framing, wherein the psychological principles that govern perception of decision problems and evaluation of the probabilities and outcomes produces predictable shifts of preference when the same problem is framed in different ways.
- 7. (Bovi, 2009): It simply states that a person's risktaking attitude in any given situation is determined by the individual's precise economic analysis, and that if the event is viewed favourably, the individual would be more risk-averse, and vice versa.
- 8. (Sahni, 2012): The historical performance of the stock market has a major impact on investor expectations. After obtaining knowledge or financial advice from experts, two personality traits known as openness and neuroticism increase financial trading frequency.

#### OBJECTIVES

#### **Primary Objectives**

- To study the impact and relevance of behavioural financing in investment decisions of investors.
- To know the effect of cognitive bias on deciding upon types of stocks.

#### Secondary Objectives

- To study various factors influencing the investors while taking investment decisions.
- To throw light on the limitations of traditional finance theories and the significance of the growth of behavioural finance discipline while studying the investors' behaviour about financial markets.
- To analyze the behaviour and psychology of investors in the financial market and their choice of different securities in the market.
- To know the mindset of investors while making investments.
- Understanding the loss-averse nature of an investor.

#### **RESEARCH METHODOLOGY**

The project is built on secondary data and involves various statistical tools and tests. The data attained is for the year 2019-2020 in the area of Ahmedabad. The sampling frame consists of people who invest and are active investors. The sampling method is convenience sampling and the sample size is 181 people. This is a descriptive type research paper, and the data is procured from the International Journal of Novel Research and Development's website.

The research also differentiates between investment by investors in Gujarat and Delhi using a single characteristic of whether the investors are risk-averse or risk-loving.

#### LIMITATIONS

The research gives us a lot of insight into how the investors' minds work and how they are likely to make decisions, but there are a few loopholes and areas where work is required. The key points are:

- The area of study is based in Ahmedabad because there is no conclusive evidence for investors in West Bengal.
- The size of the study is 181, which is a sample and cannot be fully and completely approximated for the population.

• Each investor's mindset works in a different way. The cognitive bias of a risk-averse investor will be different than that of a risk-neutral one; however, it is difficult to differentiate between them.

The study's key flaw stems from the fact that it uses questionnaires to investigate investor behaviour trends. Making financial decisions may be difficult for a variety of reasons, which can lead to many people making unreasonable decisions at some stage. However, when answering a questionnaire, the same individuals are likely to be comfortable and in a better frame of mind, and therefore choose to offer answers that might portray them in a different light, especially in the context of hypothetical questions. Many questions tried to get participants to confess past errors, which helped to alleviate the issue to some degree. The fact that India is such a large country means that this study cannot be considered an assessment of the average Indian investor. Also, one very important point is that actual investors sometimes focus on trends, past analysis of share prices or they read about the company before investing. Therefore, investing does not only depend on emotions and instincts, but research and past performances also matter a lot. Also, the position of one's economy depends on one's investment decisions.

#### CONCEPTUAL FRAMEWORK

Before heading to the analysis of how investors base their investment decisions, we need to know a few of the concepts and have a basic understanding of these so that we can make informed decisions with our analysis and key findings.

#### **Heuristic Driven Biases**

• Overconfidence: People are generally overconfident and tend to overestimate their forecasts about their returns. The perception of information contributes to overconfidence. The human mind may be designed to derive as much knowledge as possible from what is available, but it may be unaware that the information available is insufficient to develop an accurate forecast in unpredictable times.

- Anchoring: People are unable to change their minds after forming an opinion, even though new knowledge becomes available. For example, sometimes investors believe that a company's long-term earnings prospects are better than average, but the company unexpectedly records lower earnings than predicted.
- Familiarity: People are at ease with items they are already acquainted with. When it comes to investing, the human brain often uses the familiarity shortcut. Familiarity does, in reality, breed investment. As a result, people are more likely to invest in the stocks of their employer, local firms, and domestic companies.
- Confirmation Bias: People tend to overlook information that is contrary to their views and are in favour of information that confirms their views. Investors often only hear what they want to hear. They spend more time searching for reasons supporting their views and less time searching for reasons opposing their views.
- Innumeracy: People have a hard time dealing with numbers. The difference between nominal and actual changes is often misunderstood. This is referred to as the 'capital illusion' by economists. People have a hard time calculating real probability. To put it in another way, chances are that they have no idea what the odds are. People are more likely to pay attention to large numbers and give less importance to smaller figures.

#### Frame Dependence

- Prospect Theory: This was the theory proposed by Kahneman and Tversky. This tells us how people frame and value a decision involving uncertainty. Generally, utility depends on wealth level in traditional theory but here, it is based on the change of wealth from the current level. The utility function is concave for gain.
- Mental Accounting: Traditional finance holds that wealth, in general, and money, in particular, must be viewed as fungible, and that any financial decision should be based on a fair assessment of its impact on the overall wealth status. People, on the

other hand, lack the computational skills and willpower to assess decisions in terms of their overall wealth effect.

• Narrow Framing: Investors should, in theory, pay attention to shifts in their overall income. In a cross-sectional context, narrow framing implies that investors choose to look at each investment individually rather than the portfolio as a whole. As a result, they are more concerned about market fluctuations in individual stocks and less concerned about the overall portfolio's results.

#### **Emotional and Social Influences**

- Emotional Effect: Risk tolerance is influenced by emotions, and risk tolerance affects portfolio selection. As investors weigh options, determine how much risk to take, watch their decisions play out, evaluate whether the original plan needs to be modified, and eventually discover how far they have succeeded in achieving their financial goals, investors experience a large range of emotions.
- Herd Instincts/Information Cascade: Human beings have a natural tendency to belong to a community. As a result, people prefer to congregate. Moving with the herd, in fact, amplifies psychological prejudices. It encourages people to make decisions based on herd instincts rather than objective independent research. This propensity is amplified when they make a decision with a high level of uncertainty.

#### ANALYSIS

Respondents were asked several questions which focused on each of the different concepts of behavioural finance like anchoring, overconfidence bias, et al.

Given below is the table that represents combined values for each of the theories and checks if there is an influence of behavioural finance on investment decisions. A hypothesis testing was carried out to prove the same. In order to carry out the test, the level of significance was taken as 5 per cent.

#### **OVERALL HYPOTHESIS TESTING**

H0: There is no influence of behavioural finance on investment decisions.

H1: There is an influence of behavioural finance on investment decisions.

Theory		Level of Percentage	
1.	Overconfidence	64	
2.	Innumeracy Bias	38	
3.	Narrow Framing	57	
4.	Confidence Bias	90	
5.	Prospect Theory	70	
6.	Anchoring Theory	48	
7.	Familiarity with Investment	67	
8.	Herd Instinct	57	
9.	Trying to Break Even	69	
10.	Emotional Effect	57	

Table 1 (Source: Primary Data)

These are values calculated from the data which was given above.

According to the level of percentage, and considering a 5 per cent level of significance, it can be said that we can reject H0 and that there is an influence of behavioural finance on investment decisions.

THEORY	QUESTION	MEAN	STD. DEVIATION
Overconfidence	Do you think that you have sufficient knowledge about it?	1.3591	.48107
Confirmation Bias	Suppose you have shares of XYZ Ltd., then will you react to positive news about XYZ Ltd.?	1.1050	.30737
Anchoring	Do you prefer to hold on to the investment even if past performance is not good?	1.5193	.50101
Trying to Break Even	If your investment is showing losses, will you hold on to it torecover the loss?	1.3149	.46577
Emotional Bias	When it comes to decisions related to investments, will you base it on gut feeling and intuition?	1.4254	.49478

MEAN AND STANDARD DEVIATION TABLE

Table 2 (Source: Primary Data)

#### FINDINGS

The mean of 'Overconfidence' implies that people have chosen to answer positively and that they face overconfidence bias.

In 'Confirmation Bias', the mean is 1.1, indicating that frequencies are equally distributed.

According to 'Trying to Break Even', the mean tells us that people are highly affected by the bias and they try to always reach the break-even point.

'Emotional Bias' tells us that emotions and instincts are a big part of investors while making investment decisions.

The overall study suggests that there is an influence of behavioural finance on investment decisions.

#### CONCLUSION

Behavioural finance is a very important subfield of finance which combines psychology and economics to explain why and how investors act and how they take investment decisions in the market. A few things that can be highlighted are that investors generally want smooth and stable returns even if those are low. Investors will choose to sell a winning stock before its maturity, which shows that investors are riskaverse and they will always prefer gains, being non-satiated.

The motive of this study was to check the r e l e v a n c e o f behavioural finance theories, and to check whether investors are rational or not while

making decisions about financing through investments. The study and the data led to the conclusion that investors are not always rational while making decisions. The assumption of investors always being rational is not true. This is because they always want to satisfy their own greed and want to fulfil their own needs, which leads to them undertaking methods that cannot be considered rational.

The focus of the biases has been, overconfidence bias, anchoring, break-even takers, loss aversion and hindsight bias. One fallout of this theory is that, in reference to the efficient market hypothesis, markets are not always efficient and an investor will sometimes base his/her decisions on references from the past rather than taking his/her own informed decisions.

Also, behavioural finance is still a concept that is stringent to few of the classes. The need for emphasis on this matter is extremely important because the investors need to know the loopholes that they need to fill while making investment decisions.

#### REFERENCES

- https://www.ijnrd.org/viewpaperforall.php?paper= IJNRD1907016
- 2. Analysis. < http://www.uk.sagepub.com/burns/website% 20material/Chapter%2025%20-%20Discriminant %20Analysis.pdf>. UK: SAGE Retrieved: January 2012
- 3. Thaler, Richard H.2005. Advances in Behavioural Finance, Volume II. USA: Princeton University Press.
- 4. https://www.behavioralfinance.com/
- 5. https://blog.finology.in/behavioral-finance/what-isbehavioral-finance
- https://www.accaglobal.com/vn/en/student/exam-supportresources/fundamentals-exams-study-resources/ f9/technical-articles/behavioural-finance.html

- https://www.emerald.com/insight/content/doi/10.1108/ 19405971211284862/full/html
- 8. https://www.ii.co.uk/analysis-commentary/mind-moneyunderstanding-ourselves-and-our-attitudes-risk-ii515227
- 9. https://financefeeds.com/oxford-risk-warns-perilsemotional-investing-addressing-swiss-portfolio-managers/
- 10. Behavioural Finance, Author William Forbes.
- 11. https://books.google.co.in/books?id=U6V-DwAAQBAJ& printsec=frontcover&dq=behavioural+finance&hl=en&n ewbks=1&newbks\_redir=1&sa=X&ved=2ahUKEwjhlf6e4 Y7vAhXUILcAHayYAE4Q6AEwBXoECAUQAg





It is the consumer who creates the brand image of a company and thereafter, the company uses its brand image as a tool for the success of its business.

# Effects of Branding and Sales Promotion on Indian Consumer Buying Behaviour: An Explorative Study

Dr. Sumana Guha Assistant Professor Department of Commerce (Morning)

Kabir Raj Arora Department of Commerce (Morning)

#### ABSTRACT

Under the present domestic and global competitive markets, existing companies depend mostly on two key factors: branding and sales promotional techniques, to achieve or maintain their competitive advantage. This study tries to explore the impact of branding and

YOUTHINK • 2022 • Vol. XVI

contemporary techniques of sales promotion on the Indian Consumer Buying Behaviour. This study is based on primary and secondary data. The primary data has been collected by canvassing a questionnaire, containing both open and closed-ended questions, among 123 respondents across genders and age groups. This study reveals that most Indian consumers are brand conscious and brand loyal. Brand image also represents the quality of the product to the consumer. The study also reveals that irrespective of gender and age, 'Catchy Advertisements' govern the buying behaviour of about 70 per cent of Indian consumers. Irrespective of gender, 'Catchy Advertisement' appears to be a significantly effective tool of sales promotion among consumers belonging to the age group of 20 to 30 years.

**KEYWORDS:** Branding, Sales Promotion, Brand Loyalty, Offers, Coupons.

#### INTRODUCTION

Since the initiation of economic globalization, both domestic and global markets have become very competitive. Though companies have always been struggling to achieve or maintain a competitive advantage, the COVID-19 pandemic has severely affected the entire business community throughout the world. Therefore, it becomes imperative to study how the companies can regain their competitive edge.

The Indian domestic market is very lucrative, both to the domestic and the global business community. Scholars of different disciplines have studied the various aspects of business, including the two prime factors i.e., branding and sales promotional techniques. It becomes apparent that no serious attempt has been made to study the impact of branding and sales promotional techniques on Indian consumers. Consumers are considered to be the ultimate decisive factor for the success of a business and consumer behaviour, in general, is very complex. Indian consumers are very much influenced by socio-economic as well as religious norms and taboos. Despite that, innumerable business centers like Big Bazaar, City Mall and Shopping Complex create a craze for shopping among people in India. Hence, the dynamics of business are deemed necessary to study. Companies have to utilize the

opportunity of the craze-shopping behaviour of the people by updating their brand value and taking into account consumer's demands and choices. This may be one of the ways to survive in this cut-throat competition.

This study is an attempt to assess the effects of branding and sales promotion on Indian Consumer Buying Behaviour. This study also examines the respondents' priority of choosing a product along with the factors responsible for brand image building and finding effective sales promotion tools.

#### LITERATURE REVIEW

Various studies have been carried out on sales promotion till date. Cotton and Babb (1978) observed that there is a trend of sales promotion, known as instore promotion, which is used to increase consumer purchases. This is more effective during the time when a sale is going on. A few researchers, however, have a contrary view and feel that sales promotion is an expensive tool and it may affect profits negatively. Walters and Mackenzie (1988) and Martinez and Montaner (2006) mentioned that some factors can induce a customer to buy more or less of a product, and those depend on the customer's economic and social situation as well as his/her characteristics. D. B. Tse (1989) mentioned that brands create a feeling of status consciousness in most consumers which leads to a sense of recognition and that using different branded products is a new trend of fashion. People feel good when they are recognized in the society and among friends and family, regarding a specific brand that is mostly used by them. Now, people want to have almost everything to be branded from the food they eat and clothes they wear to the clothes they decorate their homes with. Status and conspicuous consumption are other important factors that affect consumer behaviour to a great extent.

#### **OBJECTIVES OF THE STUDY**

The objectives of the study are:

1. To examine the impact of branding on Indian consumer buying behaviour.

#### BEYOND

- 2. To examine the impact of contemporary techniques of sales promotion on the buying behaviour of Indian consumers.
- 3. To study the brand responses of the Indian consumers in different sectors.

#### DATA AND RESEARCH METHODOLOGY

Both primary and secondary data have been used in this study. The secondary data was collected from newspapers, magazines and the internet. Primary data was collected by canvassing a questionnaire containing both closedended and open-ended (allowing the respondents to have flexibility in their responses) questions among 123 respondents of various age groups (namely: 'below 20 years', '20 to 30 years' and 'above 30 years') and gender.

The entire PAN India region was undertaken for the research as the area of study. Simple Random Sampling method was used for selecting the respondents. For the sake of simplicity, the analysis has been presented using tabular and graphical methods.

#### DATA ANALYSIS

A. Characteristics of Respondents							
Gender	Age G	Total					
	Below 20	20-30	Above 30				
Male	15	47	2	64			
Female	9	37	13	59			
Total	24	84	15	123			

B. Respondents' First Priority of Choosing a Product by Gender and Age Group							
	Age Group		Priority				
Gender		Brand	Price	Quality	Packaging		
	Below 20	6	7	1	1		
Male	20 - 30	24	19	4	0		
	Above 30	1	0	1	0		
	Below 20	5	3	1	0		
Female	20 - 30	16	12	7	2		
	Above 30	7	3	2	1		
Total		59	44	16	4		

Table 1: Characteristics of Respondent and their First Priority of Choosing a Product (Source: Primary Data)

Among 123 respondents, there are 64 male and 59 female respondents (see Table 1; Part A). Out of these, 68 per cent (consisting of 73 per cent of the total male respondents and 63 per cent of the total female respondents) belong to the age group of 20 to 30 years. The remaining 20 per cent and 12 per cent belong to the age groups of 'below 20 years' and 'above 30 years' respectively. This implies that the majority of the respondents are young.

It is apparent that irrespective of age groups and gender division, the respondents' first priority of choosing a product is 'Brand' (48 per cent), second priority is 'Price' (36 per cent), third priority is 'Product Quality' (13 per cent) and the last priority is 'Packaging' (3 per cent) (see Table 1; part B). This priority of choosing a product becomes more evident when we observe that about 85 per cent of the respondents purchase products of popular brands. It is also observed that the purchase of branded products is most popular among the young respondents, i.e., in the age group of 20 to 30 years, irrespective of gender (see Table 2).

Gender	Age Group	Purchase Products of Popular Brand			
		Yes	Neutral	No	
	Below 20	13	2	0	
Male	20 - 30	39	7	1	
	Above 30	1	1	0	
	Below 20	8	1	0	
Female	20 - 30	32	5	0	
	Above 30		1	0	
Total		105	17	1	

Table 2: Purchase Products of Popular Brand by the Respondents (Source: Primary Data)

The survey also aims to find out the perception of the respondents regarding how the companies can build up or enhance their brand image. The responses in this regard are summarized in Table 3. It is evident that the most important criterion for a company to build or enhance its brand image is producing quality products. About 66 per cent of the respondents believe that quality products are the most important criteria for establishing a brand image. Around 19 per cent and 13 per cent of the respondents argued in favour of product uniqueness and sales promotion techniques respectively for the creation of a brand image (see Table 3).

Respondents were asked to reveal their opinion regarding the most effective tool of sales promotion among tools like 'Discount Offer', 'Catchy Advertisement', 'Personal Selling' and 'Quality Product.' It is interesting to note that irrespective of gender, about 70 per cent of the respondents were in favour of 'Catchy Advertisement' being the most

		Factors Responsible for Image Building					
Gender	Age Group	Product Quality	Product Uniqueness	Sales Promotion Techniques	All		
	Below 20	9	2	3	1		
Male	20 - 30	26	11	9	1		
	Above 30	1	0	1	0		
	Below 20	7	2	0	0		
Female	20 - 30	29	6	1	1		
	Above 30	9	2	2	0		
-	Fotal	81	23	16	3		

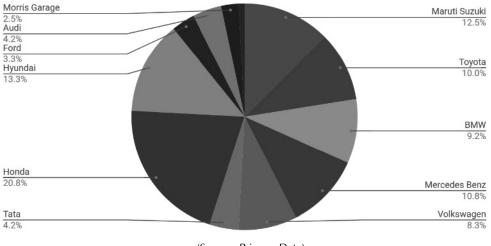
important tool for sales promotion. Out of 70 per cent of the respondents in favour of 'Catchy Advertisements', 54 percent of the total respondents, irrespective of gender, belong to the age group of 20 to 30 years. Following 'Catchy Advertisement', 'Personal Selling' and 'Discount Offers' are important sales promotion tools (see Table 4). This finding clearly reveals that there is a craze among young boys and girls to imitate fashions displayed in a 'Catchy Advertisement.' It is also evident that the most important criterion for building or enhancing the brand image is producing quality products.

# Table 3: Factors Responsible for Brand Image Building as Assessed by Respondents (Source: Primary Data)

		Sales Promotion Tools				
Gender	Age Group	Discount Offers	Catchy Advertisement	Personal Selling	Quality Product	
	Below 20	5	9	1	0	
Male	20 - 30	3	35	9	0	
	Above 30	1	0	1	0	
	Below 20	0	7	2	0	
Female	20 - 30	3	31	3	0	
	Above 30	5	4	4	0	
Total		17	86	20	0	

Table 4: Sales Promotion Tools as Considered by Respondents (Source: Primary Data)

# Chart 1: People's brand preference in the Automobile sector (taking budget into consideration).



<sup>(</sup>Source: Primary Data)

**Interpretation:** The automobile sector received the highest number of mixed responses. Honda, Maruti Suzuki, Hyundai and Toyota received a significant number of votes as compared to others.

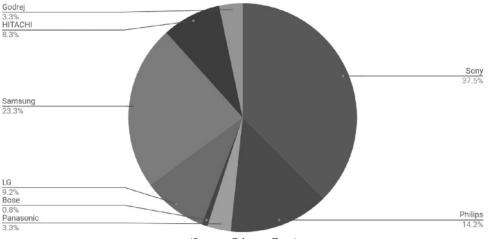


Chart 2: People's brand preference in electronic goods sector.

(Source: Primary Data)

**Interpretation:** In the electronic goods sector, Sony was clearly the most preferred, followed by Samsung and Philips. These three brands have been household names for a long time and have retained their positions in the minds of the consumers.

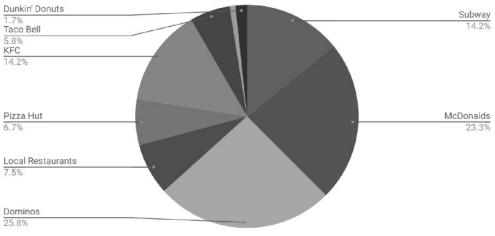


Chart 3: People's brand preference in the fast food sector.

(Source: Primary Data)

**Interpretation:** Lastly, in the fast-food sector, Domino's and McDonald's received the highest number of votes, followed by KFC and Subway. No distinction could be made when the various age groups were analyzed in terms of their preferences and their buying behaviour as there was almost an equal effect of branding and sales promotion on all age groups. Responses were heterogeneous in nature.

# **MAJOR FINDINGS**

In India, consumer behaviour, other than in cities and towns, is mostly guided by socio-economic as well as religious norms and taboos. Due to it being a market economy, as well as improvement in infrastructure and communication facilities, the act of consumerism has increased manifold. After economic liberalization, the Indian domestic market has become very attractive and foreign companies have entered our domestic markets with branded products. Consumerism has increased manifold and Indian consumers have now become very sensitive to brand image. The present study reveals that the purchase of branded products is the most popular among the young respondents, i.e., in the age group of 20 to 30 years, irrespective of gender. It is found that product quality is the most important factor responsible for brand image. Thus, it seems that the young generation has assumed that brand image ensures products quality. This study clearly identifies that 'Catchy Advertisement' is the most effective tool for sales promotion. Hence, we can say that Indian consumers have become quality conscious and prefer purchasing goods of standard quality even if it costs comparatively higher.

# LIMITATION OF THE STUDY

The major limitation of this study is that it is mainly restricted to urban areas. Therefore, generalization is not possible. This study fails to relate the greater acts of consumerism to the fulfilment of one's desires or to a change in choices and values. It also fails to explain the psychological changes behind the attraction of the young generation towards 'Catchy Advertisement'.

#### CONCLUDING REMARKS AND POLICY RECOMMENDATION

The brand image of a company is enhanced when consumers accept and recognize its product or products as satisfactory. So, it is the consumer who creates the brand image of a company and thereafter, the company uses its brand image as a tool for the success of its business. Product quality is highly related to brand image creation. Here, brand image and product quality are intertwined with each other. The present young generation in urban areas is very much conscious about product quality which has, in turn, shifted their preference towards branded products. This picture is clearly revealed in this study.

Sales promotion is another tool as well as technique to enhance businesses. There are various techniques of sales promotion like 'Discount Offers', 'Catchy Advertisement', 'Personal Selling', 'Quality Product', 'After Sale Services', 'Home Delivery' et al. All these sales promotion techniques are not equally effective in all time and space. The effectiveness of these sales promotional techniques also differs in accordance with the product differentiations. However, 'Catchy Advertisement' happens to be one of the most effective techniques in all time and space. This phenomenon is clearly revealed in our study.

Again, branding and sales promotion are interlinked because when new brands enter the market, the competition becomes more intense. These companies may not involve themselves in a price war, instead, they opt for a smart way of luring customers by ensuring brand equity as well as opting for sales promotion activities hand in hand. We can conclude that people living in urban cities, especially in metro cities, are much more informed and alert about their shopping and act as smart buyers to attain full utility out of their hard-earned money.

Indian urban consumers accept reasonable prices of branded goods. Therefore, as a policy recommendation, we can say that a company should take care of their pricing strategy while planning its products. Various factors like age, income and gender are the determining factors behind the choices of consumers, so the company should devise its marketing strategies accordingly to suit the needs of different categories of customers.

# REFERENCES

- 1. Chandon, P., Laurent, G. and Wan sink, B. (2000) 'A benefit congruency framework of sales promotion effectiveness' Journal of Marketing. Vol. 64, No. 4, pp. 65-81.
- Kopalle, P. K., and Mela, C. F. (1999) 'The dynamic effect of discounting of sales: Empirical analysis and normative pricing implications.' Marketing Science, Vol. 18, No. 3, pp. 317-332.
- 3. Kotler P. (2003), Marketing Management. Delhi: Pearson Education. Kumar SR (2007). Marketing and Branding, The Indian Scenario. Dorling Kindersley, Delhi.
- Ndubisi O.N. (2005), Customers Behavioural Responses to sales promotion: The Role of Fear of Losing Face, Vol. 17, No.1, pp.32-49.
- 5. Peter, J.P. and Olson, J.C. (1996). Consumer Behaviour and Marketing Strategy, (4th Edition). New York.: Irwin. Philip Kotler, Gary Armstrong. (2006), Principles of marketing, edition 11.
- 6. Schiffman LG, Kanuk LL. (2004), Consumer Behaviour. 8th Ed. Pearson Education, New Delhi.
- 7. Zallocco, Perreult and Kincaid (2008), Promotion, Persuasive Communication in Marketing (Irwin-Dorsey Limited, White, Senecal, Morgan, Blackwell and Miniard).



# (11

The forms and characteristics of a particular product can directly have an impact on the evaluation or the degree of anthropomorphism, and can play a moderating role in the same.

# Actualizing a Relationship Model between Anthropomorphic Communication and Product Evaluation

Samuel S Mitra Research Scholar, Department of Commerce

# ABSTRACT

It has been observed that marketers devote a substantial amount of their precious time in the designing of products and marketing communications, which involves mulling over technologies, ergonomics, and even human touch. Launching products by embedding human characteristics within the products or packaging, or even the marketing of a product through a human spokesperson is actually a deliberate ploy by the marketers to fine-tune the acceptance of their products and improvise on total product evaluation. The reason behind such uncanny marketing efforts is ingrained in the perception of consumers towards products as human beings, and thus, products are designed keeping this in mind. This is the essence of anthropomorphism, where objects are perceived as human beings or having human features and behaviour. The objective of the present study is to throw light on a systematic understanding of anthropomorphism and propose a conceptual framework highlighting the relationship.

**KEYWORDS:** Marketing, Anthropomorphism, Products, Consumers.

# INTRODUCTORY STATEMENTS

Human beings tend to look for human-like traits or characteristics in mere objects. They see faces in clouds or feel that their cell phone is their true



friend, and it has emotions, or even that their laptop is conspiring against them, when it gives trouble before or during an important task. It is almost as if humans are in their own world of fancy imaginations with ineluctable frenzies and jittery thoughts. This phenomenon of perceiving objects as humans is known as anthropomorphism. In the definition of Epley et al. (2007), anthropomorphism is a psychological process in which

humans perceive the actual or imagined behaviour of objects, also known as non-human agents, with characteristics similar to humans, including motivations, intentions, or emotions. Previous researchers opine that human beings anthropomorphize to make sense of an object which fine-tunes a manly logic of effectiveness and predictability (Epley et al., 2008). Beyond the general psychological concepts and theories, there exists limited research on priming products with human characteristics and their overall impact on the anthropomorphism of products of different types, based on complexity. The following notion has potential implications in the domain of marketing; however, very few studies have addressed the act of perceiving products as humans.

Guthrie (1995) proposed three forms of anthropomorphism, namely, partial, literal, and accidental. In the first form of anthropomorphism, people perceive objects to be humans or possess human-like traits because of the presence of limited human features. In the second case, perception is due to the presence of complete human-like features, and the third form happens as a result of a mistake.

Epley et al. (2008) theoretically highlighted the curious concept of anthropomorphism and its psychological nature. They proposed a three-factor theory termed 'SEEK' viz. Sociality, Effectance, and Elicited Agent Knowledge, which are actually the determinants of anthropomorphism that defined the very phenomenon.

Determinant	Definition		
Elicited Agent Knowledge	Possessing chronical knowledge about humans while making inferences about non-humans as it acts as a foundation to judge actions of other non-human agents		
Effectance	The tendency to interact with one's environment in an effective manner acts as a motivating factor to anthropomorphize non-human agents to predict their actions		
Sociality	The need and desire to form a social connection with other human, in the absence of which people form connection with objects or human agents in non-humans to form sense of social connection		

Figure 1: Definition of the Three Determinants of 'SEEK' (Source: Author's Compilation)

#### **REVIEW OF BACKGROUND LITERATURE**

Existent literature recommends that products are blended with human characteristics in various methods, which include human intentions, human motivations, human physical features, and human emotions (Epley et al., 2007). Studies hint that the messages that are delivered in advertisements have an impact on consumer attitude towards the brand (Labroo et al., 2008; Arias-Bolzmann et al., 2000), consumer purchase intentions (Putrevu and Lord, 1994; Susianto and Afiff, 2017), and consumer evaluation of the product (McQuarrie and Phillips, 2005). Guthrie (1993, 1995), in his study, proposed different forms of anthropomorphism based on their levels and strengths, namely, partial, literal and accidental. Aggarwal and McGill (2012) conducted a study on products and brands that were anthropomorphized as partners and servants. Delbaere et al. (2011) opined that the tendency of humans to attribute human features such as intelligence and emotions to products considerably improves product evaluation. Hart et al. (2013) pioneered an 'un-primed approach' to blend anthropomorphism in products on the basis of its complexity. In fact, anthropomorphism is an inherent trait, as suggested by Neave N. et al., 2015. Zaichkowsky, 1986; Bloch and Richins, 1983, viewed involvement as having three major components. Anthropomorphism can also be explained from the perspective of marketing (Aggarwal et al., 2007), art and craft, as well as religion (Guthrie 1993; 1995). Aggarwal and McGill (2007) and Landwehr et al. (2011), in their respective studies, tried to emphasize on product anthropomorphism and its impact on liking, sales and evaluation of products.

# ANTHROPOMORPHISM IN PRODUCTS AND BRANDS

Marketers immensely value the significance of anthropomorphism and seek the introduction of products with 'emotionally pleasing' shapes and features attuned with brands or products. A good example would be the famous clown of McDonald's. It is testimony to the fact that anthropomorphism extends beyond just seeing faces in entities, and covers the perception of facial expressions and emotions in products. Partial and literal forms of anthropomorphism are embedded in products by the marketers during promotional campaigns. For example, in the case of partial anthropomorphism, an advertisement was launched by Bajaj Pulsar motorcycle in the year 2005, which showed the motorcycle with a tagline, '#DefinitelyMale', with masculine characteristics. It was a harbinger that the motorcycle was directed towards men. In the case of literal anthropomorphism, a good example of an eye-twitching advertisement would be the Pillsbury advertisement campaign showing human-shaped dough. It is noteworthy to mention that both partial anthropomorphism and literal anthropomorphism are relevant in the context of products, unlike accidental anthropomorphism.



Figure 2: Example of Anthropomorphism in Products/Brands (Source: alchetron.com)

# ANTHROPOMORPHISM IN MARKETING AND BRANDING STRATEGIES

There was limited attention given to the concept of anthropomorphism by marketing researchers in the initial years of its emergence. With the passage of time, the concept started gathering steam because of heavy advertisements of products, which were given the shape of humans or had human-like attributes. This was first noticed in the film industry by Disney, in the year 1928, with several animated animals having human features. Currently, this is being applied by marketers in myriad campaigns or branding activities like Crest Toothpaste and M&M Candies.



Figure 3: Disney Was the First to Practice the Concept of Anthropomorphism (Source: julian-leha.blogspot.com)

Aggarwal and McGill (2012) conducted a study on products and brands which were anthropomorphized as 'Partners' and 'Servants', with defined brand roles. Partner brands were referred to as 'products or services which required human involvement to derive its usefulness', while 'products or services which provided utility on its own' were defined as servant brands. Renowned international brands like Kellogg's, Discovery Channel, and Volvo were embedded with human characteristics in the sector of Fast Moving Consumer Goods (FMCG), knowledge channel, and the automobile industry, respectively, in the quest to find their impact on anthropomorphism. The findings revealed that partner brands had a higher anthropomorphism scale than servant brands. The tendency of anthropomorphizing and evaluation of products varied depending on the perception of the products or brands as partner brands and servant brands. When humans anthropomorphize nonhumans or products, it acts as a catalyst to ultimately develop an emotional bonding and a sense of rapport between the customer and the product or brand. This further brings out the relevance of human traits in the development of a bond between the consumers and the products.

#### **PRODUCT COMPLEXITY**

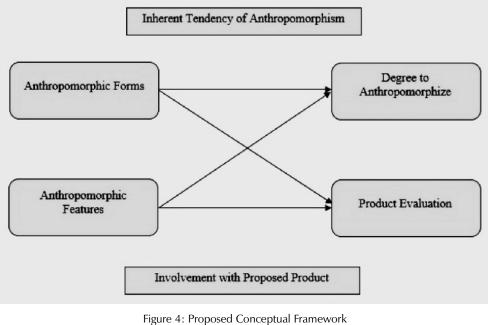
Attribution of human features such as intelligence and emotions to products has an immense potential to improve the evaluation of products, ably supported by empirical researches (Chandler and Schwarz, 2010; Landwehr et al., 2011). An un-primed approach to induce anthropomorphism in products, on the basis of their complexity, is a much-needed tonic to measure naturally occurring anthropomorphism in products, without priming them with human characteristics, where the essence would lie in the examination of the underlying relationship between perception of objects as humans and personal value of the object.

# INVOLVEMENT AND INHERENT TENDENCIES AFFECTING ANTHROPOMORPHISM

However, the tendency of consumers to anthropomorphize a product is related to its complexity. Anthropomorphizing a simple product like toothpaste also requires a considerable level of human characteristics to make a significant impact and gain the attention of the customers. Individuals have the tendency to be effective in the prediction of the behaviour towards an object, or in their interaction with an entity, ultimately, bolstering anthropomorphism. Involvement is said to have three major determinants, namely, characteristics of the person, characteristics of the stimulus, and characteristics of the situation. Any of these, or the combined force of such determinants, may have a significant impact on the level of involvement.

### PROPOSED THEORETICAL FRAMEWORK

The present study proposes a conceptual understanding of the term 'Anthropomorphism', which is used extensively by marketers as an effective tool by leveraging a balanced infusion of human forms and traits to ameliorate the extent of anthropomorphizing and product evaluation. The following relationship



(Source: Author's Compilation)

model seeks to establish a relationship between forms and features of anthropomorphism to the extent to anthropomorphize simple, as well as, complex products and product evaluation, in the presence of inherent anthropomorphic tendency and involvement. This theoretical model bridges the gap between the different varieties of products, both simple and complex, when blended with human characteristics, impact the extent of anthropomorphizing and the evaluation of the product. The following phenomenon is conducted under two moderating factors which are, 'inherent tendencies of anthropomorphism' and 'involvement with the proposed product.' Hence, the forms and characteristics of a particular product can directly have an impact on the evaluation or the degree of anthropomorphism, and can play a moderating role in the same.

The following conceptual framework has been proposed, which has been illustrated in Figure 4. The model has been developed on the basis of Aggarwal and McGill, 2007; Landwehr et al., 2011 and Hart et al., 2013.

# **CONCLUSIVE REMARKS**

The various concepts, theories, and understandings of anthropomorphism and its implication have been explained by previous literature, which stems from the backdrop of human psychology, marketing, art and craft and religion. The current study was an endeavour attempted at examining the relationship between the role of anthropomorphic forms and features in simple as well as complex products. Their evaluation has been instrumental in throwing valuable light on the large looming question about the availability of the type of human features or forms for use. The convenience of summing up the whole theoretical relationship between anthropomorphism and products has been highlighted in this study, which shall help to bridge the gap of systematic and precise examination of product anthropomorphism considering the inherent anthropomorphic tendencies in human beings and their preference of products with the right form of human characteristics.

## IMPLICATIONS

Further study may be conducted to examine the impact of human forms and characteristics on purchase intention and sale of products in the market. The market comprises consumers with varying tendencies for anthropomorphizing products. The present study pinpoints a very valuable suggestion for the marketers for designing their products with human features, based on varying inherent anthropomorphic tendencies in consumers. Under the radar of getting a better picture of product anthropomorphism categorized into simple products and complex products, the present study has made a pioneering effort in offering a focused area of research on priming products with suitable human characteristics, which will lead to further research on available products in the market with the scope of renewed implications in product anthropomorphism.

# REFERENCES

- 1. Aggarwal, P. and McGill, L.M. (2007). Is that car smiling at me? Schema Congruity as a basis for Evaluating Anthropomorphized Products. Journal of Consumer Research, Vol. 34, pp. 468-479.
- Arias-Bolzmann, L., Chakraborty, G. and Mowen, J.C. (2000). Effects of absurdity in advertising: The moderating role of product category attitude and the mediating role of cognitive responses. Journal of Advertising, Vol. 29, pp. 35-49.
- 3. Bloch, P.H. and Marsha, L. R. (1983). A Theoretical Model of the Study of Product Importance Perceptions. Journal of Marketing, Vol. 47, pp. 69-81.
- 4. Chandler, J. and Norbet, S. (2010). Use does not wear ragged the fabric of friendship: Thinking of objects to replace them. Journal of Consumer Psychology, Vol. 20, No. 2, pp. 138-145.
- Delbaere, M., McQuarrie, F. E. and Philips, J. B. (2011). Personification in Advertising – Using a visual metaphor to trigger Anthropomorphism. Journal of Advertising, Vol. 40, pp. 121-130.
- 6. Epley, N., Waytz, A. and Cacioppo, T. J. (2007). On Seeing Human: A Three-Factor Theory of Anthropomorphism. American Psychological Association, Vol. 114, pp. 864-886.
- Epley, N., Waytz, A., Alkalis, S. and Cacioppo, T. J. (2008). When we need a Human: Motivational Determinants of Anthropomorphism. Social Cognition, Vol. 26, pp. 143-155.

- 8. Hart, M.P., Jones, R.S. and Royne, B. M. (2013). The human lens: How anthropomorphism reasoning varies by product complexity and enhances personal value. Journal of Marketing Management, Vol. 29, pp. 105-121.
- 9. Labroo, A.A., Dhar, R., and Schwarz, N. (2008). Of frog wines and frowning watches: Semantic priming, perceptual fluency, and brand evaluation. Journal of Consumer Research, Vol. 34, pp. 819–831.
- Lakshmidewi, D., Susianto, H. and Afiff, A. Z. (2017). Anthropomorphism in Advertising: The effect of anthropomorphic product demonstration on consumer purchase intention. Asian Academy of Management Journal, Vol. 22, No. 1, pp. 1-25.
- 11. Landwehr, R. J., McGill, A. L. and Herrmann, A. (2011). Its got the look: The effect of friendly and aggressive facial expressions on product liking and sales. Journal of Marketing, Vol. 75, No. 3, pp. 132-146.
- 12. McQuarrie, Barbara J. Phillips (2005). Indirect Persuasion in Advertising: How consumers process metaphors presented in Pictures and Words. Journal of Advertising, 34, No. 2, pp. 7-21.

- 13. Neave N., Jackson R., Saxton T and Honekopp J (2015), The influence of Anthropomorphic tendencies on human hoarding behaviours, Personality and Individual Differences, 72, pp. 214-219.
- 14. Patsiaouras G., Fitchett, J. and Saren, M. (2014), Boris Artzybasheff and the art of anthropomorphic marketing in early American consumer culture. Journal of Marketing Management, Vol. 30, Nos.1-2, pp. 117-137.
- Putrevu, S., and Lord, K.R. (1994). Comparative and noncomparative advertising: Attitudinal effects under cognitive and affective involvement conditions. Journal of Advertising, 23, No. 2, pp. 77–90.
- Spears, N. E., Mowen, J. C. and Chakraborty, G. (1996). Symbolic role of animals in print advertising: Content analysis and conceptual development. Journal of Business Research, Vol. 37, pp. 87–95.
- 17. Zaichkowsky, J. L. (1994). The personal involvement inventory: Reduction, Revision and Application to Advertising, Journal of Advertising, Vol. 23, No. 4, pp. 59-70.





(11

Consortium between Mindtree and L&T is benefitting both companies because they have different strengths to contribute.

# 'Do Not Mind That You Are Taken' - A Case Study on the Hostile Takeover of Mindtree by Larsen & Toubro

Prof. Saptarshi Ray Assistant Professor Department of Commerce (Evening)

Sumedha Banerjee Department of Commerce (Evening)

# ABSTRACT

This research deals with hostile takeover through the case study of the forceful acquisition of Mindtree by conglomerate giant, Larsen and Toubro. A hostile takeover can be defined as the purchase of one company which is termed as 'the target' by another company which is termed as – 'the acquirer or bidder'. The objective of the study is to find why the deal became hostile and understand the various concepts related to the hostile takeover and the business environment which leads to a hostile takeover. We will analyze various methods employed by corporates to carry out a takeover and study

the advantages of a takeover on shareholders' wealth. The analysis will also throw light on the advantages and disadvantages of a takeover, the defensive strategies that the target company can use to avoid a hostile takeover, and the various legal provisions to combat a hostile takeover.

**KEYWORDS:** Hostile Takeover, Mindtree, Larsen and Toubro, Defence Strategies.

### INTRODUCTION

Mergers and acquisitions are unavoidable in the business world. A merger is when two entities are coming together to share their synergy. It is like a marriage between two companies in the corporate haven. Acquisitions can be cordial as well as incongruous. A cordial acquisition is one in which the controlling group of the target company sells its stake to a bidder voluntarily. However, if the management of the target company is not willing to reach an agreement, the bidder can directly approach the shareholders of the company by making an unconditional public offer.

Quoting the Institute for Mergers, Acquisitions and Alliances, (IMAA) the total value of mergers and acquisitions globally in the year 2019 was approximately \$3.7 trillion across 49,500 deals.

#### VARIOUS TYPES OF MERGERS

- 1. Horizontal Mergers: Horizontal mergers take place when two companies are in the same sector and stage. Companies choose these types of mergers because they want to consolidate their activities, reduce costs, survive fierce competition and increase market share.
- **2. Vertical Mergers:** It can be termed as forward or backward integration along the same value chain.
- **3. Reverse Merger:** A reverse merger takes place when a large private entity acquires a public entity to access the IPO market or when the brand value of the small entity is so big that the large company goes and acquires it.
- **4. Congeneric Merger:** When two firms are in the same industrial sector but a different line of production, and they merge together to extend their activities, market advantages, and strategic extension, it can be termed as a congeneric merger.

- 5. Conglomerate Merger: When two firms who are unrelated in their business come together to avoid saturation, diversify their business, and leverage from new business, it can be termed as a conglomerate merger.
- 6. Forward Integration: When a company is being merged with a company along the same value chain but it is an upward integration closer to the consumer, it is termed as forward integration.

# ADVANTAGES AND DISADVANTAGES OF MERGERS AND ACQUISITIONS

The advantages of merger and acquisition include sharing of synergy, reduced cost, competitive advantage, increased scope, economies of scale, diversification, strategic and financial benefits.

The disadvantages include creation of chaos in the management due to differences in the corporate culture, leaving the employees in distress as many of them tend to lose their jobs, increase in debt burden, may lead to monopoly, hinder innovation and growth sometimes.

### FEW STRATEGIES USED BY CORPORATES TO CARRY OUT MERGER AND ACQUISITIONS

- **Negotiation:** It is a friendly merger where one company amicably decides to merge with another company.
- **Hostile:** It is not a merger by choice but by compulsion, against the consent of the target company.
- **Reverse Bidding:** When a target company counter offers to the bidder company, it is termed reverse bidding.

#### LITERATURE REVIEW

'Significance of Mergers and Acquisition in India' explores the concept of mergers and acquisition in detail. It tries to find out the trend and scenarios that eventually lead to the merger. According to the findings, mergers and acquisitions and business restructuring has gained importance in today's world and are often practised by corporates to sustain the market and combat the increased competition. The paper titled 'The Importance of Mergers and Acquisition in Today's Economy' by Rima Tamosiuniene and EgleDuksaite (2009) throws light on the significance, benefits, and disadvantages of mergers and acquisition activities in today's world and the factors that trigger them. According to the findings, mergers and acquisitions in today's world are very beneficial as it leads to sharing of synergies, cost reduction, increased flow of revenue. This conscious restricting of companies is very necessary as it yields good returns to both corporate owners as well as investors.

The paper titled 'L&T's Hostile Takeover of Mindtree' by Nishith Desai and Associates (2020) studies India's first hostile takeover and finds out the major red ocean strategies used by the big opportunistic company to target the weak company and how the target company should rethink their strategies to combat the hostile takeover.

In the paper 'Larsen and Toubro Infotech's Hostile Bid for Mindtree Ltd.: Much Ado About Nothing! A Teaching Case' by Janki Mistry (2020), she investigated and analyzed the recent acquisition, anti-takeover tactics, nature of the deal, and the funding. The findings suggest how both the company's balance sheet was showing a positive result and how the share prices of both the companies went up and how both the companies benefitted from this deal.

# **RESEARCH GAP**

The majority of the research related to merger and acquisitions suggest that the related activities lead to ubiquitous outcomes for companies as well as for individuals and throws light on how the company fails to meet the financial expectations post-merger. However, this study contextualizes how hostile takeover, which is a type of merger and acquisition activity, actually impacted Larsen and Toubro and Mindtree in a positive way.

# RATIONALE

This study will include an explanation as to the concept of hostile takeover and will throw light on various pros and cons of a hostile takeover on shareholders' wealth and what are the defensive strategies that a target company can sort in order to ward off a hostile takeover.

# OBJECTIVES

- To understand why the L&T Infotech (LTI) a part of the Larsen and Toubro group (construction and engineering company) acquired Mindtree (Information Technology and Outsourcing Company) using hostile takeover methods.
- 2. To analyze the benefits of a hostile takeover on shareholders' wealth and study the share price volatility, defensive strategies used, and legal provisions to combat hostile takeover.

# **RESEARCH METHODOLOGY**

Research methodology is an approach to systematically solve issues. It is essential for us to know not just the research strategies but also the procedure. It must be noted that the centrality of research lies in its equality and not quantity. Researchers should realize how to apply specific research procedures and should know which of these strategies or methods are important and which are not. It is used to identify, select, process, and analyze information about a topic. A research paper helps the reader to critically evaluate a study's overall validity and reliability. Analytical and descriptive research methods have been used to determine the success of the hostile takeover carried out by Larsen and Toubro.

# SECONDARY RESEARCH

The data used is based on secondary data that has been taken from various research journals, news articles and reports.

# TIME FRAME

We have tried to focus on the year of 2019 in which the hostile takeover took place.

# STATISTICAL TOOLS USED

Various bar charts and graphs have been used to represent the various data and findings.

#### BACKGROUND STUDY

**Hostile Takeover:** Hostile takeover can be defined as the purchase of one company which is termed as 'the target' by another company which is termed as - 'the acquirer or bidder'. It is a merger against the will or wish of the target company through an open public offering.

The Hostile Takeover Started as: The hostile takeover bid was given by Larsen and Toubro Infotech, a subsidiary of the Larsen and Toubro conglomerate group in 2019. Initially, V.G. Siddhartha, a nonexecutive director of Mindtree decided to resign on 9th March, 2018 and sell off his 21 per cent stake in the company to recover his debt. He approached Larsen and Toubro Infotech Ltd. one of the largest global information technology services and solutions company. Larsen and Tourbo in 2019 had a lot of excess cash reserves amounting to more than \$2 billion. The company wanted to channel this cash to create higher returns and the software industry in India provides one of the highest rates of return. This was the reason why LTI decided to make an acquisition in the software space. Earlier also in 2016-17, Larsen and Toubro Infotech acquired:

• Augment IQ Data Sciences which specialized in big data.

Ruletronics for making a big entry in the Pega implementation space.

**The Seller:** V.G. Siddhartha, the owner of Café Coffee Day Enterprise, invested in Mindtree in 1999 when it was struggling as an Information Technology start up.

A Brief Description about the Target Company: Mindtree was founded by ten Information Technology professionals who were from renowned organizations like 'Cambridge Technology Partners', 'Lucent Technologies', 'Wipro' and had the same passion for creating something revolutionary in the field of IT, ecommerce, and entrepreneurship. Mindtree was the brainchild of Krishnakumar Natarajan and Subroto Bagchi. It had performed excellently over the years and had captured a huge market worldwide and expanded its business to Europe, the Asia-Pacific region, and the Middle East nations. The global expansion made a huge impact in building a strong company with a diversified customer portfolio.

A Brief Description about the Acquiring Company: Larsen and Toubro Infotech limited started operating in 1997 and currently has its operations in 33 countries. It offers services in various fields like cloud computing, cloud-based information services, assurance, cyber defence resiliency services, and application management. Larsen and Toubro Infotech aim to improve business outcomes through the use of artificial intelligence, automation, and data analytics.

Name of the Target Company	Mindtree Limited		
Name of Acquiring Company	Larsen and Toubro Infotech Ltd.		
Sellers who Instigated the Hostile TakeoverV.G. Siddhartha - Café Coffee Day Enterprises Founder and			
Modes of Acquisition used by Larsen and Toubro Infotech	Through direct acquisition: LTI purchased 33,360,229 equity shares that is 20.15 per cent of Mindtree (target company) from the seller through a special purchase agreement @₹980/share. Through open market purchase order: The bidding company purchased 15,564,579 equity shares that are 9.4 per cent shares with the help of its stock broker that is Axis Capital at prices varying from ₹967.05 to ₹980/share. Open offer was made by the acquirer to acquire 51,325,371 equity shares that is 31 per cent of the emerging voting capital.		

#### Discussed in Table 1 is the snapshot of the deal.

# DATA ANALYSIS AND FINDINGS

Equity Shares Holding	Pre-Acquisition	Post-Acquisition
Promoters	21,877,717	21,877,717
Sellers (VG Siddhartha and		
CDEL AND CDTL)	32,760,229	
Public Shareholders	109,576,095	42,927,620
Acquirer		99,650,179

Table 2: Equity Shareholding Pattern in Mindtree Ltd. Pre- and Post-Acquisition

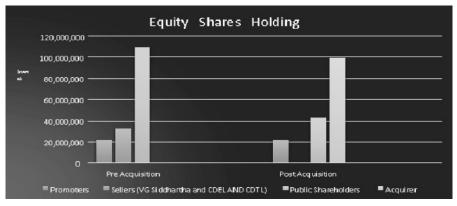


Figure 1: Graph Showing the Shareholding Pattern Pre- and Post-Acquisition

Standalone Profit and Loss Statement and Share Price Volatility in Mindtree Post-Acquisition:

Standalone Profit & Loss account	Profit & Loss account in Rs. Cr			
	Mar '21	Mar '20	Mar '19	
	12 mths	12 mths	12 mths	
Income				
Sales Tumover	7,967.80	7,764.30	7,021.50	
Net Sales	7,967.80	7,764.30	7,021.50	
Other Income	151.70	75.60	89.30	
Total Income	8,119.50	7,839.90	7,110.80	
Expenditure				
Power & Fuel Cost	0.00	31.30	30.20	
Employee Cost	5,113.20	5,064.70	4,421.10	
Miscellaneous Expenses	1,198.10	1,586.90	1,505.80	
Total Expenses	6,311.30	6,682.90	5,957.10	
	Mar '21	Mar '20	Mar '19	
	12 mths	12 mths	12 mths	
Operating Profit	1,656.50	1,081.40	1,064.40	
PBDIT	1,808.20	1,157.00	1,153.70	
Interest	50.40	52.90	2.90	
PBDT	1,757.80	1,104.10	1,150.80	
Depreciation	259.60	275.40	164.10	
Profit Before Tax	1,498.20	828.70	986.70	
PBT (Post Extra-ord Items)	1,498.20	828.70	986.70	
Tax	387.90	197.90	232.70	
Reported Net Profit	1,110.30	630.80	754.00	
Total Value Addition	6,311.30	6,682.90	5,957.10	
Equity Dividend	0.00	493.30	180.50	
Corporate Dividend Tax	0.00	101.40	37.80	
Per share data (annualised)				
Shares in issue (lakhs)	1,647.00	1,645.74	1,642.14	
Earnings Per Share (Rs)	67.41	38.33	45.92	
Equity Dividend (%)	0.00	130.00	330.00	
Book Value (Rs)	262.21	191.80	201.32	

Figure 2: Profit and Loss Statement of Mindtree Post-Acquisition (Source: Dion Global Solutions Limited) Post being acquired we can see:

- 1. There has been a constant increase in the earnings per share.
- 2. Book value of share is also increasing which is a very positive sign.
- 3. Net profit is also increasing.
- 4. Revenue is increasing on a year-to-year basis.



Figure 3: Graph Showing Five-Year Trend of Shares of Mindtree Limited

The share price of Mindtree initially slumped to ₹730 range post the takeover but after that the share prices gained momentum and bounced back to the ₹900-1,000 range and currently being traded at ₹2,225 range which means that the share prices has increased over 2 to 2.5 times since the acquisition. (Source: Moneycontrol)

# Standalone Profit and Loss Statement and Share Price Volatility in the Larsen and Toubro Infotech Post-Acquisition:

Standalone Profit & Loss account						
Standalone Front & Loss account	Mar 20	Mar 1	o			
	12 mths	12 mth				
INCOME	12 111015	12 100				
Revenue From Operations [Gross]	10,184.20	8,907.2	0			
Revenue From Operations [Net]	10,184.20	8,907.2				
Total Operating Revenues	10,184.20	8,907.2				
Other Income	421.70	329.0				
Total Revenue	10,605.90	9.236.2				
EXPENSES	,	.,				
Operating and Direct Expenses	2,173.60	1,931.6	0			
Employee Benefit Expenses	5,982.80	5.128.7	0			
Finance Costs	72.00	4.3	0			
Depreciation and Amortisation Expenses	208.40	88.1	0			
Other Expenses	162.10	123.8	0			
Total Expenses	8,598.90	7,276.5	0			
	Mar 20	Mar 1	9			
	12 mths	12 mth	s			
ProfitLoss Before Exceptional, Extraordinary Items and Tax	2,007.00	1,959.7	0			
ProfitLoss Before Tax	2,007.00	1,959.7	0			
Tax Expenses-Continued Operations						
Current Tax	353.00	447.6	0			
Deferred Tax	101.50	37.0	0			
Total Tax Expenses	454.60	484.6	0			
ProfitLoss After Tax And Before Extraordinary Items	1,552.40	1,475.1	0			
ProfitLoss from Continuing Operations	1.552.40	1.475.1	0			
ProfitLoss for The Period	1,552.40	1,475.1	0			
	Mar 20	Mar 1	9			
	12 mths	12 mth	s			
OTHER ADDITIONAL IN	FORMAT					
EARNINGS PER SHARE						
Basic EPS (Rs.)			89.31	85.31		
Diluted EPS (Rs.)	84.11					
VALUE OF IMPORTED A	IS RAW					
STORES, SPARES AND						
DIVIDEND AND DIVIDEN						
Equity Share Dividend	452.30					
Tax on Dividend			81.50	84.20		
Equity Dividend Rate (%	Equity Dividend Rate (%) 2,800.00					

Figure 4: Profit and Loss Statement of Larsen and Toubro Post-Acquisition (Source: Dion Global Solutions Limited)

Post-Acquiring Mindtree we can see that there has been:

- 1. Constant increase in the earning per share.
- 2. Increase in the book value of Larsen and Toubro Infotech shares is a very positive sign.
- 3. The net profit is increasing on a year-to-year basis.
- 4. Revenue is also increasing on a yearly basis.



the target company to buy shares in the acquiring company in order to gain control over them in defence of the hostile takeover bid.

**3. Poison Pills:** It is a very smart way to deter hostile takeover in which shareholders' rights are specially designed to combat hostile takeover. When the acquirer acquires a large percentage of shares in the

target company, the shareholders become entitled to new shares at a huge discount which in turn increases the share price in the open market offer for the bidder.

4. Shark Repellents: When the target company makes amendments to its legal charter, which reinforces the directors of the company to remain in control of the management, in case the company is taken over, it is known as shark repellents. It is usually done to deter the hostile takeover and is also known as porcupine provisions.

Figure 5: Graph Showing Five-Year Trend of Shares of Larsen and Toubro Infotech Limited

The share price increased over three times postacquiring Mindtree. In 2019, the LTI Shares were being traded at ₹ 1,500 approximately. Currently, the shares are being traded at ₹ 4,381.

Thus, we can see an increase in the share price post the takeover of Mindtree. (Source: Moneycontrol)

# DEFENCE MECHANISM AVAILABLE IN CASE OF A HOSTILE TAKEOVER

- 1. White Knight: Where a hostile takeover appears unavoidable, the target might seek out a friendly investor to whom it can sell the company or some substantial stake of the company and buy back from them later in future.
- 2. Pac-Man Defence: It is a very bold move taken by

# Defence Strategy Used by Mindtree: Buyback of Shares

In accordance with – 'Regulation 29(1) (b) and 29(2) of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015', Mindtree did provide a notice for considering share buyback. However, the board decided to drop the buyback plan since they realized that it might not have the desired impact to defend and combat the hostile takeover.

#### LAWS GOVERNING HOSTILE TAKEOVERS IN INDIA

1. The Companies Act of 2013: Section 261 of Companies Act, 2013 deals with the takeover of assets and administration of a weak company by a bidding company only after it has been authorized by National Company Law Tribunal. **2.** The Competition Act of 2002: This act regulates any unfair transactions which will have a bad impact on the competition.

# The above laws are applicable only when the criteria mentioned below is met:

The 'acquiring company' and the 'target company' need to be listed on the Indian stock exchange. These laws would not be applicable if both or either of them are listed in some other foreign exchange.

# THE EMPLOYEE'S STANCE

After getting the news of the takeover the employees feared that there might be retrenchment and job loss and thus, they obviously did not support the hostile takeover and were in support of the promoters. Although Mindtree was given a separate entity status the employees thought that there might be differences in the work culture and environment and thus, they were against the takeover.

**Analyzing the Aftermath:** The information technology industry in India is very lucrative and earned revenue of \$181 billion in March 2019 and it is expected to grow at 7 per cent to 8 per cent in the next few years. Out of the total revenue, 80 per cent comes from exporting information technology services and it amounts to \$137 billion. The IT Industry is expected to reach \$350 billion by 2025.

There are various government policies to support the IT sector industries:

'National Policy on Software Products, 2019' was passed by the government of India with the aim to make India a software producing hub. The government of India announced the launch of 'National Programme on Artificial Intelligence' and set up a 'National Artificial Intelligence Portal' in the interim budget of 2019-2020.

The government of India included information technology in the 12 Champion Services Sector for which an action plan has been developed and ₹50 billion has been allocated for realizing the potential of those champion service sectors.

For the development of India through the use of artificial intelligence, the government of India think tank has introduced the National Level Programme. As per the data of Department for Promotion of Industry and Internal Trade (DPIIT), Foreign Direct Investment (FDI) in the IT sector was \$37 billion cumulatively between the years 2000-2019.

All these resulted in ease of doing business in the IT Sector. This encouraged Larsen and Toubro Infotech to expand through acquisition.

**Post-Acquisition Challenges:** Larsen and Toubro Infotech work on the philosophy of traditional hierarchical form of management and have a very formal business environment. In contrast to LTI's business environment, Mindtree works on the principles of modern, informal business culture.

Whereas Mindtree's existing workforce and confidence in key clients will be crucial for LTI to function smoothly. This difference might hamper the integration of human resources in the business environment.

Acquisitions are measured and evaluated based on various factors like synergies, cost reduction, innovation, new technology, market etc. It can fail due to cultural differences. Top management of Mindtree like Krishnakumar Natarajan, Mr. Parthasarathy, and Mr. Rostow Ravanan resigned after the hostile bid. If LTI fails to handle and integrate things rightly, then it could impact the business in a negative way.

# FINDINGS

- This hostile takeover significantly helped both the companies to boost their synergies, reduce cost, and make new innovation and development in the field of technology and artificial intelligence.
- 2. Mindtree's presence in media and e-commerce will be a new potential area of growth, expansion and development for Larsen and Toubro Infotech.
- 3. LTI is spread over 33 countries and Mindtree spreads over 17 countries worldwide which will benefit both the companies by giving them economies of scale.

4. Mindtree provides service in customized IT solutions to various industries across various sectors such as banking, insurance, retail, consumer technology, education, travel, et al. This will benefit Larsen and Toubro to diversify their products and services as well.

# RECOMMENDATIONS

- 1. Due to the resignation of the key managerial personnel of Mindtree, the employees might find it difficult to work under the new superiors. So, Larsen and Toubro Infotech must prudently assign the supervisors from among Mindtree itself which would give them incentive and confidence to carry on their work, innovation and development in the field of technology-based services smoothly.
- 2. Larsen and Toubro Infotech can improve Mindtree's performance by increasing cash flows in the company and by reducing their costs.
- 3. Mindtree is running independently as a subsidiary of Larsen and Toubro so they can use their synergies together and build on creating new products and services and import or acquire new technologies worldwide.
- 4. They can consolidate and reduce the number of physical offices worldwide and cut down on expenditures spent on hiring manpower.
- 5. They can together exploit the IT sector across the world by using economies of scale.
- 6. They can target the IT companies using red ocean strategy and cut down on unnecessary competitions.

### CONCLUSION

Consortium between Mindtree and L&T is benefiting both companies because they have different strengths to contribute- L&T has solid manufacturing infrastructure while Mindtree has the latest technological advancements. Mindtree is to run as an independent company, in line with its original leadership's vision. Thus, this is not hampering its individuality. L&T and Mindtree are Indian multinational companies, currently sharing synergy which is giving them a competitive advantage, diversification, cost reduction, economies of scale, increasing scope and strategic and financial benefits. Collaboration of IT resources and technology will support India to become a software producing hub. Considering the increasing momentum in the share prices, book value of share, EPS, net profit and revenues of both the companies, we can also conclude that retail investors can also make a lot of profits in the long-term.

## REFERENCES

- 1. Diva Rai (2020). Takeover Regulations in India. https://blog.ipleaders.in/takeover-regulationsindia/#Other\_laws\_governing\_takeover\_code\_in\_India
- 2. Tim Jenkinson (1994). *Hostile Takeovers: Defence, Attack and Corporate Governance*. McGraw-Hill.
- 3. Marc Goedhart, Tim Koller, and David Wessels (2017). *The Six Types of Successful Acquisitions*.
- 4. Nishith Desai and Associates (2020). *L&Ts Hostile Takeover of Mindtree*.
- 5. Rima Tamosiuniene, Egle Duksaite (2009). The Importance of Mergers and Acquisition in Today's Economy.
- 6. Rita Ricardo-Campbell (1997). *Resisting Hostile Takeovers: The Case of Gillette*. Praeger Publishers Inc.





# (11

One of the biggest reasons behind this manifold increase in the IPO size is the euphoric optimism among the investors as the world recovers from the COVID pandemic.

# An Analytical Study of Investments: With an Emphasis on IPOs

Prof. Ruby Mary Notts Assistant Professor Department of Commerce (Evening)

Garima Khanna Department of Commerce (Evening)

# ABSTRACT

Initial Public Offering (hereafter IPO) is the process through which a company, for the first time, rolls out its shares to the public for subscription. Thus, when a private company, for the first time, releases its shares to the public (individuals other than the promoters of the company), then it is called an IPO. In recent years, there has been an exponential growth in the number of IPOs offered by various companies and these numbers are bound to increase.

The current COVID-19 pandemic forced the world to shut down and companies to postpone their IPOs as market expectations across the globe became pessimistic. However, the post-COVID era has witnessed a stream of IPOs from companies like Burger King, Gland Pharma, Indigo Paints, Zomato and Stove Kraft Ltd. in India. Studies have shown that June 2020 has recorded the highest number of IPOs in the world in 15 years. So, why are so many companies suddenly rolling out IPOs? Is there any correlation between market corrections post-COVID and IPOs?

**KEYWORDS:** IPO, Public Issue, Book Building, Fixed Price, Under-Pricing, IPO Market, IPO Bubble.

### INTRODUCTION

What does it mean when a company opts for an IPO? The first and the direct implication of an IPO is that the shares of the company get listed on a recognized stock exchange. A company may float new shares for subscription, allowing fresh capital to be introduced. On the other hand, the existing shareholders may sell their stake in the company, which would then be offered to the public. In both the cases, the percentage holding of the existing shareholders comes down. For example, if a company having 200 shares offers 100 shares to the public, the percentage holding of the existing shareholders will come down from 100 per cent to 50 per cent. On the other hand, the company may also issue a sum total of 100 new equity shares. In this case, the percentage shareholding will come down to 67 per cent.

Usually an underwriter– generally an investment bank, is hired for the whole process. The board of directors of the company, along with the team representing the bank, plan out the issuance process and comply with all the regulations before rolling out the IPO. In India, the Securities and Exchange Board of India (SEBI) is entrusted with the responsibility of regulating and monitoring the entire process of investment through an IPO. Only when approved by SEBI, can a company go forward with its plan of allotting shares and getting itself listed.

Thus, the whole IPO process involves huge costs and

managerial efforts, which might be challenging for new and loss-making companies. Thus, it is often perceived that an IPO is an exercise only for well-established profit-making companies. This was true until now. In recent times, considering the IPO of Zomato and the expected IPO of Paytm, the landscape of the Indian IPO market is changing. As put forward by Amarjeet Singh, the Executive Director of SEBI, 'entities with unconventional business model listing bodes well for the start-up ecosystem'.

### LITERATURE REVIEW

Haldea (2011), the Chairman and Managing Director (CMD) of Prime Database, concluded that 'IPOs are increasingly becoming a tool used for trading and shortterm gains rather than investment for long-term horizon. These investors opt for making fast money at the time of issue and not for holding the stock for a longterm period as assumed while valuing the company'. Studying the change in the performance of firms during and after an IPO, Jain and Kini (1994) mentioned that a significant decline in operating performance is noticed subsequent to an IPO. They concluded that there exists a positive correlation between the operating performance of a company post-IPO and the extent of equity retention by the promoters of the company; whereas, according to their study, there was no correlation between the operating performance of the company and initial under-pricing of the IPO. Ranjan and Madhusoodanan (2004) concluded that IPOs in India have always yielded returns abnormally in the short run. This may be due to the fact that IPOs have been mispriced during the issue process. They also found a negative correlation between the mispricing of IPOs and the issue size. This means that small companies are more prone to mispricing and the extent of pricing errors can be huge in them.

#### **RESEARCH OBJECTIVES**

- 1. To analyze the pricing strategy in IPOs.
- 2. To study the trends of IPOs in Indian markets preand post-COVID-19.

## **RESEARCH METHODOLOGY**

**Research Type:** Descriptive and Analytical research method has been used for this project.

Data Collection: The project is mostly based on secondary data which has been collected from various websites and publications. The data sample for this research consists of all the companies that have got listed in India via NSE, BSE, NSE Emerge and BSE SME Exchanges. Thus, the data of 726 companies going public from the year 2012 to 2020 was collected and analyzed. Information regarding the number of IPO issues each year, the type of issue and its listing platform, the pricing method used for each issue, the total amount raised by each IPO, the listing day gain/loss for each listing company and the information of successful and unsuccessful issues was collected from various sources, which have been duly acknowledged. The date range of 2012 to 2020 was selected because SME companies began listing and trading in India from the year 2012.

**Research Tools and Methods:** To analyze the pricing strategy, IPOs have been classified, firstly on the basis of the type of company and then, on the basis of the pricing method used by them. This was presented and analyzed with the help of tables and charts.

To study the trends of IPOs in Indian markets, the IPO volume of each year has been compared with respect to their issue size and listing day gains. For interpretation, presentation and analysis, descriptive statistics, trend lines, graphs and charts were drawn up.

# THEORETICAL FRAMEWORK

Based on the type of company, their IPO is classified as:

- Mainline IPO: These are the IPOs of companies other than Small and Medium Enterprises (SME). A company whose capital, after an IPO, is at least ₹100 million, is classified as a Mainline IPO. Moreover, these companies raise their capital by getting listed on the NSE-BSE exchanges.
- **2. SME IPO:** As the name suggests, SME IPO is the IPO of Small and Medium Enterprises, that is, companies whose capital, after an IPO, may range between a

minimum of ₹ 10 million and a maximum of ₹ 25 million. These IPOs are not traded on the NSE-BSE exchange platforms; however, both NSE and BSE allow the trading of these IPOs through their SME exchange platform. These separate platforms for the trading of SME IPOs are 'NSE Emerge' and 'BSE SME'.

This brings us to the question of how a company determines the pricing of its issue. Generally, any one of the following methods is taken up to arrive at the price.

- 1. Fixed Pricing: Earlier, IPOs used to be issued at a fixed price; i.e., the issuer, the company and the merchant bank used to agree upon a price. The investors were only allowed to bid on that particular price and had no other option available at the time of bidding. Fixed price issue is generally not considered suitable as:
  - a. Dubious issues get overpriced and
  - b. Genuine issues get under-priced
- 2. Book Building: As per the guidelines of SEBI, the term `book building' is defined as 'a process undertaken by which a demand for the securities proposed to be issued by a body corporate is elicited and built-up and the price for such securities is assessed for determination of the quantum of such securities to be issued by means of a notice, circular, advertisement, document or information memoranda or offer document'.

In other words, book building is a mechanism where bids are collected from the interested investors, within a given price band and for a specific duration of time. The investors are given an option to bid for the same at various price ranges that are equal to or greater than the floor price of the share. The final bids are evaluated on the basis of the evaluation criteria after the bids are closed.

# ANALYSIS AND FINDINGS

Keeping in mind the objectives, different samples have been chosen for each objective to facilitate better analysis and understanding.

# Objective 1: To Understand the Pricing Strategy of an IPO

#### **Data Sample**

- Total number of IPOs studied: 726
- Number of Mainline IPOs: 168
- Number of SME IPOs: 558
- Time period (years) considered in the study: 2012 to 2020
- The data of the method of pricing, that is, whether these IPOs followed book building or fixed price method, for these 726 IPOs was collected.

### FINDINGS

In the SME IPO segment, Fixed Price issue is more common, which is evident from the fact that 88.35 per cent of the SME issues are using the Fixed Price method.

Book Building method is prevalent but not as common as the Fixed Price method of issue for SME Companies.

In the Mainline IPO segment, only the Book Building method of pricing is present and dominant because, over the period of 2012 to 2020, only one company (out of 168) opted for using the Fixed Price method of pricing.

VEAD	SMI	E IPOs	MAINSTREA	M IPOs
YEAR	FP *	<b>BB</b> **	FP	BB
2012	12	2	0	13
2013	33	1	0	5
2014	38	2	0	7
2015	43	0	0	21
2016	62	5	0	27
2017	116	19	1	37
2018	117	27	0	25
2019	45	9	0	16
2020	27	0	0	16
TOTAL	493	65	1	167
Per cent	88.35 per cent	11.65 percent	0.60 per cent	99.40 per cent

#### ANALYSIS

Table 1: Total Number of IPOs Issued from 2012 to 2020 (Source: www.chittorgarh.com)

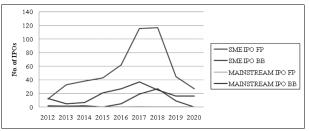


Figure 1: Total Number of IPOs Issued from 2012 to 2020 (Source: www.chittorgarh.com)

\*FP = Fixed Price Method of Issue Pricing \*\*BB = Book Building Method of Issue Pricing

# Objective 2: To Study the Trends of IPOs in Indian Market Pre- and Post- COVID-19

# Data Sample

- Mainline IPO issues over the preceding ten years (2012 to 2020).
- Data Collected: Number of IPO issues during a year, the total amount raised through the IPO, the listing day gain/loss suffered by the IPO, successful IPOs of the year and failed IPOs of the year (i.e., IPOs that were drawn out and never got listed).

Year	No. of IPOs	Amount Raised	Issue Succeeded	Issue Failed	Average Listing Day Gain Per cent
2012	13	68,341.70	11	2	4.23 per cent
2013	5	12,839.50	3	2	2.21 per cent
2014	7	12,009.40	5	2	26.08 per cent
2015	21	135,131.70	21	0	10.00 per cent
2016	27	265,008.20	26	1	13.30 per cent
2017	38	752,785.70	38	0	22.25 per cent
2018	25	317,312.80	24	1	7.53 per cent
2019	16	126,873.20	16	0	19.59 per cent
2020	16	266,280.60	15	1	43.82 per cent

#### ANALYSIS

Table 2: Summary Table of IPOs Issued from 2012 to 2020 (Source: www.chittorgarh.com)



Figure 2: Total Number of IPO Issued between 2012 and 2020 (Source: www.chittorgarh.com)



Figure 4: Average Listing Day Gain Percent from 2012 to 2020 (Source: www.chittorgarh.com)

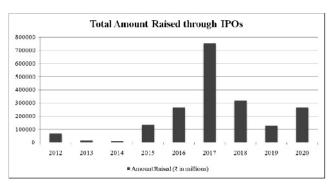


Figure 3: Total Amount Raised by Companies (Source: www.chittorgarh.com)

Table 3 indicates the descriptive statistics drawn up on the basis of the amount raised by each company through an IPO during a given year.

DESCRIPTIVE STATISTICS FOR ISSUE SIZE (Excluding the IPOs which were withdrawn) The year 2020, when compared with other years (pre-COVID years), shows a peculiar trend as it has one of the highest mean issue sizes with a comparatively lower number of IPOs.

						(₹ in millions)
Year	Mean	Number of IPOs considered	Median	Minimum	Maximum	Sum
2012	6,212.90	11	1,834.90	250.00	41,558.00	68,341.70
2013	4,279.80	3	2,703.90	944.20	9,191.40	12,839.50
2014	2,401.90	5	1,974.00	1,200.00	3,518.60	12,009.40
2015	6,434.80	21	4,916.60	661.10	30,182.40	135,131.80
2016	10,192.60	26	6,518.10	700.00	60,567.90	265,008.30
2017	19,810.20	38	7,526.30	358.70	111,758.40	752,785.80
2018	13,221.40	24	9,490.20	774.00	44,730.20	317,312.80
2019	7,929.60	16	4,907.90	230.00	31,451.60	126,873.20
2020	17,752.00	15	6,000.00	612.00	103,547.70	266,280.70

Figure 5 points to the statistic that over the years, companies have been able to acquire better prices for their share capital as the mean issue size has been increasing, especially after the COVID era. There is a manifold increase in the amount raised via these IPOs.

Table 3: Descriptive Statistics on the Basis of Issue Size (Source: www.chittorgarh.com)

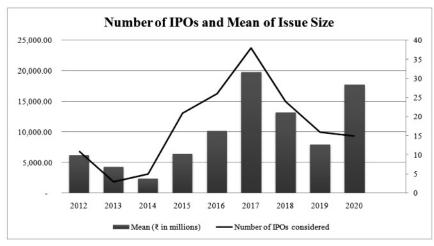


Figure 5: Representation of the Mean Issue Size and the Number of IPOs on a Year-on-Year Basis (Source: www.chittorgarh.com)

# FINDINGS

It is seen that over the years, there has been a rise in the number of IPOs offered.

2020 has seen a tremendous increase in the average percentage of listing day gains.

# CONCLUSION

From the above findings, it is evident that both the methods of issue pricing are popular among companies. However, it is noticed that SME IPOs prefer Fixed Price issue whereas Mainline IPOs prefer Book Building issue. An investment in an SME IPO is riskier than one in a regular IPO. Hence, SME companies prefer Fixed Price issue over Book Building as the fixed price set by the company is generally lower than the market price of the equity instrument,

which results in under-pricing and thus, higher listing day gains. This makes the investment attractive to the investors. Mainline IPOs of big companies generally opt for Book Building as it helps them get better prices for their shares, considering that high bids are placed due to the goodwill of the company.

Over the years, IPO markets have developed considerably. Companies can now, through an IPO,

raise more money and can get much better and fair prices as compared to ten years ago. However, what has caught the attention of many is the post-COVID 'boom' in the IPO market, where many big companies and start-ups have already got listed or are in the process of getting listed. One of the biggest reasons behind this manifold increase in the IPO size is the euphoric optimism among the investors as the world recovers from the COVID pandemic. The inflow of liquidity in the economy, in the form of government-induced financial assistance, is finding its way back into the economy via stock markets. Also, due to increased awareness and liquidity, a lot of new investors have started investing, especially in IPOs as these are perceived as a source of gaining quick returns. IPOs have been earning listing day gains of up to 100 per cent, resulting in Price-Earnings Ratios that are unsustainable. Thus, there is a need to be cautious as experts around the world believe that Indian markets are experiencing an 'IPO Bubble.' Many have even started comparing the current market situation to the 'Dotcom Bubble' of the 2000s.

#### REFERENCES

Articles

- 1. Jain, B. A., and Kini, O. (1994). The Post Issue Operating Performance of IPO Firms. Journal of Finance, 49, 1699-1726.
- 2. Prithvi Haldea, (2011). 'IPOs: More Misses Than Hits.' Dalal Street Investment Journal, Vol. 26.No. 9, Page 67.
- 3. Ranjan, N. and Madhusoodanan, T.P. (2004). 'IPO underpricing, issue mechanism and size.' Social Science Research Network E-Library, SSRN ID 520744.

#### Websites

- 1. https://www.bloombergquint.com/ipos/how-indian-iposfared-in-2020
- 2. https://www.businesstoday.in/markets/ipo-corner/marketb o o m - 1 0 0 - j u m p - i n - n u m b e r - o f - i p o s - i n - q 4 - 2020/story/429176.html
- 3. https://www.chittorgarh.com/ipo/ipo\_reports.asp
- 4. https://www.chittorgarh.com/faq/difference\_between\_ mainline\_ipo\_sme\_ipo/184/
- https://m.economictimes.com/markets/stocks/news/indiasees-19-ipos-worth-1-84-billion-in-2020-decemberquarter/articleshow/80434486.cms
- 6. https://journals.sagepub.com/doi/abs/10.1177/22786 8211200100107?journalCode=brja
- https://www.researchgate.net/publication/266396491\_ Initial\_Public\_Offers\_In\_India\_Trend\_And\_Market\_Develo pments
- 8. http://www.smelisting.net/modes\_of\_listing.php
- 9. https://upstox.com/learning-center/ipo/types-of-ipos/
- 10. https://techcrunch.com/2020/11/21/how-the-pandemicdrove-the-ipo-wave-we-see-today/
- 11. https://yourstory.com/2021/07/profit-loss-making-ipo-sebiofficials/amp





[[]

The Indian economy has always been a paradox, shifting from a socialistic approach to privatization.

# Paradox of Indian Financial Mechanism

Rev. Fr. Joseph Kulandai, SJ Vice Principal Department of Commerce (Morning)

Suraj Dhanawat Department of Commerce (Morning)

#### ABSTRACT

The Indian economy has always been a paradox. It is shifting from its socialistic approach where the entire reigns of running, competing, and regulating the economy were in the hands of the government, to the 'Minimum Government and Maximum Governance' approach that focuses on privatization. Financial markets in India are experiencing a huge boom with tremendous foreign capital inflows; on the contrary, there is a low financial literacy rate, adverse government policies, loss of confidence in banks, and increasing Non-Performing Assets (NPAs). Digital transactions and financial instruments are being encouraged, contrary to India being top on the list of ransomware attacks. Multinational Corporations (MNCs) have

become such huge players in the Indian market that they often end up regulating the fintech space, where they actually compete. India needs a proper balance between its public sector and private sector banks as there is an ever-expanding economic divide, which is quite evident from the 'K-shaped' recovery of the Indian economy post lockdowns.

**KEYWORDS:** Financial Literacy, Economy, Banking, Privatization, Governance.

# INTRODUCTION

The Indian economy has always been a paradox, shifting from a socialistic approach to privatization. The Indian tertiary sector is booming, experiencing the largest expansion among all the sectors and contributing the most towards the growth of the Gross Domestic Product (GDP), yet the least towards employment.

The Indian financial sector has undergone a huge change in the past few decades. Earlier, the backbone of our economy was the government; with the government running, competing, as well as regulating the economy. The government's new campaign 'Minimum Government and Maximum Governance' focuses on the government utilizing its machinery and resources more towards governance, rather than in competing with the private sector, yet, India has one of the highest numbers of scamsters and fraudsters.

The banking sector in India holds more than 60 per cent of the total financial assets of the country. At present, India is, without any doubt, one of the world's most vibrant capital markets, yet its financial institutions and watchdogs continue to fail their investors, time and again, sometimes making them helpless; unable to utilize their own money. Financial markets in India are experiencing a huge boom with tremendous foreign capital inflow, but our own financial literacy remains a concern; with only a fraction of the population investing, or even having knowledge about the options available. With globalization, the multinational companies have grown so significantly that they sometimes have the power to control/regulate, leave alone influence their competitors.

# **RESEARCH METHODOLOGY**

This is an exploratory and descriptive research paper. The main purpose of the project is to explore, describe, explain, and validate the findings. This also involves obtaining qualitative as well as quantitative data. Data that is obtained is interpreted with the help of various tools such as three-dimensional models, bar graphs, and histograms.

# Sampling Technique

A Convenience Sampling Method was adopted to draw the sample respondents for the research. Convenience sampling is a non-probability sampling technique, where subjects are selected because of their accessibility and proximity to the researcher.

# Sample Size

Around 90 responses were received through the questionnaire that was floated among the masses.

# Source of Data Collection

Primary data was obtained by floating a survey. Primary data is the first-hand information that is gathered for a specific research purpose. A questionnaire was designed and floated with various questions to understand people's perspectives.

Secondary data, on the other hand, was obtained through existing literature and research conducted by different authors. Using such secondary data is beneficial as sometimes primary data, on its own, gives insufficient results for the research.

# **Method of Analysis**

The data gathered was analyzed using descriptive statistics. Wherever necessary, variables in a question have been presented as a percentage of total responses using charts and graphs, and conclusions have been drawn from them.

# LITERATURE REVIEW

This consists of various literature, reviews, and research conducted earlier, which relate to various aspects and realities of the Indian economy in general and the financial sector in particular. These reviews have been done to have an idea about the related aspects of the research project. An analysis has been done to understand the viewpoints of the authors and their respective objectives; the subsequent findings have been duly noted.

- Partiener	The	Characteres .	Data	million
Teheika Bureau	PARADOX CALLED INDIAN ECONOMY tehelka.com	Three reports regarding the Indian economy by scholars of Harvard University, the UK based CEBR and the World Bank released almost simultaneously present diametrically opposite viewpoints. The Objective is to find out as to where is Indian economy headed for?	Primary Data : Author's Desk	While price controls are sometimes considered a useful tool to smooth price fluctuations, they can also dampen investment and growth, worsen poverty outcomes, and lead to heavier fiscal burdens. The Indian Trading Sector is Particularly hit by Turbulant Changes in Government Policies/ Compliance Framework
Siddharth Mohan Roy	The Importance Of Financial Literacy In India streetfins.com	India is quickly emerging as one of the fastest-growing economies in the world. However, many small producers, companies and Indian firms aren't able to succeed. We have developed ourselves in technology and to some extent in production capacity, but most of the Indian businesses fail	Secondary Data: National Centre for Financial Educational Report	Individuals and young people aren't able to manage their income. There's a disbalance between consumption and savings. Savings and investment are alien concepts for the majority of the population. School curriculum has restricted information and financial education is selectively taught to students who want to pursue a career in the same.
S Adhikesavan	YES, public sector banks aren't bad at ell The hindu Business lines	Highlight the Flaws of the Economic Survey 2019-20 tabled in the Parliament before the Budget labeling Publis Sector Banks Inferior to new private banks	Secondary : Highlights	The optimal mix of the banking system depends on the particular friction your economy faces . India is country where wedge between social and
Anusha Chari , Amiyatosh purnanandam	Public or private? The future of banking in India and US Indianexpress.com	While India warms to the idea of bank privatisation, a public bank movement is in vogue in the US. Critical to both is getting the optimal mix of financial inclusion and lending.	Secondary : 'Getting the bank balance right'	private benefits is large, as with financial inclusion, there is a strong case for public banks . At this stage, inefficiency in capital allocation seems to be a bigger issue for the Indian banking sector

Figure 1 Source: Author's Compilation

# OBJECTIVES

At present, India is, without any doubt, one of the world's most vibrant capital markets with the banking sector alone having more than 60 per cent of its financial assets. The objectives to undertake the project are as follows:

- To find out how, despite stringent rules, norms, and guidelines laid down by financial sector watchdogs to regulate it, some people have developed ways to circumvent it and expose the loopholes surrounding it.
- To evaluate how badly it affects a person's confidence in the financial sector when every year at least one bank is put under moratorium or merged with a nationalized bank, thereby

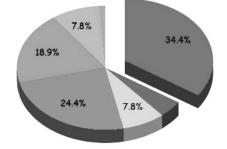
- To find out whether the new entrants in the stock markets are actually trading and learning or merely speculating.
- Financial literacy in our country is yet to be developed but the rules around it demands complete compliance.

# PRIMARY DATA ANALYSIS

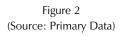
This survey was conducted in a population of financially literate and educated people using convenience sampling. Most of the people participating in this survey are in the age group 18- 25 years, but we have opinions of people belonging to other age groups as well.

Only 24 per cent of the total population of the country

Inconsistency in the Quality of human and Wealth Resource.



Imparting Financial Literacy at the very basic Level
 Imparting Financial Literacy at the very basic Level, Limiting Foreign inflow of funds thus reducing its influence.
 Imparting Financial Literacy at the very basic Level, Limiting Foreign inflow of funds thus reducing its influence.
 Imparting Financial Literacy at the very basic Level, Limiting Foreign inflow of funds thus reducing its influence.
 Imparting Financial Literacy at the very basic Level, Making new laws or increasing the scope of existing laws
 Imparting Financial Literacy at the very basic Level, Making new laws or increasing the scope of existing laws
 Limiting Foreign inflow of funds thus reducing its influence.
 Imparting Financial Literacy at the very basic Level, Making new laws or increasing the scope of existing laws
 Limiting Foreign inflow of funds thus reducing its influence.
 Making new laws or increasing the scope of existing laws at the very basic Level, Have a strict watch on the loan books of the banks and NBFCs.
 Limiting Foreign inflow of funds thus reducing its influence, Making new laws or increasing the scope of existing laws



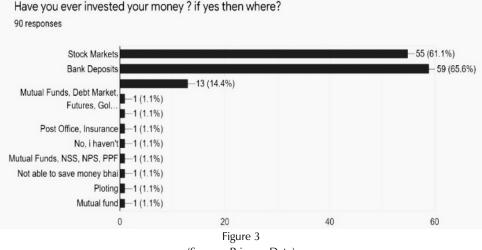
suffocating the depositors who deposit their savings in the bank but also the investors who have invested in it.

- To check whether the push by the government towards digitization is being accompanied by providing adequate infrastructure to the public, thereby allowing them to use it.
- To test the sustainability of the model where the government is trying to regulate and limit cash transactions in businesses, and encourage digital transactions and financial instruments despite the fact that India ranks amongst the top in ransomware attacks.

is financially literate, which is lowest among all the developing nations. This impacts the health of our financial sector and makes it vulnerable to high foreign influence. According to the survey, a sweeping majority of people believe that providing financial literacy at the very basic level would help move our economy forward, and would provide a holistic growth rather than a superfluous one. On the other hand, a lot of people believe that we need better laws to replace the outdated ones and ensure their proper execution along with financial literacy to move forward. There are a lot of other opinions as well that could address the root cause of all the problems.

#### **People Investment Preference**

Financially literate people were given various investment options to determine their most preferred option, and determine where they actually invest their money. Two out of every three people consider keeping money in the bank account as the best and the safest investment option. Out of all the options available, only around 50 per cent of the people are willing to invest in stock markets over and above investing their money in banks. Surprisingly, despite a population of highly educated units, only 50 per cent of the population acquired the knowledge necessary for investment through formal learning. It is also noted that some of the people who had chosen stock markets as their preferred investment option only speculate. Others have learned through experience and have adapted themselves through hit and trial, analysis and research.



(Source: Primary Data)

#### **Knowledge Required for Investment**

Figure 4 shows various sources through which people acquired the knowledge necessary for their investing.

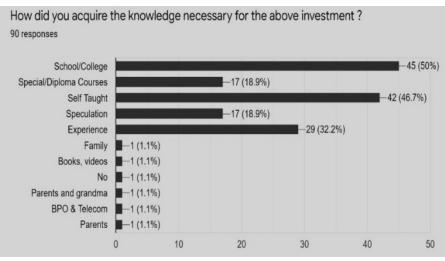


Figure 4 (Source: Primary Data)

#### The Reality of Indian Stock Markets

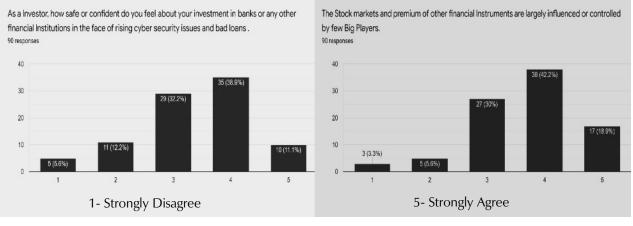
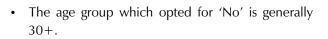


Figure 5 (Source: Primary Data)

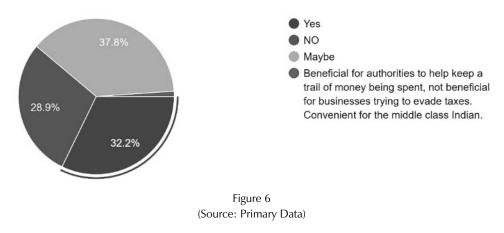
Most of the people believe that there's an increasing concentration of power following capitalism. The Indian financial sector, in particular, following globalization, is so dependent on foreign funds that any movement in it causes chaos in the Indian markets. It is also believed that few big players in the Indian market have quite control over the prices of certain stocks. People tend to follow them and ultimately lose in the bigger game. This is quite evident from the K-shaped recovery of the Indian stock markets and the outright disconnect of the Indian Stock Market with the economy.

#### Governmental Actions Affecting the Health of Our Financial Sector and Our Business Finance



- The people that have opted for 'Yes' are generally engaged in profession.
- The rest of the people are between the age group of 18-30.

Cash is the bloodline of many industrial sectors such as the FMCG sector, where 90 per cent of the retail transactions are undertaken in cash. The government's policies to limit cash transactions push the businessman to either not disclose a part of their business or face heavy penalties. Digitalization is the way forward, but not at a time where the economy is not developed enough to sustain it. There are regular conflicts with

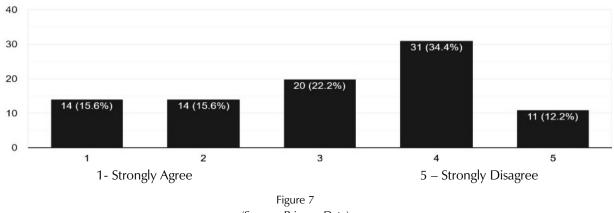


banks regarding illegally debiting charges to a business account. Furthermore, recent cyber-attacks on their servers have, many-atime, rendered these banks useless and businessmen helpless; these are very disruptive for trade as the scope of most cash transactions is limited. The increased risk of cyber-attacks

could expose all business secrets to such hackers, which could be disastrous for any business.

privatization and disinvestment, contrary to what the situation demands.

The Government is working on Aadhaar enabled Payment system where anyone would be able to make payment with their Aadhaar no. and biometrics ... the light of Prevailing cyber risks and threats ? 90 responses



(Source: Primary Data)

# The Role of Public Sector Banks

Public Sector Banks (PSBs) play a vital role in our economy. There are a number of social security schemes, poverty alleviation programmes, and other benefits that the government wants to pass on to the people who are living below the poverty line or are situated in backward areas. In this respect, the contribution of public sector banks is substantial and monumental, which if given to the private sector would fail.

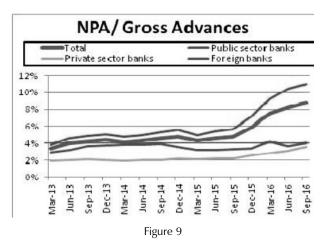
Pradhan Mantri Jan-Dhan Yojana beneficiaries		as on Feb 26, 2020
Bank Name/Type	No. of beneficiaries (cr)	Deposits in accounts (₹ cr)
Public sector banks	30.40	92,072
SBI	11.99	28,626
Private sector banks	1.26	3,163
HDFC	0.25	1,140
ICICI	0.47	296
Axis	0.09	232
Total	31.65	95,235

Figure 8

A country needs to decide on a proper balance between its public sector and private sector. India is at a stage where there's an economic divide; public sector banks are very crucial in bridging this gap, providing social development, and economic growth. In spite of this, the government is continuously moving towards

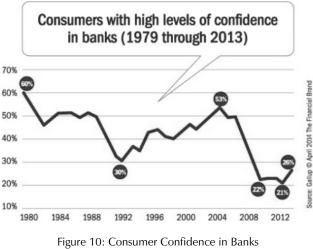
# **Politicization of Financial Policies**

Indian Politicians have used, and are continuously using, financial policies as a part of their political manifesto with utter disregard towards their impact on the financial health of our country. One such example is the farm loan waiver schemes, where political parties promise to waive off farm loans on coming to power, further adding to the already stressed banking sector in general and the public sector banks in particular.



# **Declining Public Confidence in Banks**

With the recent increase in the number of bank frauds, moratoriums, and mergers, the regulatory authorities are being questioned on their inefficiency to act and having a reactive approach rather than a proactive one.



(Source: The Financial Brand)

# ANALYSIS AND FINDINGS

There are certain points about the Indian economy as well as the financial sector which are observed and are stated as below:

- India is one of the fastest and the most lucrative investment destinations, yet, its financial literacy is the lowest among all other developing nations, and its viable investment options remain limited or less attractive.
- India has one of the highest savings to income ratios of households in the world (with one of the highest propensity to save ratio). However, most of its savings never finds its way into the circular flow of income.
- There are a variety of investment options available, but most of them are not lucrative enough, lack active participation, and thereby, awareness or knowledge; people lack the confidence to invest in such instruments.
- Some government policies have been criticized for doing more harm than good, examples being deficit financing and crowding-out effect. In the former, the government focuses on increasing the purchasing power of the people, leaving the supply

side unattended, which again leads to inflationary conditions. In the latter, the government provides freebies, which are mostly a part of their political agenda; these goods, mostly, have a crowding-out effect whereby the private investment is replaced by government investment. This will not only reduce the prospects of economic growth, but also push the interest rates up, and the private investments being sensitive to interest rates would react accordingly.

# Financial Policies: A Political Weapon

Political parties are increasingly using financial policies, in their poll manifestos and promises, in order to lure the public, with utter disregard to what could be its financial impact on the health of the economy, especially the public sector banks.

One such thing is the promise of farm loan waiver. Banks in India are already exposed to agricultural loans and are stressed with rising Non-Performing Assets (NPAs), yet sometimes, the political parties promise to completely write off the loans. This exerts a huge burden on these banks; the government has to keep on infusing capital into such banks in order to keep them afloat. This all is done with the help of taxpayer's money. Deadweight loss of these kinds of financial decisions is huge; it not only reduces the prospective investment expenditure but also reduces the welfare of the public at large. In fact, honest taxpayers and the rising middle class are particularly dissatisfied with such decisions, which, to them, are discriminating. These decisions not only discourage the honest taxpayer but also utilize their funds to finance either the wealthy or the poor.

Many states like Maharashtra, Karnataka, Madhya Pradesh, Uttar Pradesh, et al. have gone for such farm loan waivers. If such things continue, then farmers would be the ones ultimately losing, as it would be difficult to obtain farm loans. However, the direct brunt of these waiver schemes would be the public sector banks. There is an increased exposure to Kisan Credit Cards, which are supposed to be used for farm equipment but are rather being used for consumption purposes. Such accounts can be kept standard by making small repayments, but with time these advances are getting accumulated, increasing the risk and exposure. As experts have suggested, we seriously need to reconsider such types of schemes.

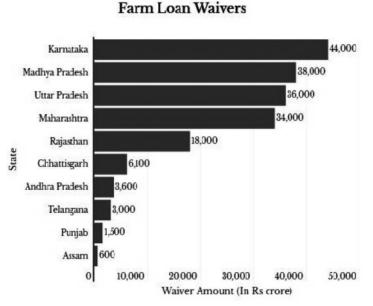


Figure 11: State-Wise Quantum of Farm Loans Waived (Sources: Reserve Bank of India; CMO Rajasthan; Bloomberg Quint; NDTV)

#### Stock Markets: A Deep Hollow

India is a country with a population of more than a billion people, but only a fraction of the population

invests its money. Out of the 7,800 scripts that are listed on Large net outfly

7,800 scripts that are listed on different national stock exchanges, only 3,000 of them are actively traded. According to the data by Securities and Exchange Board of India (SEBI), 10 cities contributed over 80 per cent of the entire trading volume of the exchanges. These figures show how hollow or concentrated is the overall investment in our economy. Developing economies like India need financial resources and capital wealth to fuel the needs of the companies.

# The coronavirus induced

lockdowns saw a sea change in retail participation in the stock markets. People, who earlier neglected or lacked funds for such investments, saw this as a scope to mint money, at a time when they were sitting idle in their homes. Such growth in participation in the markets was superfluous, as most of the trader's lacked knowledge, some lacked experience, and others simply wanted to speculate.

This led to the coining of the term 'Robinhood Traders'. These are traders usually focused on overvalued companies or poor-quality companies for trading. Initially, they were rewarded handsomely, but later they started suffering losses in the Indian context, and as the data suggests, they started withdrawing their funds from the market.

It is believed that the Indian economy is headed to a K-shaped recovery post COVID-19, with the rich getting richer and the poor getting poorer.

# Banking System: Conflict of Confidence

NDTV) The Indian banking sector, which holds around 60 per cent of the country's financial assets, is suffering from a crisis of confidence. Banking scams that have taken place and the subsequent moratorium that followed in cases such as Punjab National Bank have pained depositors, and questions have been raised on the effectiveness of

Large net outflows from equity funds and the opening of many demat accounts of late suggest that retail investors tried their hand at stock trading. However, it is unlikely that self-traders have fully abandoned MFs.

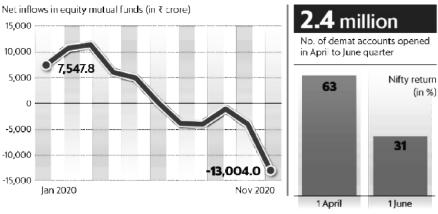


Figure 12: Net Inflows in Equity Mutual Fund (Source: Amfi)

banks. However, all these banks were backed by the government in times of uncertainty and, therefore, the safety of investment was assured. Now, with the recent scams of quid pro quo in Industrial Credit and Investment Corporation of India bank, and the Yes Bank debacle, people are afraid that they would not only not be able to withdraw their own funds but might ultimately even lose their investment/wealth, which is their hard-earned money.

- People want better services that are only provided by the private banks, yet they run towards public sector banks in the moment of crisis.
- These public sector banks, with their motive being social development, have agriculture as their priority sector, and this is the sector which has the highest share of NPAs.
- An appropriate balance is needed between the public sector banks and that of the private sector. Increasing evidence suggests that the public sector has been able to deliver the results of social development relative to the private sector; the government is continuing its policy of privatization and increasing the limits of foreign funding.

# Fintech: Who Regulates Whom?

The Indian fintech sector is bubbling with new start-ups, foreign entries, and even foreign collaborations. Digital payments have grown substantially owing to the government restrictions on cash in business transactions and incentives/benefits to consumers. Due to this being a new platform and a space not completely explored, the market leaders are able to exert monopoly powers.

- Some companies have grown so huge that they not only compete but even regulate such sectors, having their own rules and regulations. Every other company has to follow two sets of guidelines, one made by Reserve Bank of India (RBI) and the other by such MNCs. One such case was that of Paytm's, when the app was removed from the Play Store because it was allegedly violating Google's policies. An Indian fintech giant, which houses millions or even billions of Indian Rupees and a host of depositors, was removed instantly from access by a company that's not even Indian, without prior approval from RBI.
- Cryptocurrency is still not very popular in India, yet India has invested a handsome amount in it. The first thing the government tried to do is to completely ban it, repeating the mistakes from the time of License Raj. At a time when companies have started accepting such cryptocurrencies, the Indian government's move would just push India backward

in terms of global competition. This would ultimately lead to black marketing.

A huge amount of data is generated from such a platform, which requires being stored safely. However, in the past few years, there have been numerous ransomware attacks on such companies. It is believed that the hackers have the data of more than 10 million people up for sale on the dark web. Ransomware attacks are also dangerous as companies have to pay to access their own data. Privacy is a myth in such sectors.

# CONCLUSION

The loss of confidence of people in the organized Indian financial sector has been the reason for the development of the Indian unorganized financial sector. We see a parallel unorganized financial sector growing, not only in rural India but also in urban India. People are unaware of the investment options that are available, or they lack the necessary knowledge required to invest in them. Indian household savings rarely become a part of the circular flow of income and are often termed as leakages.

Government policies have been a disaster for small businesses. At a time when the entire bloodline of the economy was cash, the government moved forward with demonetization leaving hundreds of traders with piles of cash. Some Industries, especially the Fast-Moving Consumer Goods (FMCG) sector, runs only on cash. Governmental restrictions limiting cash transactions are the reason people keep a part of the business that's off their books or undisclosed. This has created a shadow economy. Most of the businesses transacting through banks have often faced the brunt of their policies, starting from illegal debt freeze to unnecessary charges being debited to their account in the name of policy change. One such case is SBI deducting substantial charges from zero balance accounts or debiting accounts for every transaction.

The government is formulating laws to limit cash transactions but, at the same time, is unable to provide adequate infrastructure to ensure data integrity and privacy. The fintech industry is a space that is yet to be explored to its full potential. Hence, the government should ensure that no single organization tries to

subdue their competition or starts regulating that sector on their own.

Loan waivers don't just impact the finances of state-run banks; they have a prolonged effect on the credit culture of borrowers. This was evident during the 2010 microfinance crisis when politicians exhorted people not to repay loans. Once a loan waiver is promised, even honest borrowers typically stop repayments of loans adding to the woes of banks. This starts a vicious cycle that harms the credit culture across the country.

Financial literacy is the basic step required in India to educate people about various investment options, and retain their confidence in the Indian financial sector. Indian stock markets, at this point, are highly vulnerable to influence, be it from the big Indian players or foreign capital inflow, which is running at an all-time high this year.

#### RECOMMENDATIONS

Imparting financial literacy at the very basic level is the first step towards improving the quality of investors. This should not be limited to some people pursuing a career in it but should begin at the basic level of schooling. Financially aware people will be better able to manage and handle their cash and the money which is usually kept as savings; these savings would ultimately find a way back into the flow of income, thereby having a multiplier effect on income and expenses.

The Election Commission of India should prohibit political parties from making any promises which could enhance the fiscal deficit of India or could stress the already distressed financial sector. All such decisions or promises should be made only after a thorough discussion with the RBI. The government should stop the privatization of all of its undertakings because there needs to be a balance in the economy. The Indian economy is not at the stage whereby private sector banks would be able to execute all government schemes for the backward areas because of their profit motive. This crisis of confidence of the public in the Indian banking sector provides a good opportunity to unleash reforms, and the government must refrain from temporary fixes like throwing more money at lenders. Such solutions only amount to kicking the can down the road. The government of India should take a cue from the United States of America, which has a separate regulatory authority to check the behaviour of these financial entities in the country.

PSBs have adopted liberal and loose credit policy, and have loans concentrated among certain borrowers and specific sectors, i.e., huge credit exposures to a few large corporate borrowers and to a few sectors such as infrastructures, powers, steels, mining, and telecoms. The government should introduce flexible compensation packages and incentives for the top and senior management of PSBs. This will improve the profitability of the PSBs and curtail the NPAs. The RBI's regulations must be ownership neutral. All banking regulatory powers of the RBI and its approaches in regulatory policies should be neutral to bank ownership.

# REFERENCES

The report has been prepared with the help of works, articles and research of various bloggers, economists, industrialists, and news outlets.

Some of them are as follows:

- 1. An article was published by Forbes India (https://www. forbesindia.com/news/business/companies/banks-staring-atfresh-npa- whammy-on-farm-loan-waivers-faulty-kisancredit-card-model-4792651.html) on the rising NPAs due farm loan waivers and Kisan Credit Card Models.
- 2. Online publication by IANS in the Financial Express (https://www.financialexpress.com/industry/banking-finance/crisis-of-confidence-in-banking-system-providesan-opportunity-to-unleash-reforms/1214719/) was published to address the crisis of confidence in the Public Sector banks.
- 3. An article published by the Reserve Bank of India (https://www.scirp.org/reference/referencespapers.aspx?refe renceid=2444944) of the trend and progress in Banking.
- 4. An article by Tehelka Bureu on the topic Paradox called Indian Economy (http://tehelka.com/paradox-called-indianeconomy/) is published by their team.





(11

Genome mapping stands as a less explored arena that has high potential to be exploited as more than just a biological topic.

# The Progression and Integration of Genome Sequencing in India

Prof. Arpita Dey Assistant Professor Department of Commerce (Evening)

Ishika Gupta Department of Commerce (Evening)

# ABSTRACT

Genome Sequencing was primarily a research tool to study the origin of viruses, diseases, and antibodies. Lately, 2014 onwards, it has been used as a medicinal revolution. It has personalized medicine and the understanding of it. Genome sequencing can possibly build the capacity to act preemptively preceding infection improvement or initiate treatment for a sickness that has not yet been diagnosed. It also has the potential to become a vital instrument

for identifying, concentrating, and predicting diseases in our food particles. Some of the developed countries like the United States of America (USA), the United Kingdom (UK), et al., have also incorporated it into their food safety campaigns in order to detect food-borne diseases and to prevent and control the same.

In India, genomic information holds the extraordinary potential to improve medical care procedures across different dimensions, such as detecting diseases, preventing end-stage diseases, information with medical/genetic/non-medical implications, drug response, and an over efficiency in the healthcare sector. Since 2019, India has gained some momentum in this field by launching its project IndiGen (discussed later on).

**KEYWORDS:** Financial Implications, Healthcare Industry, Ethical, Legal Considerations.

# INTRODUCTION

Genome sequencing is a developing tool of the healthcare industry. It provides answers to questions like why some people catch certain diseases while others do not. It has been proved to be laying the foundation for predicting disease susceptibility and drug response. It can give data on hereditary variations that can prompt sickness, or expand the danger of infection advancement, even in asymptomatic individuals. Not only does it explore the human body to personalize medicines, it also looks into food security and food control.

Genome mapping stands as a less explored arena that has high potential to be exploited as more than just a biological topic. Genome mapping attracts the eyes of venture capitalists, budding entrepreneurs, and big pharmaceutical companies. It opens the possibility of knowing what our genes entail for us thereby, not only treating it ahead of time but also preventing it.

From an entirely financial standpoint, genome sequencing can build a new sector in the country. As a budding industry, it needs physicians, researchers, participants, capital, financiers, and managers. When presented with something so technical, we often fail to estimate its commercial, legal and ethical facades. However, despite the growing advantages and possibilities of enhancing our current lives, there are vast limitations of genome sequencing, such as technical and financial issues, and legal and ethical considerations.

### LITERATURE REVIEW

**Bonah et al. (2019)** established that Genome mapping had not been commercialized in developing countries; it is mainly a developing research tool. They established that food safety is not prioritized in developing countries, and hence its practical usage for this purpose is negligible.

**Brown, Dessai et al. (2019)** found out that genome sequencing could be effectively used in the detection of diseases in food items, therefore providing precaution, detection, and investigation of food-borne viruses and bacteria. They recommended that the same can be applied by regulatory bodies and the government for providing safe food facilities.

**Ellwanger et al. (2019)** proposed that governmental agencies should appropriately invest into the medicinal use of sequencing genomic data, taking into account the available resources and the most urgent needs of their communities and countries, and sooner or later implement genome mapping for infectious diseases at a global level.

**Schwarze et al. (2018)** conducted an economic evaluation of the future of genome sequencing. They concluded that current practices apply limited to rare use of genomic data and evaluation of cost data, effectiveness all hint towards urgent translation of this science into practice.

**E. Niemiec, H.C. Howard (2016)** found out the plausibility of scientists in using and exploiting consumer genomic data. They found that there was no regulation controlling such misuse, and companies are rarely held accountable.

**Sachdeva et al. (2014)** concluded that genome mapping requires significant investment and personal, institutional, and governmental buy-in, along with a high gestational period.

#### **OBJECTIVES OF THE STUDY**

- To study and map the progression of genome sequencing.
- To understand the ethical and legal considerations of genome mapping.
- To investigate the impact of genome sequencing on the Indian economy.

#### DATA COLLECTION

The study is primarily based on secondary data which has been compiled from various sources like –

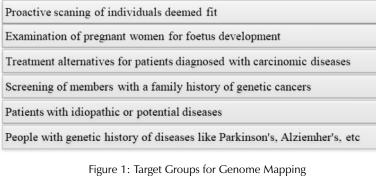
- Published Research Papers
- Newspapers and Editorials
- Internet Websites

The study has been done taking into consideration data pertaining from 2000 till date.

In relevant areas, primary data has also been collected. The data was collected during the months of March and April, 2021, from 175 subjects who were mainly peers, relatives and neighbours belonging to the middle and upper middle socio-economic classes, from the ages of 19 to 45.

#### APPLICATION AND ADVANTAGES

• Obtaining Information that has Potential Medical Implications: This is the primary purpose of obtaining genomic data about one's Deoxyribonucleic acid (DNA). It can provide a great deal of information on genetic variants that can lead to a disease or can increase susceptibility to a disease.



(Source: Australian Academy of Science)

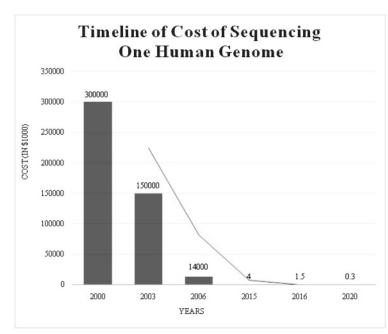
- **Pharmacogenomics:** It provides information about potential drug response and drug efficacy for all those DNAs which are under review.
- Non-medical Information: Information about one's heritage, non-health information, trait information, or indirect medical information like predisposition to obesity or depression can also be obtained.
- Lifetime Use: As cellular data does not change with progressing age and is specific to each individual, genomic data obtained once is as accurate as possible with current standards of science and need not be ever re-sequenced.
- **Psychological Benefit:** Family history of diseases can provide anxiety, in context to the uncertainty of disease to oneself and future generations; a study of disease predisposition and susceptibility can clear out such air and even help in taking preventive and precautionary steps.
- **Cost Saving:** A decoded genome data acts as a repository for information, valid till perpetuity. It reduces the trial and error of clinical tests and the need for frequent diagnostic testing.

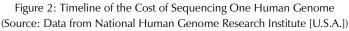
#### GLOBAL COST TIMELINE

- One of the early-stage human genome mappings generated a draft sequence in the early 2000s. This took 15 months (April 1999 – June 2000) and about a total cost of \$300 million, funded by the American Institute, National Institute of Health.
- · Further refining of this 'draft' by 2003 resulted in
  - greater efficiency and a reduction of 50 per cent in the total costs. The entire project, taken up by the government of the USA, took 13 years and billed to a total cost of \$2.7 billion. The team further estimated that, in the future, the cost of sequencing a human genome would be around \$150 million.
  - Three years since the first successful sequence was generated, new

BEYOND

technologies, knowledge, and experience resulted in a revision of costs. In 2006, the cost to sequence a human genome was around \$14 million.





• By 2016, the landscape of genome sequencing had turned around, which led to around a 97 per cent reduction in costs. In 2015, the cost to develop a human genome sequence turned out to be only \$4,000, and in 2016, this cost was further reduced to \$1,500.

Today, commercially, companies now price one human genome sequencing at around \$150 - \$1,000.

#### **INDIAN CONTEXT**

Genetic testing in India has advanced by a wide margin in the previous decade. Right now, there exist Deoxyribonucleic acids (DNA)-based tests that address various issues in medical services, from disease counteraction to cellular analysis.

Under 'IndiGen,' the Council for Scientific and Industrial Research (CSIR) chose about 1,000 youths from across India by organizing camps in various universities and instructing participants on genomics and the job of DNA in diseases. A few understudies and members donated blood samples from where their DNA groupings were gathered.

> This was the first occasion when an enormous sample of Indians was enlisted for a detailed examination for the field of genomics.

# Limitations Faced by Indian Scientists:

- Wrong/Ineffective/Inconclusive Interpretation: Genome mapping tests are considered accurate based on the comparative data present with scientists and the correct interpretation of results. If such data or experience is absent, results might be clouded or erroneous.
- Lack of Participants and Information: Genome testing has only been developing in our country over the past 15-20 years. As a result, public awareness about the same is very low. Consequently, there is a
   lack of collection of genomic data for referencing new DNAs, which ultimately results in inconclusive or ineffective interpretation.
- Lack of Indigenous Raw Materials: A proper sequencing test needs specialized plastic containers and reagents that go into sequencing machines. In India, such raw materials are not easily available.
- Bureaucratic Distractions: In order to boost local production, the Government has recently restrained government laboratories from importing raw materials below ₹ 200 million. This has been a hurdle for researchers, as they have to prove first that Indian alternatives are not available. Such an assessment is a needless bureaucratic distraction at a time when labs desperately need to sequence more genomes.
- **Funding:** To date, private equity investment in genome sequencing in India has been below satisfactory. Majority funding comes from the Government, foreign companies like Eurofins, and the issue of depository receipts.

Despite 15-20 years of extensive research by scientists, genome sequencing is a foreign topic to the majority of Indians. The field lacks substantive participation because of low awareness, which leads up to one of the major limitations of sequencing in India; it results in a restricted repository of genomic data that hinders further testing.



Figure 3: Awareness about Genome Sequencing (Source: Primary Data)

It was found that only around 33.14 per cent respondents (58 out of 175) are aware of genome sequencing and its benefits.

# LEGAL AND ETHICAL CONSIDERATIONS

India, today, has loose to no guidelines for this growing field. The Indian Council of Medical Research, the top body that manages clinical trials in India, has no particular rules to administer hereditary testing labs. Organizations have access to delicate individual data, which could be hacked or offered to outsiders without the owner's assent. Insurance companies may abuse this information for minimization and victimization of individuals based on their hereditary profiles. In India, where rank, sex, religion, and skin colour-based separation are so normal, genetic segregation can be another ticking bomb.

#### Concern over Data Privacy:

It was found that about 80 per cent respondents (140 out of 175) have concerns about their data being misused if they get their genome sequenced.

Are you concerned about your data?

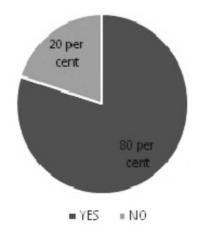


Figure 5: Concern over Data Privacy (Source: Primary Data)

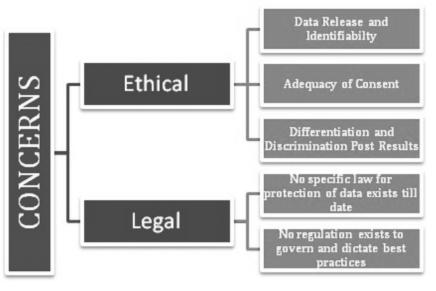


Figure 4: Legal and Ethical Concerns (Source: The National Academies Press: Integrating Large Scale Genomic Information into Clinical Practice (2012))

#### INVESTMENT SCOPE FOR GENOME SEQUENCING

'The global Genome Sequencing Services market is expected to reach \$13.1 billion by 2025 supported by a CAGR of 20.5 per cent during the forecast period of 2019 to 2025', says Meticulous Research.

In India, currently, foreign investment reigns over commercial genome sequencing, while the government has only funded the academic portion. Private equity firms or venture capitalists from domestic markets have not seeded into this industry. This showcases the imbalance in the funding structure of these entities, with great scope for Indian investors to throw their money at.

- This goes to show that the Indian companies in this sector are under-performing due to the limitations faced in India.
- There is a need for a funding revolution in this sector by way of larger investments which will be providing promising returns, like the foreign companies.
- However, companies experimenting and performing genome sequencing are bound to give positive returns in a horizon of 5-10 years due to favourable developments in science. Stock market analysts and researchers predict a manifold growth in this sector.

COMPANY	REVENUE (2019)	PROFIT (2019)	PERCENTAGE GROWTH IN THE PAST5 YEARS	PRESENCE IN INDIA
Illumina Inc.	\$354.8 million	\$1.002 billion	26	Subsidiary Incorporated
Eurofins Scientific Group	EUR 4562.8 million	EUR 833 million	29	Subsidiary Incorporated
Genewiz, Inc	\$134 million	\$24 million	19	Plans for Incorporation
Genotypic Technology (P) Ltd	₹200 million	₹3.58 million	Not Available	Indian Company

Table 1: Comparative Analysis of Companies in the Sector (Source: Data from Annual Reports)

- The analysis from Table 1 is as follows:
- i. Large global capacity to generate profit and wealth.
- ii. Potential in the Indian market. (All foreign companies are planning to or have ventured into the Indian markets).
- iii. Small-cap Indian companies are failing due to limitations; unable to perform despite global growth.
- Another way to invest in genome sequencing can be by investment in these foreign companies, which are already providing excellent returns.

#### SCOPE TO SET UP A NEW INDUSTRY

The commercialization of the academic knowledge of genome sequencing can develop an unexplored industry in India. The Genome Sequencing Services market in India lags behind tremendously. It needs factors to grow up to its potential. Genome Sequencing The Progression and Integration of Genome Sequencing in India

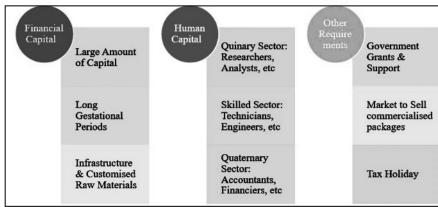


Figure 6: Requirements for Setting up a New Industry

(Source: Gentice Education)

Services industry is a capital-intensive industry,

The Indian Genome Sequencing market size was valued at \$23.67 million in 2019 and is expected to expand at a compounded rate of 14.6 per cent per

annum from 2020 to 2027. Efforts taken to develop

genomic databases for the Indian population are

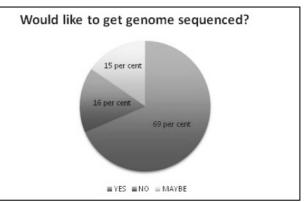
requiring a lot of physical, financial and human capital.

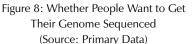
AVAILABILITY OF A MARKET TO CATER TO

expected to drive the market.

It was found that about 69 per cent respondents (120 out of 175) would be interested in getting their genome sequenced. Further, around 15 per cent (27 out of 175) of the respondents were unsure, which can be classified as a potential target market.

Figure 8 shows the incidence of a huge untapped market in India





India oncology targeted & gene panel sequencing market size, by technology, 2016 - 2027 (USD Million)

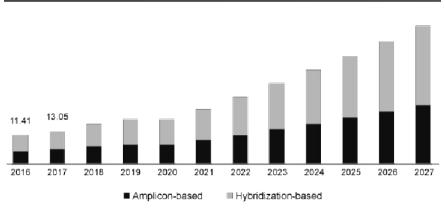


Figure 7: Expected Growth of GS Market in India (Source: Grandview)

Around two-thirds of the consumers have no idea about genome sequencing and its benefits. A survey conducted after educating the subjects about genome mapping, in order to explore potential customer base, gave the following results:

for genome sequencing, which market players hope to exploit in the coming decade. In India, the cost of tests is going down as volumes rise; and there are about half a dozen major companies in the sector, led by MedGenome, Strand Life Sciences, and leading diagnostics chains like Metropolis, SRL, and Dr. Lal PathLabs.

# **Cost Benefit Analysis:**

**COST:** The cost of the first genome sequenced in 2009, was about ₹ 5 million while the cost of each sample under the IndiGen Project

(2019) was ₹ 0.1 million. The director of CSIR, Sridhar Sivasubbu, estimates that in the next 2-3 years, the revenue costs of each sample will fall below ₹ 50,000.

#### BEYOND

**PRICING:** Earlier, commercial tests were priced at around ₹0.2-0.25 million, when the companies operated at a maximum capacity of 600 tests. Today, such tests range from ₹3,000 to ₹70,000, with a production capacity of over 150,000 tests.

**PERCEIVED VALUE:** Educated and aware consumers assume the high value of sequencing tests, taking into consideration the various benefits. The new strata of value-oriented consumers accord high importance to genome sequence testing and therefore, would accept the current pricing levels.

A survey conducted in this regard shows that the majority of consumers place a value of around ₹25,000-50,000 on genome sequence testing. (Figure 9)

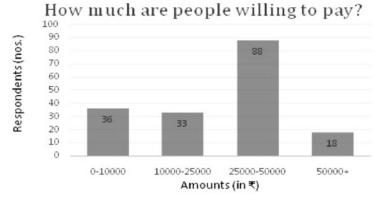


Figure 9: The Distribution of Value Perceived by the Public (Source: Primary Data)

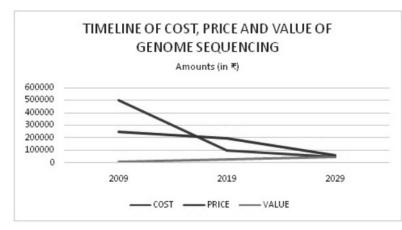


Figure 10: Timeline of Cost, Price and Value of Genome Sequencing (Source: National Human Genome Research Institute)

Figure 10 shows how the cost and price of sequencing have declined over the years, with an increase in perceived value, hinting at a market ready to commercialize genome sequencing.

Reasons of manifold reduction in costs:

- Innovation in technology
- · Reduction in capital expenditure requirements
- Economies of scale brought on by experience and learning curve effects
- Application of cost management techniques
- Easy access grants by the Government

# CONSEQUENTIAL ECONOMIC GROWTH

- Employment Generation: Setting up of a new industry brings numerous job opportunities for all sectors of the workforce.
- Reduction in Pathological Costs: Implementation at a nation-wide level will lead to disease detection at the earliest point in time, thereby, reducing the costs incurred by patients for diagnosing diseases.
- Increased Revenue: Brings cash inflows for testing centres and increases revenues of the healthcare sector.
- Increased Life Expectancy: Disease detection, prevention and cure, at the earliest, will increase the life expectancy rates, foetal survival rates, child-birth rates and safe pregnancy rates.
- Food Security: Genome testing can also be used in ensuring food safety and disease prevention from foodborne pathogens.
- Capital Inflow in the Economy: New investment avenues in the form of

genome sequencing services market will bring in new capital in the country from venture capitalists, hedge funds, private equity investors, Foreign Portfolio Investors (FPIs), Foreign Institutional

• Growth and Development: The cumulative impact of all the above benefits is an increase in the Gross Domestic Product (GDP) and also brings about sustainable development in the economy.

Investors (FIIs), and high-net-worth individuals.

# CONCLUSION

Genome sequencing is an unexplored yet promising new arena. This study is aimed to find out the plausibility of the science, the feasibility of its commercialization, and concerns of genome mapping in India at a large scale.

The future entails building an indigenous genomic database, learning and developing the infrastructural and technological requirements, and inviting the requisite financial baseline it needs for developing genome sequencing in India. This study proves that the same is possible and preposterously acknowledges the ability of our country as a whole to do so.

Reports also point out to silent investment from Tata Consultancy Services and Wipro in equipment and infrastructure for genome sequencing, suggesting the entry of big players in this market in the future.

# RECOMMENDATIONS

- 1. Comprehensive and effective policy regarding the use of genomic data while ensuring significant privacy levels for participants.
- 2. Assembling such huge scope data must be solid, private, and precise. A viable and doable answer for constructing a particularly dependable and safe data set is the use of blockchain technology.
- 3. An authority set up for the protection of such data, with periodically monitoring of usage to make users accountable, gain important consent from owners, gain public trust, and ensure that the data-sharing benefits exceed its limitations.

- 4. Framing well-defined rules for investment and reliefs for companies that set up business in this industry.
- 5. Government subsidies, import relief for getting raw materials, tax holidays, and grants to boost research.
- 6. Reduction in bureaucratic burdens over researchers and companies to enable seamless workflow without any external disturbances.
- 7. Awareness programmes at national level and incorporation in education of this science.

# REFERENCES

- 1. Apruzzese et al. (2019). Investing in food safety for developing countries: opportunities and challenges in applying whole-genome sequencing for food safety management. Foodborne pathogens and disease, 16(7), 463-473.
- 2. Brown, E., Dessai, U., McGarry, S., and Gerner-Smidt, P. (2019). Use of whole-genome sequencing for food safety and public health in the United States. Foodborne pathogens and disease, 16(7), 441-450.
- 3. Ellwanger, J. H., de Lima Kaminski, V., and Chies, J. A. (2019). Emerging infectious disease prevention: Where should we invest our resources and efforts? Journal of infection and public health, 12(3), 313-316.
- 4. Khromykh, A., and Solomon, B. D. (2015). The benefits of whole-genome sequencing now and in the future. *Molecular syndromology*, *6*(3), 108.
- Maan, S., Maan, N. S., Belaganahalli, M. N., Rao, P. P., Singh, K. P., Hemadri, D and Mertens, P. P. (2015). Full-genome sequencing as a basis for molecular epidemiology studies of bluetongue virus in India. *PLoS One*, *10*(6), e0131257.
- 6. Raizada, et al. (2014). Feasibility of decentralised deployment of Xpert MTB/RIF test at lower level of health system in India. *PLoS One*, *9*(2), e89301.
- Schwarze, K., Buchanan, J., Taylor, J. C., and Wordsworth, S. (2018). Are whole-exome and whole-genome sequencing approaches cost-effective? A systematic review of the literature. Genetics in Medicine, 20(10), 1122-1130.
- 8. Wang, et al. (2020). Initial whole-genome sequencing and analysis of the host genetic contribution to COVID-19 severity and susceptibility. Cell discovery, 6(1), 1-16.





(11

Behavioural finance demonstrates how emotions and cognitive errors influence investors in the decision-making process.

# A Study on the Application of Behavioural Finance in Analyzing Investor Behaviour

Prof. Saptarshi Ray Assistant Professor Department of Commerce (Evening)

Ruchika Chandak Department of Commerce (Evening)

# ABSTRACT

Traditional finance portrays humans to be 'homo economicus' i.e., beings that are rational and focus on maximizing their wealth and returns. Contrary to such theories that advocate how investors take decisions backed by logic and reason, the field of behavioural finance argues that individuals are susceptible to various emotional and cognitive biases that make their financial decisions diverge from rationality. This paper examines the meaning of behavioural finance, the various theories associated with it, and its application in investment decisions. It proposes the idea that investing is not simply a game of number crunching to arrive at buying or selling decisions, but is, in fact, guided heavily by an individual's personality and behaviour.

**KEYWORDS:** Behavioural Finance, Loss Aversion, Overconfidence, Investment Decision.

# INTRODUCTION

Behavioural finance tries to decode 'actual' investor behaviour in contrast to 'theories' on investor behaviour. By combining psychology with traditional economics and finance, it aims to explain stock market anomalies and identify why people make specific financial decisions. Recent episodes of extreme price volatility, like that of GameStop, have made behavioural finance's insights into market behaviour even more difficult to dismiss and prompted investors to have a deeper understanding of the impact of human behaviour and psychology on market inefficiencies and mispricing. Such an insight would enable investors to become aware of their own biases, thereby allowing them to make better financial decisions.

Behavioural biases have been categorized into two types: cognitive biases and emotional biases. Within each category, four biases and their impact on investment decisions have been identified and studied.

#### LITERATURE REVIEW

Daniel Kahneman and Amos Tversky (1979) in their paper titled 'Prospect Theory: An Analysis of Decision Under Risk' found that people assigned different weights to gains and losses, contrary to the predicted utility theory. People were found to be much more dissatisfied with potential losses than they were with comparable gains.

Hersh Shefrin (1999) defined behavioural finance as 'a rapidly growing area that deals with the influence of psychology on the behaviour of financial practitioners.'

Nicholas Barberis and Ming Huang (2001) suggested

through their paper titled 'Mental Accounting, Loss Aversion, and Individual Stock Returns', that loss aversion and narrow framing plays an important role in determining how people evaluate risky gambles.

According to M. Sewell (2007), behavioural finance questions the theory of market efficiency by explaining why and how markets may be inefficient due to human irrationality.

In his paper 'Decision Making in the Stock Market: Incorporating Psychology with Finance', Abhijeet Chandra (2008) investigated the effect of behavioural influences and investor psychology on decisionmaking. According to the findings, retail investors often make unreasonable decisions. Many behavioural factors affect investment decisions, including greed and fear, mental accounting, heuristics, and anchoring et al., which must be considered while making these decisions.

Chaudhary (2013) investigated how behavioural finance can help investors understand why they make irrational financial decisions. Investor's decision-making is influenced by feelings and cognitive mistakes, according to the report. Anchoring, overconfidence, herd behaviour, over and under-reaction, and loss aversion were all found to be factors in behavioural finance.

# **OBJECTIVES OF THE STUDY**

The primary objective of this study is to study the applicability of the different theories of Behavioural Finance in the decision-making process of individual investors on the Indian bourses. To meet this objective, the research aims to:

- Understand the concept of behavioural finance and the theories associated with it.
- Identify the prevalence of various emotional and cognitive biases in the decision-making process of investors belonging to different generations.
- Suggest methods and techniques to overcome and limit the detrimental impact of such behavioural biases.

#### **RESEARCH METHODOLOGY**

The intended study is conducted among individual investors residing in India and focuses on analyzing their behavioural patterns. It follows a descriptive research design and is based on both primary and secondary data. A convenience sampling technique has been used to collect data from the respondents. Primary Data, for the purpose of this study, has been collected from investors using a structured questionnaire involving a Google Form. Secondary data about behavioural finance has been collected from various books, journals and websites.

The sample consists of 113 investors who have been divided into two groups based on their age: (i) Generation Z (24 years of age and less) (ii) Millennials (More than 24 and up to 40 years of age). The division of investor profiles into the aforementioned generations is based on the definition given by the Pew Research Centre. Microsoft Excel software has been used to make the graphs and to facilitate statistical computation and analysis of the findings of the survey.

#### **CONCEPTUAL FRAMEWORK**

#### **Cognitive Biases:**

These biases occur as errors in judgement on account of one's line of reasoning being skewed by personal beliefs. Information processing or memory errors are examples of cognitive flaws that lead a person's decisions to diverge from rationality. These errors are divided into two groups: belief preservation errors, which refer to the tendency to hold on to one's initial belief despite new evidence contradicting it, and information processing errors, in which people make errors in their thinking, while processing information related to a financial decision. These biases can often be minimized by proper education, becoming cognizant of the loopholes in one's decision-making and making suitable alterations in one's thought process. Keeping detailed records and constantly seeking out new information that challenges one's beliefs are some measures that can be taken to reduce cognitive errors.

#### **Mental Accounting Bias:**

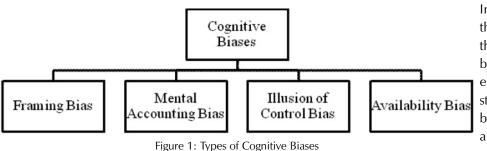
Individuals segregate their money into various categories or mental accounts, based on factors such as source of income and usage of money. The type of mental account into which such money has been placed determines how it is invested. For instance, money for day-to-day expenses and retirement funds are invested in low-risk assets, whereas bonuses are put into high-risk investments.

#### **Availability Bias:**

It refers to the tendency of people to base their decisions on information that is easily available or recallable. As a result, likelihood calculations are distorted by the ease with which those possible outcomes come to mind. Investors might choose mutual funds based on the ones that advertise themselves the most. This is an example of availability bias in investing. With readily available information, investors may be inclined to invest in the one they've heard of the most, whether or not the fund is good or aligns with their financial goals.

#### Illusion of Control Bias:

It refers to a situation wherein individuals falsely believe that they can influence the outcomes of their decisions. The belief of having more control over a situation than one actually does leads to the generation of illusions and makes one attribute future successes to one's skill



rather than their luck. Individuals may assume that they have leverage over their investment returns, but financial markets are extremely complex, and stock values are influenced by a number of factors that are beyond the control of any single person. Analysts who use complex models to make forecasts often fall prey to this bias leading them to make more frequent trades incurring excessive turnover costs.

# Framing Bias:

It happens when individuals make decisions based on the framework in which information is presented through various wordings, settings and scenarios, rather than on facts. For example, whether a cup of yoghurt is described as being '95 per cent fat-free' or containing '5 per cent fat', it would refer to the same basic fact. However, surveys reveal that consumers are more likely to buy the yoghurt with the first description. In the world of investments, individuals influenced by framing bias often misidentify their risk tolerance depending on how the information is presented.

# **Emotional Biases:**

These biases usually arise spontaneously as a result of an individual's feelings, emotions or personal experiences at the time when a decision is made. Emotional biases are more difficult to overcome than cognitive errors since they are rooted in the personality of the investors.

# Overconfidence Bias:

'It's frightening to think that you might not know something, but more frightening to think that, by and large, the world is run by people who have faith that they know exactly what is going on.' - Amos Tversky

While having confidence in one's ability to earn supernormal profits is beneficial, being overconfident about the same can lead to detrimental outcomes. When investors overestimate their ability to evaluate a particular stock, company, or industry as a potential investment, they may disregard any warning signs and engage in excessive trading in the same.

# **Regret Aversion Bias:**

When investors refuse to make decisions out of the fear that those decisions might turn out to be wrong and may cause them to regret in the future, they are said to be suffering from regret aversion bias. They tend to hold onto an underperforming investment for too long out of the fear that the investment value will go up in the future, which may cause them to regret having sold it. The bias can also manifest itself in the form of 'herding' among investors, causing them to seek validation in the decisions made by others. When their decision matches

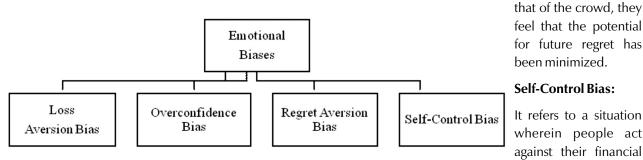


Figure 2: Types of Emotional Biases

# Loss Aversion Bias:

It refers to the fact that individuals dislike losses more than they like gains of an equal amount i.e., the value that people assign to similar gains and losses are asymmetric. It can be demonstrated through the tendency of investors to hold on to investments trading below their purchase price to avoid realizing the loss while selling off 'winning' investments too early in order to lock in the gains. world of investing, self-control bias manifests itself in the form of people suffering from the inability to delay current consumption in order to save for the future. This bias is often linked to a behavioural flaw called hyperbolic discounting, which describes how skewed an investor's perception of gain is. Due to a larger appetite for short-term gains, investors often tend to sacrifice greater long-term gains, which in turn, adversely impact their decision-making.

interests due to a lack of self-discipline. In the

#### DATA ANALYSIS AND FINDINGS

To check for the prevalence of the aforementioned cognitive and emotional biases among investors, a generation-wise breakup of the summary of the responses received has been presented.

#### Framing Bias:

#### **Question 1:**

First Selection	XYZ	DEF	ABC	Total
XYZ	2	4	10	16
DEF	1	1	6	8
ABC	0	1	5	6

Table 2 (Source: Primary Data)

'Based on the chart below, which investment portfolio fits your risk tolerance and desire for long-term return?'					
Portfolio	95 per cent Probability Return Range 10-Year Average Return				
XYZ	XYZ0.5 per cent to 6.5 per cent3.5 per cent				
DEF -18 per cent to 30 per cent 6.0 per cent		6.0 per cent			

-22 per cent to 42 per cent

o Portfolio XYZ

ABC

- o Portfolio DEF
- o Portfolio ABC

#### **Question 2:**

'Based on the chart below, which investment portfolio fits your risk tolerance and desire for long-term return?'

Portfolio	10-Year Average Return	Standard Deviation of Returns	
XYZ	3.5 per cent	1.5 per cent	
DEF	6.0 per cent	12 per cent	
ABC	10.0 per cent	16 per cent	

initially showed an inclination towards being risk-averse with 53 per cent of the people choosing the least risky portfolio. However, upon a change in the framing of the question, a shift was seen towards the portfolio accruing the highest return, despite having a high-risk profile, as evidenced by 70 per cent of the people choosing the riskiest portfolio. 73 per cent of the respondents showed inconsistency in the choice of their portfolio upon a change in the framing of the question.

The respondents in 'Generation Z'

o Portfolio XYZ

o Portfolio DEF

o Portfolio ABC

The respondents were asked to choose among three portfolios which were essentially the same across two questions. However, one question was framed with the risk involved being described first and the other was framed with the returns being described first.

#### Generation Z:

	Risk-averse	Riskier	Riskiest	
	XYZ	DEF	ABC	Total
SD before return as a range	16	8	6	30
SD after return as percentage	3	6	21	30

Table 1 (Source: Primary Data)

SHIFT TO RISKIER PORTFOLIO UPON CHANGE IN FRAMING



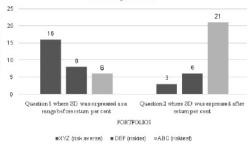


Figure 3 (Source: Primary Data)

NO. OF RESPONDENTS

10.0 per cent

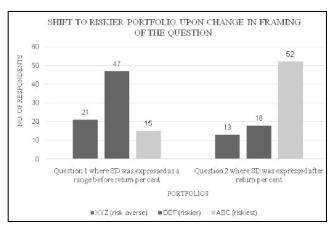
#### Millennials:

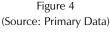
	Risk-averse	Riskier	Riskiest	
	XYZ	DEF	ABC	Total
SD before return as a range	21	47	15	83
SD after return as percentage	13	18	52	83

Table 3 (Source: Primary Data)

<b>First Selection</b>	XYZ	DEF	ABC	Total
XYZ	4	4	13	21
DEF	10	6	31	47
ABC	2	5	8	15

Table 4 (Source: Primary Data)





Initially, 57 per cent of the respondents in the 'Millennial' generation chose the riskier portfolio and 25 per cent of them chose the least risky portfolio. However, upon the change in the framing of the question, a shift was seen towards the portfolio accruing the highest return, despite having a high-risk profile, as evidenced by 63 per cent of the people choosing the riskiest portfolio. 78 per cent of the respondents showed inconsistency in the choice of their portfolio upon a change in the framing of the question.

# Mental Accounting Bias:

'Do you segregate your money based on					
its source or intended use? For example					
- Classifying money received from salary					
and bonus into different accounts.'					
Yes					
No					
Maybe					

# Generation Z:

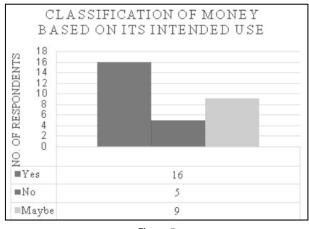
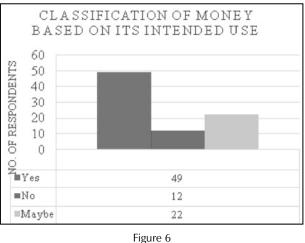


Figure 5 (Source: Primary Data)

#### Millennials:



(Source: Primary Data)

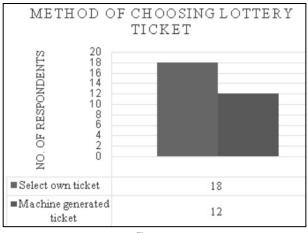
Among the respondents belonging to 'Generation Z', 53 per cent of them agreed to classify their money based on its intended use, and among the 'Millennials', 59 per cent of them agreed to the same, signifying that investors belonging to both the generations maintain mental accounts for their investments.

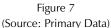
#### **Illusion of Control Bias:**

'You are offered two free lottery tickets. Which of the following things would you do?'

- o Select your own ticket
- o Have a machine generate the ticket number for you

#### Generation Z:





#### Millennials:

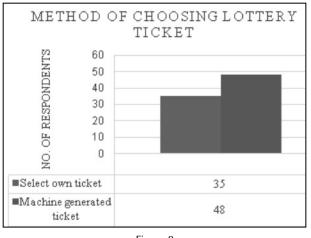


Figure 8 (Source: Primary Data)

60 per cent of the respondents in 'Generation Z' showed an inclination towards selecting their own ticket, indicating the presence of the Illusion of Control bias. 58 per cent of the respondents who were 'Millennials' opted for a machine-generated ticket, indicating that the Illusion of Control bias was not prevalent among them.

### Availability Bias:

'You make investment decisions (such as selecting a mutual fund or online broker) based on word-of-mouth or name recognition.'

- o Agree
- o Disagree

#### Generation Z:

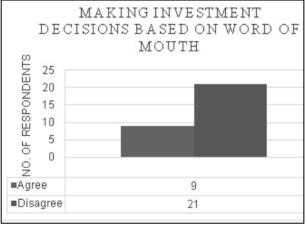


Figure 9 (Source: Primary Data)

#### Millennials:

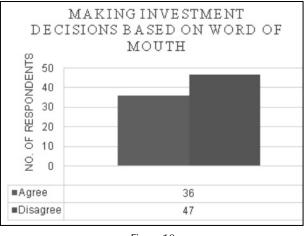


Figure 10 (Source: Primary Data)

Among the respondents, 70 per cent belonging to 'Generation Z'and 57 per cent belonging to the 'Millennial' generation disagreed with them, making investment decisions based on word of mouth or name recognition. This might indicate that the younger investors are taking more informed decisions as compared to their older counterparts.

#### Loss Aversion Bias:

#### **Question 1:**

'Which of these two options would you choose?'

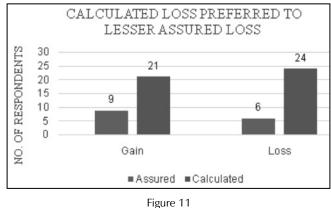
- o An assured gain of ₹400
- o A 25 per cent chance of gaining ₹ 2,000 and a 75 per cent chance of gaining nothing

#### **Question 2:**

'Which of these two options would you choose?'

- o An assured loss of ₹400
- o A 50 per cent chance of losing ₹ 1,000 and a 50 per cent chance of losing nothing

The respondents were asked to choose between an expected gain and an assured gain along with an expected loss and an assured loss across two different questions. The figure of the expected gain was higher than that of the assured gain in question one and the figure of the expected loss was higher than the assured loss in question two.



(Source: Primary Data)

Respondents in 'Generation Z' showed an inclination towards making a higher calculated gain with 70 per cent of the respondents choosing the same. However, 80 per cent of the respondents ended up choosing a higher calculated loss of ₹ 500 despite a lesser assured loss of ₹ 400, triggered by their emotion to avoid loss instead of letting it be assured.

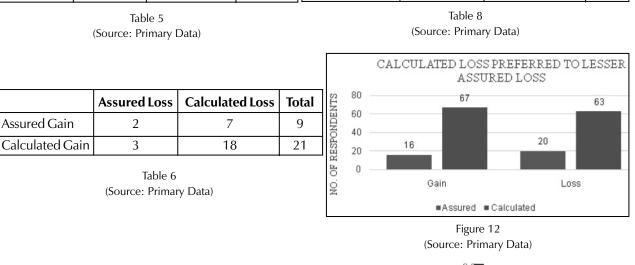
#### Millennials:

	Assured	Calculated	Total
Gain	16	67	83
Loss	20	63	83

Table 7 (Source: Primary Data)

#### Generation Z:

	Assured	Calculated	Total		Assured Loss	Calculated Loss	Total
Gain	9	21	30	Assured Gain	5	11	16
Loss	6	24	30	Calculated Gain	15	52	67



Respondents in the 'Millennial' generation showed an inclination towards making a higher calculated gain with 81 per cent of the respondents choosing the same. However, 76 per cent of the respondents ended up choosing a higher calculated loss of ₹ 500 despite a lesser assured loss of ₹ 400, triggered by their emotion to avoid loss instead of letting it be assured.

# **Overconfidence Bias:**

'You are confident of your ability to choose stocks that outperform Nifty 50 and BSE Sensex.'

- o Agree
- o Disagree

# Generation Z:

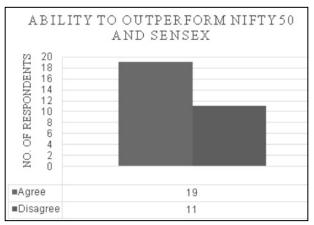


Figure 13 (Source: Primary Data)

#### Millennials:

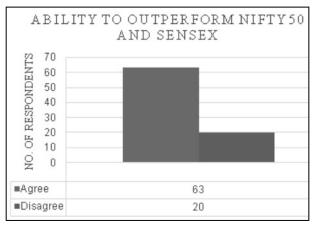


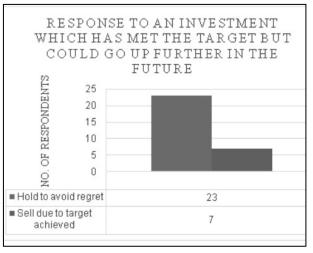
Figure 14 (Source: Primary Data) Among the respondents, 63 per cent of those belonging to 'Generation Z' and 76 per cent of those who were 'Millennials' agreed that they were confident about their ability to choose stocks that outperform NIFTY50 and BSE Sensex, indicating that the bias is more prevalent among older investors.

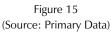
# **Regret Aversion Bias:**

'Suppose you make an investment in Stock ABC, and over the next six months, ABC appreciates by your target of 15 percent. You decide to sell, but then come across a news piece in a leading business daily that restates the company's recent successes and sparks new optimism. You wonder whether ABC could climb even higher. Which answer describes your likeliest response now?'

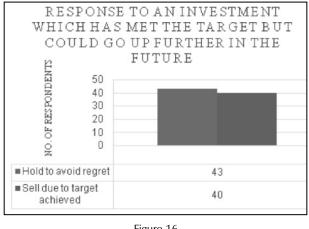
- o I think I'll hold off and wait to see what happens. I'd really regret it if I sold now and ABC went up further.
- o I'll probably sell because ABC has hit the target I set, and I try to stick to the targets set.

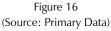
# Generation Z:





#### Millennials:





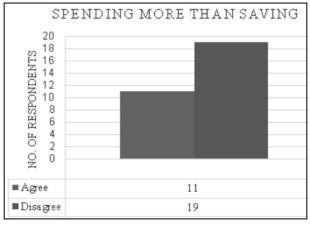
77 per cent of the respondents belonging to 'Generation Z' and 52 per cent of the 'Millennials' said that they would hold on to an investment even after it met the target only to avoid regret if it went up further. The lower likelihood of exhibiting this bias among 'Millennials' might indicate that their fear of regretting their financial decisions on account of a better understanding of their risk appetite is lesser.

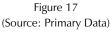
#### Self-Control Bias:

'You spend a greater percentage of your income						
than v	'hat you save.'					
0	Agree					

- o Disagree

#### Generation Z:





#### Millennials:

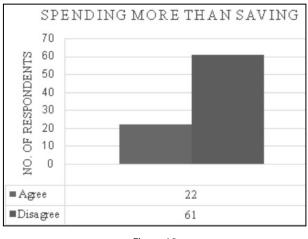


Figure 18 (Source: Primary Data)

The respondents were asked whether they spend more than they save. 63 per cent of those in 'GenerationZ' and 73 per cent of the 'Millennials' disagreed with the same indicating that there is a strong savings habit among the respondents. Thus, it can be concluded that the sample respondents do not suffer from self-control bias. A greater majority of the 'Millennials' disagreeing to spending more might indicate that one's saving behaviour increases as one approaches old age.

#### RECOMMENDATIONS

'People who miss opportunities to learn from past miscalculations are likely to miscalculate again - renewing a cycle of anxiety, discomfort, dissonance, and denial.'

Since behavioural biases can impair sound decisionmaking, investors can adopt the following strategies to immunize themselves against the same:

- 1. Understanding the biases: Awareness and recognition of biases and one's susceptibility to them can be the first step in eliminating them.
- 2. Becoming mindful of one's investment rationale: Long-term investment goals that are vague, such as 'I want to retire wealthy,' offer little investment guidance. Goals should be specific and quantifiable, such as 'I want to retire in 10 years'. A

minimum of ₹ 500,000 per year in retirement income will allow one to live comfortably and will help reduce investor myopia and assist in making more informed decisions.

- 3. Diversification of investments: The principle of diversification helps one in managing risks. Diversification across different industries and investment vehicles such as gold, stocks, bonds, real estate, et al. can be a suitable hedge against the volatility of markets.
- 4. Recognize that earning a market rate of return is acceptable: Typically, methods for making supernormal profits worsen cognitive prejudices, resulting in lower returns. Indexing-based portfolio strategies reduce the negative impact of prejudices and take emotion out of investing. Moreover, they are also the most effective in the long run.
- 5. Fundamental Analysis should be supplemented by Technical Analysis: At the time of investment decision-making, fundamental as well as technical analysis should be considered because fundamental analysis often fails to justify short-term fluctuations in the price of securities which are sometimes based more on psychological factors than on economic factors. Technical analysis helps investors where fundamental analysis proves inadequate, so both the methods should be considered in conjunction with each other.

The following recommendations are suggested to curb the adverse impact of the eight behavioural biases identified:

COGNITIVE BIASES	EMOTIONAL BIASES		
<b>Framing Bias:</b> To overcome this bias, investors should make a thorough analysis of the information at hand and consider rephrasing it to check if it changes the conclusion they had arrived at earlier.	<b>Loss Aversion Bias:</b> To eliminate this bias, entry and exit from investments should be justified by the fundamentals of the underlying assets and should be consistent with the risk and return objectives of an investor.		
<b>Mental Accounting Bias:</b> To eliminate this bias, individual investments need to be viewed from the 'portfolio perspective', considering the overall asset allocation and factoring in the correlation among investments.	<b>Overconfidence Bias:</b> In order to reduce this bias, investors should keep a proper record and justification for each investment that they make and they should do an ex-post analysis of the same.		
<b>Illusion of Control Bias:</b> To overcome this bias, investors should understand the probabilistic nature of investing. They should try to analyze the possible factors which could influence the price of a stock to realise that they do not have control over the outcome of their investment.	<b>Regret Aversion Bias:</b> In order to correct this bias, investors should take decisions keeping the long-term outcomes of their portfolio in mind and not try to simply follow the current trend.		
Availability Bias: In order to overcome this bias, investors should diligently research and contemplate on investment decisions along with setting personal trading rules so that they do not execute regrettable orders.	<b>Self-Control Bias:</b> To tackle this bias, individuals should make realistic financial plans and goals and always rationalize their spending.		

#### CONCLUSION

'The investor's chief problem - and even his worst enemy - is likely to be himself.'- Benjamin Graham

Behavioural finance provides explanations as to why investors make irrational financial decisions. It demonstrates how emotions and cognitive errors influence investors in the decision-making process. In essence, it looks at investor behaviour trends and tries to figure out how these patterns influence investment decisions.

Individual investors, contrary to what classical finance theory implies, do not always behave rationally while making investment decisions. In this study, the respondents were found to exhibit both cognitive and emotional biases. The study concluded that three cognitive biases, namely, Framing, Mental Accounting bias, and Availability bias were exhibited by the respondents from both the generations. The Illusion of Control bias was exhibited by the respondents belonging to 'Generation Z' but was not exhibited by those respondents who were 'Millennials'. Three emotional biases, namely, Loss Aversion, Overconfidence and Regret Aversion bias affected decision-making among respondents from both the generations. However, respondents from either of the generations did not exhibit Self-Control bias.

#### REFERENCES

- 1. Baker, H. K., Filbeck, G., and Ricciardi, V. (2017). How Behavioural Biases Affect Finance Professionals.
- 2. Hsu, Y. and Shiu, C. Y. (2010), The Overconfidence of Investors in the Primary Market, Pacific-Basin Finance Journal, 18(2), 217-239.
- 3. Kahneman, D., and Tversky, A. (1979). Prospect theory: An Analysis of Decision Under Risk. Econometrica: Journal of the Econometric Society, 263-291.
- 4. Parikh, Parag. 2011. Value Investing and Behavioural Finance. New Delhi: Tata Mcgraw Hill.
- 5. Thaler, Richard H. (1985) Mental Accounting and Consumer Choice, Marketing Science, 4, 199-214.

#### BEYOND



(44

The mercurial transitions in the academic sphere have increased the complexities of modern-day teachers.

# Investigating the Determinants of Stress among Teachers of Christian Schools

Rev. Fr. Joseph Kulandai, SJ Vice Principal Department of Commerce (Morning)

#### ABSTRACT

In the backdrop of the current hyper-competitive academic milieu, the modus operandi of teachers has become extremely arduous which has posed stiff challenges for them. The travails encountered by the teachers, especially during these challenging times of the COVID-19 pandemic, have been gargantuan. Along with such challenges, there is always an added demand of constantly adapting oneself to the changing academic and workplace environment, which is likely to take a toll on the mental health of the teachers. The present research study purports to examine and analyze the key factors that cause stress among teachers of selected Christian schools in the metropolitan setting of Kolkata.

**KEYWORDS:** Education, Christian Schools, Teachers, Stress.

#### INTRODUCTION

The mercurial transitions in the academic sphere have increased the complexities of modern-day teachers. Moreover, the malaise of the current ongoing Coronavirus pandemic has further escalated the concerns of mental health, especially among teachers. Truth be told, stress has become a universal conundrum and has received considerable attention since the COVID-19 lockdowns were imposed. Since then, there has been a plethora of changes witnessed in the everyday life of teachers, which has impacted their lives severely, contributing to immense levels of stress. As a result, it

BEYOND

becomes extremely crucial to explore the various antecedents of stress. The essence of the current research endeavour is very much aimed at this, where the most dominant factors of stress among teachers would be probed into.

# **STRESS - A BRIEF OVERVIEW**

Every person experiences stress in their daily lives. Undoubtedly, stress is a global phenomenon experienced in every profession and the teaching profession is no exception. Different authors have defined the term 'stress' in different ways. In simple words, stress may be defined as 'the adaptive response of an individual as a result of the interaction with the environment characterized by certain changes within those individuals causing them to deviate from their normal functioning'. Stress is actually a person's response to a situation rather than the situation itself. More often than not, stress is perceived in a negative manner. There is also a positive side of stress called 'Eustress' which is caused by good things as well as a neutral side of stress called 'Neustress' where an individual is said to have 'no positive as well as negative stress'. While positive stress is good for an individual, negative stress has an adverse impact on an individual in the form of emotional fatigue, depersonalization, reduced personal accomplishment, et al.

# LITERATURE REVIEW

The term 'stress' is borrowed from the discipline of physics. Stress actually means pressure (Cox 1978, cited in Furnham 2005, p 354). According to Bernik (1997), stress designates the aggression itself leading to discomfort, or the consequences of it. It is an organism's response to a challenge, be it right or wrong. Moorhead, G., and Griffin, R. W. (2001) said that stress is caused by a stimulus that can be either physical or psychological, and that each individual responds to the stimulus in some way. Stephen P. Robbins, et al. (2007) defined the term 'stress' as a dynamic condition in which an individual is confronted with an opportunity, constraint or demand related to what he/she desires and for which the outcome is perceived to be both uncertain and important. Salami O. S. (2010) defined occupational stress as the experience of unpleasant negative emotions such as tension, anxiety, frustration, anger and depression, resulting from aspects of work. Yan, H., and Xie, S. (2016) defined work stress as a series of physiological, psychological and behavioural responses due to the continuing effects of one or more stressors on individuals in an organization. According to Kyriacou (2001), 'teacher stress may be defined as the experience by a teacher of unpleasant, negative emotions, such as anger, anxiety, tension, frustration or depression, resulting from some aspect of their work as a teacher'. Quite a few researchers in the past have blended guintessential factors of teacher stress like student behaviour, role ambiguity, task stress, curriculum changes, workload, et al. A closer introspection of literature review would reveal that it is extremely arduous to come across researches focusing on teacher stress of Jesuit institutions. Hence, in this present study, we shall focus on many of these factors falling under different categories of the sources of stress from the innate viewpoint of Jesuit institutions.

# **RESEARCH OBJECTIVE**

To identify the dominant factors of stress among teachers of Christian schools.

# **RESEARCH METHODOLOGY**

An anonymous survey had been conducted on a sample of 138 respondents, both male and female, employed in teaching in various Christian schools in the city of Kolkata. A structured questionnaire had been developed for conducting the survey where all such questionnaires were mailed to the teachers, as physical interaction was not possible due to the current pandemic situation. A total of four schools located in Kolkata were selected, namely, St. Anthony's High School, St. John Berchman's School, Loyola High School and St. Xavier's Collegiate School. A 5-Point Likert scale was used to measure the concepts (1= Strongly Agree, 2= Agree, 3= Neutral, 4= Disagree and 5= Strongly Disagree). The data collected has been meticulously processed by the use of IBMs SPSS.

#### DATA ANALYSIS AND PRESENTATION

#### **Demographic Profiling**

The following demographic data of the teachers has been captured in pie diagrams which are distributed across gender, age and income. Pie diagrams have been used instead of a table to enhance visibility among the readers.



Figure 1: Representation of Gender among Respondents (Source: Primary Data)



Figure 2: Representation of Age among Respondents (Source: Primary Data)

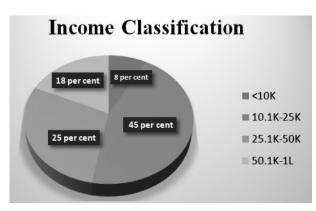


Figure 3: Representation of Income among Respondents (Source: Primary Data)

### KMO Bartlett's Test of Sphericity

Since the objective of the study is to prune out the dominant factors of stress among teachers of Christian schools by the usage of Factor Analysis through Principal Component Analysis, it is necessary to conduct KMO and Bartlett's Test of Sphericity to measure the sample adequacy as well as to explain whether it is feasible to conduct Factor Analysis. The results of the Factor Analysis have been presented below. As evidenced, the KMO value is 0.789, which is greater than the ideal limit of 0.6. The p-value is also significant at 0.000 (p is less than 0.05), hence, it is worthwhile to run a Factor Analysis test on the different variables contributing to stress among teachers of Christian schools.

Kaiser-Meyer-Olkin Measure of	
Sampling Adequacy	0.789
Bartlett's Test of Sphericity Approx.	
Chi-Square	810.456
df	31
Sig.	.000

Table 1: KMO and Bartlett's Test of Sphericity (Source: Primary Data)

The KMO and Bartlett's Test is succeeded by Total Variance Explained (TVE). According to TVE, the result will indicate the number of factors derived on the condition that the Eigenvalues are greater than one. We observe five factors of stress which have Eigenvalues greater than one, so only those factors have been taken into consideration, which explains 86 per cent of stress levels experienced by the teachers of Christian schools.

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	Per cent of Variance	Cumulative Per cent	Total	Per cent of Variance	Cumulative Per cent
1	2.138	23.102	23.102	2.138	23.102	23.102
2	1.705	20.938	44.040	1.705	20.938	44.040
3	1.587	18.898	62.938	1.587	18.898	62.938
4	1.126	12.240	75.178	1.126	12.240	75.178
5	1.014	10.822	86.000	1.014	10.822	86.000
6	0.616	6.224	92.224			
7	0.474	3.903	96.127			
8	0.235	2.610	98.737			
9	0.105	1.263	100.00			

Table 2: Factor Analysis (Total Variance Explained) (Source: Primary Data) Extraction Method: Principal Component Analysis

Below is the Table 3 showing the Rotated Component Matrix, according to which the variables would get accommodated in the factor loadings, thereby showing the final results. The component may be arranged in the following manner:

	Component				
	1	2	3	4	5
F1	0.363	-0.062	0.124	0.697	0.412
F2	0.219	0.155	0.352	0.815	0.224
F3	0.638	0.403	0.013	-0.028	0.387
F4	0.123	0.077	-0.032	-0.166	0.168
F5	0.089	0.352	0.237	0.061	-0.056
F6	-0.079	-0.533	0.158	-0.189	0.213
F7	-0.008	0.061	-0.098	-0.091	0.512
F8	0.688	0.257	-0.197	0.175	-0.192
F9	0.705	0.398	0.221	-0.092	0.749

Table 3: Rotated Component Matrix (Source: Primary Data) Extraction Method: Principal Component Analysis Rotation Method: Varimax with Kaiser Normalization a. Rotation Converged in Six Iterations

The nine variables are disintegrated into five factors which we have renamed as Component I, Component II, Component III, Component IV and Component V. The following components have been renamed as Academic Stress, Personal/Individual Stress, Studentrelated Stress, Home-Workplace Stress and Interpersonal Stress.

# **RESEARCH FINDINGS AND DISCUSSIONS**

A total of nine factors contributing to stress among teachers of Christian schools have been identified. However, there are five most dominant factors amongst those nine, namely, Academic Stress, Personal/Individual Stress, Student-related Stress, Home-Workplace Stress and Interpersonal Stress. The other four factors of stress, according to the strength of independence on the basis of Factor Analysis were Working Condition Stress, Group Stress, Social Stress and External Stress. A significant proportion of respondents agreed to the fact that they were more stressed due to their academic-related work, that is, their workload in institutions. Another significant proportion of respondents completely agreed that a major source of stress in their daily lives stemmed out of their own personal problems. We also had a significant number of respondents who were said to experience stress because of student-related factors like improper communication, poor feedback, countering challenging and intelligent students, et al. Home-Workplace Stress also played a significant part in causing stress to teachers of Christian schools as many of such teachers have a tough time coping up with the gruelling task of travelling from home to institutions and vice versa during these challenging times of COVID-

19. Last but not least, Interpersonal Stress in the form of competition with peers, conflict with peers, et al., also was a menacing source of stress, as the ramifications ensuing out of this kind of stress is said to have a detrimental effect on the teachers. We also discovered factors like Working Condition Stress, Group Stress, Social Stress and External Stress, which in accordance with our study did not prove to be so important. But this does not undermine their role in contributing to stress among teachers of any institution, let alone Christian schools. Coming to Working Condition Stress, as pointed out by the American psychologist Frederick Herzberg in his Two-Factor Theory, working conditions/hygiene factors are absolutely pivotal as the absence of such good hygiene factors or working conditions will lead to dissatisfaction and hence result in stress. In this context, factors like poor classroom ambience, poor infrastructure, lack of good technological facilities inside institutions, et al., contribute to a prodigious amount of stress among teachers. Group Stress in the form of group conflicts, group politics, competitions with other groups, et al., also contributes to stress among teachers. Social Stress stemming from lack of social support, culture, ethics, religion, et al., are also significant influencers of stress. However, this was not ably supported by our study. Last of all, External Stress in the form of climate, political parties, pollution, et al. had a negligible impact on teachers according to our study.

#### CONCLUSION

The rapidly changing world and the emerging ramifications are having an adverse impact on the lives of everyone, especially working professionals. They are witnessing stress every now and then. However, the level of stress varies among individuals. There are myriad sources of stress. It is to be noted that what may be a source of stress to one, may not be a source of stress to another. The teachers of Christian schools have been experiencing a prodigious amount of stress with each passing day. It has become incumbent to provide teachers with appropriate training and counselling programs to fight and overcome stress efficiently. Christian schools have started implementing various kinds of teacher training programs for the teachers in the form of FDP, counselling sessions, special seminars on stress management, et al., in order to provide the much-needed balm to this menacing problem. Truth be told, stress is simply inevitable but simultaneously could be managed properly, keeping in mind the demands of the fast-paced world and one's ability to fulfil the demands as well as cope up with the challenges, be it with the universal phenomenon called 'stress'.

#### REFERENCES

- 1. Burman Richa and Goswami TulseeGiri. (2018). A Systematic Literature Review of Work Stress. International Journal of Management Studies, Volume 5, Issue No. 3 (9).
- 2. Jain Geetika, Tyagi Harish Kumar and Kumar Anil. (2015). Psycho-Social Factors Causing Stress: A Study of Teacher Educators. Journal of Education and Practice, Volume 6, Issue No. 4.
- 3. Jenitta J.N and Mangaleswaran T. (2016). Factors Affecting the Stress of Teachers; A Special Reference to Trincomalee District, International Journal of Engineering Science and Computing, September 2016 Volume 6, Issue No. 9.
- 4. Kaur Navneet. (2016). Evaluation of Factors causing Stress among School Teachers of North India (Unpublished MBA Dissertation). Dublin Business School, Dublin, Ireland.
- 5. Fisher, M. H. (2011). Factors Influencing Stress, Burnout, and Retention of Secondary Teachers. Current Issues in Education, Volume 14, Issue No. 1.

#### BEYOND



# (11

Educational institutions are posed with a stiff challenge of not only educating its students with the latest approaches in pedagogy, but also enhancing the skills and competencies of the teachers and students.

# Exploring the Determinants of Workplace Spirituality among Teachers at Jesuit Schools: Insights from Kolkata

Rev. Fr. Peter Arockiam, SJ Vice Principal Department of Commerce (Evening)

# ABSTRACT

Teachers in educational institutions are entrusted with the responsibility of shaping the future citizens of a nation, which necessitates their involvement and commitment to their profession. This is further dependent on the teachers' mindset and spirit for finding true meaning and strong purpose in their work, as well as their desire to engage with other teachers and be a part of the community. This is the essence of workplace spirituality, thus, it is pivotal to explore the key factors that influence it, particularly among teachers in Jesuit schools, where high-quality education is pillared on spiritual values rooted in the Ignatian charism. Therefore, the aim of the present research study is to examine and analyze the most dominant factors of workplace spirituality. A survey has been conducted on 114 school teachers belonging to Jesuit schools in Kolkata. The data collected has been analyzed by IBM's SPSS. The findings of the study reveal some key factors of

workplace spirituality like altruistic love, faith, vision, calling, meaning, membership, organizational commitment, productivity and spiritual leadership.

**KEYWORDS:** Workplace Spirituality, School Teachers, Jesuit Schools, Kolkata.

# **BACKGROUND OF THE STUDY**

The landscape of education is undergoing a stunning metamorphosis with each passing day. As a result, educational institutions are posed with a stiff challenge of not only educating its students with the latest approaches in pedagogy but also enhancing the skills and competencies of the teachers and students. Teachers play an instrumental role in disseminating knowledge and learning among the students of any institution. The roles they play in Jesuit schools are all the more challenging because the approach focuses on not only providing academic lessons to students, but also on their overall development in terms of character, moral behaviour, good ethics, and most importantly, acting as agents of change in society and being men and women for others. This calls for a huge challenge on the part of the teachers of Jesuit schools for finding a true meaning and strong purpose in their work and the desire to engage themselves with their colleagues at their workplace and be deep rooted in the community.

However, it is important to intricately probe on the very concept of 'workplace spirituality', in the sense, to prune out the various factors of the same, so as to gain a robust understanding of the key elements from which the sacrosanct values flow. This in fact, is the prime objective of the purported research study.

# INTRODUCTION TO THE STUDY

Before beginning with the process of scouting the various factors of workplace spirituality, it becomes essential to throw valuable light on keywords like 'Workplace Spirituality' and 'Jesuit'.

# Workplace Spirituality

Spirituality at the workplace should not be confused with religious spirituality as the two concepts are different from each other. Workplace Spirituality is a 'framework of organizational values evidenced in the culture that promotes employees' experience of transcendence through the work process, facilitating their sense of being connected to others in a way that provides a feeling of completeness and joy'. In simple words, workplace spirituality can be defined as having a sense of connection between one-self and the workplace, thereby, helping the employees be more engaged in their work.

# • Jesuit

The term 'Jesuit' is used to address the religious priest of the 'Society of Jesus' (S.J.), the largest religious order of the Catholic Church. It was founded by St. Ignatius of Loyola, one of the most hallowed and revered religious figureheads in the Roman Catholic Church. Although the Society of Jesus was founded in August of 1534, it was not officially established until 1540, when Pope Paul III passed it as a religious order. Since its inception, Jesuits all around the world have been a force to reckon with, especially in the field of education but they actually undertake all forms of work in any part of the world. Jesuit education came to India through St. Francis Xavier, a fellow companion of St. Ignatius, who came to India as a missionary and established the first Jesuit institution in Goa, in the year 1542. There are seven values of the Jesuit education which are cura personalis (care for the individual), unity of heart, mind and soul, magis (More), finding God in all things, ad majorem dei gloriam (for the greater glory of God), forming and educating agents of change and the last but not the least, creating men and women for others. All the Jesuit values are rooted in the Ignatian spirit and flawlessly practiced in Jesuit institutions.

# **REVIEW OF LITERATURE**

There hardly exists any literature that emphasizes on a proper examination and analysis of the factors that influence workplace spirituality. Furthermore, it is gruelling to come across any research study which blends the keywords of 'Workplace Spirituality' and 'Jesuit'. As a result, conducting such a study is a gargantuan challenge for any researcher. Truth to be told, the elements of workplace spirituality in any institution can be applied to Jesuit schools because the factors are nearly identical. To this end, it is instrumental to conduct a robust survey of literature to determine the various aspects of workplace spirituality.

Spiritual leadership is a type of leadership that uses values and a sense of calling for motivating followers (Northouse, 2016). The development of such leadership depends on various sources and the factors like spiritual meanings and programmes, past experiences, family influence, beliefs and life at institution (Banke et al., 2012). An organizational culture based on the values of altruistic love, inner life of employees and spiritual practices are of great help to the employees to make them aware and conscious (Fry & Nisieiwcz, 2013).

A study done by Misbah et al. (2016) revealed that there existed a positive relationship between workplace spirituality and job satisfaction. Similarly, Yusof (2011) found that certain dimensions of spiritual leadership like altruistic love, hope/faith, vision, meaning and membership were associated with job satisfaction.

Gupta et al. (2013), Hassan et al. (2016) and Mahipalan (2018), found a positive relationship amongst the dimensions of workplace spirituality and job satisfaction. As Swanepoel (2015) and Pio (2017), in their study explored the positive roles of workplace spirituality on job satisfaction. Panes et al. (2017) found that spiritual leadership and school culture were key drivers of job satisfaction among the school teachers. Furthermore, Musta'in et al. (2014), in their study, revealed that implementing a model of spiritual leadership enhances the motivation of employees and increases their satisfaction which leads to improved work performance.

The benefits of spiritual leadership go beyond job satisfaction, as it is knitted with high worker commitment (Ahiauzu, 2009). Spiritual leadership is also said to decrease job stress (Yaghoubi et al., 2010). In a study done by Karadag (2009), it was also observed that the behaviour of school administrators who were oriented towards peace and performance enabled the teachers to perceive the administrative efforts in a positive manner. Dayler and Fry (2012), further opined that spiritual leadership is impeccable in Catholic schools and is used to preserve Catholic values and the vision of service and as a result, improves the overall level of employee engagement (Devendhiran and Wesley, 2017).

#### DATA AND METHODOLOGY

Simple random technique has been used where questionnaires were mailed to various teachers of Jesuit schools. The questionnaire is a small one, where the concept of responses has been measured by a 5-Point Likert scale, where (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = Strongly Agree). The responses of 114 teachers of Jesuit schools have been collected which has been meticulously put into processing by the use of IBM's SPSS version 23.

#### ANALYSIS AND PRESENTATION OF DATA

Since the current research study is attempted at finding the most dominant factors of workplace spirituality, it is ineluctable to conduct an Exploratory Factor Analysis to prune out the most dominant factors. But, before that, it is important to conduct a KMO Bartlett's Test of Sphericity to check for the adequacy of the sample which would hint whether it would be worthwhile to go for a Factor Analysis.

Kaiser-Meyer-Olkin Measure of	
Sampling Adequacy	0.789
Bartlett's Test of Sphericity Approx.	
Chi-Square	810.456
df	31
Sig.	.000

Table 1: KMO and Bartlett's Test of Sphericity (Source: Primary Data)

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	Percentage of variance	Cumulative Percentage	Total	Percentage of variance	Cumulative Percentage
1	4.214	46.820	46.820	3.105	34.500	34.500
2	1.100	12.220	59.040	2.319	25.766	60.026
3	0.876	9.733	68.733			
4	0.749	8.322	77.095			
5	0.610	6.777	83.872			
6	0.531	5.900	89.772			
7	0.407	4.522	94.324			
8	0.321	3.566	97.890			
9	0.192	2.110	100.00			

Table 2: Factor Analysis (Total Variance Explained) (Source: Primary Data)

Table 2 shows us the Factor Analysis conducted obtaining a TVE (Total Variance Explained). According to the TVE, results highlight the number of factors obtained with the condition that their Eigenvalues are greater than 1 (Eigenvalue > 1). It is proved by the Component 1 and Component 2 accounting for and of the total variance explained respectively. Principal Component Analysis helped to extract the variables according to the requisite of the Eigenvalues are greater than 1 (Eigenvalue > 1).

<b>Rotated</b> Co	omponent Matrixa
-------------------	------------------

	Compon	ent
	1	2
Altruistic Love	0.728	0.156
Faith	0.749	0.178
Vision	0.547	0.319
Calling	0.595	0.371
Meaning	0.497	0.492
Membership	0.593	0.47
Organizational Commitment	0.272	0.735
Productivity	0.432	0.618
Spiritual Leadership	0.816	0.168

Table 3: Rotated Component Matrix (Source: Primary Data) Extraction Method: Principal Component Analysis Rotation Method: Varimax with Kaiser Normalization a. Rotation Converged in three Iterations. Table 3 shows the Rotated Component Matrix, according to which the variables would get accommodated in the factor loadings, thereby showing the final results. The component may be arranged in the following manner:

Component I	Component II
Altruistic Love	Membership
Faith	Organizational Commitment
Vision	Productivity
Calling	Spiritual Leadership
Meaning	

Table 4: Arrangements of Components

The nine variables are disintegrated into two factors, which have been renamed as Component I and Component II, where Component I can be renamed as Individual Factors and Component II can be renamed as Organizational Factors.

There was an aggregate of nine factors explored, which are altruistic love, faith, vision, calling, meaning, membership, organizational commitment, productivity, and spiritual leadership.

#### FINDINGS AND DISCUSSIONS

The aim of the study was to probe into the various factors of workplace spirituality in the selected Jesuit

#### BEYOND

schools of Kolkata. The findings reveal a total of nine factors which determine workplace spirituality, viz. altruistic love, faith, vision, calling, meaning, membership, organizational commitment, productivity, and spiritual leadership. All the nine factors are pivotal antecedents of workplace spirituality with altruistic love, being perched as the most powerful component. The nine factors which have been obtained have been divided into two segments, viz. Individual Factors and Organizational Factors. The rationale behind this division lies in the component's belongingness to each of those categories. It can be safely asserted that altruistic love, faith, vision, calling and meaning, all stem mostly from within an individual, whereas the organizational factors like organizational commitment, productivity and spiritual leadership are actually forces of an individual's interaction with the organization.

# CONCLUSION

The current research study was a pioneering effort towards examining the relationship between workplace spirituality and job satisfaction. Albeit, research in the present issue is not a new one, but the uniqueness of the present research endeavour exists in the study being conducted in metropolitan Kolkata, where previous researches in this domain have never been conducted. The study takes into consideration only a few selected schools of Kolkata, whose teachers were surveyed by the author. But, in the long haul, the study can also be extended to include employees of any organization or even professionals of any body. It is noteworthy to mention that the various factors of workplace spirituality have universal applicability which further makes the topic an exciting area of research.

#### REFERENCES

- 1. Ahiauzu, A. (2009). Altruistic Love Culture and Workers' Commitment in the Nigerian Manufacturing Industry: A Study in Workplace Spirituality. Retrieved from How do organizational culture and organizational learning capacity jointly affect it? Journal of Industrial Engineering and Management, Vol. 1, No. 2.
- 2. Banke, S., Maldonado, N., and Lacey, C. H. (2012). Christian School Leaders and Spirituality. Journal of Research on Christian Education, Vol. 21, No. 3, pp. 235-264.

- 3. Dayler, L. T., and Fry, L. W. (2012). Impact of Spiritual Leadership on Catholic Organizational Identity. Academy of Management Proceedings, Vol. 1.
- 4. Devendhiran, S., and Wesley, J. (2017). Spirituality at work: Enhancing levels of employee engagement. Development and Learning Organization, Vol. 31, No. 5.
- 5. Fry, L. W., and Nisiewicz, M. S. (2013). Maximizing the triple bottom line through spiritual leadership. Stanford, CA: Stanford Business Books, an imprint Stanford University Press.
- Gupta, M., Kumar, V., and Singh, M. (2013). Creating Satisfied Employees Through Workplace Spirituality: A Study of the Private Insurance Sector in Punjab (India). Journal of Business Ethics, Vol. 122, No. 1, pp. 79-88.
- 7. Hassan, M., and Ali Bin, A. (2016). Impact of Workplace spirituality on job satisfaction: Mediating Effect of true. Cogent Business and Management.
- 8. Karadag, E. (2009). Spiritual Leadership and Organizational Culture: A Case Study of Structural Equation Modelling. Educational Sciences: Theory and Practice, Vol. 9.
- Mahipalan, S. S. (2018). Mediating Effect of Engagement on Workplace Spirituality - Job Involvement Relationship: A Study among Generation Y Professionals.
- Misbah, H., Nadeem, A., and Akhter, A. (2016). Impact of Workplace Spirituality on Job satisfaction: Mediating Effect of Trust. Cogent Business and Management, Vol. 3, Edition 1.
- 11. Musta'in, M., Sanusi, A., and Manan, A. (2014). A Study on Employees Performance: Spiritual Leadership and Work Motivation with Mediation Work Satisfaction at the University of DarulUlum, Indonesia. European Journal of Business and Management, Vol. 6, No. 39.
- 12. Northouse, P. G. (2016). Leadership: Theory and Practice. California: Sage Publication.
- 13. Panes, R. T., Gempes, G. P., &Genuba, R. L. (2017). A causal model on job satisfaction among the teachers force of selected private schools in Region XI. International Journal of Scientific and Technology Research, Vol. 6, No. 9.
- 14. Pio, R. J., & Tampi, J. R. (2018). The influence of spiritual leadership on quality of work life, job satisfaction and organizational citizenship behaviour. International Journal of Law and Management, Vol. 60, No. 2, pp. 757-767.
- 15. Swanepoel, H. (2015). The relationship between workplace spirituality and work-related attitudes.
- 16. Yaghoubi, N., Moloudi, J., & Banihashemi, S. (2010). The Relationship between Spirituality Leadership and Empowerment: A Case Study. American Journal of Scientific Research, Vol. 10, No.
- Yusof, J. M. (2011). Spiritual Leadership and Job Satisfaction: A Proposed Conceptual Framework. Information Management and Business Review, Vol. 2, No. 6.



# (11

Favourable economic policies augmented by increasing investments in the public and private sector have transformed the economy.

# An Exploration of the Copious Factors Affecting Investment Decisions among Indian Individual Investors

Prof. Joyita Banerji Assistant Professor Department of Commerce (Morning)

Tanay Goel Department of Commerce (Morning)

# ABSTRACT

This paper gives the reader an idea about the various types of individual investors and the various traits of behavioural theory in finance. Behavioural



finance talks about the theories that take into account an investor to be an emotional being rather than a rational one. Retail investors exhibit various characteristics such as risk capabilities, capacities, and much more. It is important to understand their psychological, emotional and financial needs and provide them with personalized portfolios to maximize the investor's utility.

**KEYWORDS:** Behavioural Finance, Individual Investors, Behavioural Biases, Investment Behaviour.

#### INTRODUCTION

India is one of the world's fastest-growing economies. Favourable economic policies augmented by increasing investments in the public and private sector have transformed the economy. This has led to an increase in the average income of the residents, which translates to greater disposable income and savings. Domestic saving in India contributes substantially towards the growth of the economy (Nayak, 2019). The savings are invested in various types of financial assets available and there has been an increase in the total amount of investments made within the country. The Indian markets have experienced innovation, transparency, coordination, and international integration. This has had a direct impact on the market in terms of the greater participation of individual investors. An investor is a person who selects a mode of allocating their money to earn a certain rate of return over time.

The process of investment involves allocating sums of money to assets with the expectation of building returns over time. Investors undertake the activity of investing to ensure that they grow their investment amount and make full use of the power of compounding. Investors come from all walks of life. They sacrifice today's consumption to enjoy returns in the future. The main criteria for investment are the surety of return, the risk involved, the knowledge of investment products and the liquidity of investments. Investors keep these criteria in mind because of their desire to maximize wealth. (Schweser Notes, 2020)

Investors choose the investment alternatives that provide them with psychological satisfaction rather than those that maximize their economic benefits. Psychological factors cause an investor to behave irrationally. These factors cause them to invest in financial products based on their emotions, passions, enthusiasm and inclinations.

#### LITERATURE REVIEW

Hersh Shefrin (Shefrin, 1994) concluded that behavioural biases are cognitive errors and are caused by noise traders. The article also incorporates the effects of noise investors on the price efficiency in the capital market.

According to Kabra, et al., (Kabra, 2010), the investing behaviour of an individual is dependent on a number of factors, such as age and gender. The paper concluded that demographics are no longer a suitable explanation for the differences in the behaviour of investors.

National Council of Applied Economic Research (Maynes, 1963), noticed that irrespective of the occupation, educational level and age, households in each group felt that saving for the future was desirable.

Also, Dr. Subhadeep Chakraborty, in his paper (Chakraborty, 2017), had researched and concluded that there was, indeed, a correlation between the income of a household and investments undertaken by a household, based on the risk and return involved.

Tsuji (Tsuji, 2006) realized that traders made trading decisions based on both cognitive and emotional reasons. Trading brings pride when decisions made are profitable, but it brings regret when they are not. Investors try not to suffer losses to avoid the pain of regret.

The paper aims to identify the key factors that are considered by individuals before taking a particular investment decision. The paper tries to conduct an analysis of whether the risk appetite of an individual varies as per one's income level. This has been done by identifying the individuals who invest in different asset classes, ranging from those carrying low to high risk, and comparing the proportion of such individuals across different income levels.

#### **RESEARCH GAP**

The topic for this study was chosen considering the absence of research on the behaviour of Indian

investors, based on the various biases listed in the conceptual framework, taking into account the difference in their income levels, occupation, gender and investment horizon. For this purpose, the study has, through a literature survey, first identified the biases that influence decisions among individual investors. Further, to prove that these biases truly influence the decisions of individual investors, a quantitative approach was taken. Based on these quantitative results, the real behaviour of Indian investors can be explained. This will lead to a reduction in the noise that exists in a developing financial market such as India, and may reduce the probability of the occurrence of asset price bubbles. A clearer understanding of the heretofore ignored individual investors will also improve the strength of the Indian stock markets.

#### **OBJECTIVES OF THE STUDY**

The paper was undertaken with the aim of attaining the following objectives:

- To study investment and wealth management as psychological functions concerning the impact of specific biases listed in the conceptual framework.
- To study how individuals arrive at financial decisions, and how such decisions are influenced by demographic traits.

#### **RESEARCH METHODOLOGY**

The paper utilized a survey as a primary research method to examine the behaviour of Indian investors. The sample size of the survey is 71. A questionnaire consisting of ten elements was created. Each of these elements was presented in the form of a statement, wherein statements one and two were in reference to the demographic profile, that is, the occupation, income and gender of the respondents, and statements three to six were in reference to the motives and preferred forms of investment. The rest of the statements were aimed at confirming the presence and impact of selected biases in investment behaviour. These statements, based on the identification of the main features of the biases of loss aversion, overconfidence and herding, have been developed and discovered through a literature survey. The information sought from respondents was related to the respondents' gender, income level, occupation, preferred mode of investment, income level, and other factors influencing the respondents' investing decisions. The results of the survey were observed and analyzed so that an understanding of investment choices across various levels of risk and loss aversion could be developed. This is aimed at assessing whether the most popular investment choices are the same or varied across different investor biases. Similarly, the reasons for choosing a particular investment avenue are studied and the most popular reasons are determined across different income levels.

#### CONCEPTUAL FRAMEWORK

Investors are the backbone of the capital market since they not only determine the level of activity in the securities market but also in the economy. Unlike institutional investors, who possess greater knowledge, retail investors do not possess such financial capabilities. There are universally observed investing biases leading to poor decisions by such investors. These include, but are not limited to (Ricciardi, 2014) (Schwese Notes, 2020):

#### 1. Regret Theory

Investors become emotionally affected by the price at which they purchased the stock and avoid selling it as a way to avoid the regret of having made a bad investment and so that they don't have to report a loss. Regret theory can also hold for investors who discover that a stock they had considered buying but had not, has gone up in value. (Quiggin, 1994)

#### 2. Risk Aversion Theory

A risk-averse investor is an investor who chooses the preservation of capital over the potential for a higherthan-average return. Such an investment demands a risk premium for taking greater risks. (Schmidt, 2005)

#### 3. Over/Under Reacting Theory

Investors get extremely optimistic if the market swings upwards and extremely pessimistic in case the market swings downwards. (Callegaro, 2017)

#### 4. Theory of Overconfidence

It refers to an average investor's ability to overestimate and overvalue his/her knowledge as compared to

#### ASCENT

others. Overconfidence leads to excess trades, excess trading costs, and denting profits. (Kent, 2004)

#### **5. Loss Aversion**

This theory tells us that an investor prefers losing profit over incurring a loss. This theory explains that people experience a different degree of emotion towards gains as compared to the emotion they experience towards losses. Such investors are called loss-averse investors. (Schmidt, 2005)

#### 6. Bandwagon/Herding Bias

It implies that investing is primarily based on groupthink, maybe because there already exists a large number of people who are already doing the same thing. (Lin, 2007)

#### 7. Neglect of Probability

Investors only focus on the outcome and not on the probability of occurrence. This is especially true in the case of equity in India. Investors overestimate the loss, given that a default has occurred, but do not take into calculation the probability of such an event taking place and therefore wrongly estimate the expected loss. (Sunstein, 2002)

#### 8. Anchoring Bias

Anchoring bias is the tendency of an individual to rely too heavily on, or anchor to, a past reference or a piece of information while making a decision. This is also true for investors fearing equity investments as they are anchored to the thought that equity has uncalculated risks involved with it. (Bunn, 1975)

#### DATA AND ANALYSIS

The survey undertaken had received 71 responses in total. An in-depth analysis of the behaviour of an Indian investor based on various factors has been stated below:

#### 1. Occupation and Income:

On comparing the sample outcomes, it is found out that students prefer a form of equity investment. On considering self-employed and working professionals, it is found that they just have a fixed income or a combination of fixed income and equity. These types of investors prefer the diversification of their portfolios through various asset classes.

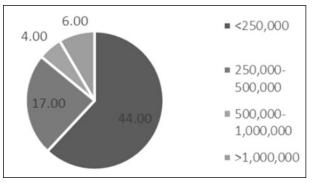


Figure 1: What is the Income (₹) of the Respondents? (Source: Primary Data)

A majority (54.9 per cent) of the respondents were students, 29.6 percent were professionals and the remaining were self-employed. In this survey, a majority of the respondents had an income below ₹250,000 and 24 per cent of the respondents had an income ranging from ₹250,000 to ₹500,000.

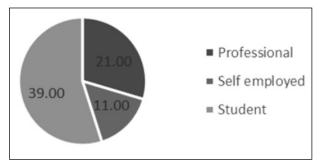


Figure 2: What is the Occupation of the Respondents? (Source: Primary Data)

#### 2. Gender:

56 per cent of the respondents, that is, 40 respondents were male whereas 44 per cent of the respondents, that is, 31 respondents were female. A further study based on gender is concluded under various headings.

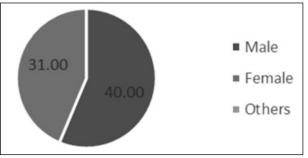


Figure 3: What is the Gender of the Respondents? (Source: Primary Data)

#### 3. Mode of Investment:

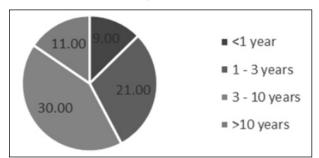
47 respondents have some form of their investments in fixed income instruments. Investments in fixed income instruments are one of the safest forms of investment that a risk-averse investor can opt for. This is followed up closely by the equity mode of investment with 42 respondents. Only 10 of the respondents had some form of exposure in derivative markets.

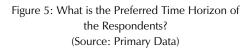


Figure 4: What are the Preferred Modes of Investment of the Respondents? (Source: Primary Data)

#### 4. Preferred Time Horizon for Investment:

The time horizon of an investment tells us about the willingness or the capacity to take risks too. Long-term investments are said to be riskier due to the uncertainty of liquidity and credibility along with the existence of the investment. A majority of the respondents are willing to invest for a horizon of three to ten years, followed by 29.6 per cent of the respondents preferring one to three years of the investment horizon. It was also found out that fixed-income investors preferred a time horizon of more than ten years.





#### 5. The Factor for Making an Investment Decision:

50 per cent of the respondents choose the safety of capital as the most important factor while choosing their investment strategies. This is followed by 25 per cent of the respondents, who choose an appreciation of capital. These respondents are typically students who have a high risk-taking capacity and thus, could want to grow their capital corpus. Liquidity in investments might be required by those respondents who are close to their retirement or have to incur some expenditure in the near future. Familiarity with the financial instruments can indicate that an investor believes in trust and thus, prefers such instruments. 10 per cent of the respondents prefer an investment for the diversification of their portfolio.

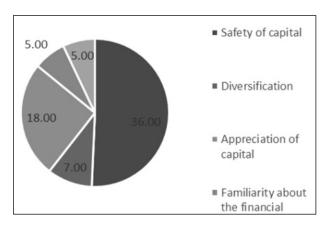


Figure 6: What are the Factors Influencing Investment Decisions? (Source: Primary Data)

#### 6. Fear Related to Equity Investments:

34 respondents agreed to the fact that they fear using their money if they invest in the equity market. Out of the remaining 37 respondents, 26 respondents disagree with the fact that equity is an unsafe form of investment. This part of the survey suggests the orthodox mentality of the Indian investors who consider equity to be an unsafe form of investment.

An Exploration of the Copious Factors Affecting Investment Decisions

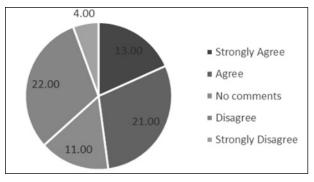


Figure 7: Do the Respondents Have a Fear of Losing Money in Equity? (Source: Primary Data)

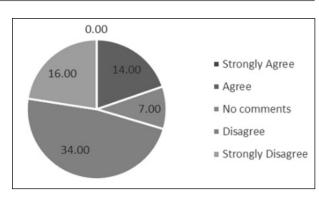


Figure 9: I Rely on My Own Judgement Even When Others Do Not Agree (Source: Primary Data)

#### 7. Loss Aversion:

65 per cent of the respondents show forms of loss aversion. This is a very prominent trait of any investor. Only a small portion (21 per cent) of the sample shows that they are not averse to loss. It is found that women are more loss averse than men since 22 female respondents out of 31 agree that they are loss averse whereas only 24 out of 40 male respondents agree that they are loss averse. 13 per cent of the respondents, who have opted for the 'No comments' option, are loss neutral investors.

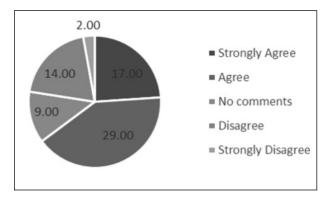


Figure 8: I Prefer Losing Profit over Incurring a Loss (Source: Primary Data)

#### 8. Herding Behaviour:

80 per cent of the respondents agree that they are not a part of herding while making financial decisions. The remaining 20 per cent agree to some form of herding behaviour exhibited by them.

#### 9. Overconfidence Bias:

Indian investors exhibit the theory of overconfidence. This can be concluded as 79 per cent of the respondents agreed to rely on their judgment even when others do not agree with it. This bias is like a double-edged sword. This is because relying on one's judgment is good only to a certain extent. If the investor displays signs of overconfidence, it is detrimental for the investment strategies as this increases the possibility of incorrect estimations, models, assumptions, or valuations. A very small part of the sample does not exhibit this trait.

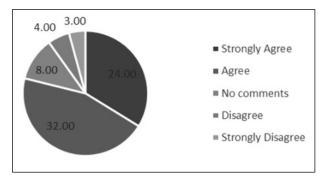


Figure 10: I Rely on My Own Judgement Even When Others Do Not Agree with It (Source: Primary Data)

#### CONCLUSION

From the data collected through the survey, it is observed that the most important factor that is considered by individuals before arriving at investment decisions is the safety of capital. This could be justified by the large number of risk-averse investors in India. This has also resulted in fixed deposits being the most popular form of investment in India. Most respondents prefer an investment horizon of three to ten years, which can also be supported by the fact that the most popular form of investment is fixed deposits, which are comparatively longer-term investment options.

Fixed income is a popular choice among investors from all income groups. Investors with low income (less than ₹ 250,000) invest in bonds to ensure the safety of capital, while investors with higher income see it as a tax saving option. The second most popular form of investment is the one made through equity, which is in line with the macroeconomic trend wherein the number of retail individual investors is increasing. This is a surprising fact as Indians are averse to losses and risks. They also consider equity to be an unsafe form of investment.

The investors are not impacted by the investment decisions made by others; therefore, they do not exhibit herding bias. But they tend to make decisions without taking into account the analysis of others. Thus, they exhibit an overconfidence bias. This can lead to unforeseen losses in the future.

#### RECOMMENDATIONS

A few recommendations based on the above study are listed below:

Investors who have exhibited herding bias should avoid it and understand what they are investing in instead of following someone blindly. This is extremely detrimental to one's financial planning as it results in a buy trap for the individuals.

Indian investors tend to exhibit overconfidence bias. They should keep in mind that there is a probability that their analysis may not be accurate at all points in time. It is also necessary to maintain a thin line between overconfidence and herding.

Indian investors also need to change their mindset regarding equity investments. When equity investments are undertaken with full research and analysis, there is a very small margin for error. They should not exhibit As discussed above, a large segment of Indian investors have very little financial knowledge and understanding of financial instruments. Understanding finance is as basic and necessary as understanding other subjects. Thus, the government should take up the initiative and build a basis of finance for every student from the school level. It is crucial to have financial literacy in today's time to grow one's savings exponentially.

Every individual investor has different capacities and capabilities of taking risks and thus, cannot be classified into one category. Thus, all investors cannot opt for the same form of investment and therefore should have a personalized mode of investment.

#### SCOPE FOR FUTURE RESEARCH

There is a huge scope for future research since there are only a limited number of researches that have been conducted on this topic. Future research can be conducted on the other biases listed in the paper which are not covered till now due to the limited time frame for its preparation.

As the population of India is growing, more and more percentage of the population is becoming financially aware. Therefore, it is becoming extremely crucial to analyze the behaviour of an Indian investor to predict the movements and gain an upper hand in the investment journey.

#### REFERENCES

- 1. Bunn (1975). Anchoring Bias in the Assessment of Subjective Probability. Operational Research Quarterly, 449-454.
- 2. Callegaro, G. S. (2017). Optimal investment in markets with over and under-reaction to information. Mathematics and Financial Economics, 299–322.
- Chakraborty, D. S. (2017). Investment Behaviour of Urban Population – a Case Study of Households in Tinsukia Town. Indian Journal of Applied Research, 342-344.
- 4. Kabra, G. (2010). Decision of Generations in India: An Econometric Study. India: Asian Journal of Management Research.

- ASCENT
- 5. Kent, D. D. (2004). A Theory of Overconfidence, Self-Attribution, and Security Market Under- and Over-Reactions. Munich, Germany: University Library of Munich.
- Lin, H.-W. (2007). How Herding Bias Could be Derived from Individual Investor Types and Risk Tolerance? International Journal of Economics and Management Engineering, 1395-1401.
- 7. Maynes, E. S. (1963). Urban savings survey. Journal of the American Statistical Association, 569-572.
- 8. Nayak, S. (2019). Stochastic differential equations with imprecisely defined parameters in the market. A Fusion of Foundations, Methodologies and Applications, 7715-7724.
- 9. Quiggin (1994). Regret theory with general choice sets. Risk Uncertainty, 153–165.
- 10. Ricciardi, H. K. (2014). How Biases Affect Investor Behaviour. The European Financial Review, 7-10.
- 11. Roley, B. M. (2001). Aspects of Investor Behaviour Under Risk. Arrow and the Ascent of Modern Economic Theory, 626-653.
- Sar, G. A. (1990). Individual expectations, risk perception and preferences in relation to investment decision making. Journal of Economic Psychology, Volume 11, Issue 2, 227-245.

- 13. Schmidt, U. (2005). What is Loss Aversion? Journal of Risk and Uncertainty, 157-167.
- 14. Schwese Notes (2020). 2021 Level III CFA Book3: Portfolio Management. United States of America: Kalpan, Inc.
- 15. Schweser Notes (2020). Level 1: Book 5: Portfolio management. United States of America: Kaplan, Inc.
- 16. Shefrin, M. S. (1994, September). Behavioural Capital Asset Pricing Theory. Journal of Financial and Quantitative Analysis, pp. 323-349.
- 17. Sunstein, C. R. (2002). Probability Neglect: Emotions, Worst Cases, and Law. The Yale Law Journal, 61-107.
- 18. Thaler, R. et al. (2001). Anomalies: Risk Aversion. JOURNAL OF ECONOMIC PERSPECTIVES, 219-232.
- 19. Tsuji, C. (2006). Does investors' sentiment predict stock price changes? Applied Financial Economics Letters, 353-359.



There is a need to understand electric vehicles and factors that would increase their adoption, all of which are necessary for the long haul in our fight for the environment.

# **Growth Prospects of Electric Vehicles in India**

Prof. Sourav Das Assistant Professor Department of Commerce (Evening)

Jahnvi Bayanwala Department of Commerce (Evening)

#### ABSTRACT

Automobiles have been there for quite some time. The impact of gasoline vehicles on the environment such as harmful emissions, fewer fossil fuels and pollution is well-known. We have an alternative in the form of electric cars but the electric vehicles (EVs) market, even with its advantages, has not been able to disrupt the automobile sector. Consumer preference for these has been absent. There is a need to understand electric vehicles and factors that would increase their adoption, all of which are necessary for the long haul in our fight for the environment. Thus, it is necessary to understand the growth prospects of EVs in India and how they will impact the Indian automobile industry in the upcoming years. This study mainly focuses on electric four-wheelers like cars and light commercial vehicles. It also looks into the

YOUTHINK • 2022 • Vol. XVI

measures taken by the Government of India to help facilitate the EV sector and things that are yet to be done. The study uses secondary data for analysis and findings. The findings show that the Indian market has a long way to go in the complete adoption of EVs. Through this research, the growth prospects of electric vehicles are inferred.

**KEYWORDS:** Electric Vehicles, Automobile, Gasoline, Emission, Pollution, Growth, Initiatives, Manufacturing, Future.

#### INTRODUCTION

India's automobile industry is the fourth largest on the planet and records for 49 percent of the nation's complete manufacturing yield and today's quick economic advancement. This in turn is causing an increase in the consumer class and the formulation of supportive regulations and policies, both of which imply an increase in demand for vehicles. Thus, the urban traffic blockage and the air quality get influenced in the all-significant metropolitan urban areas and towns. In India, the vehicle sector had contributed around 18 per cent of carbon discharge. The Indian government is attempting to move to electric fuel-based vehicle innovation as these vehicles can significantly decrease harmful polluting gases and emissions in the transportation sector. Despite a growing automobile sector and the need for electric vehicles, the Indian electric vehicle industry has not covered itself in greatness, as there is low awareness among the masses, a few unseen and non-advertised product launches, and policies that are not steady at all.

Electric vehicles (EVs) are defined as vehicles that use electric motors for propulsion. They might be batteryoperated or electricity-driven, which can be done through transmission wires. The first electric car was introduced in the German market in the 1880s and since then, the technologies used in EVs have evolved immensely. Tesla, in 2008, was the first company to produce an entirely electric car, Tesla Roadster, which could meet the consumer's needs. Kyoto electric scooters have been in the markets for a very long time now. Different Indian companies like Mahindra and Tata have also introduced their own electric cars into the Indian market and have been performing quite well.

#### NATURE OF THE PROBLEM

The Indian government is attempting to move to electric fuel-based vehicle innovation. EVs are the most efficient way to have the benefit of sustainable power sources, other than power sources like wind and solar energy, that would be squandered or wasted unnecessarily. Internal combustion motor vehicles have technologies that are not only proven but accepted by the public, along with solid infrastructure, worldwide distribution chains, and already set government policies and standards. EVs regularly require drastic changes, not only in technology, but also in political guidelines, taxes and value systems, and the conduct of consumers which explains why the numbers of EV vehicles keep on being somewhat disappointing in comparison with gasoline vehicles. The major drawbacks are premium cost, limited range and recharging time of EVs in contrast to regular vehicles. It is well-established that even with many advantages over regular vehicles, EVs are unable to gather sales. Hence, this study is being conducted to determine the growth prospects of electric vehicles in India. There does not exist a study that determines this growth in the Indian scenario using the existing sales figures. The research findings would enable changes that would make a positive difference to individuals, groups, organizations, and society as a whole. This study will also help government agencies in making policies and strategies regarding the adoption in the sector for EVs.

#### **OBJECTIVES**

- 1. To study the growth prospects of Electric Vehicles (EVs) in India.
- 2. To study how the Indian automobile industry is adapting to the shift towards EVs.
- 3. To study the measures adopted by the Government of India to support the growth of EVs.

#### **RESEARCH METHODOLOGY**

This study uses both quantitative and qualitative methods of research to analyze the existing data and findings. The quantitative methods are used to analyze the financial and other statistical data present in the study. The qualitative methods are used to analyze the textual material found in existing literature, such as research papers, annual reports, relevant articles, journals, et al. The study is based on secondary data to determine the existing growth in the sales figures. Financials have been obtained through company websites and other financial websites. The premise of the study is such that primary data collection is not possible, as it will be very difficult to collect. The primary source of data, is thus, secondary data obtained through different companies official websites, existing journals, research papers and articles, et al.

#### **GOVERNMENT SCHEMES**

The Government of India plans to eliminate petrol and diesel cars by 2030.

**1. National Electric Mobility Mission Plan** (NEMMP), 2020: The Union Cabinet outlined a five-staged manufacturing programme till 2024 for a couple of enormous, integrated batteries and battery-manufacturing Giga plants, along with the National Electric Mobility Mission Plan 2020, in 2013. Under this, a huge number of electric vehicles charging stations were installed in

	FAME-I	FAME-II			
	2015-19	2019-20	2020-21	2021-22	Total
Technology Platform	1,900	3,660	0	0	3,660
Demand Incentives	4,950	8,220	45,870	31,870	85,960
Charging Infrastructure	300	3,000	4,000	3,000	10,000
Pilot Projects	700	0	0	0	0
Operations	100	120	130	130	380
Total	7,950	15,000	50,000	35,000	100,000

Table 1: FAME India Scheme - Fund Allocation (in INR million) (Source: bridgetoindia.com)

#### MARKET PLAYERS

numerous states, with no tax on building these stations being charged. It was even decided to use electric vehicles, in stages, for public transport.

2. Tax Benefits: The Goods and Services Tax (GST) rates on EVs have been reduced to 5 per cent from 12 per cent. As for the electric chargers and charging stations, the rates have been reduced to 5 per cent from 18 per cent.

3. Faster Adoption and Manufacture of (Hybrid and) Electric Vehicles (FAME): Faster Adoption and Manufacture of (Hybrid and) Electric Vehicles, commonly known as FAME, is a scheme that was launched by the Ministry of Heavy Industries and Public Enterprises in the year 2015. It aims to promote the adoption of hybrid and electric vehicles and to provide an incentive for the production and purchase of the same. The scheme consists of two phases - Phase I, which was launched in the year 2015 and concluded on 31st March, 2019 and Phase II, which began on 1st April, 2019 is expected to be completed by 31st March, 2022. FAME- II aims for a more comprehensive growth of this industry, which requires better infrastructure and manufacturing capabilities. The FAME scheme aims to boost the sales of hybrid and electric vehicles by offering incentives on their purchase, establishing essential charging stations and addressing fuel security and the matters regarding environmental pollution.

Tata Motors is the leading automobile manufacturer in

India and has played a significant role over the years, in contributing to economic growth through its

commercial and passenger vehicles that transport

people and goods. Tata plans to win proactively in the

EV sector. It has launched an EV ecosystem, the Tata

UniEVerse, to closely leverage the strengths and

knowledge of other Tata Group corporations, making a viable environment and driving the adoption of EVs in India. Key components of the ecosystem include charging solutions, supplier base for EV parts, vehicle finance and quality service providers.

Mahindra & Mahindra: Amazon India partnered with Mahindra Electric to fulfil its commitments towards EVs in the country. Amazon India had announced in 2020 that they plan to include 10,000 electric vehicles in their delivery fleet by 2025. Tech Mahindra partnered with Mahindra Logistics in 2019 to introduce a fleet of 300 electric vehicles for employee transportation by 2020. Mahindra Electric partnered with Bhagirathi Group in Karnataka to facilitate an e-Mobility Awareness Campaign by the Government of Karnataka.

Tesla Motors has planned to enter India as Tesla India Motors and Energy Private Limited, bringing in its electric cars into the Indian market. In the short run, Tesla's entry into the country will not change the EV dynamics as it plans to import CBUs (completely built units) in its initial stage. This, in turn, will increase the price of the vehicles because of India's high import levies. However, in the long run, Tesla's entry might kick-start the next-level innovation of EVs in India. With the entry of its premium cars, the competition among the Indian manufacturers will drastically increase and will force them to diversify into the mass market segment. The prices of the EVs might have to be slashed down, which can only be done by cutting battery costs and local manufacturing rather than imports.

#### ANALYSIS

Electric Vehicles in the Indian Automobile Industry

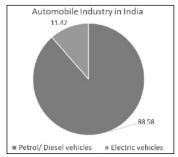


Figure 1: Figure Representing the Market Share of Electric Vehicles in the Indian Market in FY20 (Source: statista.com)

**Inference:** In Figure 1, it is seen that the share of electric vehicles (EVs) in the Indian market during the FY20 was merely 11.42 per cent, which is very less in comparison to vehicles running on conventional fuels, the share of which was 88.58 per cent. This shows that the EV market in India has not advanced much.

Туре	Sales in FY 19-20
Two-wheelers	152,000
Three-wheelers	90,000
Public four-wheelers	600
Passenger four-wheelers	3,400
Total	246,000

#### Market Scenario of Electric Vehicles in India

**Inference:** In Table 2, it is seen that the market sales of electric four-wheelers is 1.63 per cent, comprising both public and passenger vehicles, which is very less in comparison to electric two-wheelers and three-wheelers, which have the majority share of 61.79 per cent and 36.59 per cent respectively. This shows that the market for electric four-wheelers is very low and needs improvement, so that the Government can reach its goals.

#### Growth of Electric Vehicles Over the Past Five Years

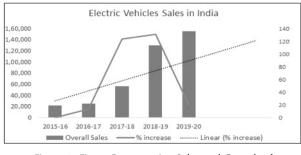


Figure 2: Figure Representing Sales and Growth of Electric Vehicles over the Past Five Years (Source: smev.in)

**Inference:** Electric vehicles in India have seen significant growth over the past five years. The percentage increase in sales has gone up and down over

Table 2: Table Representing the Sales of Electric Vehicles for FY 2019-20 (Source: livemint.com)

the years, that is, there is inconsistency in the percentage increase, but the sales figures have always risen. The average annual growth has been 57.8 per cent over the past five years. The trend line shows a linear growth in the percentage increase. This depicts that the sales of EVs will further grow in the forthcoming years as shown in Figure 2.

### Comparative Study of Electric Two-wheelers and Four-wheelers in the Indian Market

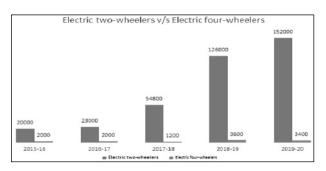
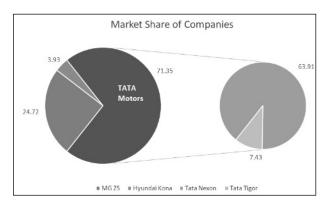
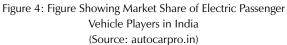


Figure 3: Figure Showing Comparison Between Electric Two-Wheelers and Four-Wheelers in the Indian Market Over the Past Five Years (Source: smev.in)

**Inference:** The electric two-wheeler market has seen significant growth over the years but the four-wheeler market is still lagging behind and has a long way to go, as seen in Figure 3.

#### Market Share of Electric Passenger Vehicle Players in India





**Inference:** In Figure 4, the main player in the electric passenger vehicle market is Tata Motors Ltd., with 71 per cent market share. The MG ZS stands at the second position and Hyundai Kona at third.

### Existing Electric Vehicle Charging Stations (EVCSs) in India

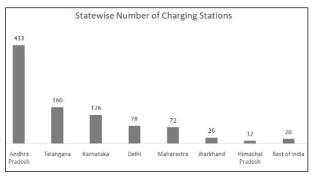
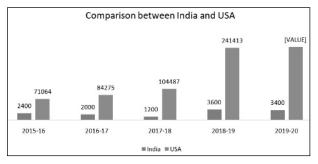


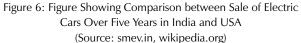
Figure 5: Figure Showing the Existing Electric Vehicle Charging Stations (EVCSs) in India

(Source: The Central Electricity Authority under the Ministry of Power of the GOI)

**Inference:** Charging infrastructure is minuscule in various states across the country, with Andhra Pradesh and Telangana leading, as shown in Figure 5.

### Comparison between India and the United States of America





**Inference:** India is lagging behind in the electric vehicle market when compared to other big economies like the United States of America (USA). Sales of EVs in India and the USA are very different, with India having very low sales as compared to the USA on a per year basis, as seen in Figure 6.

#### FINDINGS

- 1. The existing companies are working more on twowheelers and four-wheeler models are less, with low sales, but at the same time, there are many plans for the advancement of four-wheelers by different companies.
- 2. The number of electric buses running on the Indian roads is very less. The current sales of electric buses show that public transport can grow with good government influence, which will help in the overall growth of EVs in the country. India is a country where public means of transport are preferred over private means, so government intervention in the public transport sector will help in the growth of the EV sector.
- 3. Tata is the main player and there are very few companies operating in the market. Furthermore, Tata's recent model TATA Nexon EV is the only selling vehicle, which shows that there is a lack of models to choose from along with the lack of awareness among the consumers.
- 4. There is a lack of charging infrastructure in most of the states and union territories in India, which hinders the growth of EVs. In rural states, there is no government initiative. Hence, the charging infrastructure is backward. Charging facilities are non-existent, though charging station installations have recently started because of recent efforts by entities like Tata Power and National Thermal Corporation Ltd. (NTPC).
- 5. The USA has adopted the EV segment, which is now booming. India, on the other hand, needs to work on this segment as there should not be a drastic difference between two big capitalistic economies that urge to fight against climate change.
- 6. The benefits offered by the government are not enough and it needs to scale up infrastructural development and increase public transport. The government has given benefits and subsidies to the consumers, but there are no policies to increase awareness about these.
- 7. There are fewer models of passenger vehicles in India, hence the shift towards EVs has been a slow

process. Due to this, EVs are priced higher, as there are no better alternatives and there is low infrastructure. Also, there is no major shift or wave for real expansion of the EV segment, but companies like Tata Motors Ltd. are getting ready with various new models, better technology and better alternatives. This will lead to a wave of growth in the segment in the near future, but much more needs to be done.

#### RECOMMENDATIONS

The market share of EVs has to increase exponentially in order for the Government to reach its goals by 2030. This can be done by:

- 1. Laying focus on incentives and lowering prices to attract customers, and building infrastructure for removal of barriers.
- 2. Manufacturers need to increase range and reduce battery charging time. They should focus on motorcycles, e-rickshaws, buses, and not only on cars. Advertisements should highlight the green efficiency of such cars rather than style and design.
- 3. The Government should concentrate on the development of charging infrastructure as it will set up the root for the development of EVs in India.
- 4. The main focus should be electrifying public transport like buses, as most of the population in India prefers to do their day-to-day travelling by public buses. This will drastically help in reducing the carbon emissions from these buses.
- 5. The Government should work on bringing awareness about EVs among the people. It has given benefits and subsidies to the people but did not make them aware of it.
- 6. The Government may give incentives and benefits to manufacturers for developing better models and better technology in the long run.

#### CONCLUSION

Due to the prevalence of fewer models of passenger vehicles in India, the shift towards EVs has been a slow

process. EVs are priced higher and there are no better alternatives. The existing companies are working on two-wheelers more and the four-wheeler models are less with low sales. However, there are several plans for the advancement of four-wheelers by many companies. There is a scarcity of charging infrastructure in most of the states and union territories in India, which hinders the expansion of EVs. The Government has given benefits and subsidies to the consumers but there are no policies to extend awareness about the same. The fact that there are very few companies operating in the market shows that there is a lack of models to choose from and a lack of awareness among the shoppers. To tackle these hindrances, the government ought to focus on the development of charging infrastructure as it will set up the foundation for the development of EVs in India. Electrifying public transport like buses should be the main focus, as most of the population in India prefers to do their day-to-day commute by public buses. This will lead to a reduction in the carbon emissions from these buses. In order to develop greater models and better technology in the long run, the Government may give incentives and benefits to manufacturers. Electrification is the path that the automobile industry is going to take soon. A slow transition can be seen but there is still a lot of work to be done before EVs can actually form a significant part of the Indian automobile industry.

#### REFERENCES

- 1. Annual Reports of Tata group.
- 2. Kesari, J. P., Sharma, Y., & Goel, C. (2019). Opportunities and Scope for Electric Vehicles in India. International Journal of Mechanical Engineering.
- 3. Kumar, R., Jha, A., Damodaran, A., Bangwal, D., & Dwivedi, A. (2020). Addressing the Challenges to Electric Vehicle Adoption via Sharing Economy: An Indian Perspective.
- National Electric Mobility Mission Plan (NEMMP), 2020, Faster Adoption and Manufacture of (Hybrid and) Electric Vehicles (FAME).
- 5. NITI Aayog & World Energy Council. Zero Emission Vehicles (ZEVs): Towards a Policy Framework (2018).
- 6. Press Releases from Mahindra.
- 7. https://blog.ipleaders.in/future-of-electric-vehicles-inindia/
- 8. https://www.autocarpro.in/news-national/electric-busmakers-in-india-could-seesales-boom-with-governmentbuying-78600
- 9. https://www.autocarpro.in/news-national/electric-pv-salesto-hit-record-high-infy2021--esuvs-lead-the-charge-78374
- 10. https://www.autocarpro.in/news-national/tata-nexon-evturns-a-year-old--racestowards-3-000-unit-sales-78348
- 11. https://www.google.com/amp/s/www.livemint.com/ companies/news/electricvehicle-sales-in-india-up-20-in-2019-20/amp-11587370389230.html
- 12. https://www.news18.com/news/auto/growth-of-ev-salesin-indiaconsistent-since-past-three-years-167041-unitssold-in-2019-20-3543386.html
- 13. https://www.smev.in/ev-sales
- 14. https://www.statista.com/statistics/608392/automobileindustrydomestic-sales-trends-india/



(1)

The digitization of learning, government support via policy reforms and the National Education Policy (NEP) 2020 have optimized the development of EdTech in India.



## A Study on the EdTech Industry: The Future of Education

Prof. Hanzala Awais Assistant Professor Department of Commerce (Evening)

Aarushi Saraf Department of Commerce (Evening)

#### ABSTRACT

Technology has impacted every aspect of human life, including education. Education is no longer confined to a traditional classroom setup. EdTech companies offer multiple courses, which are economical and studentfriendly. With high internet penetration and access to smartphone devices, students are leveraging the tools and content provided by EdTech platforms. COVID-19 has given the EdTech industry an additional push, which is just a start to the paradigm shift in the way one views learning. individuals The rapid adoption and penetration of EdTech tools by Most gove

The rapid adoption and penetration of EdTech tools by schools, teachers, parents and students has cleared the path for the industry's enormous growth and expansion.

**KEYWORDS:** EdTech, Venture Capitalists, Investments, Byju's.

#### INTRODUCTION

#### Industry Profile: EdTech Industry

Education includes learning and gaining new skills and knowledge. Education Technology (EdTech) is the incorporation of technology and education theory to encourage learning. It is the combined use of personal computers, laptops or cell phones, and study material to support learning and help improve students' academic performance. EdTech companies are offering an entire host of applications for students of all age groups.

Coronavirus, being a pandemic, essentially made

individuals stay inside and practice social distancing. Most governments around the globe immediately shut schools and universities to check the spread of the infection. This influenced a large number of students across the globe. The more the students and educators embrace distance and online learning, the better it is for companies in the EdTech space.

The National Education Policy (NEP), 2020 recognized the need to use innovation and technology while acknowledging its challenges. It was set to give a stimulus to technology in learning, evaluation, administration and personalization. The current platforms were upgraded and challenges were addressed with the aim of providing quality education to all. Attention was given to the Digital India Campaign, to prepare and equip teachers to be more efficient while using the online mode.

With a market size of \$2.8 billion in 2020, this industry is set to grow at a Compound Annual Growth Rate (CAGR) of 39 per cent and reach \$10.4 billion by 2025. The number of users is expected to grow from 1.6 million in 2016 to 9.6 million by 2021.

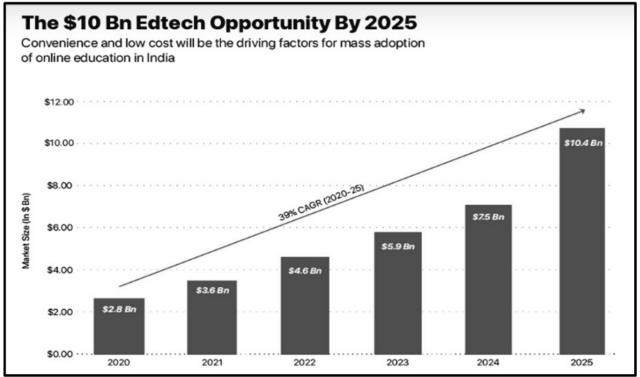


Figure 1: The Market Size of the EdTech Sector in India is Expected to Grow at a CAGR of 39 per cent by 2025 (Source: Inc42Plus)

#### **RESEARCH OBJECTIVES**

- To identify the different market players in the EdTech industry.
- To analyze why venture capitalists are investing in the EdTech industry.
- To examine the EdTech market leader's financial statements.

#### **RESEARCH METHODOLOGY**

In-depth research was conducted on the information already available. An attempt was made to evaluate and analyze the financial performance of the market leader in the EdTech industry and make a critical evaluation of the same. This study was based on secondary data collected from various websites, records, reports and profiles of the companies.

### MARKET PLAYERS IN THE EDTECH INDUSTRY IN INDIA

The EdTech industry is taking learning in India a step ahead, and is developing at a fast pace. Figure 2 shows a few Indian EdTech companies.

#### 1. BYJU'S

Think and Learn Private Ltd., established in 2011 by Byju Raveendran and Divya Gokulnath, developed Byju's application. Byju's, with a valuation of \$16.5 billion, is a dominant player in India's developing EdTech space. The Bengaluru - based firm has support from venture capitalists like Mary Meeker, Yuri Milner and investment firms like Black Rock, Silver Lake, Tiger Global, MC Global EdTech Investment Holdings LP, Tiga Investments and Baron Capital, to name a few.

Byju's has raised \$2.3 billion from investors in over 18 funding rounds. They have, most recently, raised a funding of \$460 million in March 2021 from a Series F round and \$1 billion from new investors like B Capital Group, Baron Funds and XN. Byju's recent acquisitions include Epic, Great Learning and Toppr in June 2021.

Byju's has plans to expand internationally. Moving forward, the company plans to launch Byju's Future School. Byju's has the necessary funds for expansion and investment in the research and development of new methods of augmented learning, through artificial intelligence and machine learning.

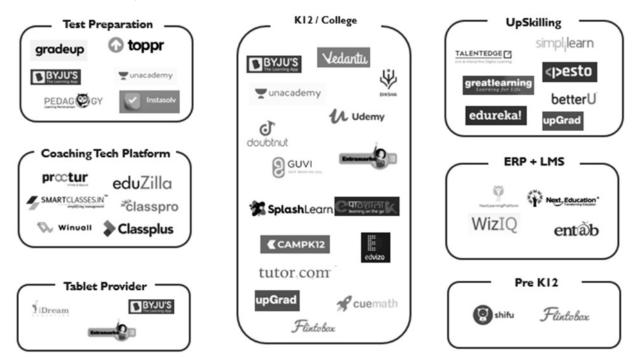


Figure 2: Logos of Indian EdTech Companies

#### 2. UNACADEMY

Started as a YouTube channel by Gaurav Munjal in 2010, Unacademy has become a well-known name in the EdTech industry in India. It has tied up with experienced educators to guide its students. A majority of the courses are free on this platform; however, one may need to pay for the certificates. Unacademy's acquisitions include Kreatryx, Tap Chief and Prep Ladder, to name a few. Its financial backers include Blume Ventures, Tracxn, Sequoia Capital, Tiger Global Management and Dragoneer Investment Group.

#### 3. VEDANTU

Vedantu is an Indian EdTech platform offering live courses for school students. Multiple of these meetings are free; however, one may need to pay for certain courses. Vedantu raised \$100 million in its Series D funding in July 2020. Its existing financial backers are GGV Capital, Omidyar and Westbridge Capital. Accel and Tiger Global are among the latest financial backers of Vedantu. Vedantu has acquired platforms like Instasolv and Pedagogy.

#### **REVENUE MODEL OF EDTECH COMPANIES**

- **Content Sharing:** Students are provided with learning material and content on EdTech platforms. Tools on these platforms encourage teachers and students to share assignments and ideas along with them giving feedback, if necessary.
- Free Content and Material: To keep students engaged, a lot of free modules and content are provided at first and later charged for, with the total course.
- **Course Subscription:** Students are asked to pay a one-time course fee to purchase and access the course.
- **Pay Per Module:** Students are charged on the basis of the number of modules utilized.
- Advertising Commission: Teachers, who wish to be highlighted on these platforms, may be charged a commission.

#### INVESTMENTS IN EDTECH COMPANIES BY VENTURE CAPITALISTS

Venture Capitalists (VC) are private equity investors who invest in organizations displaying high development and growth potential, in return for an equity stake. With COVID-19 changing how education is conferred, this industry has got the most elevated yearly investment in 2020. Amidst the lockdown, the education sector continued being one of the huge wagers for financial backers and venture capitalists. The EdTech industry, in particular, has recorded noteworthy investments. From January to August 2020, venture capitalists pumped in \$1.19 billion, spread across thirty-six deals, against \$409 million across forty-three arrangements, during a similar period a year ago.

Indian EdTech start-ups have seen an investment of \$2.22 billion in 2020, when contrasted with \$553 million in 2019, as per the Indian Private Equity and Capital Association (IVCA) and Praxis Global Alliance Labs data. The report surveys that the education sector is a \$117 billion market in India, which had around 360 million students in the year 2019-20. The report additionally stated that \$49 billion is spent on school training, 66 per cent of which is spent on essential instructions and 27 per cent on optional schooling. Moreover, it stated that \$42 billion is spent on supplementary learning, which principally involves private training and test readiness.

### REASONS FOR INVESTMENTS BY VENTURE CAPITALISTS

• **High Growth:** The adoption of EdTech across the country, due to the high internet penetration and increasing use of laptops and smartphones, has driven the demand for online education. COVID-19 proved to be a catalyst because of which it became imperative for teachers and students to adopt EdTech.

#### Key Drivers for Growth:

o Increasing Awareness and Demand for EdTech Platforms: Individuals, who are anxious to expand their knowledge but cannot do so with the existing system, opt for EdTech platforms. The EdTech

elements unmistakably demonstrate that the Return on Investment (ROI) is significantly higher on

industry has overcome issues of the individuals who wish to learn, by providing economical and detailed courses for all age groups. It focuses on

empowering students to learn and master any subject, whenever and whichever they wish to, according to their own pace. This process of learning is acknowledged by various stakeholders, including teachers and students.

- Innovative Features on 0 EdTech Platforms: To make a user experience more effective and long-lasting, EdTech platforms provide personalized learning features as well as simplified learning material in a variety of languages. Many EdTech platforms are rich in innovation and implement interesting features using the latest technologies. EdTech platforms provide users with a variety of features. For example, Byju's worked with an organization like Disney to make learning and understanding fun and effective.
- Premium Profit Business Model: The EdTech industry is being accepted widely. Research shows that individuals are willing to pay for these services. The EdTech companies work on a premium profit business model, where users have to pay a membership fee on the content they choose to consume. By providing interesting educational content, EdTech is combining the best of technology with education.
- **Higher ROI:** The EdTech industry is developing significantly and is being accepted widely. Both of these

COMPANYINVESTORSByju'sSequoia Capital, BlackRock, Silver Lake, Omidyar Network, Bond<br/>Capital, Sands Capital Management, Sofina, Alkeon Capital<br/>Management, Owl Ventures, Tiger Global, General AtlanticUnacademyBlume Ventures, Soft Bank, Nexus, Sequoia Capital, General Atlantic,<br/>Steadview CapitalVedantuOmidyar Network, GGV Capital, Tiger Global

account of online learning.

Figure 3: Top Venture Capitalist Investing in EdTech Companies in India (Source: Created by the Author)

### **BETTING ON LEARN FROM HOME**

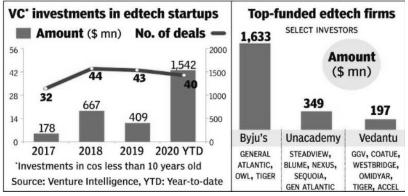
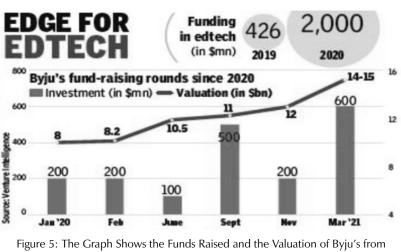


Figure 4: The Graph Shows the Amount Invested by Venture Capitalists across Various Deals in EdTech Companies from 2017 to September 2020 (Source: Venture Intelligence)



igure 5: The Graph Shows the Funds Raised and the Valuation of Byju's from January 2020 to March 2021 (Source: Venture Intelligence)

#### FINANCIAL ANALYSIS OF THINK AND LEARN PRIVATE LIMITED (BYJU'S)

### Rationale Behind the Analysis of Byju's Financial Reports:

Byju's, with a valuation of \$16.5 billion, has become one of the most valued start-ups in India. The company has captured the Indian EdTech market, gaining a massive user base. The company is financially backed by top venture capitalists and has adopted an aggressive acquisition strategy. The rationale for financial analysis of Byju's is to give key insights into the company's fundamentals and financial performance.

#### Highlights of Financial Statements of Think and Learn Pvt. Ltd. (Byju's)

An in-depth study of the financial statements of Think and Learn Pvt Ltd. (Byju's) highlights that the company incurred a loss of ₹88 million during the financial year (FY) 2019. Its revenue from operations rose to ₹13,060 million in FY 2019. In FY 2019, its sales added up to 90.5 per cent of the total revenue, that is, ₹11,810

million increasing 2.8 times from FY 2018. Total expenses rose from ₹5,374 million in FY 2018 to ₹13,765 million in FY 2019 and expenditure on development was accomplished by raising ₹24,550 million through the issue of shares in FY 2019. In FY 2019, losses were controlled by 76.3 per cent to ₹ 88 million.

#### Part 1: Financial Analysis Using Ratios

#### A. Liquidity Ratios:

Liquidity Ratio			
	2019	2018	
Current Ratio	14.17	8.61	
Liquid Ratio	13.90	8.42	

Figure 6: Liquidity Ratios (Source: Calculated by the Author from the Annual Reports of Byju's (2017-18 and 2018-19))

#### Comments:

- The Current Ratio of the company was above 2:1, which means the company was capable of funding its current liabilities and managing its day-to-day activities.
- The Liquid Ratio of the company is maintained well above the standard 1:1, which has enabled the company to run smoothly and allowed it to have a high safety margin to meet its current liabilities. Hence, the company is doing well in terms of liquidity.

#### **B. Turnover Ratios:**

Turnover Ratios				
	2019	2018		
Inventory Turnover Ratio	6.71	6.52		
Trade Receivable Turnover Ratio	24.40	17.03		
Trade Payable Turnover Ratio	2.59	1.24		
Working Capital Turnover Ratio	0.52	0.92		

Figure 7: Turnover Ratios (Source: Calculated by the Author from the Annual Reports of Byju's (2017-18 and 2018-19))

#### Comments:

- Inventory Turnover Ratio is elevated, which shows that every finished product is quickly turned over and neither are there obsolete stocks, nor is there over-stocking.
- The Accounts Receivable Turnover Ratio is sufficient, which shows that the company is efficient in collecting its receivables.
  - The Accounts Payable Turnover Ratio is low, which suggests that the business is not taking the complete edge of the credit terms allowed by the creditors.
  - Lower Working Capital Turnover Ratio indicates that the company is not generating enough revenues with its working capital.

#### C. Solvency Ratios:

Solvency Ratio				
	2019	2018		
Debt Equity Ratio	0.01	0.02		
Proprietary Ratio	0.92	0.91		
Debt to Total Assets	0.0048	0.014		
Interest Coverage Ratio	-2.00	-19.01		

Figure 8: Solvency Ratios

(Source: Calculated by the Author from the Annual Reports of Byju's (2017-18 and 2018-19))

#### **Comments:**

- The Debt Equity Ratio is low, which means that the company has a very low financial leverage and has low financing via debt in comparison to equity.
- The Proprietary Ratio is satisfactory, which indicates its good financial condition and throws light on the fact that the larger portion of its capital comes through equity.
- The Debt to Total Assets Ratio is less than one, which means that Byju's has more assets and could meet its obligation by selling these assets.
- The Interest Coverage Ratio is very low due to the high-interest payment, which has led to an increase in losses.

#### **Comments:**

- The Gross Profit Ratio indicates that the company is financially healthy and is making a reasonable profit on sales. It is more than satisfactory.
- The Net Profit Ratio was extremely poor previously, which indicates that the expenses are greater than revenue from sales, with the situation having improved considerably but the company has yet to reach the ideal margin.
- As the Return on Investment (ROI) is negative, the company is in financial distress. Since ROI is the profitability indicator, it comprises the aspects of performance. However, in this case, the ROI does not meet the standards and has a negative return.
- The Operating Ratio was high previously and has

decreased significantly, but it
indicates that the cost of
revenue from operations is
higher than the revenue from
operations.

• There is an increasing trend in the Operating Profit Ratio of the firm which is an improvement and a positive indication. This represents the correctness of the company's financial standing and its ability to pay off its debt obligations.

#### **D. Profitability Ratios:**

Profitability Ratio				
	2019	2018		
Gross Profit Ratio	84 percentage	88 percentage		
Net Profit Ratio	-0.68 percentage	-7.9 percentage		
Return on Investment (ROI)	-0.36 percentage	-4.69 percentage		
Operating Ratio	37 percentage	114 percentage		
Operating Profit Ratio	67 percentage	-7.5 percentage		

#### Figure 9: Profitability Ratios

(Source: Calculated by the Author from the Annual Reports of Byju's (2017-18 and 2018-19))

Common Star Derfft and Lass Assessed					
Common-Size Profit and Loss Account					
for the year ended 31st March 2018 and 2019					
				(₹ in Millions)	
	Absolute	Absolute Amounts		Percentage of Balance Sheet Total	
Profit and Loss Account	2019	2018	2019	2018	
	₹	₹	Percentage	Percentage	
I. REVENUE FROM OPERATIONS	13059.29	4711.88	100.00	100.00	
II. Add: Other Income	610.51	290.27	4.67	6.16	
III. TOTAL REVENUE (I+II)	13669.80	5002.15	104.67	106.16	
IV. LESS: EXPENSES:					
Cost Of Materials Consumed	146.33	55.52	1.12	1.18	
Purchase Of Stock-In Trade	2379.34	611.77	18.22	12.98	
Changes in Inventories of Finished Goods, Work-In-Progress and Stock-in-Trade	-376.84	-85.09	-2.89	-1.81	
Employee Benefit Expenses	2737.40	1062.48	20.96	22.55	
Finance Costs	47.84	19.55	0.37	0.41	
Depreciation And Amortization Expenses	684.53	304.12	5.24	6.45	
Other Expenses	8146.90	3405.49	62.38	72.27	
TOTAL EXPENSES	13,765.48	5,373.85	105.41	114.05	
V. PROFIT/LOSS BEFORE TAX (III-IV)	-95.68	-371.70	-0.73	-7.89	
Current tax	0	0.025		0.0005	
Deferred tax	-7.38	-0.19	-0.06	-0.0040	
VI. LESS: TOTAL TAX	-7.38	-0.16	-0.06	-0.0035	
VII. PROFIT/LOSS AFTER TAX (V-VD	-88.30	-371.54	-0.68	-7.89	

Figure 10: Common-Size Profit and Loss Account of Byju's

(Source: Calculated by the Author from the Annual Reports of Byju's (2017-18 and 2018-19))

Common-Size Balance Sheet						
as at 31st March, 2018 and 2019						
				(₹ in Million		
	Absolute A		Percentage of Balance Sheet Total			
Particulars	2019	2018	2019	2018		
	₹	₹	Percentage	Percentage		
ASSETS						
Non-current assets:						
Tangible Assets	487.98	122.66	1.11	1.3		
Intangible Assets	15762.41	2882.32	35.96	31.5		
Non-Current Investments	0	0	-	-		
Deferred Tax Assets [Net]	0.52	1.56	0.0012	0.01		
Long Term Loans And Advances	0	0	-	-		
Other Non-Current Assets	442.30	363.74	1.01	3.98		
				and the second sec		
Current assets:						
Current Investments	17173.47	2808.79	39.18	30.74		
Inventories	508.67	131.83	1.16	1.44		
Trade Receivables	793.60	276.68	1.81	3.03		
Cash And Cash Equivalents	7790.37	2065.40	17.77	22.6		
Short Term Loans And Advances	0	0	-	-		
Other Current Assets	873.11	484.00	1.99	5.30		
TOTAL ASSETS	43,832.42	9,136.97	100.00	100.0		
LIABILITIES & SHAREHOLDERS' EQUITY						
Non-current liabilities:						
Long Term Borrowings	8.426	10.235	0.02	0.11		
Deferred Tax Liabilities [Net]	1337.914	0.269	3.05	0.0029		
Other Long Term Liabilities			-	-		
Long Term Provisions	203.719	121.077	0.46	1.33		
Current liabilities:						
Short Term Borrowings	56.643	-	0.13	-		
Trade Payables	1342.974	495.315	3.06	5.42		
Other Current Liabilities	502.512	165.27	1.15	1.8		
Short Term Provisions	13.159	8.833	0.030	0.10		
Shareholders' equity:						
Equity Share Capital	40367.069	8335.96579	92.09	91.23		
Reserves and Surplus				-		
TOTAL LIABILITIES	43.832.42	9,136,96	100.00	100.0		

Figure 11: Common-Size Balance Sheet of Byju's

(Source: Calculated by the Author from the Annual Reports of Byju's (2017-18 and 2018-19))

#### Comments:

In the Common-Size Income Statement, we see that the Operating Costs are expanding, yet the percentage increase in the level of Revenue from Operations is more prominent than the Cost of Revenue from Operations. Consequently, the loss percentage has diminished significantly. In the Common-Size Balance Sheet, we can unmistakably call attention to the Intangible Assets and Non-Current resources, which have expanded strikingly. Long Term Borrowings have decreased. Moreover, Proprietor's Equity has expanded, which is a positive sign.

#### Part 3: Financial Analysis Using Comparative Statement

Comparative Profit and Loss Account							
for the year ended 31st March 2018 and 2019							
(₹ in Millions							
	31.03.2019	31.03.2018	Absolute Change	Percentage Change			
Profit and Loss Account	A	В	C=(A-B)	D=(C/B * 100)			
	₹	₹	₹	Percentage			
I. REVENUE FROM OPERATIONS	13059.29	4711.88	8,347.41	177.16			
II. Add:Other Income	610.51	290.27	320.24	110.33			
III. TOTAL REVENUE (I+II)	13,669.80	5,002.15	8,667.65	173.28			
IV. LESS: EXPENSES:							
Cost Of Materials Consumed	146.33	55.52	90.81	163.56			
Purchase Of Stock-In Trade	2379.34	611.77	1,767.57	288.93			
Changes in Inventories of Finished Goods, Work-In-Progress and Stock-in-Trade	-376.84	-85.09	-291.76	342.90			
Employee Benefit Expenses	2737.40	1062.48	1,674.91	157.64			
Finance Costs	47.84	19.55	28.29	144.68			
Depreciation And Amortization Expenses	684.53	304.12	380.41	125.08			
Other Expenses	8146.90	3405.49	4,741.40	139.23			
TOTAL EXPENSES	1376.55	537.39	839.16	156.16			
V. PROFIT/LOSS BEFORE TAX (III-IV)	12293.25	4464.77	7,828.49	175.34			
Current tax	0	0.025	-0.03	-100.00			
Deferred tax	-7.382	-0.189	-7.19	3,805.82			
VI. LESS: TAX	-73.82	-1.64	-72.18	4,401.22			
VII. PROFIT/LOSS AFTER TAX (V-VI)	12.367.07	4.466.41	7,900.67	176.89			

Figure 12: Comparative Profit and Loss Account of Byju's (Source: Calculated by the Author from the Annual Reports of Byju's (2017-18 and 2018-19))

Comparative Balance Sheet					
as at 31st March, 2018 and 2019					
				(₹ in Millions	
	31.03.2019	31.03.2018	Absolute Change	Percentage Change	
Particulars	А	В	C=(A-B)	D=(C/B * 100)	
	₹	₹	₹	Percentage	
ASSETS					
Non-current assets:					
Tangible Assets	487.98	122.66	365.32	297.8	
Intangible Assets	15762.41	2882.32	12,880.09	446.8	
Non-Current Investments	-	-	-		
Deferred Tax Assets [Net]	0.52	1.56	-1.04	-66.9	
Long Term Loans And Advances	(*)	-	-		
Other Non-Current Assets	442.295	363.736	78.56	21.6	
Current assets:					
Current Investments	17173.5	2808.8	14,364.68	511.4	
Inventories	508.7	131.8	376.84	285.8	
Trade Receivables	793.6	276.7	516.92	186.8	
Cash And Cash Equivalents	7790.4	2065.4	5,724.98	277.1	
Short Term Loans And Advances		-	-		
Other Current Assets	873.11	484.00	389.11	80.3	
TOTAL ASSETS	43,832.42	9,136.97	34,695.45	379.7	
LIABILITIES & SHAREHOLDERS' EQUITY					
Non-current liabilities:					
Long Term Borrowings	8.426	10.235	-1.81	-17.6	
Deferred Tax Liabilities [Net]	1337.914	0.269	1,337.65	4,97,265.8	
Other Long Term Liabilities					
Long Term Provisions	203.719	121.077	82.64	68.2	
Current liabilities:					
Short Term Borrowings	56.64	-	56.64		
Trade Payables	1342.97	495.32	847.66	171.1	
Other Current Liabilities	502.51	165.27	337.24	204.0	
Short Term Provisions	13.16	8.83	4.33	48.9	
Shareholders' equity:					
Equity Share Capital	40367.07	8335.97	32,031.10	384.2	
Reserves and Surplus					
TOTAL LIABILITIES	43.832.42	9,136,96	34.695.45	379.7	

Figure 13: Comparative Balance Sheet of Byju's (Source: Calculated by the Author from the Annual Reports of Byju's (2017-18 and 2018-19))

#### Comments:

In the Comparative Income Statement, it can be seen that the rate of expansion in Revenue from Operations and Other Income is extensively high; however, the Direct and Indirect Expenses surpass that rate, which shows why the company is incurring a loss. This further indicates that the company is expanding its business activities. In 2018, the organization made a loss, which was significantly reduced in 2019. In the Comparative Balance Sheet, we see an expansion in current investments. The Long-Term Borrowings have decreased from 2018, while the Current Liabilities have increased. The company's liquidity has decreased and the solvency has increased.

#### RECOMMENDATIONS

• Byju's is one of the most valued EdTech start-ups. It has maintained a good financial position in terms of

liquidity and solvency, but the total expenses are very high.

- Consequently, the company is incurring a loss and shall take steps to curb the expenses. The direct and indirect costs along with the marketing costs should be controlled.
- There is a need for proper utilization of the working capital, assets and equity fund, to overcome the loss.
- The company can focus on increasing its managerial efficiency with respect to the Accounts Payable Turnover Ratio. Therefore, the management should work towards lowering its costs and increasing its revenue, so that Byju's can emerge profitable in the future.

The financial performance of the company is good, which attracts investors for further investments. It also gives confidence to lenders and ensures that they extend financial support. The rapid growth which the EdTech industry is witnessing gives Byju's an opportunity to expand its user base and turn into a profitable business in the future.

#### CONCLUSION

With all the institutions gradually adopting hybrid learning, the EdTech industry is currently thriving. COVID-19 has given the EdTech industry extra momentum, making way for industry expansion. The digitization of learning, government support via policy reforms and the National Education Policy (NEP) 2020 have optimized the development of EdTech in India. EdTech in India will continue to attract global investments and large sums of capital even when schools and universities reopen. EdTech has the power to transform the education sector in India because these platforms deliver the same content to the urban as well as rural populace of the country. Companies like Byju's and Unacademy are leading the market by providing personalized and cost-efficient modules, giving equal learning opportunities to millions of students.

The challenge EdTech faces is the retention of students in the long run. The companies would have to focus on

remaining relevant and engaging. EdTech companies would have to innovate to address issues faced by students as well as teachers.

Post-pandemic, EdTech could complement the schooling education in India. The idea that EdTech promotes is self-paced learning. Students with differential learning capabilities or professionals seeking to acquire a certain skill set could benefit from the tailor-made modules that EdTech offers. What one knows for sure is that EdTech is here to stay in the long run due to the high acceptance of technology and hybrid formats of teaching.

#### LIMITATIONS OF THE STUDY

- This research has been conducted over a time frame of approximately three months only. Due to time restrictions, there were challenges in terms of coverage of data for the topics covered.
- The approach may differ in terms of the calculation of certain items, hence, there might be a difference in the interpretation of certain statements.
- Ratio analysis deals only with the quantitative aspect and completely ignores the qualitative aspect of the data.

#### REFERENCES

- 1. Dubey, P., and Pandey, D. (2020). Distance Learning in Higher Education During Pandemic: Challenges and Opportunities. Int. J. Indian Psychol, 8(2), 43-46.
- 2. Jena, P. K. (2020). Impact of Pandemic COVID-19 on Education in India. International Journal of Current Research (IJCR), 12.
- 3. Miglani, N., and Burch, P. (2019). Educational Technology in India: The Field and Teacher's Sense Making. Contemporary Education Dialogue, 16(1), 26-53.
- Teräs, M., Suoranta, J., Teräs, H., and Curcher, M. (2020). Post-COVID-19 Education and Education Technology 'Solutionism': A Seller's Market. Post-digital Science and Education, 2(3), 863-878.

#### ANNEXURES Presentation of Main Data

	01/04/2018	01/04/2017
	to	to
	31/03/2019	31/03/2018
Statement of profit and loss [Abstract]		
Income [Abstract]		
Revenue from operations	130,592.91	47,118.83
Other income	6,105.12	2,902.69
Total income	136,698.03	50,021.52
Expenses [Abstract]	13	~ ~
Cost of materials consumed	1,463.28	555.19
Purchases of stock-in-trade	23,793.40	6,117.69
Changes in inventories of finished goods, work-in-progress and stock-in-trade	-3,768.41	-850.85
Employee benefit expense	27,373.98	10,624.84
Finance costs	478.35	195.5
Depreciation, depletion and amortisation expense	6,845.28	3,041.21
Other expenses	81,468.96	34,054.93
Total expenses	137,654.84	53,738.51
Profit before exceptional items and tax	-956.81	-3,716.99
Total profit before tax	-956.81	-3,716.99
Tax expense [Abstract]		
Current tax	0	0.25
Deferred tax	-73.82	-1.89
Total tax expense	-73.82	-1.64
Total profit (loss) for period from continuing operations	-882.99	-3,715.35
Total profit (loss) for period	-882.99	-3,715.35
Comprehensive income OCI components presented net of tax [Abstract]		
Whether company has other comprehensive income OCI components presented net of tax	No	No
Other comprehensive income net of tax [Abstract]		
Components of other comprehensive income that will not be reclassified to profit or loss, net of tax [Abstract]		
Other comprehensive income, net of tax, gains (losses) on remeasurements of defined benefit plans	-58.37	-22.61
Total other comprehensive income that will not be reclassified to profit or loss, net of tax	-58.37	-22.61
Components of other comprehensive income that will be reclassified to profit or loss, net of tax [Abstract]		
Exchange differences on translation net of tax [Abstract]		
Gains (losses) on exchange differences on translation, net of tax	-550.04	18.96
Total other comprehensive income, net of tax, exchange differences on translation	-550.04	18.96
Total other comprehensive income that will be reclassified to profit or loss, net of tax	-550.04	18.96
Total other comprehensive income	-608.41	-3.65
Other comprehensive income attributable to net of tax [Abstract]		
Other Comprehensive income, attributable to owners of parent	0	0
Other Comprehensive income, attributable to non-controlling interests	0	0
Total comprehensive income	-1,491.40	-3,719
Comprehensive income attributable to net of tax [Abstract]		
Comprehensive income, attributable to owners of parent	0	0
Comprehensive income, attributable to non-controlling interests	0	0
Comprehensive income OCI components presented before tax [Abstract]		
Whether company has comprehensive income OCI components presented before tax	No	No
Other comprehensive income before tax [Abstract]		
Total other comprehensive income	-608.41	-3.65
Other comprehensive income attributable to [Abstract]		
Other Comprehensive income, attributable to owners of parent	0	0
Other Comprehensive income, attributable to non-controlling interests	0	0
Total comprehensive income	-1,491.40	-3,719
Comprehensive income attributable to [Abstract]		
Comprehensive income, attributable to owners of parent	0	0
Comprehensive income, attributable to non-controlling interests	0	0

Figure 14: Statement of Profit and Loss

(Source: Company Filings with Ministry of Corporate Affairs)

Balance sheet [Abstract]		ĺ
	3/31/2019	3/31/2018
Assets [Abstract]		
Non-current assets [Abstract]		
Property, plant and equipment	4879.82	1226.62
Goodwill	58041.71	1021.38
Other intangible assets	72474.69	22152.55
Intangible assets under development	27107.65	5649.22
Non-current financial assets [Abstract]		
Non-current investments	0	0
Loans, non-current	0	0
Other non-current financial assets	2690.15	2363.94
Total non-current financial assets	2690.15	2363.94
Deferred tax assets (net)	5.16	15.59
Other non-current assets	1,732.80	1,273.42
Total non-current assets	166,931.98	33,702.72
Current assets [Abstract]		
Inventories	5,086.69	1,318.28
Current financial assets [Abstract]		
Current investments	171,734.70	28,087.88
Trade receivables, current	7,936	2766.79
Cash and cash equivalents	46,870.23	13,902.59
Bank balance other than cash and cash equivalents	31,033.51	6,751.40
Loans, current	0	0
Other current financial assets	2,789.66	462.68
Total current financial assets	260,364.10	51,971.34
Other current assets	5,941.39	4,377.31
Total current assets	271,392.18	57,666.93
Total assets	438,324.16	91,369.65
Equity and liabilities [Abstract]		2.22
Equity [Abstract]		
Equity attributable to owners of parent [Abstract]		
Equity share capital	327.0269	285.1579
Other equity	403,343.66	83,074.50
Total equity attributable to owners of parent	403,670.69	83,359.66
Non controlling interest	0	0
Total equity	403,670.69	83,359.66
Liabilities [Abstract]	15	
Non-current liabilities [Abstract]		
Non-current financial liabilities [Abstract]		
Borrowings, non-current	84.26	102.35
Total non-current financial liabilities	84.26	102.35
Provisions, non-current	2,037.19	1,210.77
Deferred tax liabilities (net)	13,379.14	2.69
Total non-current liabilities	15,500.59	1,315.81
Current liabilities [Abstract]		1.549
Current financial liabilities [Abstract]		
Borrowings, current	566.43	0
Trade payables, current (A)	13,429.74	4,953.15
		007.01
Other current financial liabilities	275.55	907.84
Total current financial liabilities	14,271.72	5,860.99
Other current liabilities	4,749.57	744.86
Provisions, current	131.59	88.33
Total current liabilities	19,152.88	6,694.18
Total liabilities	34,653.47	8,009.99
Total equity and liabilities	438,324.16	91,369.65

Figure 15: Balance Sheet

(Source: Company Filings with Ministry of Corporate Affairs)



## 

In order to maximize the benefits of smartphones and technology while also developing a forum for cashless and open financial transactions, the Indian government created one significant device, \_\_\_\_the 'UPI'.



## Unified Payments Interface (UPI): The Game Changer

Dr. Sreemoyee Guha Roy Assistant Professor Department of Commerce (Morning)

Murli Agarwal Department of Commerce (Morning)

#### ABSTRACT

India is rapidly becoming a cashless economy. Digital payment has emerged as a result of the rise in internet use. Payments moved from conventional payments to electronic payments via debit and credit cards, e-payments via e-banking, and then to mobile payment via m-payment technologies. The year 2016-17 was a watershed moment in India's payments environment, with drastic policy decisions. NPCI launched UPI in August 2016, a payment system app which would solve the problem of carrying bank account numbers and cards in mind. UPI took advantage of India's high tele-density as it further helped it to reach millions of people. Since NPCI's establishment in 2009, UPI has been the result of a number of innovations by the organization. In this paper, we have tried to show a small study on consumer satisfaction using UPI and analyze the security aspect of digital payments.

**KEYWORDS:** UPI, Digital Payment, Customer Satisfaction.

#### INTRODUCTION

National Payment Corporation of India (NPCI), an organization of RBI has developed low-cost retail digital payment systems known as UPI. The acceptance of one touch payment is influenced by the availability of an internet connection, one touch access, and safe financial transactions. As a result, in order to maximize the benefits of smartphones and technology while also developing a forum for cashless and open financial transactions, the Indian Government created one significant device, the 'UPI' (Unified Payment Interface).

In India, technological advancements have altered the payment system. The post-demonetization era (after 8th November, 2016) has been an important phase in the growth and development of the Indian payment system. In India, there are a lot of digital payments. Cashless transactions have also become more common. Smartphones, a smart tool that has become a key component of people's personal, professional, and financial lives, have had a significant impact on the digital payment industry.

Consequently, NPCI launched the UPI in August 2016 in order to solve all the previous problems which were unavoidable. On 11th April 2016, RBI Governor formally inaugurated the UPI, which was then made available to the public on 25th August, 2016. UPI is a digital payment system that allows users to send and receive money by using a Virtual Payment Address (VPA). It is a system that combines many banking functions, smooth fund routing, and merchant payments into one mobile application which can be easily downloaded online.

#### LITERATURE REVIEW

A research on the effect of UPI on customer satisfaction was conducted by Bijin Philip. The aim of the study was to determine customer preferences for unified payment interfaces and to assess the effect of UPI services on customer satisfaction. Customers have a positive attitude toward unified payment interface services and functions, according to the findings, and there is a positive connection between respondents' education and their use of UPI services. People with a higher level of education are more likely to use UPI programmes, and they inspire others to do so as well. (Bijin Philip, 2019)

The performance of UPI demonstrates that India is making strides toward a cashless economy. However, the scope of Bharat Interface for Money (BHIM) needs to be expanded. For user interaction, BHIM could add more categories to the payment app. UPI is IMPS's refined and finished product, and it is expected to be integrated with the NEFT framework, which is governed by the RBI guidelines, at some stage. (Salil Panchal and Manu Balchandran, 2018)

#### **OBJECTIVES OF THE STUDY**

This research is based on two major objectives. They are as follows -

- A Study on Consumer Satisfaction of UPI: This has been taken up to know whether the customers are satisfied or not after the emergence of Unified Payment Interface as a new payment system.
- Security Analysis of UPI as Compared to Other Digital Payments: This has been taken up to ensure that UPI as a payment system is safe and secure as millions of transactions take place on a daily basis.

#### **RESEARCH METHODOLOGY**

**Questionnaires:** Questionnaires are used to gather information. They are a good way to gather data

because they allow people to take their own time, think about the questions properly, and return to it later. MCQs, closed questions, and open-ended questions are common in the questionnaires. I have prepared different questionnaires and circulated it with the help of Google forms to my colleagues for gathering the required information.

**Surveys:** The act of analyzing a process or interviewing a selected sample of individuals to collect data about a programme, product, or process is referred to as a survey.

Data collection surveys are used to gather information about a certain group of people's thoughts, behaviour, or expertise.

#### Getting Started with UPI

- Step 1 Download the UPI app from the internet.
- Step 2 Install the app on your device.
- Step 3 Now set a unique passcode for the app for safety. This may be your lock screen or any other pattern.
- Step 4 Now create a virtual address.
- Step 5 Add your bank account by providing the registered mobile number linked with your bank account.
- Step 6 Set the UPI PIN. This is the most important step and the customer must set a unique PIN which can be remembered easily.
- Step 7 Now start transacting.

#### Sample Size

I have collected data from 80 respondents of Rourkela to know the satisfaction level of them. They have filled the questionnaires circulated to them in Google forms via a link.

#### **Target Respondents**

The target respondents were my colleagues, corporate employees and businessmen who were using UPI services on a regular basis.

#### **Demographic Statistics**

#### i) Gender of the Respondents

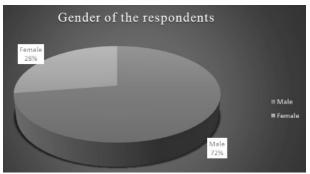


Figure 1: Gender of the Respondents (Source: Primary Data)

#### Data Interpretation:

28 per cent of the respondents were female and the rest 72 per cent were male.

#### ii) Age group of Respondents

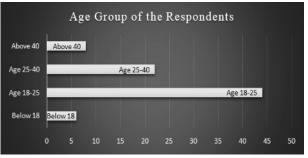


Figure 2: Age Group of Respondents (Source: Primary Data)

#### Data Interpretation:

We can find that eight people were below the age of 18, forty-four were between 18-25 years as most of them were students, twenty-two of them between 25-40 years and six of them were above the age of 40.

#### iii) Occupational Status



Figure 3: Occupational Status (Source: Primary Data)

48 of them were students, eight were self-employed, 14 were salaried person and 10 were businessmen.

#### iv) Annual Income (in ₹ )

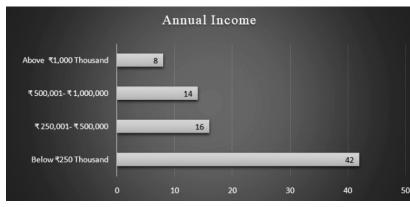


Figure 4: Annual Income (Source: Primary Data)

#### Data Interpretation:

42 of the respondents were earning below ₹250 thousand, 16 were earning between ₹250 thousand and ₹500 thousand, 14 respondents earned between ₹500 thousand and ₹1,000 thousand and eight earned above ₹1,000 thousand.

#### ANALYSIS AND FINDINGS

I have formulated different questionnaires and circulated it with

the help of Google forms. Based on the data received, following were found:

- Which UPI app do you prefer the most f o r m a k i n g payments?
  - A. Google Pay
  - B. PhonePe
  - C. Paytm
  - D. Amazon Pay

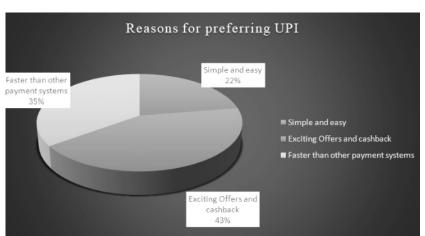


Figure 6: Reason to Prefer UPI over Other Payment Gateways (Source: Primary Data)

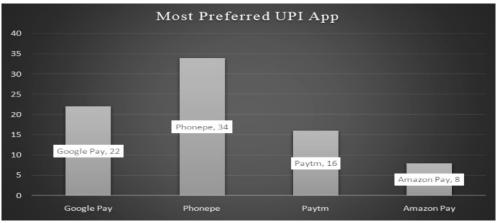


Figure 5: Most Preferred UPI App (Source: Primary Data)

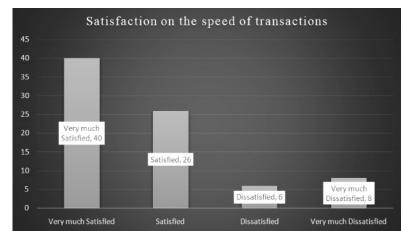
22 of the respondents said that they found Google Pay the best while 34 settled with PhonePe becoming the most preferred one. 16 chose Paytm, maybe for its

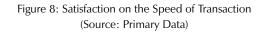
> simple interface and eight chose Amazon Pay due to exciting offers and cashback.

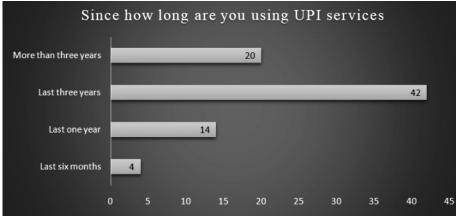
- Why did you prefer UPI over other payment gateways?
  - A. Simple and easy
  - B. Exciting offers and cashback
  - C. Faster than other payment systems

18 of the respondents said that they preferred UPI over other payment systems because it was simple and fast. 34 of them used UPI because of the exciting offers and cashback provided by the UPI apps. 28 of them said that they used UPI because it was faster than any other payment gateway.

- Since how long are you using the UPI services?
  - A. Last six months
  - B. Last one year
  - C. Last three years
  - D. More than three years







#### Figure 7: How Long Have You Been Using the UPI? (Source: Primary Data)

#### Data Interpretation:

20 respondents have been using the UPI services for more than three years. This shows that UPI has been successful to retain the customers by constantly hearing and addressing the grievances of its customers. 42 of them said that they had been using it for three years. 14 of them said that they were introduced to UPI a year ago and four of them started to use it six months back.

- Are you satisfied with the speed of the transactions while making payments through UPI?
  - A. Very much Satisfied
  - B. Satisfied
  - C. Dissatisfied
  - D. Very much Dissatisfied

Data Interpretation:

40 respondents were very much satisfied with the speed of transactions made by them, while 26 of them were only satisfied. Six of them said that they were dissatisfied and eight of them were very much dissatisfied because their transactions got stuck in the middle and the amount got debited too. What happens is, the amount gets debited and the payment is stuck in the

middle. It does not get credited to the receiver's bank and asks to wait for a certain time. This is the reason why some of the respondents may have opted for dissatisfaction. However, I think that the UPI service providers are constantly working on this and may provide a solution to such cases which hardly take place.

- UPI app provides customer service for grievance redressal, are you satisfied with the service?
  - A. Very much Satisfied
  - B. Satisfied
  - C. Dissatisfied
  - D. Very much Dissatisfied



Figure 9: Satisfaction on Customer Services (Source: Primary Data)

We found that 30 respondents were very much satisfied while 18 of them were only satisfied. Chat support, call centres, FAQs answered, et al., are some of the ways by

which the UPI service providers have managed to win the hearts of the customers. However, the problem still persists as we can see that 14 of them were dissatisfied and 18 were very dissatisfied, maybe due to the delayed service and long wait. However, UPI services providers, with the help of SWOT analysis, take note of everything and will soon address this issue to make it more easy, convenient and fast.

- How frequently do you use UPI apps and make payments?
  - A. Daily
  - B. Occasionally
  - C. Once in a week
  - D. Once in a month

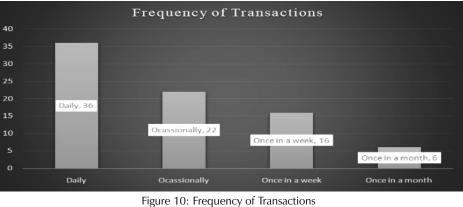
Data Interpretation:

36 respondents said that they were using UPI on a daily basis. Cashless economy has arrived where people today do not want to carry cash and prefer to pay online. It has brought a huge surge in the daily transactions. 22 of them said that they used UPI occasionally. However, 16 of them said that they used UPI once a week and to a surprise some even admitted that they use UPI once a month.

- Which of the payment systems do you find safe while doing transactions?
- A. Credit card and Debit card
- B. UPI
- C. Net Banking
- D. Wallets







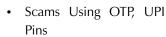
(Source: Primary Data)

20 respondents said that credit card/debit card is safe because it asks for minute details like card number, expiry date of the card, CVV, and only makes payment after a one-time password is received on the registered mobile number. 42 of them said that UPI is safe as it asks for an MPIN/UPI pin without which no transactions can take place. Five of them opted for net banking and 13 of the total respondents said that wallets are a safe option for making payments. dissatisfaction. Every coin has two sides and likewise, UPI too is on a developing stage where it learns daily from its past mistakes.

#### Security Analysis

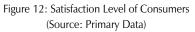
How have fraudsters made UPI the main tool for scams?

- Phishing Scams
- Remote Screen Mirroring Tool
- Deceptive UPI Handles
- Satisfaction Level of Customers 50 Very Satisfied, 43 45 40 30 25 20 ok, 14 15 Satisfied, 11 Dissatisfied, 8 10 Very Dissatisfied, 4 Very Satisfied Satisfied Dissatisfied Very Dissatisfied



QR Codes and Fake Links

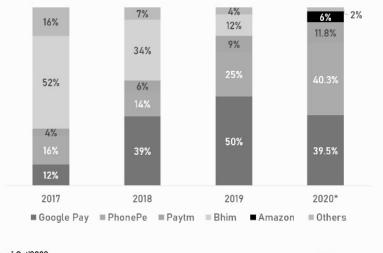
However, UPI service providers have taken steps to overcome this problem and have tightened the security level by bringing the twostep verification and approval system before the payment. Here is the list of apps providing UPI services and the one which is considered to be the safest.



- Are you satisfied with the services provided by different UPI apps like BHIM, Google Pay, PhonePe, Paytm?
  - A. Very Satisfied
  - B. Satisfied
  - C. Okay
  - D. Dissatisfied
  - E. Very Dissatisfied

#### Data Interpretation:

Overall, 43 respondents were very much satisfied with the UPI services, 11 were only satisfied and 14 of them were okay with it. However, eight were dissatisfied and four were very much dissatisfied. Some of them were the victims of cyber fraud and this may be the reason why they have opted for



Market share of different UPI payment apps

#### \*As of Oct'2020. Data on BHIM's market share for Oct'2020 is not available.

🗊 FINSHOTS

Figure 13: Market Share of Different UPI Payment Apps (Source: Finshots.in) **Phone initiating** 

a transaction

There are different UPI apps providing the services, however, some of them like PhonePe, Google Pay, Paytm, Amazon Pay, have been able to make their own mark. PhonePe is considered to be the safest of all and the graph reveals that it has the largest market share among the UPI apps.

> Transaction received at Bank

Bank Send to

NPCI

NPCI is the central switch routing all such trans

NPCI

Figure 14: NPCI - The Central Switch

(Source: NPCI)

NPCI sends to

receiving Bank

**Bank** intimates

receiver

transaction details to the receiving bank and after the approval, the recipient is informed by the receiver's bank that the transaction has been completed successfully and that the receiver has received the money. As UPI is working hard and making itself better day by day, it is predicted that it will make a ₹115.4

trillion value by the end of FY 2025-26.

#### CONCLUSION

UPI is the most significant innovation in India's digital payments market till date. It has created a platform where people can invest their trust and transact safely and easily. Millions of transactions take place through UPI daily, all over the world. Its simple interface and strong security are some of the key features which have led to its success.

NPCI is the central switch routing all the transactions. That is why it is safe and secure. At first, the customer initiates a transaction through the UPI app and the customer's bank sends the transaction details to NPCI. NPCI serves as a control switch. Now, they send the

It is excelling at a high speed and it is expected that by the year 2025, it shall have tripled its business. People, nowadays, are going cashless and prefer to pay online through UPI. It has made the payment system stronger

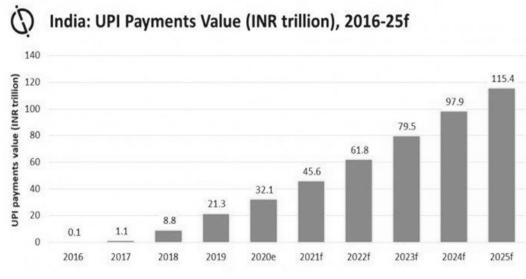


Figure 15: Growth of UPI in Upcoming Years (Source: Axisbankingandfinance.net)

than ever. It has completely changed the scenario of the payment system. NPCI is the control switch and it ensures that all transactions are safely carried on. Every coin has two sides and I believe that UPI will soon emerge as the best payment option available.

On the security analysis part, UPI may have become a source of emptying people's bank accounts at first, but UPI 2.0 has significantly developed itself and has increased the security more than ever. Now it works on double step verification and approval of payment which is extremely good. Overall, it is a good payment system and people, including me, are satisfied. This research has provided me with a good opportunity to increase my knowledge and I have completed my research here with the help of my colleagues, guide and parents.

#### ASCENT

#### REFERENCES

- 1. https://www.npci.org.in/what-we-do/upi/product-overview
- 2. https://en.wikipedia.org/wiki/Unified\_Payments\_Interface
- 3. https://www.digit.in/features/general/the-origins-of-upiroad-to-a-cashless-society-50210.html
- 4. https://business.paytm.com/blog/common-challenges-inonline-payments-how-to-overcome-them/
- 5. https://economictimes.indiatimes.com/what-isupi/tomorrowmakersshow/70241683.cms



[[]

The banks should take necessary actions and steps to neutralize the effects of NPAs on their profitability, performance and improve the situation to induce an inflow of investments.



## Escalation of Non-Performing Assets in the Banking Sector Impedes Growth and Prosperity of that Sector and the Overall Economy: An Analytical Study

Dr. Sumana Guha Assistant Professor Department of Commerce (Morning)

Anirudh Shah Department of Commerce (Morning)

#### ABSTRACT

The banking industry plays a significant role in the fundamental growth and development of the overall Indian economy. A strong banking sector is a

symbol for flourishing opportunities. The soundness of the asset quality is of utmost importance for prosperity. However, with time the asset quality has deteriorated and has affected the industry adversely. In the present study, an effort has been made to understand the nonperforming asset levels in different bank groups and to analyze the effects on profitability and return on assets, with the help of regression and correlation analysis. The study applies descriptive and causal research approaches and utilizes secondary data. It is observed that the Non-Performing Asset (NPA) levels have shown an increasing trend throughout the decade and have a significant inverse impact on the profitability and return on assets of public sector and private sector banks.

**KEYWORDS:** Non-Performing Asset (NPA), Substandard Assets, Doubtful Assets, Loss Assets, Return on Assets (ROA).

#### INTRODUCTION

The banking industry plays a scathing role in the Indian economy. A good banking system ensures healthy economic growth which in turn ensures easy flow of credit as well as credit creation. The banking industry has grown manifold and so has the complexity associated with it over time. Non-Performing Assets (NPAs), to name one, is a critical factor that has adversely affected the growth and development of the banking industry and the economy as a whole. Lending is generally encouraged but it also carries the 'credit risk' along with it, which arises from default in repayment of loans, thereby creating NPAs. Nonperforming assets are the loans or advances provided by the banks and financial institutions in which borrowers default in repayment of principal and interest amount. The entire NPA conundrum not only affects the banks but also the entire wealth of the country. As a matter of fact, the level of NPA also reflects the health of the industry and trade. The Indian banking system has primarily suffered because of a large number of accumulated stressed assets. These stressed assets consist of both gross non-performing assets as well as restructured standard advances resulting from a default in repayment of loans, largely, by corporate borrowers. Although complete eradication of such losses is not possible, banks can always aim to minimize the losses. In the post-pandemic period, special purpose vehicles and bad banks as a solution for the accumulation of these bad loans have been making headlines in India. The concept of bad banks, viewed as a special responsive measure primarily, has attracted huge significant support lately to relieve banks of their stress temporarily; keeping in mind the on-going market situation particularly exacerbated by the COVID-19 pandemic and is now extensively viewed as a major constituent in rescuing and bolstering the banking system.

Although the Gross Non-Performing Assets (GNPAs) and Net Non-Performing Assets (NNPAs) ratios continued to decline and stood at 9.7 per cent and 2.9 per cent respectively for Public Sector Banks (PSBs), 4.6 per cent and 1.0 per cent respectively for Private Sector Banks (PVBs), 2.5 per cent and 0.4 per cent respectively for Foreign Banks (FBs) and 7.5 per cent and 2.1 per cent respectively for all Scheduled Commercial Banks (SCBs), in September 2020, the Financial Stability Report by Reserve Bank of India suggests that the GNPA ratio of all SCBs may increase from 7.5 per cent in September 2020 to 13.5 per cent by September 2021.

The banks involve public money and require huge investments to operate. Therefore, studying the impact of NPA on profitability and return on assets of different bank groups is of utmost importance as minimizing the impact to maximize profit will help attract investment in the future.

### LITERATURE REVIEW

Arasu et al., (2019) observed that GNPA and NNPA of both PSBs and PVBs gradually increased year-on-year from 2014 to 2018. Wadhwa and Ramaswamy, (2020) addressed the fact that the problem is more deeprooted for PSBs than PVBs, in respect of NPA levels. Vikram and Gayathri, (2018) showed that the root causes for rising NPAs and higher levels of NPAs in PSB are derived from the nature of overseeing credit chances by the banks and its wilful defaulters. Wadhwa and Ramaswamy, (2020) argued that NPA is negatively correlated with net profits, except in the case of HDFC Bank where it is positively correlated, however, it is ascertained that a rise in NPA does not lead to higher profits.

Kandela, (2019) observed that these enlisted factors are adding to the accumulation of NPAs in PSBs. Bittu and Dwivedi, (2012) opined that the variations in NPAs are negatively related to the efficiency of bank performance, as seen in the study by Wadhwa, (2020) as well and positively related to capital-adequacy ratio, as opposed by Kandela, (2019) in his study. Aisac et al., (2018) observed that there is a significant relationship between NPAs and Gross Domestic Product (GDP). Chavan and Gambacorta, (2016) observed that NPAs ratios are sensitive to the interest rate environment in the form that there is a procyclical risk-taking response to loan growth of both PSBs and PVBs with the latter being more reactive to changes in business cycle conditions and interest rates. Navaneethakrishnasamy et al., (2017) argued that the negative trade cycles are not the basis of rising NPAs but are a result of faulty credit delivery systems and promotion of impractical operational techniques.

Tejashwini and Ramani, (2019) described that despite determinants demonstrating increasing trends in both public and private sectors, PVBs performed better than PSBs. They concluded that PVBs had more lending appeals and easy procedures to avail loans. Kamra and Samir, (2013) stated that the problem of NPAs is significantly higher in the non-priority sector than the priority sector. Moreover, the largest share of NPA in the priority sector belongs to the small-scale industries.

#### **OBJECTIVE OF THE STUDY**

The objectives of the study are:

- To study the levels of NPAs in different bank groups, namely scheduled commercial banks, public sector banks, private sector banks and foreign sector banks.
- To examine the impact of NPAs on the profitability of banks. Therefore, testing the following hypothesis:

 $H_{\mbox{\tiny 0}}$  : There is no significant impact of NPA on the profitability of banks.

 $H_1$ : There is significant impact of NPA on the profitability of banks.

• To study the relationship between NPAs and return on assets.

#### DATA AND RESEARCH METHODOLOGY

The research is conducted on secondary data collected from RBI annual reports, publications, and press releases; real-time handbook of statistics on the Indian economy available on RBI's website; Basic Statistical Returns (BSR)-one (Annual) - Credit by SCBs; Basic Statistical Returns (BSR)-two - Deposits by SCBs; Annual reports of PSBs and PVBs. The research aims to study the NPA levels over the years through graphical representation and examine the relationship between NPA and profitability of banks by considering five public sector banks and five private sector banks, selected based on the highest NPAs. The study applies the tools and techniques for analysis like descriptive graphs; Pearson's cross-correlation; linear regression. The above-mentioned analysis will be applied using MS-Excel and R-Programming.

The study tried to explore the Indian banking sector and the profitability aspect of the major banks in order to assess the impact of non-performing assets and their adverse effects that impede the overall growth of the sector and the Indian economy. The research applies the descriptive and causal research approaches. The inference is observed through correlation analysis and linear regression on data from 2010-11 to 2019-20. In this study, 18 public sector banks, 22 private sector banks and, 46 foreign sector banks in comparison to consolidated 96 scheduled commercial banks, are considered to analyze the levels of NPAs and growth in NPA ratio over a period of 10 years from 2011-2020.

#### DATA ANALYSIS

# Analysis of Gross Non-Performing Assets (GNPA) in Different Bank Groups:

Figure 1 shows GNPA levels of different bank groups over a period of 10 years. It demonstrates the steady growth of GNPA in Scheduled Commercial Banks (SCBs), Public Sector Banks (PSBs), Private Sector Banks (PVBs), and Foreign Sector Banks (FSBs). PSBs record higher NPAs year-overyear as compared to PVBs and FSBs. After a rising trend with 30.8 per cent growth in 2017-18 itself, PSBs decreased steadily by 17.4 per cent. However, PVBs set a rising trend throughout with around 14.1 per cent increment in 2019-20.

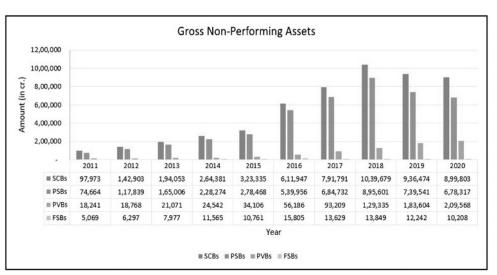
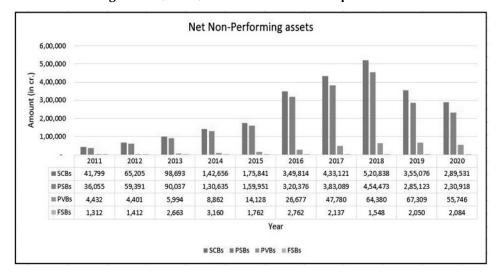


Figure 1: Comparison of GNPA in SCBs, PSBs, PVBs and FSBs (Source: https://www.rbi.org.in/Scripts/Publications/)



Analysis of Net Non-Performing Assets (NNPA) in Different Bank Groups:

Figure 2: Comparison of NNPA in SCBs, PSBs, PVBs and FSBs (Source: https://www.rbi.org.in/Scripts/Publications/)

Figure 2 exhibits NNPA levels of the same sample of bank groups as above. However, NNPA reflects the actual losses of the bank groups and therefore, a clearer picture can be illustrated from it. A similar movement can be seen in both GNPA and NNPA throughout the decade with identical relationships between inter-bank groups. Moreover, a 100 per cent growth is observed in NNPAs of PSBs in the year 2015-16 and a Compounded Annual Growth Rate (CAGR) of 20.4 per cent over the period. ASCENT

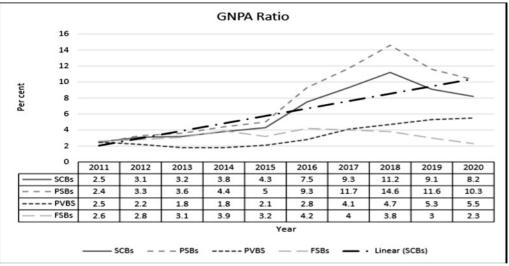


Figure 3: Comparison of GNPA Ratio of SCBs, PSBs, PVBs AND FSBs (Source: https://www.rbi.org.in/Scripts/Publications/)

Figure 3 shows the GNPA ratio as a percentage of gross advances of different bank groups for comparison. PSBs demonstrate an increasing trend with the record high of 14.6 per cent in 2017-18 but fall significantly after 2017-18 with a CAGR of 15.7 per cent over the 10 year time period. PVBs, on the other hand, exhibit a slightly rising trend after 2016-17 overtaking FSBs thereafter, with a CAGR of 8.2 per cent.

Analysis of NNPA Ratio in Different Bank Groups:

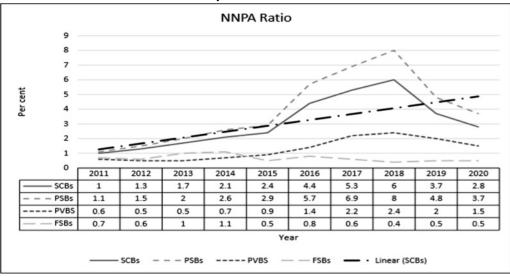


Figure 4: Comparison of NNPA Ratio of SCBs, PSBs, PVBs and FSBs (Source: https://www.rbi.org.in/Scripts/Publications/)

Figure 4 exhibits the NNPA ratio as a percentage of net advances of different bank groups. However, the NNPA ratio reflects the actual losses of the bank groups and therefore, a clearer picture can be demonstrated from it. As compared to the GNPA ratio, a similar trend can be seen in the NNPA ratio in the case of all bank groups. PSBs set a record high of 8 per cent in the year 2017-18 with a CAGR of 12.9 per cent throughout.

									Amount (ir	n cr.)
Year	SB	1	PI	PNB Bank of Bar		Baroda	Bank o	of India	Union Bank of India	
Tear	NPA	Net Profit	NPA	Net Profit	NPA	Net Profit	NPA	Net Profit	NPA	Net Profit
2011	12,346	8,265	2,039	4,433	791	4,242	1,945	2,489	1,803	2,082
2012	15,818	11,707	4,454	4,884	1,544	5,007	3,656	2,678	3,025	1,787
2013	21,956	14,105	7,237	4,748	4,192	4,481	5,947	2,749	3,353	2,158
2014	31,096	10,891	9,917	3,343	6,035	4,541	7,417	2,729	5,340	1,696
2015	27,591	13,102	15,397	3,062	8,069	3,398	13,518	1,709	6,919	1,782
2016	55,807	9,951	35,423	-3,974	19,046	-5,396	27,996	-6,089	14,026	1,352
2017	58,277	10,484	32,702	1,325	18,080	1,383	25,305	-1,558	18,833	555
2018	1,10,855	-6,547	48,684	-12,283	23,483	-2,432	28,207	-6,044	24,326	-5,247
2019	65,894	862	30,038	-9,975	15,610	434	19,119	-5,547	20,332	-2,947
2020	51,871	14,488	27,219	336	21,577	546	14,320	-2,957	17,303	-2,898
Correlation	-0.78274 -0.85311		-0.8	3690	-0.8	7711	-0.8626	68		
p-value	0.007	743	0.00	0170	0.00	253	0.00	086	0.0013	1

Relationship between NPA and Profitability of Public Sector Banks:

Figure 5: Relationship between NPA and Profitability of PSBs [Net Profit and Net NPA of PSBs from 2010- 11 to 2019-20] (Source: https://www.rbi.org.in/Scripts/Publications/)

Figure 5 exhibits the correlation of NNPA and Net Profit of five Public Sector Banks (PSBs) selected on the basis of the highest NPA over the 10 year time period. All the five PSBs taken into consideration show a high negative correlation indicating an inverse relationship between NPA and profitability of PSBs. Hence, an increase in NPA would result in a decrease in profitability of banks. Figure 5 also shows the p-value which is calculated by applying linear regression with net profit as the dependent variable. The null hypothesis  $H_0$  that there is no significant impact of NPA on the profitability of banks is rejected for all the PSBs since the p-value is less than the 5 per cent significance level. Therefore, we have sufficient evidence to conclude that there is a significant impact of NPA on the profitability of PSBs.

									Amount (ii	n cr.)
Maga	Axis B	ank	ICICI Bank		IDBI	IDBI Bank Yes Ban		Bank	Bank HDFC Bank	
Year	NPA	Net Profit	NPA	Net Profit	NPA	Net Profit	NPA	Net Profit	NPA	Net Profit
2011	1,187	3,388	2,407	5,151	1,678	1,650	9	727	296	3,926
2012	1,187	4,242	1,861	6,465	2,911	2,032	17	977	352	5,167
2013	704	5,179	2,231	8,325	3,100	1,882	7	1,301	469	6,726
2014	1,025	6,218	3,298	9,810	4,902	1,121	26	1,618	820	8,478
2015	1,317	7,358	6,256	11,175	5,993	873	88	2,005	896	10,216
2016	2,522	8,224	12,963	9,726	14,643	-3,665	284	2,539	1,320	12,296
2017	8,626	3,679	25,217	9,801	25,206	-5,158	1,072	3,330	1,844	14,550
2018	16,592	276	27,824	6,777	28,665	-8,238	1,313	4,225	2,601	17,487
2019	18,351	4,677	13,450	3,363	14,837	-15,116	4,485	1,720	3,215	21,078
2020	20,803	1,627	9,923	7,931	5,439	-12,887	8,624	-16,418	3,542	26,257
Correlation	-0.6588	7112	0.015	03902	-0.507	79140	-0.839	77746	0.98682262	
p-value	0.0382	7196	0.967	10959	0.134	03482	0.002	36500	0.00000	013

#### Relationship between NPA and Profitability of Private Sector Banks:

Figure 6: Relationship between NPA and Profitability of PVBs [Net Profit and Net NPA of PVBs from 2010-11 to 2019-20] (Source: https://www.rbi.org.in/Scripts/Publications/)

Figure 6 exhibits the correlation of NNPA and Net Profit of PVBs. Axis Bank (-0.6589), IDBI Bank (-0.5078), and Yes Bank (-0.8398) show a high negative correlation indicating an inverse relationship between NPA and profitability of these PVBs. However, ICICI Bank (0.015) and HDFC Bank (0.9868) exhibit a positive correlation value, indicating a direct relationship. However, we cannot conclude that an increase in NPA would lead to an increase in profitability of ICICI Bank and HDFC Bank.

/.

Figure 6 also shows the p-value which was calculated by applying linear regression with net profit as the dependent variable. The null hypothesis  $H_0$  that there is no significant impact of NPA on the profitability of

banks is rejected for Axis Bank, Yes Bank, and HDFC Bank, since the p-value is less than the 5 per cent significance level.

Year	GNPA-PUB	GNPA-PVT	NNPA-PUB	NNPA-PVT	ROA-PUB	ROA-PVT
2011	2.4	2.5	1.1	0.6	0.96	1.43
2012	3.3	2.2	1.5	0.5	0.88	1.53
2013	3.6	1.8	2	0.5	0.80	1.63
2014	4.4	1.8	2.6	0.7	0.50	1.65
2015	5	2.1	2.9	0.9	0.46	1.68
2016	9.3	2.8	5.7	1.4	-0.07	1.50
2017	11.7	4.1	6.9	2.2	-0.10	1.30
2018	14.6	4.7	8	2.4	-0.84	1.14
2019	11.6	5.3	4.8	2	-0.65	0.63
2020	10.3	5.5	3.7	1.5	-0.23	0.51

#### Cross-Correlation between NPA and Return on Assets:

Figure 7: NPA and Return on Assets of Public Sector Banks and Private Sector Banks (Source: https://www.rbi.org.in/Scripts/Publications/)

	GNPA-PUB	GNPA-PVT	NNPA-PUB	NNPA-PVT	ROA-PUB	ROA-PVT
GNPA-PUB	1.0000					
GNPA-PVT	0.8500	1.0000				
NNPA-PUB	0.9372	0.6256	1.0000			
NNPA-PVT	0.9796	0.8305	0.9382	1.0000		
ROA-PUB	-0.9729	-0.8521	-0.8748	-0.9385	1.0000	
ROA-PVT	-0.6508	-0.9429	-0.3522	-0.6091	0.6938	1.0000

Figure 8: Cross-Correlation Analysis between NPA and Return on Assets (Source: https://www.rbi.org.in/Scripts/Publications/)

The Data Table shows the Gross Non-Performing Assets (GNPAs), Net Non-Performing Assets (NNPAs) and Return on Assets (ROA) of Public Sector Banks (PSBs), and Private Sector Banks (PVBs).

Figure 8 shows the cross-correlation analysis between NPA and Return on Assets of PSBs and PVBs, derived from the above data table. It demonstrates a high positive correlation between GNPA and NNPA of both PSBs and PVBs with each other.

#### **MAJOR FINDINGS**

The level of GNPA and NNPA of Public Sector Banks increases steadily year-over-year from 2010-11 to 2017-18 and thereafter declines. However, GNPA and NNPA for Private Sector Banks increase steadily throughout. Public Sector Banks record higher NPAs than Private Sector Banks and Foreign Sector Banks. They dominate the overall calculation of NPA in the banking sector. A linear increasing trend is observed in the overall NPA levels over the 10-year period from 2010-11 to 2019-20. It is observed that there is an inverse relationship between NPA and the profitability of Public Sector Banks. There is an inverse relationship between NPA and the profitability of Private Sector Banks except, in the case of ICICI Bank and HDFC Bank. However, a positive correlation does not signify that an increase in NPA would lead to an increase in profitability of these two banks. There is a significant impact of NPA on Axis Bank, Yes Bank, and HDFC Bank, but an insignificant impact on ICICI Bank and IDBI Bank. Certainly, the problem of NPA is more in Public Sector Banks than Private Sector Banks. It is observed that GNPA has a positive relationship with NNPA, whereas, it has a negative relationship with return on assets of Public and Private Sector Banks, indicating that an increase in GNPA or NNPA will result in decrease in return on assets.

#### LIMITATION OF THE STUDY

The research is conducted for a period of 10 years from 2011-2020. The research considers only selected public and private sector banks based on the highest NPAs, neglecting co-operative banks, NBFCs, and other types of banks for avoiding complexity. This might present a skewed picture.

#### RECOMMENDATIONS

A more stringent policy should be formulated for credit appraisal and monitoring and for following the due process before giving credit. The loan accounts should be reviewed and followed up at regular intervals. Banks may resort to one-time settlement offers or compromises to minimize bad debts. The Insolvency and Bankruptcy Code, 2016 and SARFAESI Act, 2002 should be applied for managing NPAs. Banks may resort to transferring NPAs at a discount to Bad Banks/Asset Reconstruction Companies/Asset Management Companies. This will, in turn, improve banks' profitability and clear off bad debts. The books with reduced stressed assets will look more attractive to investors and help the banks bring in more investment in the future.

#### **CONCLUDING REMARKS**

Gradually, the banking industry has flourished manifold along with the complications associated with it. Non-Performing Assets (NPAs), to name one, have hindered growth and development for a long time. The banks need to be proactive and move forward in recovering the NPAs efficiently. The banks should take necessary actions and steps to neutralize the effects of NPAs on their profitability, performance and improve the situation to induce an inflow of investments. For an indepth study and analysis of how deep-rooted the entire NPA conundrum is, macroeconomic factors can also be taken into consideration.

#### REFERENCES

- Aisac, N.M., Mathew, H.E., Cherian, S. and Thangjam, R. (2018). The rising Level of NPAs and its impact on GDP of India, *Journal of Emerging Technologies and Innovative Research*, Vol. 5, Issue No. 11, ISSN: 2349-5162.
- 2. Arasu, B., Sridevi, P., Nageswari, P., and Ramya, R. (2019). A Study on Analysis of Non - Performing Assets and its Impact on Profitability, *International Journal of Scientific Research in Multidisciplinary Studies*, Vol. 5, Issue No. 6, pp. 01-10.
- 3. Bittu, S., and Dwivedi, A. (2012). Determinants of credit risk in Indian banking sector: some panel results, *Int. J. Business Continuity and Risk Management*, Vol. 3, No. 2, pp. 178-184.
- 4. Chavan, P., and Gambacorta, L., (2016). Bank Lending and Loan Quality: The Case of India, *Department of Economic and Policy Research*.
- 5. Kamra, S., and Kamra, D. (2013). A Comparative Analysis of Non-Performing Assets (NPAs) of Selected Commercial Banks in India., *Opinion: International Journal of Management*, Vol. 3, Issue No. 1, pp: 68-80.
- Kandela, R. (2019). Bad Loans of Public Sector Banks in India: A Panel Data Study, *Emerging Economy Studies*, *International Management Institute*, Vol. 5, Issue No. 1, pp. 22–30.
- Navaneethakrishnasamy, R., Sharmila Devi, M., Mathivannan, S., (2017). Position of Non- Performing Assets in IDBI Bank, International Conference on Recent Trends in Engineering Science, ISBN: 978-93-86171-18-4, pp. 466-472.
- 8. Tejashwini. C. and Ramani. (2019). A comparative study on NPAs and its effect on financial performance of Public and Private Sector Banks, *International Journal of Research in Engineering, Science and Management*, Vol. 2, Issue No. 12, ISSN: 2581-5792.
- 9. Vikram, SK., Gayathri, G. (2018). Analysis of Non-Performing Assets, *International Journal of Pure and Applied Mathematics*, Vol. 118, Issue No. 20, pp. 4537-4540.
- 10. Wadhwa, R., Ramaswamy, K. (2020). Impact of NPA on Profitability of Banks, International Journal of Engineering Technology and Management Science, Vol. 7, Issue No. 3, pp. 01-07.

#### ASCENT





The tea industry plays a key role in earning foreign exchange and contributes a significant share to India's Gross Domestic Product.

# Tea Industry in India -

Study on Goodricke, Gillanders Arbuthnot and Company Limited, McLeod Russel, Jayshree Tea and Industries Limited and Bengal Tea and Fabrics Limited

Dr. Tuhina Manna Assistant Professor Department of Commerce (Morning)

Yashish Doshi Department of Commerce (Morning)

### ABSTRACT

The tea industry plays a very important role in the national economy. India is one of the largest producers of tea in the world. Tea is indigenous to the northern and eastern parts of India, but the tea industry has grown and expanded over the past few years, making India one of the largest producers and growers of tea in the world. China is the biggest competitor of India followed by Sri Lanka, Indonesia, and Kenya. There is an overall decline in the profitability of the tea industry in India due to the constant increase in employee cost in the last few years, making it a loss-making industry or a nonprofitable industry. There is no motivation for new entrants to enter into the tea industry because of the low profitability. The tea industry is under intense pressure and needs all sorts of support from the Government of India.

**KEYWORDS:** Largest Producer, Non-Profitable Industry, Intense Pressure.

#### INTRODUCTION

Tea is a staple beverage in India. The Indian tea industry is about 172 years old. Tea is indigenous to the northern and eastern parts of India, but the tea industry has developed and flourished over the previous few years, making India one of the largest producers and growers of tea in the world. The tea industry plays a very crucial role in the national economy. In 1823, tea plants were discovered by Robert Bruce, growing wild in upper Brahmaputra Valley. India has been one of the largest growers and producers of tea in the world, but currently, China is the largest producer of tea due to increased land availability.

Tea-producing states in India are as follows: West Bengal, Assam, Kerala, Tamil Nadu, Tripura, Arunachal Pradesh, Himachal Pradesh, Karnataka, Nagaland, Mizoram, and Manipur (see Figure 1).

A wide variety of tea is produced in India; from CTC tea and green tea to the aromatic Darjeeling tea and the strong Assamese tea. The tea industry plays a key role in earning foreign exchange and contributes a significant share to India's Gross Domestic Product (GDP). People of India take a lot of pride in their tea industry. Some of the leaders of the tea industry in India are

as follows: -

- 1. Gillanders Arbuthnot and Company Limited
- 2. Goodricke Group Limited
- 3. Jayshree Tea and Industries Limited
- 4. McLeod Russel India Limited
- 5. Bengal Tea and Fabric Limited
- 6. Warren Tea
- 7. James Warren Tea Limited

- 8. Joonktollee Tea and Industries Limited
- 9. Dhunseri Tea

The objectives of this study are as follows:

- 1. Understanding the reasons behind the decline in the profitability of the tea industry in India in the past few years.
- 2. Understanding the reason behind increasing interest in the sale of tea estates.
- 3. Studying the future prospects of the new entrants in the tea industry of India and the position of the existing players in the market.
- 4. Understanding the issues faced by the different stakeholders of the tea industry in India.

#### WHAT IS THE BOARD OF INDIA?

The Tea Board of India is a state agency operated by the Government of India (see Figure 2). It has been established for the promotion of harvesting, processing, and facilitation of domestic trade as well as the export



Figure 2

of tea from India to other countries. It is headquartered in Kolkata. The Tea Board of India is headed by Deputy Chairman Mr. Arun Ray, Indian Police Service. The different committees which constitute the above are known as the Executive Committee, the Development Committee, the Labour Welfare Committee and the Export Promotion Committee, and many more.

> It is responsible for assigning certificate numbers to the tea exporters. This certification verifies the tea's origins and the quality of tea, which in turn reduces the number of frauds relating to labelling on rare teas like the ones grown in Darjeeling. This helps the exporter to fetch a reasonable price for their tea.

> Its work is to endorse the diverse production and productivity of tea. It also provides financial support to



Figure 1: Tea Producing States of India



Figure 3: Tea Board of India's Head Office at Kolkata

research institutes. The Tea Board of India coordinates with research institutes of tea, tea trade unions, and government bodies, to ensure that technical support is available to tea traders in the global tea industry. Tea Board of India has its offices located in Kolkata (see Figure 3), London, Moscow and Dubai.

#### DETAILS OF THE COMPANIES UNDER STUDY

#### I. Goodricke Group Limited

Goodricke Limited (see Figure 4) has its headquarters in West Bengal. It is one of the largest tea-producing companies which is based in India. It is associated with



Figure 4

Camellia PLC UK - world's leading tea producer in the private sector. Goodricke Group Limited, Stewart Holl Limited, and Koomber Tea Company Private Limited are a few companies in its fold.

#### **II. Gillanders Arbuthnot and Company Limited**

Gillanders Arbuthnot and Co. Ltd. (GACL) (see Figure 5) was a partnership firm formed in the 19th century. It was started by Mr. F. M.



Gillanders Arbuthnot & Co. Ltd. Figure 5

Gillanders and Mr. G. C. Arbuthnot. On 1st February, 1935, it was incorporated as a limited company. It later became a part of Kothari Group of Companies, a highly reputed group of companies in the 1960s. Assam and

Dooars quality tea is produced by Gillanders in bulk. They have a garden which is located in the foothills of the Himalayas and stretches along the banks of the Brahmaputra producing that magic brew tea.

#### III. McLeod Russel

McLeod Russel India Ltd. is an India-based tea company, which was the world's leading teagrowing company. This company was started in 1869 by two Calcutta-based Englishmen, Captain J.H. Williamson and



Richard Boycott Magor. They named the partnership firm as- Williamson Magor and Company. To serve the requirements of the British Empire from the tea estates in Assam was the main objective of the company.

#### **IV. Jayshree Tea and Industries Limited**

Jayshree Tea and Industries Limited is a conglomerate of the Birla Empire. It was formed on 27th October, 1945. For seven decades they had enticed the wholesale market of tea with their premium quality tea.



Figure 7

Jayshree Tea not only provides a variety of flavours but also entices the palate and introduces it to a different world of taste and cravings. Their objective is to cater to the needs of the customer and keep them satisfied.

### V. Bengal Tea and **Fabrics** Limited

Bengal Tea & Fabrics Limited (BTFL) is an India-



Figure 8

based company that was incorporated on 16th July, 1983. The company comprises different divisions, one of which is the tea division. It also has a textile division. It has three tea estates. The company is listed on BSE Limited having a paid-up share capital of ₹ 90,059,850 which is divided into shares of ₹10/- each. The company's turnover is around ₹1.215 billion, which includes the turnover of the textile division as well.

#### **RESEARCH METHODOLOGY**

The analysis is wholly based on the primary and secondary data collected.

1. Questionnaire was prepared for two levels of respondents: -

(a) Managing director, vice presidents, and managers of the companies.

(b) Audit experts who have been associated with the tea industry for years.

- 2. Performance evaluation statement of various tea industry leaders was prepared and analysis was done.
- 3. Interviews of managing directors of various companies were conducted to discuss and understand the various problems that the tea industry is going through.
- Analysis of the questionnaire was done using tools of graphical presentation like pie charts and bar graphs.

- 5. Analysis of both primary data and secondary data was conducted. Primary data was collected through questionnaires and by interviewing the industry experts. The sources of secondary data are annual reports of the companies under study.
- 6. Also plotted are the profit figures for the last five years to understand the downward trend in the profits of the tea industry.

#### **RESULTS AND INTERPRETATIONS**

From our analysis in Figures 9 and 10, we can see that most of the respondents have upto five years of experience in the tea industry of India. From Figures 11 and 12, we can see that the responses have been received from respondents holding different positions in the industry, from partners, chief executive officers, and chief financial officers to audit executives, article assistants, and assistant managers.

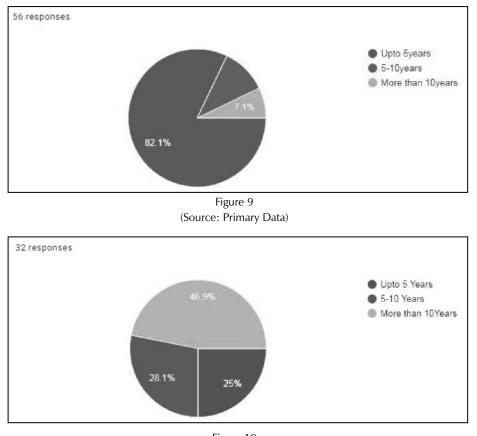
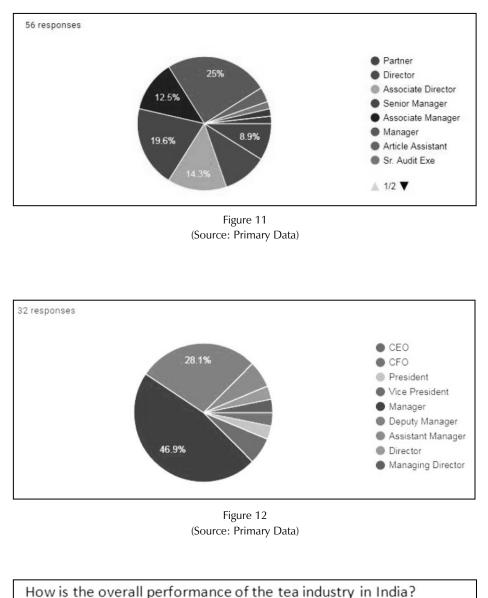
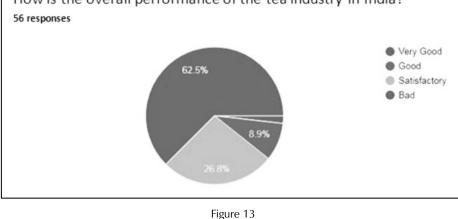


Figure 10 (Source: Primary Data)

ASCENT





(Source: Primary Data)

#### ANALYSIS OF PRIMARY DATA

# (A) How is the overall performance of the tea industry in India?

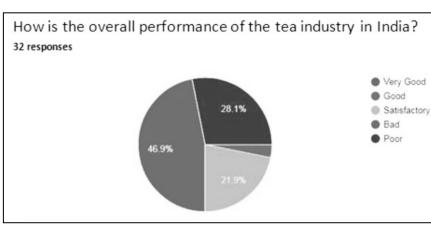
According to Investment Information and Credit Rating Agency of India, the marginal improvement in financial performance witnessed during the financial year 2020 notwithstanding, profit margins for bulk tea players are expected to remain under pressure during the financial year 2020 primarily owing to tepid price movement in the current fiscal.

In Figure 13, the responses of the audit experts are shown. Figure 13 shows that out of the 56 responses, 62.5 per cent (more than 50 per cent) of the population thinks, as per their experience, that the overall performance of the tea industry is bad.

In Figure 14, the responses of the management of the tea industry are shown. Out of 32 responses, 46.9 per cent of the population thinks, as per their experience, that the performance of the overall tea industry is bad, and 28.1 per cent of the population thinks that the performance is poor. We can see that the overall performance is bad and poor, not up to the expectations of the stakeholders. This will not only have an adverse impact on the GDP of the country but also cast a wrong impression on the minds of the new entrants in the industry. It also affects the morale of the employees working in this industry.

In Figure 15, we can see that out of 56 responses, almost 82.1 per cent of the population agrees that the profitability of the tea industry has declined.

From Figure 16, we can observe that almost 96.9





per cent of the population among the management level agrees that the profit of the companies have gone down rapidly in the past few years, making it a non-profitable or a lossmaking industry.

#### (C) What is the reason for the decline in profit in recent years?

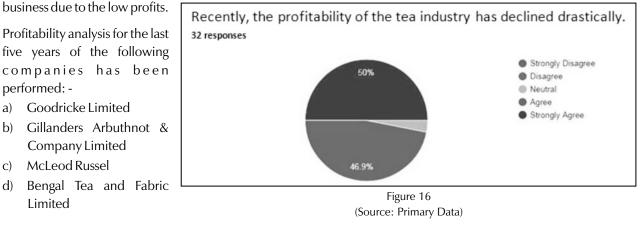
There can be various reasons for the decline in

(Source: Primary Data)

profit of the companies in the tea industry.

#### (B) Recently, the profitability Recently, the profitability of the tea industry has declined drastically. of the tea industry in India 56 responses The profitability of the tea Strongly disagree industry in India has declined 46.4% Disagree Neutral drastically in the past few Agree years, to be specific, since the Strongly agree past two years. Few companies like McLeod 35.7% Russell, which was once the largest tea-producing company in India, are facing

Figure 15 (Source: Primary Data)



companies has been

Goodricke Limited a)

performed: -

has declined drastically.

Gillanders Arbuthnot & b) **Company Limited** 

difficulties to continue their

- McLeod Russel C)
- Bengal Tea and Fabric d) Limited

223

YOUTHINK • 2022 • Vol. XVI

#### 1. Higher Cost of **Production/Sale:**

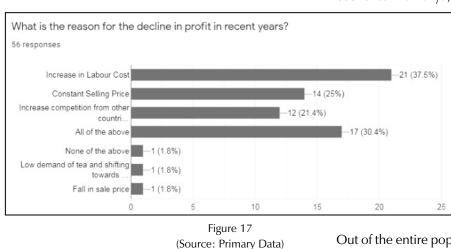
One of the simplest factors that has led to a decline in profit is increasing labour cost. There has been a huge increase in the labour cost because the plantation owner is responsible for the workers as well as family members of the workers who stay with them.

#### 2. Lower/Constant Selling Price:

Reduction in selling price results in increased sales but also reduces

gross profit margins. Companies continuously offer discounts coupons and promotions to attract buyers and hence increase sales, but it is not the case in this industry. There is huge competition from countries like China, Kenya, Sri Lanka, and many more. Hence, they cannot increase the selling price to compensate for the increasing cost of labour.

3. Intense Competition: Competition from new entrants or, increase in competition or rivalry, leads to a decrease in profit margin of the companies.

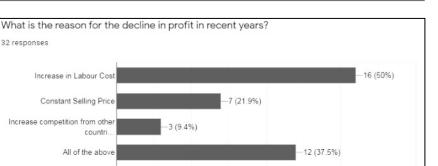


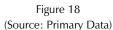
32 responses

None of the above -0 (0%)

0

In Figure 17, we can observe that out of 56 responses, 37.5 per cent think that reason for the decline in profits in recent years is due to increase in labour cost, 25 per cent think that it is due to constant selling prices, and 21.4 per cent of the population thinks that it is due to





From Figure 18, it is clear that 50 per cent of the respondents think that the reduction in profits of the company is due to the increase in labour cost. This would have an adverse impact as plantation owners will start selling off their tea estates, which will lead to unemployment for many workers.

10

#### (D) Which countries are India's competitors in the tea industry?

India's tea industry is struggling to move upwards in the value chain. It has to face stiff competition from countries like Kenya, Sri Lanka, China and many more.

> Green tea is mainly produced by China, while other varieties of tea (orthodox) are mainly produced by Indonesia and Sri Lanka. Due to this fact, a higher volume of export is made by Sri Lanka and Kenya as compared to India.

15

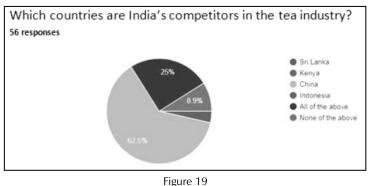
20

From Figure 19, it is evident that China is one the biggest competitors of India in the tea industry, followed by Sri Lanka.

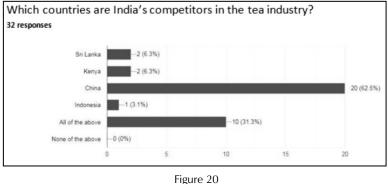
Out of the entire population of 56, 62.5 per cent (more than 50 per cent of the population) voted in favour of China being India's biggest competitor.

In Figure 20, the management and most experienced in the tea industry also state that China is the biggest competitor of India followed by Sri Lanka and Kenya.

increase in competition from other countries.



(Source: Primary Data)



(Source: Primary Data)

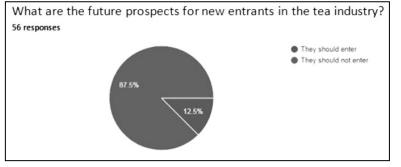


Figure 21 (Source: Primary Data)

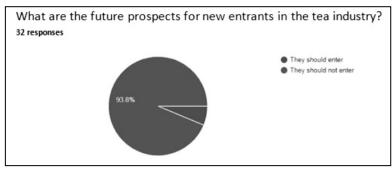


Figure 22 (Source: Primary Data)

# (E) What are the future prospects for new entrants in the tea industry?

There is no motivation for new entrants to invest in an industry that is already making huge losses and with no growth. The tea industry has declined in the recent years making it a non-profitable industry.

From Figures 21 and 22, we can observe that both the audit-experts and management do not feel that it will be feasible for new entrants to enter the industry.

# (F) Recently, it has been observed that plantation owners are selling off their tea estates.

Plantation owners are selling off their tea estates because they have not been able to make profits as per their expectations and are incurring huge losses due to workmen's cost of living. It will lead to unemployment and hence will have an impact on the economy. In Figure 23, we can see that 62.5 per cent (more than 50 per cent) of the population agrees that they have an intention of selling or disposing off their tea estates.

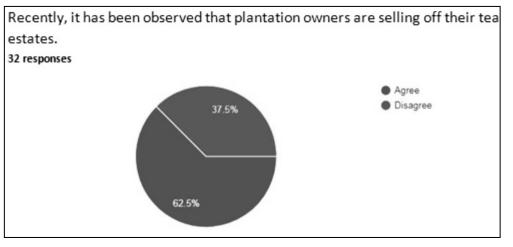


Figure 23 (Source: Primary Data)

Extract of Minutes of McLeod Russel: -

'Approval for sale of Specified Assets of certain tea estates has been received from the shareholders of the company on 9th August, 2018. As per the approval given by the shareholders:

- a) During the year ended 31st March, 2019, the company has sold specified assets of 16 tea estates for ₹ 6.1491 billion. Profit on sale of such assets amounted to ₹ 1.8041 billion is shown in the Statement of Profit and Loss.
- b) During the year, the Committee formed by the Board of the Directors of the Company for the purposes of disposal of assets of tea estates, further identified the assets of four tea estates which were approved to be sold.

Pending such approvals et al. the final binding agreements with proposed buyers a r e a s p e r negotiation. The carrying value of those specified assets of the tea estates as on 31st March, 2019 has been reclassified from PPE (Property,

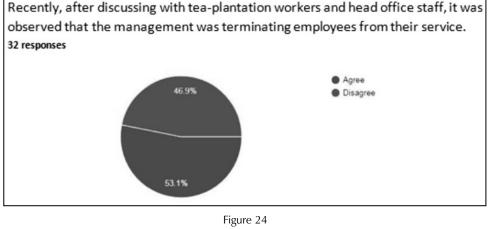
Plant and Equipment) to assets held for sale and the sale consideration agreed is higher than their carrying value.'

(Source: McLeod Russel - Annual Report, 2019)

#### (G) Recently, after discussing with tea plantation workers and head office staff, it was observed that the management was terminating employees from their service.

In Figure 24, 53.1 per cent of the respondents agree that the companies are terminating their employees from the service due to insufficient profits. There will be unemployment in the economy, which will lead to the downfall of the economy as a whole.

The company has entered into Memorandum of Understanding (MoU) with the proposed buyers to sell certain assets of those four tea-estates for ₹ 1.7815 billion, subject to due diligence by the proposed buyers and necessary approvals.



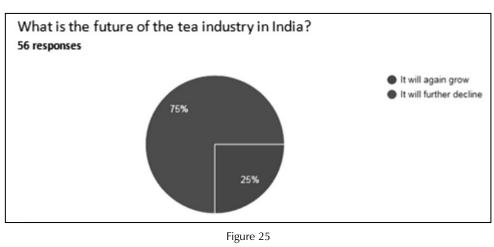
(Source: Primary Data)

#### (H) What is the future of the tea industry in India?

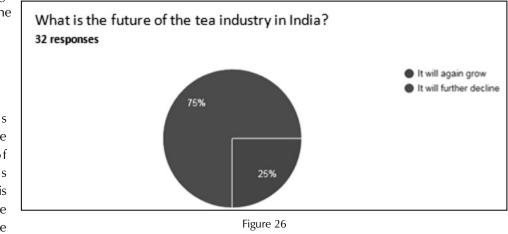
Through Figures 25 and 26, we can see that in both cases 75 per cent of the respondents have a notion that the tea industry of India will further decline. The Government of India should take some immediate steps because this will have a huge impact on the GDP of the Indian economy.

#### ANALYSIS ON SECONDARY DATA

Secondary data is collected from the annual reports of various companies under study. This data is easily available on the website of the companies, National Stock Exchange of India



(Source: Primary Data)



(Source: Primary Data)

Ltd. and BSE Ltd. These reports are unbiased and reflect the true and fair picture of the company.

Profitability Analysis								
	Year Ended (₹In millions)							
Company's Name	31st March, 2020	31st March, 2019	31st March, 2018	31st March, 2017	31st March, 2016			
Goodricke	126.93	256.60	488.55	488.99	28.45			
Gillanders Arbuthnot And Company Limited	(220.62)	67.41	56.81	40.24	145.42			
McLeod Russel	(279.88)	0.02	832.34	49.95	1.88			
Bengal Tea And Fabric Limited	(21.68)	(17.74)	43.31	94.29	23.80			

Table 1 (Source: Annual Report of the Various Companies under Study) Note: -

- (i) The figures have been taken from the annual reports of the respective companies.
- (ii) The profit of Goodricke Limited as on 31st March, 2016 i.e., ₹ 28.45 million is the profit for the fifteenth period i.e., from 1st January, 2015, to 31st March, 2016. It is also to be noted that before that the financial year for the company was from 1st of January to 31st of December.
- (iii) The profit of McLeod Russel as on 31st March, 2019 i.e., ₹0.021 million is after deducting extraordinary income from sale of land.

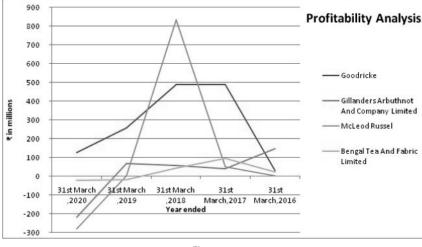


Figure 27

We can see from Figure 27, the upward and downward movement in the profitability of the companies. Goodricke's profit figures are better than the other companies but there is an overall decline in the profit of the company.

#### CONCLUSION

The tea industry in India was once the largest producer of different varieties of tea. However, recently, we can see that China has taken over the market share of India. China is the biggest competitor of India followed by Sri Lanka, Indonesia, and Kenya. Green tea is mainly produced by China, while other orthodox varieties of tea are produced by Sri Lanka and Indonesia.

We can conclude that the tea industry's performance in

the past few years has declined drastically. There has been a fall in the profits of the companies in the tea industry due to an increase in labour cost, making it a loss-making industry or a non-profitable industry. There is no motivation for new entrants to enter into the tea industry because of low profit.

The main reasons for the decline in the profit of the companies as observed from the responses are as follows:

- Increase in labour cost.
- Constant selling price.
  - Increase in competition from neighbouring countries.
  - · Low demand for tea.
  - High dependence on the weather conditions.

The Government of India should take immediate steps because a decline in tea industry would have a great impact on the Indian economy. There will be unemployment in the economy. It was also observed that employees were getting terminated from their service due to insufficient profits, indicating job insecurity among the workers and employees

of the tea industry of India. It is recommended that the Government should provide tax benefits and other forms of benefit so that the industry can grow.

Hence, we conclude that the tea industry is under intense pressure and needs all sorts of support from the Government of India.

#### REFERENCES

The following information has been collected from the following sources: -

- https://en.wikipedia.org/wiki/History\_of\_tea\_in\_India# History
- 2. https://www.indianmirror.com/indian-industries/tea.html





(11

It is safe to say that when working hours stretch long enough to disrupt the work-life balance, productivity is affected negatively.

# Examining the Relation between Productivity and Working Hours in the Education Sector

Prof. Aparajita Hembrom Assistant Professor Department of Commerce (Evening)

Marissa Anne Sum Department of Commerce (Evening)

## ABSTRACT

This paper attempts to study the relation between productivity and working hours in the education sector using information collected from teachers related to their working hours and health status. The study focuses on the



nature and behaviour of input, as stated by teachers, and measures productivity through attributes that are universally accepted to be pre-requirements of a productive mindset. The results indicate that productivity and working hours are related and an integral cause is the satisfaction teachers experience from their work-life balance.

**KEYWORDS:** Productivity, Working Hours, Work-Life Balance.

#### **CONCEPTUAL FRAMEWORK**

In the education sector, there is a great disconnect between input and output (Hanushek and Ettema, 2017). Thus, many cause-effect relationships are yet unclear. If we define output for a teacher as the service they provide to students and other teachers, productivity for a teacher would be the quality and efficiency with which they deliver such services. It is not possible to measure and compare their performance as it is largely subjective. Thus, I intend to study certain attributes that are related to or essential in order to be productive, namely, attentiveness, physical and mental wellbeing, and good work-life balance.

#### BACKGROUND

It is a common notion that input is directly proportional to output. That is, as input increases, output shall increase. Though this statement holds well in many circumstances, the heterogeneous nature of input makes it infeasible to call it a universal truth. Labour as input is responsible for the complexity in the seemingly simple relation between input and output.

For long, this phenomenon was seen through purely economic lenses and was commonly credited to the concept of diminishing marginal returns. But as thinkers and leaders worldwide got a better understanding of these concepts, it emerged as a subject of psychosocial analysis. However, even after so many decades, we are still on the journey to completely unravel the secrets and anomalies of labour as a factor of production.

#### **RESEARCH GAP**

It is clear to see that a diverse subject like this can be approached in many ways. Yet most work done on this topic has only contributed or in most part solely considered, the economic aspect of the relation. At times, the results have been tainted with the flaws of the research method adopted.

#### LITERATURE REVIEW

Fredrick Taylor (1857) had explained that division of work is a useful tactic to improve production because when a worker keeps repeating the same activity, he masters it and is able to do it better with time. In other words, by repeating a job, labourers acquire 'practiceefficiency', a term coined by Vernon (1921). This is why productivity can be expected to increase with the increase in working hours. However, increasing working hours also creates the factor of fatigue which can adversely affect productivity.

Fatigue is a psychophysiological phenomenon (Van Dijk and Swaen, 2003) and previous studies on the link between productivity and working hours in the manufacturing industry have outlined the role of worker fatigue. (Goldmark, 1912; Vernon, 1921).

A study conducted by Ng Chi Man et al., (2014) found that there is no statistically significant correlation between working hours and productivity in the food services and information communication industries in Hong Kong. Another study concluded that though the quantity of output suffered, the quality could potentially improve due to an increase in working hours (Collewet and Sauermann, 2017).

As a majority of the studies on the relation between productivity and working hours report that increase in working hours yield diminishing returns (Crocker and Horst, 1981; Brachet et al., 2012; Pencavel, 2015, Dolton et al., 2016; Collewet and Sauermann, 2017), it seems that fatigue, and factors of the like, outweigh the merits of practice-efficiency.

#### **OBJECTIVES OF STUDY**

The primary purpose of this study is to ascertain if there exists any relation between productivity and working hours in the education sector. If any relation exists between them, the study aims to determine the nature of it. Additionally, attempting to define the role of work-life balance in the scenario is the secondary objective of conducting this study.

#### **RESEARCH METHODOLOGY**

21 candidates from different social backgrounds working in diverse conditions were chosen by purposive sampling. They were given to fill a questionnaire. As attention is an essential attribute of productivity that cannot be effectively measured via a questionnaire, an attempt was made to measure the attention of candidates before and after a normal working day. The Sustained Attention to Response Task (SART 2, which is a widely used continuous performance task that measures sustained attention. The original study was conducted by Robertson et al. (1997) in Neuropsychologia) was selected as the tool. considerable stress levels. When studied with the actual hours worked and days regularly worked, it showed that as actual hours worked increased, the incidence of work-related-stress also increased sharply.

A large chunk of the sample admitted to experiencing mental health problems, such as emotional fatigue, either rarely or sometimes. However, calculations showed a weak yet negative correlation (-0.1) between actual hours worked and this index. Analysis showed that the level of sustained attention of 37.5 per cent of the people decreased after work. This implies that constant working hours tend to cause a fall in the level of attention of people in over of one-third cases. As attention falls with hours worked, productivity is also adversely affected. In the entire sample, only 56 per cent of the candidates feel they have time to participate in skill-enriching activities while all others either don't, or they must compromise on work to make time.

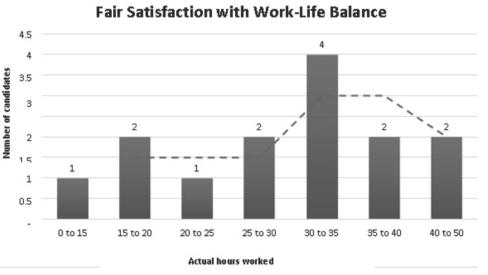
#### WORK-LIFE BALANCE IN THE SCENARIO

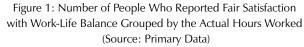
It was observed that as working hours increased, worklife satisfaction first increased then decreased with the maximum number of people satisfied with the balance belonging to the 30 to 35 working hours a week category.

Most candidates answered that at times they faced health problems (physical) that restricted them from doing the kind or amount of work they could do. These responses when studied with the actual hours worked and days regularly worked, showed that as actual hours worked increased, the frequency of physical health problems faced also increased.

DATA ANALYSIS AND FINDINGS

The majority of the candidates reported





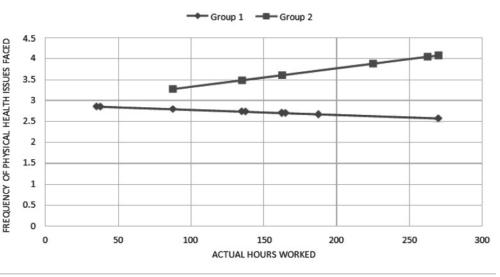


Although most candidates expressed fair satisfaction with the work-life balance, the same candidates also said that given the option, they would choose a 10 per cent increase in salary implying that though they are happy with their working conditions, they believe the salary they receive does not do justice to the amount of work they put in.

To get a closer look, participants were categorized into two groups according to

their satisfaction with the work-life balance. The first group consisted of participants who reported that they were fairly satisfied (four on five) with the work-life balance their work offered. The other group was of people who gave a rating of two or three. The actual hours worked in each group were compared with the frequency of physical health issues faced. It was found that as working hours increased, people who were considerably satisfied with their work-life balance faced fewer physical health issues, whereas it was the opposite for people who reported dissatisfaction with their work-life balance. This goes to show the impact of satisfaction with work-life balance on physical health.

When the rates of error in tests before and after these two groups were studied, it was found that people who were more satisfied with their work had a very slight fall in the level of attention before and after work.



WORK-LIFE BALANCE AND PHYSICAL HEALTH ISSUES

Figure 2: Difference in the Frequency of Physical Health Issues Faced by Persons Who are Fairly Satisfied with Their Work-Life Balance and Persons Who are Dissatisfied with the Same (Source: Primary Data)

	(Fairly satisfied with ork-life balance)		2 (Not satisfied with ork-life balance)
Name	Increase or decrease in mistake percentage frombefore to after	Name	Increase or decrease in mistake percentage frombefore to after
А	+16 per cent	I	-24.50 per cent
В	-16.50 per cent	J	+5 per cent
С	+19.50 per cent	к	+19.50 per cent
D	-30.50 per cent	L	-1.50 per cent
E	-17 per cent	м	+43 per cent
F	-0.50 per cent		
G	+24 per cent		
н	+29 per cent		
Mea	Mean = 3 per cent		n = 8.30 per cent
(Implyi	(Implying that on average, people		g that on an average, people
	to make 3 per cent nistakes after work)		to make 8.3 per cent nistakes after work)

Table 1: Level of Change in Mistake Percentage of Group 1 and Group 2 (Source: Primary Data) Moreover, the correlation coefficient between the increase in mistake percentage from before to after and satisfaction with work-life balance was calculated as - 0.17054, indicating that as satisfaction with work increased, fall in attention level after work decreased. Thus, people who are more satisfied with their work tend to have a better attention level even after work.

At a 10 per cent level of significance, it was found that figures in both tests suggested acceptance of the null hypothesis. Thus, statistically proving that irrespective of the number of hours, participants were more attentive before work compared to after work. However, it should be noted that the difference in the mean of rates of error between the first and second test in Group 1 (13.10 per cent) was larger than the 1 per cent increase in the mean of rates of error from the first test to the second test in Group 2. This means that though the attention level of participants from both groups fell with hours worked, the magnitude of fall was much lower in participants who worked for more than 30 hours a week. Higher working hours have a lesser negative impact on attention level.

## CONCLUSION AND RECOMMENDATIONS

The journey undertaken by this study has yielded many results - some expected while others quite not. Nevertheless, they all point to the fact that there exists a relation between productivity and working hours in the education sector, albeit a complicated one.

The majority of the people in the sample who expressed fair satisfaction with the work-life balance offered by their job worked 30 to 35 hours per week in the education sector. A lesser number of people who worked below or above this level reported such satisfaction.

The hypothesis conducted as part of the study revealed that the level of attention after work is poorer compared to the level before work. However, the same hypothesis testing revealed that higher working hours had a lesser negative impact on attention level. Liberty may be taken to sketch an extension from these results that though attention level falls with hours worked, at some point it starts to improve to a noticeable extent. However, the author is of the view that attention level varying with different levels of working hours has more to do with the satisfaction people experience from their work-life balance than the actual hours worked by them. This was proven by the data analyzed in Table 1. People who were more satisfied with their work-life balance not only showed a lesser fall in the level of attention but also in the frequency of physical health issues faced. Figure 2 represents the difference in the relation between physical health issues and working hours for people who were satisfied with their work-life balance and the people who were not. As people who are dissatisfied with their work-life balance work more and more hours, the frequency of physical health issues faced by them rises steeply. But the opposite is noticed in people who are quite satisfied with their work-life balance; they show a slight and steady fall in the frequency of physical health issues. Therefore, it is clear to see that work-life balance and people's satisfaction with it play an integral role in the relation between productivity and working hours. It is safe to say that when working hours stretch long enough to disrupt the work-life balance, productivity is affected negatively.

Those eager to test the validity of results yielded by this study in areas lying outside the universe of this study are encouraged to enlarge and diversify the sample size and possibly incorporate more comprehensive tests, not only to obtain more in-depth and holistic information but also to verify the information so obtained.

## LIMITATIONS OF THE STUDY

This study and its findings largely depend on the results of productivity measured. The definition, method of measuring, and interpretation thereupon of such productivity is highly subjective which makes the validity and success of the study stand on the needle-tip of the reader's perspective. Many would disagree with this study's definition of a teacher's productivity as it substantially reduces the importance of time that productivity in other sectors is accustomed to.

Measurement of productivity is another aspect where this study has chosen an uncommon path. Productivity has been divided into essential attributes and these attributes have been measured. Satisfaction with worklife balance, physical and mental wellbeing, motivation, and level of stress experienced have been recorded by questioning the subjects which means there are no set standards to hold the answers to. The tool used to measure attention is a well-known, designed, and tested tool but it brings with itself an element of digital complexity.

Another limitation is the considerably small sample size which means the sample distribution is not normal (as it is less than 30). Lastly, lack of direct contact with the participants has left room for misinterpretation of instructions and therefore, there is a possibility of collection of incorrect data that cannot be completely relied upon.

#### REFERENCES

1. Collewet M. and Sauermann J. (2017). Working Hours and Productivity. IZA Discussion Paper No. 10722.

Available at SSRN: https://ssrn.com/abstract=2960531

2. Cui D., Cui N., Nijkamp P., Wei X., Wu D. (2019). Leisure time and labour productivity: a new economic view rooted from a sociological perspective. Economics: The Open Access, Open-Assessment E-Journal, 13 (2019-36): 1–24.

http://dx.doi.org/10.5018/economics-ejournal.ja.2019-36.

3. Eric A., Hanushek E.E. (2017). Defining Productivity in Education: Issues and Illustrations.

- 4. The American Economist.
- 5. Gelade G., Treisman A. (1980). A feature integration theory of attention, Cognitive Psychology, 12, 97-136.
- 6. Li X., Prescott D. (2009) Measuring Productivity in the Service Sector.
- https://www.researchgate.net/publication/268440342\_ Measuring\_Productivity\_in\_the\_Service\_Sector#pf3.
- 8. Man N.C., Ling T.W. (2014). Relationships between Working Hours and Productivity.
- The Case of Food Services and Information Communication Industries in Hong Kong, Advances in Economics and Business 2(7): 281-292, 2014 http://www.hrpub.org DOI: 10.13189/aeb.2014.020704.
- 10. Solow R.M. (1957). Technical change and Aggregate Production Function. The Review of Economics and Statistics, Vol. 39, No. 3. (August, 1957), pp. 312-320.
- 11. Stoet G. (2010). PsyToolkit A software package for programming psychological experiments using Linux. Behaviour Research Methods, 42(4), 1096-1104.
- 12. Stoet G. (2017). PsyToolkit: A novel web-based method for running online questionnaires and reaction-time experiments. Teaching of Psychology, 44(1), 24-31.
- 13. Treisman A. (1977). Focused attention in the perception and retrieval of multidimensional stimuli. Perception and Psychophysics, 9, 40-50.
- 14. Employment Market Analysis and Research, Department of Trade and Industry, (2003) www.dti.gov.uk/er/emar



(11

The insurance sector in India is suffering from problems like low penetration rate, low policy renewal rates, et al. as of now, but on the bright side, it has the potential to grow in the future.



# An Empirical Approach to the Potential Valuation of LIC

Dr. Joyita Banerji Assistant Professor Department of Commerce (Morning)

Ashutosh Jaiswal Department of Commerce (Morning)

### ABSTRACT

The research paper 'An Empirical Approach to the Potential Valuation of LIC' has explored the overall existence, purpose, and other aspects of the insurance sector in India. It tries to explain the background of the Indian insurance sector, how it has evolved post-independence and how the various new regulations have brought a change in this sector post 2000. The performance of this sector depends on the various recent developments and the initiatives taken by the Government. In this study, both these things are

discussed properly. Life Insurance Corporation of India (LIC) is considered as the backbone of the Indian insurance sector, and it is expected that the upcoming Initial Public Offer (IPO) of LIC is going to be a big event for this sector. LIC has been valued using the top-down approach in this study. The study concludes with recommendations for the insurance sector of India.

**KEYWORDS:** Valuation, IPO, Investment.

#### INTRODUCTION

In recent times, the development of the insurance sector and various insurance instruments has impacted the performance of an economy to a great extent. Insurance sectors of various countries across the globe are growing tremendously after the year 1990. India is no exception; the insurance sector of India is growing dynamically (Statista Research Department, 2020). There are a variety of insurance companies operating in the Indian insurance sector. Be it public or private, listed, or unlisted, life insurance or non-life insurance company, India has it all. Insurance instruments provide us with a lot of benefits like protection against the contingent event, financial security, debt coverage, and tax benefits.

On 1st September, 1956 more than 245 companies (both Indian and foreign) were merged and nationalized to form the Life Insurance Corporation of India (LIC). This was done under the LIC Act, 1956. All the 55 companies relating to General Insurance were nationalized to form General Insurance Corporation of India (GIC), in the year 1972, under the General Insurance Business (Nationalization) Act, 1972 (popularly known as the GIBNA Act).

In the year 1999, under the Insurance Regulatory and Development Authority of India (IRDAI) Act, the Insurance Regulatory and Development Authority of India was established to bring about proper supervision of the insurance sector in India. Prior to 2000, the Indian sector was not open to private and foreign players. It only had five companies in 2000. Post these regulations, many new insurance companies were set up in India. As of today, there are 57 insurance companies in India. In the year 2015, the Government increased the foreign investment limit from 26 per cent to 49 per cent. This was a blessing for the insurance industry as more investments (from developed nations) were made in various insurance companies in India.

The importance of LIC has only increased over time since its formation in 1956. It is now considered to be the torchbearer of the Indian insurance sector. The budget has sparked the talks of it being listed on the stock exchange soon which makes conducting the pre-IPO valuation of LIC an important thing to do. Valuation of LIC has been shown using different methods. Valuation requires many inputs, the required rate of return being the most important one. The Capital Asset Pricing Model has been used to find the required rate of return.

#### **OBJECTIVES OF THE STUDY**

This paper aims to propose a valuation of LIC (the juggernaut of the Insurance sector) by using the CAPM approach. In this year's budget, the Government has hinted that LIC will come out with its IPO. It is expected that this will be one of the biggest IPOs that the Indian market has ever seen. IPO pricing is still a controversial area of valuation; there are numerous methods, but the perfect valuation is yet to be empirically proved. In this paper, the CAPM approach has been used to provide a base value of how LIC's IPO may be appraised. This is in no way a conclusive study; its aim is to allow the readers to prospectively evaluate the insurance sector as an investment avenue. LIC has a market share of about 70 per cent in India so conducting its valuation will give the readers an insight into how the insurance sector of India is expected to perform in the financial markets of the near future.

#### LITERATURE REVIEW

• Madan Mohan Dutta in his study conducted in 2020, 'Insurance Sector in India: An Analysis of its Performance' has discussed how health insurance has primarily contributed to the growth of the insurance sector in India. He has also discussed

briefly about the increasing penetration rates and the increasing amount of premium received. (Dutta, 2020)

- Drishti IAS in their study conducted in 2020, 'Insurance Sector in India' has discussed the challenges faced by the insurance sector in India. In their study they have explained the concept of 'Saral Jeevan Bima' and how it can be used to increase the penetration in India. (Dristi IAS, 2020)
- Ashwin Manikandan and MC Govardhan Rangan in their article 'Staying Contrarian has Worked for LIC; IPO Process is the Fast Lane' in 2021, have discussed about LIC touching lives in India when it comes to financial security. They have also discussed how a contrarian approach has helped LIC over the years. (Manikandan and Rangan, 2021)
- Disha Sanghvi in her work 'COVID-19: How has it Impacted Insurance Industry in India', conducted in 2020, has discussed how the uncertainty brought by COVID-19 has pushed people to buy Health Insurance and Term Life Insurance. She has also talked about how the renewal rates of insurance contacts have risen significantly during the pandemic. (Sanghvi, 2020)

# RECENT DEVELOPMENTS IN THE INSURANCE SECTOR

As of now, the insurance companies are entering into strategic partnerships to provide various services. In December 2020, SBI and RailYatri partnered together to offer better travel insurance to domestic bus travelers. ICICI Lombard partnered with Plum to cocreate technologically backed health insurance products for the first time in India. Bajaj Allianz and Muthoot Finance came together to provide insurance on gold jewellery.

In November 2020, The ANANDA or AtmaNirbhar Agents New Business Digital App was launched by LIC. It aimed to aid the agent and brokers to provide insurance policy through a paperless module. HDFC ERGO General Insurance tied up with NSDL Payment Bank Services so that the former can use the latter's wide distribution network to provide its customers with different general insurance products. (IBEF Organization, 2020)

# IMPACT OF COVID-19 ON THE INDIAN INSURANCE SECTOR

COVID-19 has brought both positive and negative impacts on the Indian insurance sector. The positive impact is that due to the outbreak of the pandemic people are now realizing the importance of health and life insurance and thus people are applying for the same. The negative impact is that due to the pandemic people have lost their livelihood and meeting their dayto-day expenses is a tough task these days. In such a scenario, people are refraining from buying health insurance contracts as they have to pay regular premiums for the same. Life insurance primarily focuses on protecting the livelihoods of the people and their future financial security. As a result, life insurance has a direct correlation with the earnings of people, their business performance, and net worth. Since the onset of the pandemic, there has been a rush to increase one's cover. While long-term guarantees will look attractive, insurers will still face constraints as the interest rates plummet; with consumers becoming more cautious about their investments, leading to an unstable stock market. (Chandrashekharan, 2020)

## **BRIEF PROFILE OF LIC**

LIC is considered as the backbone of the Indian insurance sector. LIC has approximately 280 million policies in force, with a total premium collection of 45,000 billion. Since its inception, it has been completely under the ownership and control of the Government of India. In the budget session of FY 2020-21, the Finance Minister of India announced the proposal of minority shares selling of LIC through IPO launch. Given the great size and importance of the corporation, it is expected to be the biggest IPO launch in India yet. Thus, this IPO is expected to change the dynamics of the insurance sector. And because of all this, the valuation of LIC has been included while analyzing the insurance sector.

#### ANALYSIS

For the sake of predicting the IPO value of LIC, the CAPM approach has been used in the study. The Capital Asset Pricing Model or CAPM is a model that describes the relationship between systematic risk and the expected return for assets (particularly stocks). CAPM is a very popular model in the field of finance. It is widely used throughout finance for pricing risky securities and generating the expected returns for various assets, given the risk of those assets and the cost of capital. (French, 2003)

#### WHY CAPM?

The CAPM has been used in this study because it is based on the concept of systematic risk and diversification of portfolios. Since other models based on the Dividend Discount Model (DDM) fail to capture the systematic risk, CAPM is a better choice (ACCA, 2018). Systematic risk is an unpredictable risk that cannot be completely obliterated, and the insurance sector, which is based on the probability of risk, is perhaps more vulnerable to such volatility. The entry of private competitors in the background of the COVID-19 crisis is perhaps a change that can affect the standing of LIC. For this reason, the CAPM best serves the purpose of stock valuation, with its incorporation of market risk. In this study, comparable competitors have been used to estimate the market risk, both similar in terms of market size or administration or a combination of both. This leads to a reasonable estimate of  $\beta$ , which is based on the previous five years information since the Foreign Direct Investment (FDI) limit in insurance was raised to 49 per cent in 2015. The information thus reflects the change in the market already caused due to FDI regulatory changes.

 $Eri = RF + \beta i(ERm - RF)$ 

Where RF = Risk-free rate

ERi = Expected return of investment

(Erm - RF) = Market risk premium

Bi = Beta of the investment

Use: CAPM is used to find a discount rate and then the expected future cash flows of the company are

discounted back (from their value when they are expected to be earned to today's value).

#### **Assumptions:**

- Investors face no unsystematic risk, which means that they have their investments properly diversified.
- Investors are rational and risk averse.
- Unlimited borrowing and lending at a risk-free rate of interest is allowed.
- No transaction costs or taxation costs.

Calculation of Required Rate of Return (using CAPM):

- R<sub>i</sub>:10 years Long Term Government Bond's Yield = 6.180 per cent or 6.2 per cent (approx.) (As of 16th March, 2021 Source: Investing.com)
- 2.  $R_m$ : Return on the Indian equity (Taking Return of Nifty50 as proxy) = 8.22 per cent

(As of 16th March, 2021 Source: Investing.com)

3. Calculation of Beta:

Company's Name	Similarity with LIC	Beta*
GIC	Both are government owned.	0 (Since no debt)
HDFC LIFE	Both are Life Insurance companies.	0.81
LIC Housing Finance	Both are government owned and the same type of management.	0.95
LIC		= (0+0.81+0.95)/3 $= 0.588867$ $= 0.60(approx.)$

Table 1

\*The Time Frame of Beta is Five Years, Monthly Calculated (As on 16th March, 2021, Source: MoneyControl.com)

So,  $Re = [6.2 + (8.2 - 6.2) \times 0.60]$  per cent = 7.4 per cent

Adding 4.1 per cent and 3 per cent, which is Liquidity Risk Premium and Credit Risk premium respectively. These are based on the consensus estimates of the market.

So, Adjusted Required Rate of Return is 14.5 per cent.

## VALUATION OF LIC USING TOP-DOWN APPROACH

In the top-down approach, the expected turnover of the overall insurance sector is estimated using inputs like current size and expected CAGR. Then from that, the turnover of LIC is calculated. From turnover, profit is estimated and from that dividend is estimated. After getting the dividend we apply a single-stage DDM to get the equity value of LIC. (Kotzin, 2005)

Advantage of this approach is that it helps investors to

determine an ideal allocation for a portfolio.

### CONCLUSION

LIC is the foremost company that comes to mind when there is mention of the Indian insurance sector. It is the most important insurance company of India, given its history and market size. It was LIC who laid the foundation of the Indian service sector. In 2021, we are about to see the much-awaited IPO of LIC which is going to change the dynamics of the sector.

The IPO of LIC will be an event of great importance. It will help the company get a huge amount of funds which will be used for better working capital management and for expanding its business overseas. The insurance sector helps the economy as it promotes capital formation in a very efficient manner. When the IPO of LIC rolls out, the capital formation will take place on a greater and more efficient scale as both retail investors and institutional investors will try to invest in the company. The insurance sector in India is suffering from problems like low penetration rate, low policy renewal rates, et al. as of now, but on the bright side, it has the potential to grow

Serial Number	Particulars	Amount (In INR)
А	Insurance Sector Turnover in FY20	7,310 million
В	CAGR of Insurance Sector (Refer to CAPM results of author above)	14 per cent per annum
С	Projected Turnover in FY21 (A X B)	8,334 million
D	Market Share of LIC (Source: Motilal Oswal Financial Services Ltd.and Livemint)	40 per cent
E	Projected Turnover of LIC (C X D)	3,333.4 million
F	Net Profit Margin of LIC (Based On Average Net Profit Margin of The Insurance Sector Source: Business Standard)	8.4 per cent
G	Net Profit of LIC (E X F)	280 million
Н	Dividend Payout (Based on the average payout of listed insurance companies)	25 per cent
I	Projected Dividend for Next Year (G x H)	70 million
J	Present Value of Dividend Using Single Stage DDM	70/(0.145 – 0.14) =1,400 million
К	Number of Shares (Based on reports of Money Control)	100 million shares
L	Issue Price Per Share	14 per share

Table 2

in the future. Post IPO we can expect tougher competition between the top insurance companies of India and this competition will benefit the masses as they will get better insurance services. Ex-ante the privatization decision of the Government seems correct as LIC is in need of funds and over the years we have seen that the performance of government-owned entities is deteriorating. Post the IPO, the privatization decision will be proved right if the IPO is oversubscribed.

#### RECOMMENDATIONS

It is expected that only 10 per cent of the stake will be sold in the IPO and thus the actual control will still lie in the hands of the Government. This can discourage many investors from investing in LIC as the performance of government-controlled entities is not that good in recent years. Under-pricing of LIC IPO will be a great blow to its brand image. The IPO price of LIC can be overpriced due to its strong financials as well as the hype created about it.

LIC may face some problems with its upcoming IPO when it comes to meeting the new norms issued by the Securities Exchange Board of India (SEBI).

#### REFERENCES

- 1. ACCA, (2018). Financial Management Study Guide. London: ACCA.
- 2. Chandrashekharan, (2020). The impact of Covid 19 on the Indian Insurance and Reinsurance sector. (P. P. Ltd., Interviewer) Bengaluru: PwC.
- 3. Dristi IAS, (2020, October 26th). Insurance Sector in India. *Indian Economy*.
- 4. Dutta, M. M. (2020). Health Insurance Sector In India: An analysis of its performance. *Vilakshan: XIMB Journal of Management*, 97-109.
- 5. French, C. W. (2003). The Treynor Capital Asset Pricing Model. *Journal of Investment Management*, pp. 60-72.
- IBEF Organization. (2020, July 2021). Indian Insurance Industry: Overview and Market Development Analysis. Retrieved August 30, 2021, from IBEF: https://www.ibef.org/ industry/insurance-sector-india.aspx
- Kotzin. (2005, 20 April). Top-Down Process; Understanding Business Valuation. Retrieved April 21, 2021, from Kotzin Valuation Partners: https://www.kotzinvaluation.com/ articles/understanding-business-valuation
- 8. Rangan, A. M. (2021, January 11). Staying contrarian has worked for LIC; IPO process is the fast lane. *Economic Times*.
- 9. Sanghvi, D. (2020, June 17). Covid-19: How has it impacted Insurance industry in India. *Mint*.
- 10. Statista Research Department. (2020, July 2021). *Life and Non-Life Insurance penetration in selected countries globally* 2020. Retrieved August 30, 2021, from Statista: https://www.statista.com/statistics/381174/insurancepenetration-in-selected-countries-worldwide/





If customized and widely used, bicycles can solve a majority of small-distance travel problems.



# India under Pandemic: A Study on Factors Influencing Purchasing Decisions of Bicycles

Dr. Arijit Ghosh Assistant Professor Department of Commerce (Morning)

Harsh Prakash Nahata Department of Commerce (Morning)

## ABSTRACT

In today's world, people widely use vehicles requiring petrol, diesel or electricity. At present, bicycles are largely used for recreation, sport and transportation. In places where there are few automobiles, bicycle acts as an important mode for moving people and goods. Amidst pandemic COVID-19, maintaining social distancing and a healthy lifestyle is very essential. Bicycle fits in satisfying these requirements. In this research study, we aim to find out the various factors that have an impact on the purchasing decisions of bicycle during the pandemic. It explores the responses to understand the

behavioural pattern and their outlook towards this ecofriendly mode of transport. The study is a crosssectional study to identify which factors influence bicycle purchase decision during the pandemic. A pilot study was conducted and subsequently a final purposive sampling of 400 respondents was done through a structured questionnaire within India and the respondents were mainly who have purchased and used a bicycle. Reliability analysis and subsequently factor analysis has been applied. Four factors 'Health and Entertainment', 'Convenience, Environment and Pocket friendliness', 'Inconvenience and Security' and 'Infrastructure and Safety' have been identified. It is observed that the present pandemic-stricken environment is favourable for promoting bicycle as it ensures social distancing and healthy lifestyles. The bicycle market is expected to grow at a faster rate in coming years.

**KEYWORDS:** Pandemic, Purchase Decision, Eco-Friendly, Reliability Analysis, Factor Analysis.

#### INTRODUCTION

In the current scenario, vehicles requiring petrol and diesel are widely used by people. However, in the present times, the demand for electric vehicles is also increasing. A majority of today's cars and bikes operate with the help of fossil fuels and cause huge damage to the environment. Gases emitted by these vehicles are also a threat to the environment. Moreover, the prices of petrol and diesel keep on fluctuating, which causes problems to the middle-class people. Besides, the repairing cost of these vehicles is also high.

Electric vehicles, have fewer disadvantages as compared to those which require diesel or petrol. However, despite these vehicles using electricity to run, it is leading to people becoming less physically active.

Bicycles, if customized and widely used, can solve a majority of small-distance travel problems. Presently, bicycles are widely used for recreation, transportation and as a sport. Bicycles act as an important mode of transport for both people and commodities, in places where there are few automobiles. Moreover, maintaining social distance and leading a healthy India under Pandemic

lifestyle, amidst the COVID-19 pandemic, is very necessary. Bicycle fits in fulfilling these conditions. It does not require petrol, diesel or electricity to operate. No one can deny that a bicycle, as compared to other vehicles, has certain advantages. It acts as a mode of transport that helps us in combating traffic-related hurdles. Cycling is environment-friendly as it does not emit harmful and toxic gases into the atmosphere. Moreover, one does not need a license to operate it. It can be used at any time of the day and the maintenance costs, parking-related costs and repairing costs are negligible. One can park a lot of bicycles in the same area one requires to park a car. In many developed cities, there is a good cycling infrastructure with separate cycleways. In the long run, purchasing a bicycle is better than getting a car, as it is a cost-effective mode of transportation. Studies have shown that bicycle commuters are more active, healthy, fit, productive and can do more work in less time. Cycling helps reduce stress and anxiety as it helps us inhale more oxygen, making us breathe deeper. Bicycles do not damage the roads as most other vehicles do. Moreover, cycling is animal-friendly. Cycling is also a good source of enjoyment with friends and family. Though it has many advantages, we cannot ignore that it has disadvantages too. People argue that it is an uncomfortable mode of transport because it has a small seat which sometimes causes back pain. Considerably, more labour is required to ride a bicycle and bad weather may demotivate cycling. Bicycles are not good for long-distance travel and it is also argued that cycling is not safe in hilly regions.

Nowadays, these vehicles are being improved and modified with more rider-friendly features being added in the modern bicycle, which helps in minimizing the disadvantages and hurdles people face while cycling.

Inspired by bikes and cars, today's cycles also have gears in them. A geared bicycle allows one to make multiple combinations of gears. So, if one wishes to use a bicycle in a hilly region, one can apply lower gears to pedal faster, which gives comfort to the legs. Geared cycles help maintain the rate at one pedal per minute. One more advantage of using a geared cycle is that one can go for long-distance, adventurous rides without feeling tired and exhausted. Another modification made in cycles is the availability of a variety of frames. Earlier, frames made only of steel were available, but now, carbon, aluminium and titanium frames are also available. Steel frames are comparatively heavier and make it uncomfortable for the rider to ride. Aluminium frames, however, are relatively light, stiff and affordable. These frames absorb road buzz better and make the rider feel comfortable. Carbon frames do the same job but are slightly costlier than the aluminium ones. The feature of disc brakes is also included in cycles to make them more attractive and to motivate people to use them. Disc brakes give better braking power to cycles so that even wet roads, in rainy seasons, do not act as a hurdle to braking properly. Disc brakes reduce the load on muscles and give faster, speedier and longer rides.

#### SCOPE OF THE STUDY

In this research study, we aim to find out the various factors that have an impact on the purchasing decisions regarding bicycles, during the pandemic. This study analyzes the responses to apprehend the behavioural pattern of people and their views towards this sustainable mode of transport.

#### **OBJECTIVE OF THE STUDY**

- To identify the factors influencing purchasing decisions regarding bicycles.
- To identify the usage pattern of bicycles among different age groups of consumers.

#### LITERATURE REVIEW

Wang et al. (2014) conducted a survey at the University of Auckland to understand the factors influencing the students' usage of bicycles. This led to the identification of five constructs:

- 1. Security
- 2. Lack of separate pathways
- 3. Policies restricting usage of cars
- 4. Planned Public Transportation System
- 5. Adequate facilities for cycling

Ling et al. (2017), in their survey of 806 respondents, compared bicycle users with e-bike users and concluded that conventional bicycle owners use bicycles for exercise and enjoyment. It was also found that e-bike respondents use e-bikes for long-distance trips and that the number of trips per week is higher. One thing common among both e-bike owner respondents and conventional bicycle respondents was that improved health was a vital factor for both forms of cycling.

Scheper (2014) compared the chances of crashes and injuries in e-bicycles with classic bicycles in the Netherlands. It was found that e-bikes are more vulnerable to crashes than classic bikes.

Sausa (2014) found that lack of good cycling infrastructure in Brazil is the strongest barrier in that country and that there is a direct relationship between the city size and barrier strength. The larger the city, the stronger the barrier.

Lindsay and Woodward (2011) conducted a survey, the objective of which was to identify the impact on health and air quality if short trips (lesser than 7 km) are done on bicycles rather than cars. The results of the survey showed that shifting 5 per cent of vehicle kilometres to cycling would decrease vehicle travel by 223 million km each year and would result in the saving of 22 million litres of fuel and a decrease in the emission of greenhouse gases by transport cars by 0.4 per cent.

Campbell and Ryerson (2016) conducted a survey with the objective of exploring the factors that influence the choice of bicycles and e-bikes in China. Survey results showed that a trip on a bicycle is negatively impacted by trip distance, temperature and air quality, whereas ebikes are positively impacted by these factors.

Lungu et al. (2011) conducted research in the Nsanje district of Malawi, regarding whether bicycles can be used as ambulances. It was concluded that important cultural beliefs deterred pregnant women from using bicycles as ambulances. It is believed that the usage of bicycle ambulance attracts evil forces if used for obstetric cases. This is why general medicinal cases use bicycles as ambulances more often as compared to obstetric cases. Schleinitz et al. (2017) compared the speed of three bicycles, namely, Conventional, Pedelecs and S-Pedelecs. Ninety participants took part in this survey. It was revealed that riders using Pedelec bikes are 2 km/hr faster than conventional cyclists. It was also found that conventional bicyclists are 9 km/hr slower than the ones using S-Pedelec. Therefore, the speed of e-bicycles is faster than that of conventional cycles.

Hong et al. (2015) conducted a survey in the United States of America (USA) with the objective of finding out whether safe cycling infrastructure inspires and motivates the usage of bicycles when it rains. This research concluded that high levels of precipitation negatively influences bicycle usage.

Sirosis and Geneidy (2014) concluded that women cycle less to go for work, as compared to men.

Though many researches were conducted on this topic in foreign countries like the USA, China, Netherlands, et al., but any research on bicycles was hardly conducted in India.

#### **RESEARCH METHODOLOGY**

The study is a cross-sectional study to identify the factors that influence bicycle purchase decisions during the pandemic. A pilot study was organized and consequently, a final purposive sampling of 400 respondents was done through a structured questionnaire from 2nd March, 2021 to 15th April, 2021 in India. The respondents were mainly those who have purchased and used a bicycle. The data was then processed through Microsoft Excel and IBM Statistical Package for Social Sciences (SPSS) statistics software.

#### ANALYSIS AND INTERPRETATION OF DATA

Cronbach's Alpha is a measure of internal consistency. Sixteen variables related to the purchase of bicycles were given to the respondents, who were requested to submit their degree of agreement or disagreement with the statements on a 5-point Likert scale. On the basis of the responses, reliability analysis was conducted for checking the overall consistency of the data.

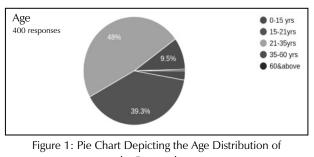
#### **Reliability Statistics**

Cronbach's Alpha	Number of Items
.780	16

Table 1: Reliability Statistics (Source: Primary Data)

A value of 0.7 is considered 'acceptable.' In this research study, the alpha coefficient depicted in Table 1 for sixteen items is 0.780, which means that the items are internally consistent and are acceptable.

In this survey, 48 per cent of the respondents belong to the age group of 21 to 35 years. There were only two respondents who were of the age group of 60 and above. Among 400 respondents, 262 belong to urban areas while the others belong to rural areas. Moreover, 64.8 per cent of the respondents were male and 34 per cent were female. Four respondents belonged to the 'other' category. 42.5 per cent of the respondents were college graduates. Maximum respondents had a monthly income below ₹ 30,000. Only 8 per cent of the respondents had a monthly income above ₹ 100,000. 69.3 per cent of the respondents stated that cycling has a positive impact on their health. 75 per cent of the respondents answered that they prefer the offline mode while purchasing bicycles. Out of 400 respondents, 212 strongly agree that cycling makes us healthy, fit and strong, whereas 15 respondents are neutral in this regard. 34 per cent of the respondents strongly agree that there is no cycleway that is separated from traffic for the entire route. 47 per cent of the respondents agree that good-quality roads encourage cycling. 110 respondents strongly recommend purchasing a bicycle, whereas 179 of them recommend purchasing it.



the Respondents (Source: Primary Data)

The majority of the respondents, as depicted in Figure 1, belong to the age group 21-35 yrs.

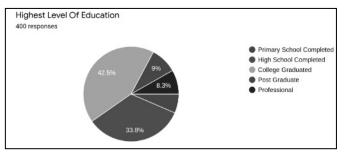


Figure 2: Pie chart Depicting the Education Level of the Respondents (Source: Primary Data)

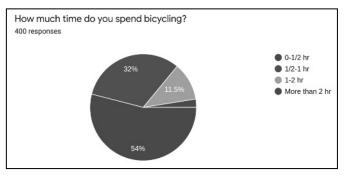


Figure 3: Pie Chart Depicting the Time Spent by the Respondents on Cycling (Source: Primary Data)

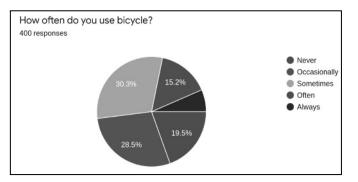


Figure 4: Pie Chart Depicting the Frequency of Bicycle Usage of the Respondents (Source: Primary Data)

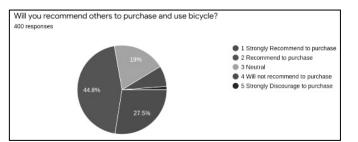


Figure 5: Pie Chart Depicting the Recommendation of the Respondents Regarding the Purchase of a Bicycle (Source: Primary Data)

Among 400 respondents, the maximum number of respondents were college graduates, followed by the respondents who have completed high school. Only a very few respondents are those who have only completed primary school.

Maximum (54 per cent) respondents spend a time period of 0-30 minutes cycling in a day. Very few respondents spend more than two hours a day cycling.

30.3 per cent of the respondents sometimes use bicycles, whereas 19.5 per cent of the respondents have never used a bicycle. 15.2 per cent of the respondents often use bicycles. This usage pattern shows that there is a scope for enhancing the usage of bicycles through incentives and promotion.

44.8 per cent of the respondents recommend others to purchase and use bicycles. 27.5 per cent of the respondents strongly recommend others to purchase bicycles. 19 per cent of the respondents have a neutral view, whereas the rest do not recommend purchasing a bicycle. This clearly shows that the majority of respondents are recommending others to purchase and use a bicycle. Factor analysis is a dimension-reduction technique used to reduce a large number of variables into fewer number of factors. Prior to factor analysis, it is essential to test the adequacy of the sample, for which the Kaiser-Meyer-Olkin (KMO) and Bartlett's test was used.

#### KMO and Bartlett's Test

Kaiser-Meyer-O Sampling Adequ	.825	
Bartlett's Test of Sphericity	Approx. Chi - Square	1806.057
	df	120
	Sig.	.000

Table 2: KMO and Bartlett's Test (Source: Primary Data)

A significant Bartlett's Test of Sphericity and KMO measure of 0.825 depicted in Table 2 implies that factor analysis can be considered appropriate for this data. Factor analysis was conducted to identify the core factors that influence the purchasing decisions regarding bicycles. Table 3 depicts that 57.521 per cent of variability can be explained with the help of the four factors identified through this analysis.

	Rotation Sums of Squared Loadings						
Component	Total	Per Cent of Variance	Cum	ulative Per Cent			
1	3.343	20.894		20.894			
2	2.634	16.465		37.359			
3	1.880	11.749		49.108			
4	1.346	8.413		57.521			

Table 3: Total Variance Explained (Source: Primary Data)

Pattern Matrix Reflecting				
Factor Loading	Component			ent
	1	2	3	4
Cycling makes us healthy,				
fit and strong				.799
Cycling is a good method				
of enjoyment and recreation				
with friends and family				.704
Cycling is environment-				
friendly	.765			
Cycling is cost-effective as				
compared to bikes,				
cars et al.	.688			
Parking is easier in case of				
cycles as compared to bikes,				
cars et al.	.729			
Good-quality roads				
encourage cycling	.661			
Cycling is good for short-				
distance trips	.718			
No license being required				
for bicycle favours its usage	.648			
Increasing cycling will				
reduce road accidents			.606	
There will be an increased				
demand for bicycles				
in future			.802	
There is no cycleway that is				
separated from the traffic				
for the entire route			.489	
Cycling is not safe for girls			.648	
There is a fear of cycles				
being stolen very easily		.733		
Cycling is not as				
comfortable as other modes				
of transport		.821		
Cycling is not safe in hilly				
regions		.820		
There is a fear of accidents				
or falls in case of cycling		.790		

Table 4: Pattern Matrix (Source: Primary Data) After analyzing the pattern matrix depicted in Table 4 and the loading of each variable, four factors have been identified.

Component one has 'Cycling makes us healthy, fit and strong' with a factor loading of 0.799 and 'Cycling is a good method of enjoyment and recreation with friends and family' with a factor loading of 0.704. All these variables relate to health and entertainment; hence this factor has been named, 'Health and Entertainment.'

Component two has 'Cycling is environment-friendly' with a factor loading of 0.765, 'Cycling is cost-effective as compared to bikes, cars et al.' with a factor loading of 0.688, 'Parking is easier in case of cycles as compared to bikes, cars et al.' with factor loading 0.729, 'Good-quality roads encourage cycling' with a factor loading of 0.661, 'Cycling is good for short-distance trips' with a factor loading of 0.718 and 'No license being required for bicycle favours its usage' with a factor loading of 0.648. This factor has been named, 'Convenience, Environment and Pocket friendliness.'

Component three has 'Increasing cycling will reduce road accidents' with a factor loading of 0.606, 'There will be an increased demand for bicycles in future' with a factor loading of 0.802, 'There is no cycleway that is separated from traffic for the entire route' with a factor loading of 0.489 and 'Cycling is not safe for girls' with a factor loading of 0.648. All these variables relate to infrastructure and safety; hence this factor has been named, 'Infrastructure and Safety'.

Component four has 'There is a fear of cycles being stolen very easily' with a factor loading of 0.733, 'Cycling is not as comfortable as other modes of transport' with a factor loading of 0.821, 'Cycling is not safe in hilly regions' with a factor loading of 0.820 and 'There is a fear of accidents or falls in case of cycling' with a factor loading of 0.790. All these variables relate to inconvenience and security; hence this factor has been named, 'Inconvenience and Security.' Thus, the objective of identifying the factors that influence purchasing decisions regarding bicycles has been successfully taken care of.

#### CONCLUSIONS AND RECOMMENDATIONS

The present pandemic-stricken environment is favourable for promoting bicycles as these ensure social

distancing and healthy lifestyles. The bicycle market is expected to grow at an extremely fast rate in the coming years. It can be said that the benefits of using a bicycle outweigh the costs. A lot of people are, however, unaware of bicycles and their benefits. People should be aware of it and should use it. There must be bicycle education programmes that promote the use of bicycles. The government must come forward to motivate and encourage people to use these vehicles. Provisions should be made for adequate bicycle parking facilities. Infrastructure should be improved to motivate more people to use bicycles. The government should formulate and implement policies that encourage the use of bicycles.

#### REFERENCES

- 1. Campbell, A.A., Cherry, C.R., Ryerson, M.S., and Yang,X. (2016). Factors influencing the choice of shared bicycles and shared electricbikes in Beijing. *Transportation research part C*: emerging technologies, 67, 399-414.
- 2. Damant-Sirois, G., Grimsrud, M., and El-Geneidy, A.M. (2014). What's your type: A multidimensional cyclist typology. *Transportation*, *41*(*6*), 1153-1169.
- 3. De Sousa, A.A., Sanches, S.P., and Ferreira, M.A. (2014). Perception of barriers for the use of bicycles. *Procedia -Social and Behavioural Sciences, 160,* 304-313.
- 4. Lindsay, G., Macmillan, A., and Woodward, A. (2011). Moving urban trips from cars to bicycles: impact on health and emissions. *Australian and New Zealand journal of public health*, 35(1), 54-60.
- 5. Ling, Z., Cherry, C.R., MacArthur, J.H., and Weinert, J.X. (2017). Differences of cycling experiences and perceptions between e-bike and bicycle users in the United States. *Sustainability*, 9(9), 1662.
- 6. Lungu, K., Kafosa, V. M., Hussein, J., and Ashwood-Smith, H. (2001). Are bicycles ambulances and community transport plan effective? *Malawi Medical Journal*, *13*(2), 16-18.
- 7. Schepers, J.P., Fishman, E., den Hertog, P., Wolt, K.K., and Schwab, A.L. (2014). The safety of electrically assisted bicycles as compared to classic bicycles. *Accident Analysis & Prevention, 73*, 174-180.
- 8. Schleinitz, K., Petzoldt, T., Franke-Bartholdt, L., Krems, J., and Gehlert, T. (2017). The German Naturalistic Cycling Study–Comparing the cycling speed of riders of different e-bikes and conventional bicycles. *Safety Science*, *92*, 290-297.
- 9. Wang, J.Y., Mirza, L., Cheung, A.K., and Moradi, S. (2014). Understanding factors influencing choices of cyclists and potential cyclists: A case study at the University of Auckland. *Road and Transport Research: a journal of Australian and New Zealand research and practice, 23(4),* 37-51.

```
ASCENT
```





The nationalization of major commercial banks in 1969 and the occurrence of the Green Revolution in 1970 acted as a catalyst towards leveraging the commercial banking system towards extending agricultural credit.



# Performance of Banks in Disbursement and Recovery of Agricultural Credit: A Comparative Analysis

Prof. Shirsendu Roychowdhury Assistant Professor Department of Commerce (Morning)

Dattatreya Dutta Department of Commerce (Morning)

# ABSTRACT

Agricultural credit is the backbone of prosperity and development of the agricultural sector in India. Initially, it was dominated by the informal sector with the Mahajans and Zamindars, but with the passing of the Reserve Bank of India (RBI) Act 1934, the system was slowly institutionalized and dominated by banks. Our paper aims to analyze the performance and consistency of commercial banks, cooperative banks, and Regional Rural Banks (RRBs) in the disbursement and recovery of agricultural credit. We also analyzed the performance of the banks in undertaking the Kisan Credit Card scheme. Finally, the study is concluded by finding out the Real Gross Value Added in agriculture and allied activities from 2012-13 to 2020-21, and suggesting measures to reduce Non-Performing Assets (NPAs) in the agricultural sector.

**KEYWORDS:** Agricultural Credit, Kisan Credit Card Scheme, Real Gross Value Added, Non-Performing Assets, Regional Rural Banks.

#### INTRODUCTION TO THE STUDY

#### **Historical Background**

Agriculture has been the bread and butter of the rural economy for decades. The prominence of agriculture in India as a means of livelihood emerged during the 9,000 BCE in the Indus Valley Civilization. However, over the decades, the accessibility of agricultural credit for the population involved in agriculture has been a nightmare. In the pre-independence era, agricultural credit was granted by moneylenders who used to charge high interests from the farmers at the time of repayment. They employed exploitative practices if the farmers were unable to repay, forcing them to fall into a vicious circle of debt. The farmers have to sell their entire produce, at times, to the moneylenders as distress sale to repay the loan. The need for agricultural credit has been eminent for ages due to the seasonal nature of agriculture, lack of developed warehouses for storage, et al. However, a major development in India's agriculture credit delivery mechanism took place in 1934 with the passing of the RBI Act. The RBI Act empowered the cooperative banks and land development banks to provide credit to agriculture at reasonable rates of interest.

There are two main provisions of the RBI Act looking into the aspect of agriculture credit delivery:

**Section 54:** Enables the RBI to set up an Agricultural Credit Department having an expert staff to advise the Government at different levels regarding agricultural credit delivery by coordinating the functions of the RBI.

**Section 17:** Enables the RBI to empower the cooperative banks and other banks to provide agricultural credit.

#### **Efforts After Independence**

The need for agricultural development and creation of buffer stock of major agricultural grains was felt during 1966, at the time of Indo-China and Indo-Pakistan war, when the country faced acute deficiency of food grains as majority finances were utilized towards the defense expenditure of the country. During this period, the RBI continued to engage the attention of the Government towards the development of agricultural credit. This was evident from the fact that the Agriculture Refinance Commissionwas set up in the year 1963 to provide funds by way of refinancing.

# Era of Nationalization of Banks and Green Revolution

The nationalization of major commercial banks in 1969 and the occurrence of the Green Revolution in 1970 acted as a catalyst towards leveraging the commercial banking system towards extending agricultural credit. The Green Revolution stimulated the growth of the agricultural credit system as the farmers needed funds to purchase High Yielding Variety (HYV) seeds, tractors, and other mechanized machines for tilling of the soil, pumps for irrigation facilities, and many more. The emergence of agriculture as a priority sector in 1969 introduced the concept of decentralized credit planning, where a lead bank was given the responsibility to focus on credit allocation for agricultural lending. In this regard, the lead bank is required to ensure that the credit allocation process gets completed on particular dates. Agriculture Refinance and Development Corporation (ARDC) was set up in the year 1975, which focuses more on the development and promotional role of delivery and allocation of agricultural credit. In addition to ARDC, Regional Rural Banks (RRBs) were constituted in 1976 under the recommendation of the Narasimham Committee to provide financial services to the rural areas of the country.

# Formation of NABARD

National Bank for Agricultural and Rural Development (NABARD) was formed in the year 1982 as the apex Development Financial Institution (DFI). From the beginning, NABARD has played an important role in the delivery of agricultural credit to rural households and, its success is attributed to robust policy planning in the area of agricultural credit.

Rural Infrastructure Development Fund (RIDF) was set up in 1995-96, which provided loans at various levels of the Government to continue with the projects that can enhance development in rural areas. Any shortfall in RIDF is to be funded by the commercial banks. NABARD has been playing a catalyst role in microcredit through the conduit of Self-Help Groups (SHGs).

#### **Kisan Credit Card Scheme**

On the basis of recommendations of the RV Gupta Committee in 1998, Kisan Credit Card (KCC) scheme was introduced, which provided loans to farmers for purchasing agricultural inputs. From 2012, the banks started issuing Electronic Kisan Credit Card (EKCC), and also simplified the scheme, ensuring its wide accessibility by the agricultural community. The interest rate for the Kisan Credit Card scheme is as low as 2 per cent which extends up to an average of 4 per cent. Following are the salient features of the Kisan Credit Card Scheme:

- Loans up to ₹0.3 million were available to the farmers on hypothecation of crops (on the basis of card limit), marketing loans are also available.
- Insurance coverage up to ₹50 million for KCC holders in case of death or permanent disability, ₹25 million as coverage for other risks.
- For marginal and landless farmers, a credit limit of 10 to 50 million is given for purposes relating to post harvested crops, farm expenses, storage expenses, et al.

# **OBJECTIVES OF THE STUDY**

To review the period wise progress of banks towards delivery and recovery of agricultural credit.

To compare the performance and consistency of banks towards facilitating the availability of Kisan Credit Cards (KCC) to the agricultural sector.

# LITERATURE REVIEW

For the purpose of the study the following literatures and research papers were referred to:

# Kaur and Dhaliwal (2018)

The study was conducted to find out the progress of the Kisan Credit Card (KCC) scheme in India for the period 1998-2013 across Commercial Banks, Cooperative Banks, and Regional Rural Banks (RRBs).

# Ahangar, Ganie and Padder (2013)

The research aimed to find out the outreach of financial institutions towards delivery of credit for the people engaged in the agricultural sector which was conducted between for the period 2000-2012 across commercial banks, cooperative banks, and regional rural banks (RRBs).

#### Narayanan (2015)

The study aims to establish a relationship between formal agricultural credit and the agricultural Gross Domestic Product (GDP) in India with the help of statelevel panel data from 1995-96 to 2011-12. The study shows that in spite of the increased credit flow, GDP growth in agriculture is not positive due to low technical efficiency and productivity.

#### Mohan (2004)

The paper studies the success of the agricultural credit mechanism in India along with contentious issues that have crept into the system that have affected its functioning in recent years.

#### **RESEARCH METHODOLOGY**

#### **Research Tools**

The following tools were used to analyze the data in accordance with the objectives of the study:

### Compounded Annual Growth Rate (CAGR) (Average)

It can be calculated using the following steps:

Let us assume original amount to be 'P'

Average growth rate to be 'r'

Number of years to be 'n'

Then, we can say that:

$$\implies P(1+r)^n = P(1+r_1)(1+r_2)(1+r_3)(1+r_4)\dots\dots(1+r_n)$$

 $\Rightarrow (1+r)^n = (1+r_1)(1+r_2)(1+r_3)(1+r_4)\dots\dots(1+r_n)$ 

Taking log on both sides we get,

$$\Rightarrow nlog(1+r) = log log(1+r_1) + log log(1+r_2) + log log(1+r_3) + log log(1+r_4) + \dots + log \oplus 1 + r_n)$$

$$\Rightarrow \log(1+r) = \frac{\log\log(1+r_1) + \log\log(1+r_2) + \log\log(1+r_3) + \log\log(1+r_4) + \dots + \log(1+r_n)}{n}$$

$$\Rightarrow (1+r) = antilog[\frac{(1+r_1) + log \log(1+r_2) + log \log(1+r_3) + log \log(1+r_4) + \dots + log \mathbb{Q}[1+r_n)]}{n}]$$

$$\Rightarrow r = antilog \left[ \frac{(1+r_1) + log \log(1+r_2) + log \log(1+r_3) + log \log(1+r_4) + \dots + log \mathbb{R}[1+r_n) \right]}{n} - 1$$

Compounded Annual Growth Rate (CAGR) helps to analyze the actual returns arising from a project over a number of years. Here, compound interest law is used for calculating the average growth rate because the increase in the growth rate is based on the agricultural credit disbursed in the previous year and not on any fixed agricultural credit disbursement.

In this way the growth of agricultural credit by various banks can be compared to arrive at a meaningful conclusion.

#### Coefficient of Variation

Coefficient of variation (CV) is a relative measure of dispersion which is calculated as

$$CV = rac{Standard Deviation}{Mean} imes 100$$

If CV is high the data is said to be less consistent and more variable, whereas, if the CV is low data is more consistent and less variable.

# Sample and Data

- Direct institutional credit for agriculture and allied activities (total short-term and long-term): The data is collected from the RBI's 'Handbook of statistics on Indian Economy' and report on 'Credit Delivery and Financial Inclusion' from 1995-96 to 2019-20.
- Kisan Credit Card Scheme (state-wise progress): The data is collected from RBI's reports on 'Trend and Progress of Banking in India' and 'Annual Reports' of

NABARD published from 1998-99 to 2019-20. For the purpose of this study, state wise totals have been cumulated to arrive at national totals.

For both the tables, data is collected for scheduled commercial banks, cooperative banks and regional rural banks.

# DATA ANALYSIS AND OBSERVATIONS

Short-Term and Long-Term Credit

	Compounded Growth Rate (Average)	
Type of Banks	Loans Issued	Loans Outstanding
Scheduled Commercial Banks	21.84 per cent	17.70 per cent
Cooperative Banks	10.91 per cent	9.00 per cent
Regional Rural Banks	21.99 per cent	23.11 per cent

Table 1: Compounded Growth Rate of Loans Issued and Loans Outstanding Across Various Categories of Banks (1995-96 to 2019-20) (Source: Values Calculated from RBI's 'Handbook of Statistics on Indian Economy')

According to the results obtained, Regional Rural Banks (21.99 per cent) are ahead of Commercial Banks (21.84 per cent), and Cooperative Banks (10.91 per cent) in terms of growth in the disbursement of short and long-term agricultural credit. The reason behind the enhanced flow of credit by Regional Rural Banks is because of the following reasons:

Dr. Vyas Committee recommended the amalgamation of RRBs in 2001, and the process was initiated in 2005.

Amalgamation and consolidation of RRBs was focused on providing better customer service to needy people by integrating the capacity of many RRBs.

Due to the consolidation process, RRBs were reduced from a peak of 196 as of 31st March, 2004 to 43 as of 1st April, 2020.

However, for loans outstanding also, regional rural

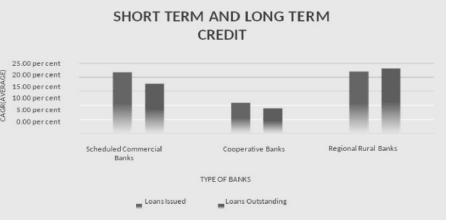


Figure 1: Representation of Compounded Annual Growth Rate (Average) for Loans Issued and Loans Outstanding (1995-96 to 2019-20)

(Source: Values Calculated from RBI's 'Handbook of Statistics on Indian Economy')

banks (23.11 per cent) are ahead of commercial banks (17.70 per cent) and cooperative banks (9 per cent). This highlights the need for the RRBs to develop a robust mechanism for the recovery of agricultural credit.

From the point of view of consistency in the disbursement of agricultural credit, which is captured by the Coefficient of Variation (CV), cooperative banks (70.167) are ahead of commercial banks (116.79) and regional rural banks (483.167). Similarly, from the point of view of consistency in the recovery

of agricultural credit, cooperative banks (63.322) are ahead of commercial banks (100.919) and regional rural banks (147.75).

#### ASCENT

T (D)	Coefficient of Variation (CV)		
Type of Banks	Loans Issued	Loans Outstanding	
Scheduled Commercial Banks	116.79	100.919	
Cooperative Banks	70.167	63.322	
Regional Rural Banks	483.167	147.75	

Table 2: Coefficient of Variation (CV) of Loans Issued and Loans Outstanding Across Various Categories of Banks (1995-96 to 2019-20) (Source: Values Calculated from RBI's 'Handbook of Statistics on Indian Economy')

Consistency in the disbursement and recovery of agricultural credit by cooperative banks shows that their

performance is not subject to seasonal fluctuations. Lower consistency in the disbursement and recovery of agricultural credit by scheduled commercial banks and regional rural banks is attributed to the 'Loan Waiver' schemes of the Government. Nationally, a loan waiver scheme was announced by the Finance Minister in 2008 after which, the

r e c o v e r y a n d d i s b u r s e m e n t o f agricultural credit was severely affected. However, the loan waiver scheme is also applicable for cooperative banks in spite of which their consistency is high. The reason for such an exception is unknown.

In this regard, a study was conducted by the Reserve Bank of India in a few districts of Tamil Nadu, in 2016, after which the Reserve Bank of India came to the conclusion that officials of various cooperative banks made the farmers aware of the disadvantages of loan waiver schemes and assured them that, in case of prompt repayment on maturity date, the interest on loan amount will be waived off, and the amount of interest will be credited to their bank accounts. This initiative by the cooperative banks encouraged the farmers to repay their loans on time.

In terms of growth in the delivery of Kisan Credit Cards (KCC), regional rural banks (52.68 per cent) are ahead of cooperative banks (33.67 per cent) and commercial banks (27.76

Tura of Double	Compounded Annual Growth Rate (Average)		
Type of Banks	Cards Issued	Amount Sanctioned	
Scheduled Commercial Banks	22.54 per cent	36.96 per cent	
Cooperative Bank	33.67 per cent	32.82 per cent	
Regional Rural Banks	52.68 per cent	68.84 per cent	

#### **Kisan Credit Card Scheme**

Table 3: Compounded Annual Growth Rate of Cards Issued and Amounts Sanctioned under the KCC Scheme (1998-99 to 2019-20)

(Source: Values Calculated from RBI's Report on 'Trend and Progress of Banking in India')

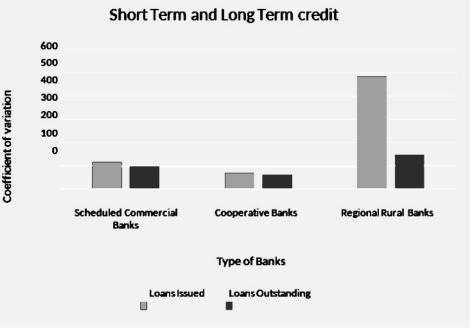


Figure 2: Representation of Coefficient of Variation of Loans Issued and Loans Outstanding (Source: Values Calculated from the RBI's 'Handbook of Statistics on Indian Economy')

per cent). Higher share of RRBs indicates wider coverage of the KCC scheme in rural areas.

Similarly, in terms of the growth of amount sanctioned to Kisan Credit Cards, regional rural banks (68.84 per

cent) are ahead of commercial banks (36.96 per cent) and cooperative banks (32.82 per cent). Increased share of loans by RRBs indicates availability of loans to agriculturists at a concessional interest rate.

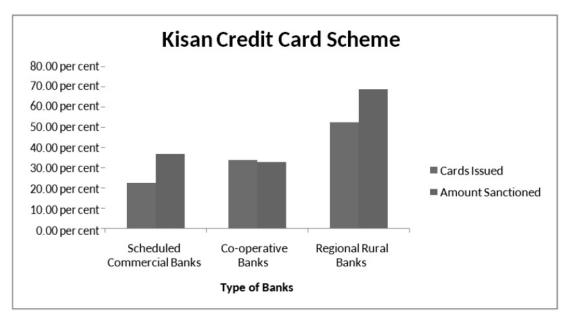


Figure 3: Representation Growth Rate in Cards Issued and Amounts Sanctioned across Various Categories of Bank (Source: Values Calculated from RBI's report on 'Trend and Progress of Banking in India')

	Coefficient of Variation (CV)		
Type of Banks	Cards Issued	Amount Sanctioned	
Scheduled Commercial Banks	100.63	154.13	
Cooperative Banks	133.74	134.05	
Regional Rural Banks	128.85	160.27	

Table 4: Coefficient of Variation in Cards Issued and

Amounts Sanctioned under the KCC Scheme (1998-99 to 2019-20)

(Source: Values Calculated from RBI's Report on 'Trend and Progress of Banking in India')

From the point of view of consistency in the number of cards issued, scheduled commercial banks (100.63) are ahead of regional rural banks (128.85) and cooperative banks (133.74). It shows that Kisan Credit Cards are

issued by commercial banks uniformly throughout the years and is not dependent upon the seasonal nature of agriculture in India.

Similarly, for consistency in the amounts sanctioned to Kisan Credit Cards, cooperative banks (134.05) are ahead of commercial banks (154.13) and RRBs (160.27). Higher consistency by cooperative banks shows that the amount disbursed under the scheme is uniform over a number of years.

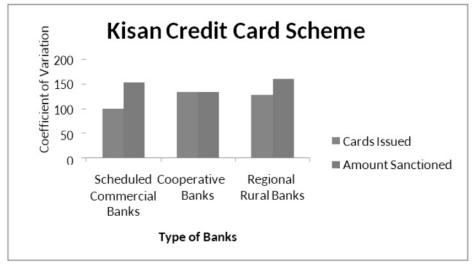


Figure 4: Representation of Coefficient of Variation (CV) of Cards Issued and Amounts Sanctioned under KCC Scheme

(Source: Values Calculated from RBI's Report on 'Trend and Progress of Banking in India')

### Other Descriptive Statistics for the Study Short-Term and Long-Term Credit

	Mean		Standard Deviation	
Type of Bank	Loans Issued	Loans Outstanding	Loans Issued	Loans Outstanding
Scheduled Commercial Bank	2918376	3097822	3408382.93	3126297.44
Cooperative Banks	733074	907871	514379.72	574887.47
Regional Rural Banks	483220	729568	2334763.28	1078002.30

Table 5: Mean and Standard Deviation of Loans Issued and Loans Outstanding by Various Categories of Banks (1995-96 to 2019-20)

(Source: Values Calculated from RBI's 'Handbook of Statistics on Indian Economy')

#### Kisan Credit Card Scheme

	Mean		Standard Deviation	
Type of Banks	Cards Issued	Amount Sanctioned	Cards Issued	Amount Sanctioned
Scheduled Commercial Banks	8.295	1127264.74	8.348	1737427.63
Cooperative Banks	9.216	357327.89	12.326	478987.83
Regional Rural Banks	3.586	300746.84	4.620	482011.15

Table 6: Mean and Standard Deviation of Cards Issued and Amounts Sanctioned under KCC Scheme (1998-99 to 2017-18) (Source: Values Calculated from RBI Reports on 'Trend and Progress of Banking in India')

#### CONCLUSION AND RECOMMENDATIONS

Agriculture plays an important role in the development of the Indian economy and directly contributes to the GDP of the country. If we analyze the data, 2012-13 to 2020-21, for Real Gross Value Added at Basic Prices by agriculture, forestry, fishing, mining, and quarrying (At constant prices, Base Year 2011-12), the compounded growth rate (average) for the period comes to 3.13 per cent, which is facilitated mainly through agricultural credit made available to farmers. debt waiver should be used for research and development and empowerment of farmers.

Banks should not grant loans in haste to meet priority sector targets, and loans should be granted after inspecting Know Your Customer (KYC) documents.

Credit for post harvesting requirements should be provided by the Government, which would reduce the chances of spoilage and wastage, enabling the farmers to repay the loan on time.

Timely review visit should be conducted by the bank

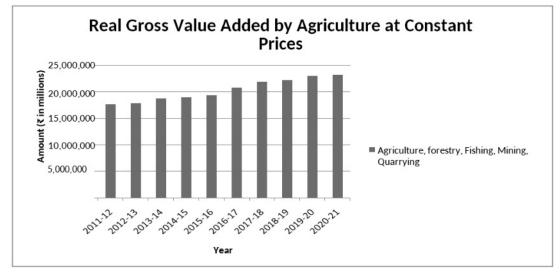


Figure 5: Representation of Real Gross Value Added by Agriculture (Source: Economic Survey 2020-21 Statistical Appendix; Central Statistical Office)

So, the scheduled commercial banks, cooperative banks, regional rural banks play an important role in facilitating the availability of credit to the agricultural population.

However, rising levels of credit dues resulting in creation of Non-Performing Assets (NPAs) are detrimental to the growth of agriculture. According to a report by the State Level Bankers Committee, there has been a 900 per cent increase in NPAs in the agricultural sector since June 2010.

Following steps can be taken to reduce the rising NPAs in agricultural sector:

Debt Waiver schemes should be discouraged by the Government and the funds created for financing the

officials to see the usage of agricultural credit granted to farmers.

#### LIMITATIONS OF THE STUDY

The study is too simplistic in nature as it does not use any sophisticated mathematical models to compare the performance of banks in facilitating the availability of agricultural credit.

It assumes three main financial institutions for credit delivery; however, in reality, many other institutions coexist in order to facilitate the availability of agricultural credit to farmers like local area banks, microfinance institutions, state governments, NonBanking Financial Companies (NBFCs), et al., who play an important role in credit delivery mechanism.

The scope of the paper does not consider any new schemes which were recently introduced for welfare of farmers, like Pradhan Mantri Kisan Samman Nidhi and Pradhan Mantri Kisan SAMPADA Yojana.

The paper does not make any detailed analysis of Non-Performing Assets (NPAs) and recovery mechanism of agricultural credit given to the agricultural population for their daily needs.

#### REFERENCES

Research Papers and Journals

- Ahangar, B.G., Ganie, H.A. & Padder, J.U.P. A study on the institutional credit to agriculture in India, Volume (1) Number 4 (2013) pp. 72-80.
- Kaur, H., Dhaliwal, K., N. Progress of Kisan Credit Card Scheme in India. Amity Journal of Agribusiness (2018) 3(1), (26-36).
- 3. Mohan, R. (2004). Agricultural Credit in India, Status, Issues and Future Agenda. Reserve Bank of India Bulletin.
- 4. Narayanan, S. The Productivity of Agricultural Credit in India, Indira Gandhi Institute of Development Research 2015. Indira Gandhi Institute of Development Research.

- 5. Raj, D.S., Prabhu, E.A. Agricultural Loan Waiver: A Case Study of Tamil Nadu's Scheme, Vol. 39, No. 1&2, 2018. Reserve Bank of India Occasional Papers.
- 6. Tankha, A. Regional Rural Banks and Financial Inclusions: Policy Imperatives (2015). Small Industries Development Bank of India.

Reports

- 1. Report on 'Credit Delivery and Financial Inclusion' published by Reserve Bank of India, 1995-96 to 2019-20.
- 2. Report on 'Handbook of Statistics on Indian Economy' published by Reserve Bank of India, 1995-96 to 2019-20.
- 3. Report on 'Trend and Progress of Banking in India' Reserve Bank of India, 1998-99 to 2019-20.
- 4. Annual Reports, National Bank of Agricultural and Rural Development, 1995-96 to 2019-20.
- 5. Economic Survey 2020-21 Statistical Appendix.

Websites

- 1. https://www.nabard.org
- 2. https://rbi.org.in





[[]

Retail investors are extremely important facets of the participants of the financial market, but they require attention too.

# Cognitive Analysis of the Elusive Retail Investment: An Empirical Study Based in India

Dr. Soma Nath Assistant Professor Department of Commerce (Evening)

Aditi Pareek Department of Commerce (Evening)

#### ABSTRACT

In this study, there has been an identification of the factors influencing the cognitive behaviour of retail investors in the Indian financial market. To identify the factors, the study has used raw data from retail investors

belonging to different demographical, social and income groups from India. The outcome of the study suggests that factors such as a personal analysis, market conditions due to ongoing pandemic and recommendations from financial analysts have a considerable effect on the investors. Investor confidence in the advice of their financial advisor plays an important role in the behaviour of small investors. The result of the study provides companies offering financial services in developing countries such as India with information to take these factors into account when offering products/services or targeting private investors in the Indian stock market through their marketing campaigns. It also provides recommendations to the investors and exchanges which would lead to a better market experience. Lastly, the study has gathered inputs from sample and made findings of investor behaviour during the pandemic. The findings state that investors have started to have more discussions and through these very discussions, the retail investor community is stronger in knowledge and moving towards better investment practices.

**KEYWORDS:** Retail Investors, Behaviour, Markets, Financial Knowledge.

# INTRODUCTION

# **Conceptual Framework**

Capital markets have significantly changed the face of savings worldwide. It has facilitated investments by providing savings with a platform to earn generous returns. These markets have also led to the introduction of psychology, when it came to monetary matters. Humans, being unique social creatures, have different fundamentals concerning investment logic. Logically, it cannot be expected for a brain to reach a decision without incorporating factors of needs, fear, greed and emotion.

In the financial markets, there are two distinct individual groups, namely the retail investor and the institutional investor. The distinction is not only on the basis of the generic opportunities based on the availability of one's resources but also alluding to a dynamic, where greater opportunities of investment are provided to the ones with greater resources as well as a lead over the subordinating counterparts.

Retail investors have been observed to lose, especially over the years, even when markets have performed well. They tend to rely heavily on the empty advice of seemingly professional people or were side-tracked by market charades. Interestingly, due to the fact that there is an interrelationship between the economy and the financial market, it is certainly noted that the marginal growth of retail investors depends on their investment plan and their response to activities of the securities market. The connection linking cognitive behaviour and individual investment is the epitome of determining the factors that lead to investment success.

Investing, for the individual Indian investor, has been nothing short of a puzzle. The causes of it could be related to the lack of expertise and knowledge about finance in the common Indian man. Whereas, there are several new regulations passed to protect the retail investor, doors for him to invest in a larger finance universe are still very restricted.

# **COVID-19 Induced Pandemic**

With the world hitting a sudden break, it became important, almost necessary, for the governments and central banks to take charge of the economy and calm the capital markets. Several regulatory measures were introduced to provide relief to the panic-stricken population. Even though the virus does not seem to disappear any time in the recent future, the Government, Reserve Bank of India (RBI), and Securities and Exchange Board of India (SEBI) strive to make a continuous effort to maintain stability in the market.

# NATURE OF THE PROBLEM

The scope of the current study is not limited to only the behavioural aspects of an investor's portfolio decision. It also focuses on the main grounds, due to which the small retail investors have to perpetually work with sentiments rather than professional analysis and modelled portfolios. The scope of behavioural finance is limited to the question of the absence of rationality and the presence of psychological factors in an investment decision. The world of finance has evolved significantly since the introduction of behavioural finance. The main question that arises now is why individual investors are far from the modern portfolio theories and concepts of allocative efficiency, when the finance world has come so far in its route.

The real scenario present here is that the financial analysis industry mainly targets the wealthy and influential institutional investors. Although, in the developed markets of western countries, retail investors are supplemented with trading recommendations, the same is not very common in the developing markets of Asia. In the Indian context, the market has publicly available trading data, provided by market analysis companies, but it is almost impossible for a retail investor to make use of this information because of the thorough knowledge the task requires. The simple way out for the retail investor is: 'go by the gut'.

With the advent of the COVID-19 pandemic in 2020, the financial markets opened new investment horizons for every participant in the market. Funds were flown into the market and it has evidently become a crucial time to learn about finance and money. In this era of the pandemic, political tension, and deaths, the world seemed to understand that investments are not cups of tea of just the sophisticated investors; rather everyone should be involved in it.

#### LITERATURE REVIEW

- Malcolm Baker and Jeffrey Wurgler (2007) studied the investment sentiment and the challenges it faces, when it comes to two different kinds of stocks; safe and easy to arbitrage stocks, and speculative and difficult to arbitrage stocks. They found that major influence of investor sentiments is on speculative stocks. The most important finding of the study states the possibility of measuring investment sentiments and throws light on the role sentiments play on firms and the stock market.
- **Dimitrios I. Maditinos, et al. (2007)** in their empirical study, argued that individual investors mainly get influenced by mainstream media noise, and seldom base their investment decisions on

techniques of technical and fundamental analysis, contrary to the practices of seasoned professional investors. They also found that investment horizons play a crucial role in determining the techniques to be used for stock analysis. The study is based on Greek investors but forms an essential part of the literature because of its holistic nature.

- Aregbeyen and Mbadiugha (2011) studied the Nigerian investors encompassing the external circumstances which include social, economic, psychological and cultural factors. The study applies a ranking method through which factors are ranked according to their influence on investor behavior. The study found that social factors ranked over other factors of cultural, economic, and psychological influences.
- A. Dutta et al. (2020) argues the presence of behavioural biases in the Indian stock market. The study, factors in the cognitive theories of psychological behaviour of an individual investor. An interesting observation that came out of the study was that deep regret forms a part of the retail investor behaviour due to herding and panic. Despite this, the retail investors indulge into practices of heuristics and anchoring.

#### **OBJECTIVES OF THE STUDY**

#### Primary Objectives of the Study are:

- To determine the sentiments which drive the retail investors.
- To analyze the investment opportunities accessible to retail investors.
- To study the impact of COVID-19 on the investment pattern of these investors.

#### Secondary Objectives:

- To study the reforms brought in to protect the retail investor.
- To analyze the impact of 'dumb money' retail investors on the financial market.

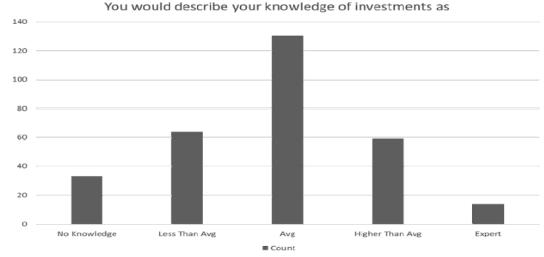
# ANALYSIS

# **Descriptive Analysis**

# Demographic Details of the Respondents

Gender	Frequency	Percentage
Male	206	68.67
Female	94	31.33
Total	300	100
Age	Frequency	Percentage
18-25	140	46.67
51 and above	86	28.67
36-50	45	15
26-35	29	9.67
Total	300	100
Occupation	Frequency	Percentage
Student	114	38
Business	88	29.33
Salaried	85	28.33
Retired	8	2.67
Homemaker	5	1.67
Total	300	100
Annual Income (Family)	Frequency	Percentage
₹ 500,001 to ₹ 1,500,000	112	37.33
Above ₹ 2,500,000	68	22.67
₹ 1,500,001 to ₹ 2,500,000	62	20.67
Up to ₹ 500,000	58	19.33
Total	300	100

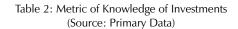
Table 1: Demographic Details (Source: Primary Data)



#### Interpretation of Research Questions

Figure 1: Research Question 1 [Describe Your Knowledge of Investment] (Source: Primary Data)

You Would Describe Your Knowledge of Investments as		
Mean 2.86		
Minimum (No Knowledge)	1	
Maximum (Expert)	5	

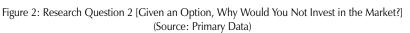


From Figure 1, it is ascertained that most of the individual investors have an average level of knowledge. The mean of 2.86  $\sim$  3, authenticates the findings, indicating an average (3) level of knowledge.

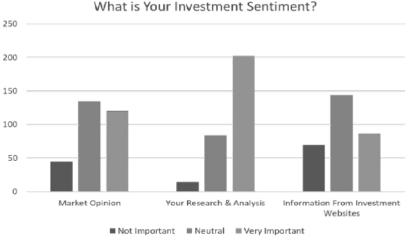
In Figure 2, it is found that the retail investors of India are conscious of their lack of financial knowledge, which is required to make successful investments (34 per cent responded 'very likely', followed by 29 per cent 'extremely likely'). Secondly, the investors are

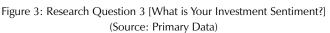


aware of the risk involved and are afraid of it too (34.3 per cent responded 'very likely', followed by 20 per cent 'extremely likely'). The factor of limited trust was also observed to be a significant factor in building a perspective towards the securities market (35.33 per cent responded 'very likely'). Lastly, the remaining factor of lost money in earlier investments is noted to be as an inconsequential

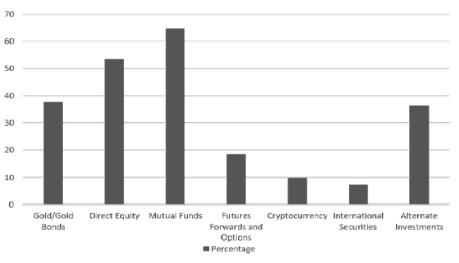


factor (28.33 per cent responded 'not at all').





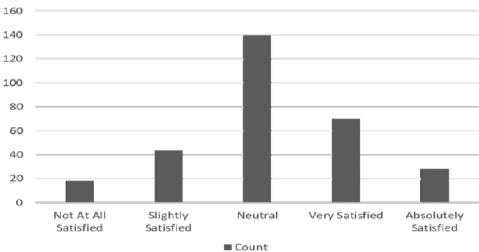
From Figure 3, an interesting observation that comes out is that the retail investors, despite being unprofessional individuals, place their own research and analysis significantly important while taking an investing decision (67.33 per cent responded 'very important'). Market opinion (45 per cent responded 'neutral') and information from investment websites (48 per cent responded 'neutral') were observed to be indifferent factors for building an investment sentiment for the investors.



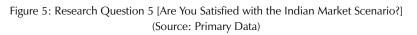
What Kind of Securities Does Your Portfolio Constitute?

Figure 4: Research Question 4 [What Kind of Securities Constitutes Your Portfolio?] (Source: Primary Data)

The most important finding that comes out of this chart is the popularity of mutual funds as an investing instrument (65.33 per cent have mutual funds in their investing portfolio). Followed by direct equity (52.33 per cent) and gold investments (38 per cent). Retail investors move around the extremely mainstream investing instruments and lack participation in other complex securities like derivatives (19.33 per cent), cryptocurrency (10 per cent) and international securities (8.33 per cent).



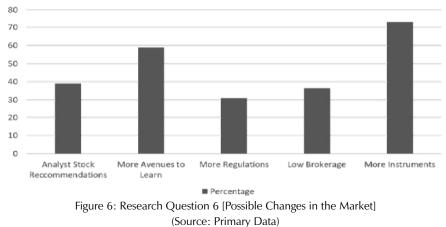
# Are You Satisfied With The Market Scenario?



	Satisfaction Index
Mean	3.15
Minimum (Not Satisfied)	1
Maximum (Absolutely Satisfied)	5

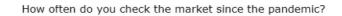
From Figure 5, it is understood that the respondents are neutral towards the market. The mean of  $3.15 \sim 3$  signifies that the investors share a neutral level of satisfaction from the markets.

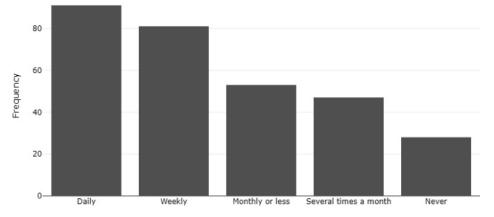
Table 3: Metric of Satisfaction Index (Source: Primary Data)



What are the possible changes you would want in the financial markets as a participant?

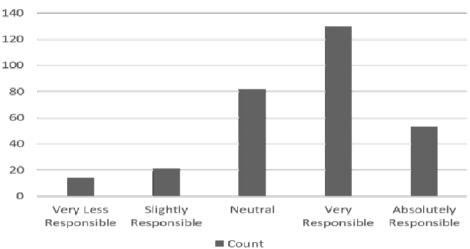
Figure 6 shows the most significant factors for the study: the wants of the individual investors. Retail investors want to know more about the market (60 per cent), try new instruments of investing (73.67 per cent) and want to have the support of the financial advisory industry (40 per cent).





The pandemic has made investors aware of the volatility of the market, hence the majority of respondents show that they check the markets daily (30.33 per cent) or weekly (27 per cent).

Figure 7: Research Question 7 [How Often Do You Check the Market since the Pandemic?] (Source: Primary Data)



# Are you more or less financially responsible since the pandemic?

Figure 8: Research Question 8 [Scale of Financial Responsibility since Pandemic] (Source: Primary Data)

Responsibility Index		
Mean	3.62	
Minimum	1	
Maximum	5	

The pandemic has done an excellent job at making every generation financially responsible. From the graph, it is evident that a majority of the respondents are observed to be more responsible since the pandemic. The mean of  $3.62 \sim 4$  signifies the very responsible measure to be the common characteristic among the respondents.

Table 4: Metric of Responsibility Index (Source: Primary Data)

### Inferential Analysis Factor Analysis

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.69
Bartlett's Test of Sphericity	
Df	6
Significance According Bartlett	0

Table 5: Bartlett's Test and KMO Results (Source: Primary Data) The factors are identified by the corresponding total percentage of the variance. The findings are obtained by scrutinizing the factors listed to the respondent and finding out their dimension and extent to which it becomes an essential part of the investor psychology.

Factors	Percentage of Variance	Accumulated Percentage
Lack of knowledge	32.4	32.4
Fear of risk involved	25.6	58
Lost money in earlier investments	22.82	80.82
Limited trust on market performance	19.18	100

In Table 6, the relevant factors that are brought out by the analysis are namely, lack of knowledge and fear of the risk involved.

Table 6: Given an Option, Why Would You Not Invest in the Market? (Source: Primary Data)

Factors	Percentage of Variance	Accumulate d Percentage
Fear of missing out on a limelight security	28.54	28.54
Majority investing	21.96	50.5
Gut feeling towards a particular security	20.55	71.05
Trust in market	16.86	87.91
Fundamental analysis	12.09	100

Table 7: What Drives Your Investment? (Source: Primary Data) In Table 7, the relevant factors that come out from the analysis are fear of missing out with 28.54 per cent of variance, majority investing with 21.96 per cent of variance and gut feeling towards a particular security with 20.55 per cent of variance. The factor of fear of missing out on a limelight security forms a part of the availability bias, whereas majority investing indicates herding behaviour and gut feeling suggests overconfidence bias.

Factors	Percentage of Variance	Accumulate d Percentage
Put money into safer investments	26.97	26.97
Cryptocurrency is the new deal	25.5	52.47
Short-term trading is important	19.23	71.71
Investments help in financial stability	14.37	86.08
No outlook	13.92	100

From Table 8, the important and relevant factors for the study on COVID-19 can be ascertained. The pandemic has built the mindset of safe investing among the investors (26.97 per cent of total variance) and it has also brought attention to new instruments of cryptocurrency (25.5 per cent of total variance).

Table 8: What Has Been Your Outlook after the Pandemic? (Source: Primary Data)

#### Correlation

Have you ever traded on a security in ab any professional analysis or research bac	On a scale, how accurate have the investments in the absence of a research been?	
Have you ever traded on a security in absence of any professional analysis or research backing it?	1	0.27
On a scale, how accurate have the investments in the absence of a research been?	0.27	1

Table 9: Correlation Matrix of 'Have You Traded on a Security in the Absence of Any Research?' and 'On a Scale, How Accurate Have the Investments in the Absence of a Research been?' (Source: Primary Data)

The matrix shows positive correlation between the two variables, indicating that there were investments made in the absence of any research and they turned out to be somewhat accurate.

# FINDINGS AND OBSERVATIONS

The Indian financial market has evolved over the years after going through several scams, crashes and not to mention, an ongoing pandemic. Anywhere in the world, the regulatory body has been an important anchor in the growth of retail investors, and it is no exception even in the Indian securities market. Retail investors are extremely important facets of the participants of the financial market, but they require attention too. Their exposure is although limited to a few direct investments and intermediate investments through funds, their influence and the protection of interests is something to always look after. Whereas, there is a great income disparity between income groups, retail investments are giving stage to the middleand lower-income group to have a stage on their own. However, the accessible opportunities for generating greater return and having professional assistance remain questionable even today (Anita Krug, 2018).

The current study has found that retail investors have

matured overtime and also because of the sudden hit due to the pandemic. The COVID-19 surprise made commodities market crash in the initial months of its introduction. The Indian financial markets saw a huge volatility in prices of gold because it is one of the safest investments available. People rushed to make investments for stability and income, and were supported in the endeavour by the Reserve Bank of India. RBI made bonds available and made banks facilitate the process of investing. In the due course, even as the retail investor participation increased, the process of making an investment got easier because the pandemic had sparked discussions around financial investments and its implications.

Nevertheless, the coronavirus is here to stay and the pandemic is definitely not over but with the pandemic, the question has shifted from psychological biases and investor behaviour in financial markets, to how each investor in his/her capacity is doing things differently from a financial perspective so that another pandemic could do little harm as compared to the current one.

Finally, it can be said that the retail investors, even though called 'dumb money' due to their unprofessional behaviour, are doing extremely well in the market. The credit for this cannot go to any institution, other than the regulator SEBI. Further, measures to ensure that the market is not dominated by big players who can influence or manipulate prices in a way that negatively affects retail investing is a prerequisite. Especially, there appears to be few cases where SEBI has properly and adequately punished those who indulged in illegal and/or unethical practices. The number has increased in recent years, but the situation is getting better too.

#### CONCLUSION

Indian retail investors have a choice of quite a few investing instruments, yet their favourite instrument have been mutual funds. This makes us go back to their characteristic of being 'small' and 'unprofessional', because mutual funds make them free from the hassle of maintaining a portfolio of a particular security (say stocks or bonds), which is beneficial to them due to their lack of financial knowledge. Secondly, these funds give them exposure to various expensive and well performing stocks at considerably less cost. This brings us to our conclusion that these investors are aware of their lack of financial knowledge and leave out those investments which require some financial understanding. It follows that the retail investors do make investments other than mutual funds, that are not managed by any professional but themselves, hence their cognitive biases play a major role in their investment sentiment.

These biases were identified and lead to the implication of herding, overconfidence and anchoring behaviour present in the retail investment sentiment. Retail investors often chase a particular security, sometimes having a lesser idea of how this could lead to distortion in the price of the security. Herding behaviour is not contemporary but has been a threat since its foundation. Furthermore, overconfidence leads the investor to regret when investments fail or there is a loss, which makes them shy away from great investing opportunities. Lastly, the anchoring behaviour ties the hands of investors and makes them hover around the few, extremely popular investing instruments like foreign equity or derivative options because information on these investments is not readily covered by the media, but have to be explored into.

Subsequently, it has become necessary to discuss the intricacies with regards to the COVID-19 pandemic. The pandemic was an eye-opener for the masses, in every sense. It has proven to be a catalyst for people to indulge further into the financial markets. A large number of youth have flocked the market, despite it being a time of volatility and uncertainty. The most interesting finding led us to conclude that since the pandemic, a greater population has started to worry about finance and has been involving themselves into discussions which help them understand the psychology of finances and money.

Finally, the pandemic has been successful at making investors financially responsible, which is great for them and is a step in the process of the economy healing from the impact of the harsh pandemic. Prudent approaches to investing will be the saving resorts for the retail investors, and as they follow on to become mature, the exchanges and regulators must keep a check on their activity.

### REFERENCES

- 1. Ameet Pandit and Ken Yeoh. The Journal of Developing Areas, Summer 2014, Vol. 48, No. 3 (Summer 2014), pp. 129-148.
- 2. Anita Krug (2018). Investor's Paradox. The Journal of Corporation Law [Vol. 43:2].
- 3. Aregbeyen, Omo, and Stanley Ogochukwu Mbadiugha. 'Factors influencing investors decisions in shares of quoted companies in Nigeria.' *The Social Sciences* 6.3 (2011): 205-212.
- 4. Baker, Malcolm, and Jeffrey Wurgler. 'Investor sentiment and the cross-section of stock returns.' *The Journal of Finance* 61.4 (2006): 1645-1680.
- 5. Barber, B., Lee, Y., Liu, Y., Odean, T., 2009. Just how much do individual investors lose by trading? Review of Financial Studies 22, 609–632.
- 6. Dutta, Abhijit, Madhabendra Sinha, and Padmabati Gahan. 'Perspective of the Behaviour of Retail Investors: An Analysis with Indian Stock Market Data.' *Computational Intelligence in Data Mining*. Springer, Singapore, 2020. 605-616.

- 7. Julijana Angelovska, Zagreb. Review of International Economics and Business, Vol 18 No. 1, pp.51-60 (2015).
- 8. Maditinos, D., Zeljkosevic, S., Theriaous, N.G.: Decision making process by investors and heuristic methods in the study of retail investors in Russian context. J.Behav. Financ.
- 9. Ramiah, V., Xu, X., and Moosa, I. A. (2015). Neoclassical finance, behavioural finance and noise traders: Are view and assessment of the literature. International Review of Financial Analysis, 41, 89-100.
- 10. Sewell, M. (2007). Behavioural finance. University of Cambridge.
- 11. Sultana, Syed Tabassum (2010). An Empirical Study of Indian Individual Investors' Behaviour. Global Journal of Finance, vol 2.
- 12. Vieru, M., Perttunen, J. and Schadewitz, H. (2006). 'How investors trade around interim earnings announcements.' Journal of Business Finance and Accounting.
- 13. Zhu, Ning, 2002. The Local Bias of Individual Investors, Working Paper.



Cashless strategy has the ability to find all significant development of cash including terrorism financing, bribery and all endeavours to bargain monetary straightforwardness.

# Consumer Behaviour Towards a Cashless Economy in India -Special Reference to Kolkata

Dr. Madhu Agnihotri Assistant Professor Department of Commerce (Morning)

Rohit Patwari Department of Commerce (Morning)

#### ABSTRACT

A proficient payment framework is essential for the improvement of a country's economy. One of the greatest yet less talked about changes that the Information Technology transformation has achieved in India and the world is the move towards a cashless economy. This study aims to analyze how cashless transactions have caused changes in the behaviour of consumers, the level of awareness and faith in the electronic system, and the problems

faced by consumers while using such modes of payment.

**KEYWORDS:** Economy, UPI, Virtual Payment Address, Consumer Behaviour, Cashless, E- Wallet.

### INTRODUCTION

A 'cashless economy' alludes to an economy where exchanges are completed without the utilization of physical money. In a credit-only economy, buyers can make installments over the web, at automated distributing machines, monitored retail locations Point of Sale (POS) utilizing portable telephone gadgets, individual computerized aides Personal Digital Assistants (PDAs), smart cards, and other electronic installment frameworks including debit and credit cards.

#### MODES OF CASHLESS TRANSACTIONS

A plethora of cashless payment methods have cropped up and newer technologies are coming up every day such as:

- 1. Payment cards (Credit card, Debit card, Smart card)
- 2. Electronic payment networks (EFT/NEFT, RTGS, ECS)
- 3. Net banking
- 4. Mobile banking
- 5. Mobile payments (Quick Response (QR) Codes, Near Field Communication (NFC), Wireless Application Protocol (WAP))
- 6. Electronic money (e-cash, e-cheque)
- 7. Cryptocurrencies
- 8. Biometric payments

Given that the cost of handling cash is high, it is in the interest of the government, banks, and businesses to push for the change towards a cashless economy. Cash is expensive to print and move about from one location to another. In 2012-2015, RBI incurred an annual cost of 28 billion to just print the currency notes, which was 0.4 per cent of the total currency in circulation. As per the Mastercard Advisors' report (2016), India is at its inception stage in the move towards a cashless economy.

#### NATURE OF THE PROBLEM

Digitalization of the Indian economy is a challenging task. The first and the most basic issue is the lack of proper infrastructure. Cashless modes of transactions have to dramatically expand to touch at least 40 per cent of the whole economy before any meaningful effect can be achieved. Quality and availability of networks at any given time is also a huge prerequisite for the success of digitalization. Communication exists as a major handicap when it comes to semi-urban and rural areas. Another major concern is the risk involved in executing these cashless transactions due to the prevalence of e-fraud. With a low literacy rate, India lags as a developing nation.

# OBJECTIVES

- 1. To examine consumer awareness and usage of cashless transactions.
- 2. To assess the opinion of consumers regarding the benefits and challenges of using cashless transactions.
- 3. To make a comparative study about the comfort level of various groups of people in using cashless modes of payment as opposed to using cash.
- 4. To review the current usage of the various modes of cashless transactions and their suitability in the Indian context.

# LITERATURE REVIEW

Basel Committee (1998) communicated the trouble in appropriately characterizing the electronic cash yet concurred that it mixes innovative and financial attributes.

Jain (2006) thought that e-installments will actually want to check black cash. Exploiting innovation, quick installments, and settlements will guarantee ideal utilization of accessible assets for banks, monetary organizations, business houses, and normal residents of India.

Ajay (2014) thought that electronic installments have major electronic advantages separated from their

accommodation and security. Robotized electronic installments help develop bank stores, in this manner, expanding assets for financial action.

Das (2010) in his article 'Cashless Payment System in India - A Roadmap' contended that cash as a method of an installment is a costly recommendation for the public authority. The country needs to die from a cash-based installment framework towards a credit-only (electronic) framework.

Vincent (2005) in the article 'Credit cards - Modern payment system' provided data about Mastercard working in India and inferred that it is a gift to both the merchants and clients.

Omotunde, Sunday, and John-Dewole (2013) think that a credit-only economy is an economy where exchanges should be possible without essentially conveying cash as a method for the trade of exchange, but instead with the utilization of credit or check card installment for products. research has been used. Primary data has been collected with the help of a questionnaire comprising 15 questions for the consumers. An online survey was carried out using a convenient sampling method with respondents from Kolkata who came from all walks of life and answered a self-constructed questionnaire on demographics, awareness, benefits, and the comfort of using cashless transactions in India.

Sample size: The total number of respondents is 180.

Secondary data collected include those from the Reserve Bank of India on the usage of various modes of cashless transactions, extracts from the Economic Survey of 2014-2015, RBI's vision 2018 document, various other journals, and newspaper articles. The data collected was shown graphically using Figures and interpreted accordingly.

#### ANALYSIS

#### Hypothesis

**RESEARCH METHODOLOGY** 

A total sample of 180 people was collected from Kolkata and their socio-economic variables were compared with their opinions and comfort with respect

Variables	Comfort with using newer technologies for everyday payments by Income		Total	na volue	F-Crisical Value	Remarks			
		Vas	960	Con't Soy					
Annual Income(Rs.)									
Less than 1.00.000		85	5	2		23	0.709	\$2.6	Rajoct HO
Between 1,00,000- 5,00,000		20	10	6		36			
Between 5,00,000-10,00,000		19	5	6		30	0.705		
Above 10.00,000		57	16	2.9		52	]		
Educational Qualification	<u> </u>	1	1	1	<u> </u>		1	1	1
No Formal Education		0	3	c		3		22	Rajoct HO
Primary Education		0	1	8		2	0.667		
Socondary Education		2	8	3		6			
Higher Secondary Education		36	13	6		55			
Bechelor's Degree		51	87	18		86			
Haster's Degree		27	e	6		25			
Doctoral Degree		3	0	1		ê			
Age		1	1	1			1	1	1
Balow 18 years		27	5	s		27	0.35	12.6	Вајаст НО
Between 18-25 years		67	22	27		105			
Batween 25-80 years		16	5	6		27			
Above 80 years		88	6	5		88			

In this research project, both analytical and descriptive

Figure 1: Relationship between the Comfort of Using New Technologies for Everyday Payments and the Socio-economic Variables (Source: Primary Data)

to shifting towards a cashless economy at five per cent significance level.

#### Analysis 1:

H0: There is no significant difference in comfort of using new technologies for everyday payments and the socio-economic variables.

H1: Comfort of using new technologies for everyday payments depends on the socio-economic variables.

It is clear that the critical values of chi-square at a five per cent level of significance are less than the calculated values, so the null hypothesis is rejected. There exists a significant association between age, educational qualification, and annual income of the respondents and their comfort in using cashless transactions for everyday payments. It can also be observed that people in the higher income groups, higher educational qualifications, and the youth are more acceptable to change.

#### Analysis 2:

H0: There is no significant difference of comfort in shifting of spending pattern from cash to cashless and the socio-economic variables.

H1: Comfort in shifting the spending pattern from cash to cashless depends on the socio-economic variables.

It is clear that the critical value of chi-square at five per cent level of significance is less than the calculated values, so the null hypothesis is rejected. There exists a significant association between age, occupation, and annual income of the respondents and their comfort in shifting the spending pattern from cash to cashless modes of transaction. However, majority of the people had a problem in adopting cashless modes of payments and completely giving up cash in a move towards a cashless economy. However, compared to the 21 per cent who were averse to using new technologies, 32 per cent were in favour of giving up cash. This suggests that some people were willing to move towards a cashless

Variables	Comfort in shifting of spending pattern from cash to cashless			Total	IS Asias	F-Critical Value	Remarks	
	Ves	Péo	Can't Say					
Annual Income(Rs.)								
Less than 1,00,000	26	52	14		92		12.6	Reject HO
Between 1.00,000- 5.00,000	11	20	5		36	0.79		
Between 5,00,000- 10,00,000	9	13	8		30	0.75		
Above 10.00.000	21	10	2		23			
Age								
Below 18 years	8	16	3		27		12,5	Reject HO
Between 10-25 years	31	59	15		105	5.89		
Between 25-40 years	10	11	6		27	2000		
Above 40 years		9	5		22			
Occupation								
Student	35	73	15		123		15.5	Rejecs HO
Service	9	10	15		35	1.73		
Business	4	7	5		16			
Homemaker	8	5	2		32			
Other	1	2	3		6			

Figure 2: Relationship between the Comfort in Shifting of the Spending Pattern from Cash to Cashless and the Socio-economic Variables (Source: Primary Data)

#### Consumer Behaviour Towards a Cashless Economy in India

economy but by using common and known cashless modes of payments rather than embracing cutting-edge technology presently.

Note: Figure 3 to Figure 16 contain responses from the respondents.

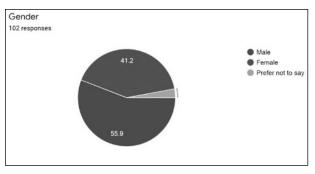


Figure 3: Gender of the Respondents (Source: Primary Data)

#### INTERPRETATION

Figure 3 depicts that 55.9 per cent of the respondents are male, 41.2 per cent are female and 2.9 per cent are other. This data will help us further in the study.

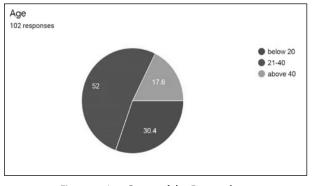


Figure 4: Age Group of the Respondents (Source: Primary Data)

#### INTERPRETATION

Figure 4 shows that there are 30.4 per cent respondents of the age group below 20 and 52 per cent respondents belonging to the age group of 21-40 and 17.6 per cent respondents are above 40.

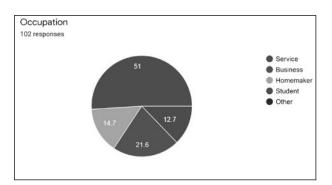


Figure 5: Occupation Group of the Respondents (Source: Primary Data)

#### INTERPRETATION

Figure 5 shows that there are 51 per cent students, 14.7 per cent homemakers, 21.6 per cent businessmen and 12.7 per cent service holders.

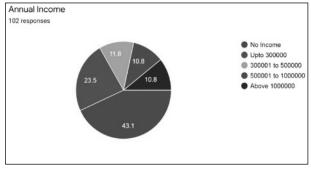


Figure 6: Annual Income of the Respondents (Source: Primary Data)

Note: Figures used in the above analysis are in Rupees ( ${\ensuremath{\overline{\textbf{C}}}}$  ).

#### INTERPRETATION

- Figure 6 shows that there are 43.1 per cent respondents having no income, 23.5 per cent having an income below ₹ 300,000, 11.8 per cent having income between ₹ 300,000 to ₹ 500,000, 10.8 per cent having income between ₹ 500,000 to ₹ 1,000,000 and 10.8 per cent having income more than ₹ 1,000,000.
- This shows that the maximum number of respondents were students having no income.

Consumer Behaviour Towards a Cashless Economy in India

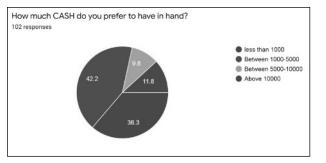


Figure 7: Amount of Cash in Hand Preferred by the Respondents (Source: Primary Data)

Note: Figures used in the above analysis are in Rupees ( $\mathfrak{F}$ ).

# INTERPRETATION

- Figure 7 shows that there are 36.3 per cent respondents prefer to have less than ₹1,000 cash in hand, 42.2 per cent prefer ₹1,000 to ₹5,000 in hand, 9.8 per cent prefer ₹5,000 to ₹10,000 in hand and 11.8 percent prefer to have above ₹10,000 in hand.
- This shows that the maximum number of people want to hold less cash which means that they prefer cashless payments.

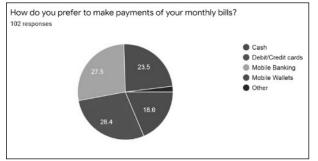
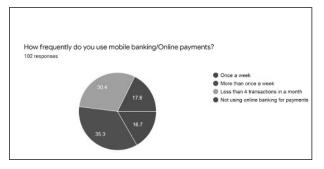


Figure 8: Respondents Preference for Payment of their Monthly Bills (Source: Primary Data)

# INTERPRETATION

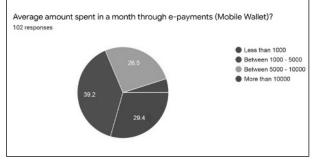
- Figure 8 shows that there are 18.6 per cent of people who pay their monthly bills using cash, 28.4 per cent pay using debit/credit card, 27.5 per cent pay using mobile banking, 23.5 per cent using mobile wallet, and the remaining use other methods.
- This figure shows that fewer people want to pay using cash as they preferred cashless mode of transactions more.

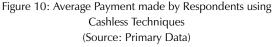




# INTERPRETATION

- Figure 9 shows that 16.7 per cent people use online payment techniques only once a week, 35.3 per cent people use it more than once a week, 30.4 per cent make less than four transactions in a month and 17.6 per cent are not using online payment techniques.
- The above data shows that very few people want to pay without using online techniques and maximum people pay using it more than once a week, which means more than four transactions in a month.



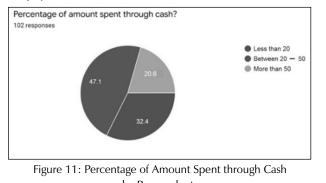


Note: Figures used in the above analysis are in Rupees  $(\overline{\boldsymbol{\tau}}\,).$ 

# INTERPRETATION

Figure 10 shows that 39.2 per cent respondents spend between ₹ 1,000 to 5,000 rupees through cashless methods, 29.4 per cent spend less than ₹ 1,000, 26.5 per cent spend ₹ 5,000 to 10,000 and the rest spend more than ₹ 10,000 monthly.

 This data shows that people spend a reasonable amount of their total spending through cashless mediums, but very few people spend more than ₹ 10,000 monthly via such means implying that people are still conservative regarding online payment.



by Respondents (Source: Primary Data)

#### **INTERPRETATION**

- Figure 11 shows that 32.4 per cent people spend less than 20 per cent of the total expense through cash, 47.1 per cent spend between 20 per cent to 50 per cent through cash and 20.6 per cent people spend more than 50 per cent through cash.
- The above data indicates that people tend to spend less cash and more of their expenses are paid via cashless modes.

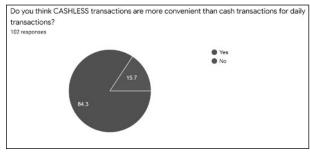
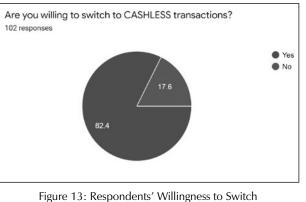
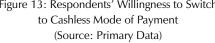


Figure 12: Respondents' Beliefs Regarding Convenience of Cashless Transactions (Source: Primary Data)

#### INTERPRETATION

- Figure 12 shows that 84.3 per cent finds cashless payment more convenient than cash transactions.
- We can conclude from this that maximum people find cashless transactions as a better option for payment.





#### **INTERPRETATION**

- Figure 13 shows that 82.4 per cent of respondents are willing to switch to cashless transactions.
- From the data, we can conclude that most people are wanting to go cashless in the near future. They are liking cashless transactions more than cash payment.

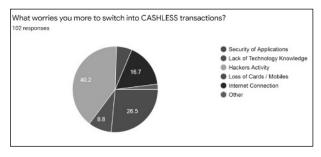


Figure 14: Reasons for not Opting Cashless Mode of Payment (Source: Primary Data)

#### INTERPRETATION

- Figure 14 shows that 26.5 per cent respondents are worried about security of application, 8.8 per cent for lack of technical knowledge, 40.2 per cent for hacker activity, 10 per cent for loss of card/mobiles, 16.7 per cent for internet connection, and remaining for other reasons.
- This shows that there are very few people who are not opting for cashless transaction due to lack of knowledge.
- Most people are worried about loss of their data and other fraudulent activities.

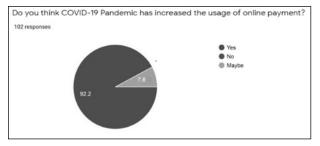


Figure 15: Impact of COVID-19 Pandemic on Cashless Payments (Source: Primary Data)

# INTERPRETATION

- Figure 15 shows that 92.2 per cent people think that due to COVID-19 the use of cashless mode of payment has increased in India.
- This concludes that the pandemic has induced cashless payments, as all of us were inside our homes. Thus, online payment was the only way to make payments.

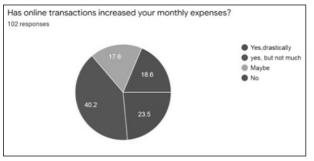


Figure 16: Effect of Cashless Transaction on Monthly Expenses (Source: Primary Data)

# INTERPRETATION

- Figure 16 shows that 23.5 per cent believe that their monthly expenses have increased drastically due to online transactions, 40.2 per cent have accepted that expenses have increased but not much, 17.6 per cent have no idea whether their expenses have increased or not and 18.6 per cent believe that expenses did not increase.
- This shows the negative impact of cashless transactions indicating that it increases the expenses of consumers due to various reasons.

# FINDINGS

- Awareness of credit/debit cards was maximum among the respondents. Online payment services (for example, PayPal) and virtual wallets (for example, Google Wallet), mobile money transfers and mobile banking had substantial awareness, but a trend in the fall of actual use as compared to knowledge of such services was seen. Cryptocurrencies, QR code payments and Nearfield communication (NFC) payments are new technologies that were relatively unknown to most people.
- 2. The initiatives taken by the Government have forced people to use such transactions and some have realized its benefits. 'I used to be only dealing in cash till date but after Prime Minister Modi's announcement two weeks back my customers did not have cash in hand to pay me for essential items. Instead of going for credit, I thought if I switch over to Paytm it will be a far better option for me as well as for my customers,' said a vegetable vendor in Kolkata.
- Summarizing the data from the RBI, it can be seen 3. that the retail electronic installment space in India is overwhelmed by modes like NEFT, Immediate Payment Service (IMPS), and credit and debit cards which registered a growth of 21.3 per cent in 2017 as compared to 2016. Card based transactions occupy more than half the share of cashless payments. Number of transactions using credit cards grew 47 per cent year-on-year, while it rose 100 per cent for debit cards for the 12-month period ending May 2017. In May, the transactions through credit cards were 115.3 million while the amount for debit cards was 267.5 million. Online shopping and related discounts have increased the use of card-based payments significantly. Paperbased transactions have come down to 6.5 per cent in 2017 of all non-cash transactions from 13.3 per cent in 2016. In the past five years, the number of transactions using mobile banking has gradually increased by four times to 106 million while the money transacted has increased by more than 10 times to 1,612 billion.

#### RECOMMENDATIONS

- 1. Adequate and well-working infrastructural offices should be set up. Constant and regular power should be accessible even in the remotest territories of India to guarantee steady network connection.
- 2. It is suggested that a more noteworthy push should be given to portable installments in provincial regions. RuPay, with its versatility can acquire an upheaval in rustic India as M-Pesa has done in helpless African countries like Kenya.
- 3. While government activities have done a lot to guarantee that an ever-increasing number of Indians approach e-installment instruments, there is no motivation for them to utilize these instruments in lieu of cash.
- 4. Regular mindfulness missions to instruct people in general on the credit-only exchange channels and safety efforts that shield the clients from electronic burglary should be embraced.

The investigation shows that not many individuals accept that a cashless economy can, as of now, be carried out. Many people would not like to surrender money. Consequently, the execution of cashless arrangements would be completed in distinct stages. India ought to gradually move towards a cashless economy rather than radically executing new strategic changes.

#### CONCLUSION

The advancement of cashless exchange can possibly change monetary movement and accomplish formative objectives. Cashless strategy has the ability to find all significant development of cash including terrorism financing, bribery and all endeavours to bargain monetary straightforwardness. The dread of being ransacked of an enormous amount of cash would not be there again, since individuals wouldn't convey money. Throughout the following decade, there would be progress towards a cashless economy both in India and different nations.

#### REFERENCES

- 1. Batra, S. K. & Kazmi, S. (2008). Consumer Behaviour (second edition). Thrissur: Excel Books.
- 2. Das, A. (2010). Cashless Payment System in India: A Roadmap.

Retrieved from http://dspace.library.iitb/

- 3. Humphrey, D. B. & Berger, A. N. (1990). Market Failure and Resource Use: Economic Incentives to Use Different Payment Instruments.
- 4. Swartz, D. D. G., Hahn, R. W. & Layne-Farrar, A. (2004). Economics of a Cashless Society: An Analysis of Costs and Benefits of Payment Instruments.
- 5. India Development Fund (IDF). Internet and Mobile Association of India (IAMAI), (2016). Road to Less Cash. s.l.: s.n.
- 6. Reserve Bank of India, Database [Online] available at: http://rbi.org.in/scripts/statistics.aspx
- 7. http://cashlessindia.gov.in/, India Moving Towards Cashless Economy.
- 8. http://niti.gov.in/writereaddata/files/Digital per cent20Payments per cent20- per cent20Progress per cent20Report-April per cent202017.pdf
- 9. https://www.financialexpress.com/economy/rbi-reportondemonetisation-digital-transaction-up-initially-butdelines-to-5-monthlow-here-is-why/833970/



(11

Since marketing involves the capitalization of every area and opportunity, the senses prove to be one of the most exploitable ones.



# **The Sensory Customer** - A Study on the General Awareness of Sensory Marketing in Cafes and Restaurants in Kolkata

Dr. Tridib Sengupta Assistant Professor Department of Commerce (Morning)

Krish Madhogaria Department of Commerce (Morning)

# ABSTRACT

Sensory marketing is used prevalently in the hospitality industry in Kolkata, precisely in cafes and restaurants. Taste, vision, smell, and sound are the senses that they try to exploit to create the required atmosphere to attract customers and make them stay longer. We found that many owners are yet to realize the potential of sensory marketing and still haven't used it adequately.

, , , ,

YOUTHINK • 2022 • Vol. XVI

So, we look into how it can be implemented effectively. We try to study the current situation of the sensory techniques used by cafes and restaurants to attract customers and analyze their usage patterns. This would help us find the connection between the awareness and opinion of both the customers and the owners. There is a significant impact on the buying choices of the customer when the senses are manipulated differently. From customers' point of view, sensory activities form a major part of the product they are paying for. It has become an ineradicable part of the service industry. Sensory marketing is a relatively underrated and unexplored form of promotional activity that entrepreneurs should look to use to their advantage, especially in industries that have a direct impact on the customer's senses.

**KEYWORDS:** Senses, Cafes and Restaurants, Taste, Scent, Colour, Music, Sensory Marketing, Subconscious, Atmosphere, Service.

# INTRODUCTION

Senses are features that make us feel alive and differentiate us from other species. Since marketing involves the capitalization of every area and opportunity, the senses prove to be one of the most exploitable ones. Cafes and restaurants in Kolkata have used sensory marketing to attract more customers. The senses of sight, smell, taste, and sound create a unique environment in cafes and restaurants. As far as customers are concerned, they accept that sensory marketing is fundamental for hospitality because of the explanation that it is one of the most significant components of the experience of visiting a restaurant.

Sensory marketing is the activity that emphasizes on understanding the views of the buyer. The cycle begins from the stimuli that influence the feelings of the purchasers to how the customer understands, comprehends, and reacts to them. These could be the fundamental factors that impact the customer's actions if used properly, and consequently affect the propensity to spend.

# **SCOPE OF STUDY**

The study is conducted to test sensory marketing's awareness among marketeers and its effectiveness on the modern customer. The research explores the extent to which the senses are exploited through marketing and emphasizes how different customers have varied levels of responsiveness to their activated senses. The study is based on the cafe and restaurant industry in Kolkata. The majority of the respondents are millennials who are regular cafe-goers and casual diners.

# LIMITATIONS OF THE STUDY

The collection of primary data is based on 65 respondents, which leads to a very small sample. Thus, the data collected may be inadequate. Only two restaurateurs could be interviewed, which might again lead to inadequate information. The collection of further information required effort, time, and money.

The instrument used to analyze data was descriptive and not inferential. Thus, an in-depth statistical analysis could not be conducted due to the lack of knowledge. Secondary data collected was based on the findings of other researchers. Even though proper referencing has been done, its relevance cannot be justified.

# LITERATURE REVIEW

- 1. Touching, tasting, hearing, smelling, and seeing a product plays an important role in our understanding. Recently, behavioural economists have started addressing these needs through sensory marketing, which is usually associated with a favourable emotional response to bring a change in the shopping behaviour (Yoon & Park, 2012).
- 2. Sensory marketing, as a marketing-oriented experience, is one of the innovative solutions that give the consumer opportunities to percept and experience the product and services (Heitzler, Asbury, &Kusner, 2008).
- 3. An effect on restaurants and cafes is also relevant to this research KFC (Monishan, Randhir, Tooraiven,

& Latasha, 2016). However, despite the focus on sensory perceptions within consumer behaviour, there lacked cohesiveness within this research stream.

4. In addition, Lindstrom (Lindstrom, 2005) mentioned that if the consumer's senses are more involved, it connects more strongly with the brand, which means that it can increase the willingness to pay more.

#### **RESEARCH METHODOLOGY**

The research design is partly exploratory and partly descriptive. Our source of data is primary. It has been collected through surveys and personal interviews of owners and regular visitors of cafes and restaurants. The data has been presented through descriptive statistics including, graphs, charts, and averages.

#### **Primary Data**

Qualitative and quantitative strategies are utilized in this study, which are: interviews and questionnaires. The questionnaire addressed the consumer habits on the preference of its senses. Also, the primary respondents are individuals who are regular visitors of restaurants and cafes. The interview approach is often considered as the viable data collection method. A handful of restaurateurs were interviewed personally and asked questions which were categorized into four parts:

- 1. General Questions
- 2. Questions on Sight
- 3. Questions on Sound
- 4. Questions on Smell

#### **Secondary Data**

Scientific articles, research papers, and books found on the internet, which are important to the topic and purpose of the paper, are collected as secondary data to support the primary data. Additionally, to stress the dependability of the data, our sources have been objectively thought through.

#### EMPIRICAL DATA AND ANALYTICAL FINDINGS

Process of how sensory marketing activities have an impact on consumers' decisions - Secondary Data

- Olfactory Senses (Fragrance): Smell is considered as a strong sense on account of its capacity to induce feelings; it permits customers to get submerged in the experience and urges them to linger. Fragrance seems to be the most reaction-prone because it is connected directly with the memory of the customer. Aroma can induce the customer to visit and return.
- Visual Senses: Colour can impact the mental state and feelings of customers. Colours give an instant feeling to the viewer. For example, pink is used for depicting romance, green for representing the environment, purple for royalty, et al. In cafes, red is used because it induces hunger.
- Aural Senses (Sound): Music works beneath the awareness of the customer. Consumer consciousness of music is moderately low. In a study on the impact of music in a restaurant's environment, it was concluded that the music tempo can affect the duration of completion of the customer's meal and amount of money they spend on liquor.

#### Impact of Sensory Marketing on General Consumer Behaviour - Questionnaire Part

Demographic Characteristics	Majority of Respondents	Frequency	Percentage (100 per cent)
Gender	Male	35	53.85
Age	21-25 years	34	52.31
Occupation	Student	36	55.38
Income	₹5,000 or less	43	66.15

Part 1: Demographic Information

Table 1: Demographic Information (Source: Primary Data) Part 2: Background of Consumption Pattern of Target Group Regarding Restaurants and Cafes

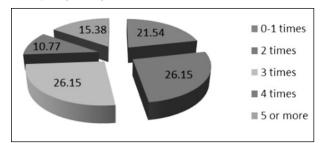


Figure 1: Number of Times You Visit a Restaurant or Cafe Per Week? (Source: Primary Data)

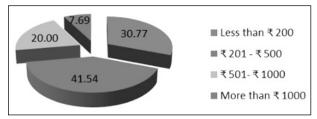
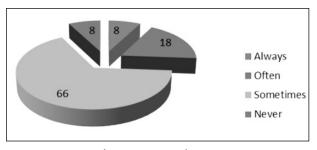
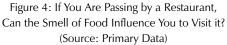


Figure 2: How Much Do You Spend on Every Visit to a Restaurant or Cafe? (Source: Primary Data)





#### The Interview

The owners of two restaurants - 'Kaidi Kitchen' and 'Hammer' were interviewed. The inferences from the interviews were:

- Customers are significantly affected by fragrances. Both interviewees agreed on the use of aromatic oil at the entrance to create a welcoming and pleasurable feeling.
- The design of the place creates a first impression for

Element	Percentage of Agreement	Minimum	Maximum	Mean
Colour (Both interior and exterior)	32.7	1	5	3.64146
Fragrance	39.7	1	5	3.6753
Music	36.9	1	5	3.5351
Layout of restaurant	38.7	1	5	3.7195

Table 2: What is the Most Significant Component of Ambience in a Restaurant or Cafe? (Source: Primary Data)



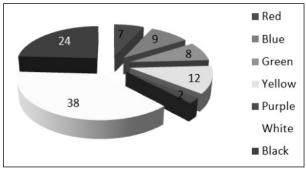


Figure 3: What is the Most Suitable Colour for a Restaurant or Cafe? (Source: Primary Data)

the customer. The interior design should match the concept of the restaurant. The importance of the proper use of colours was emphasized by both interviewees.

 Customers are kept engaged through

music. It is used to induce a relaxed and carefree environment.

• Furthermore, taste and feel are enhanced by consistent food quality and hospitable service. All things apart, for a restaurant/cafe, no sensory marketing can substitute for taste. Taste has kept these widely known places going.

#### **Summary of Findings**

The effect of sensory marketing on consumer behaviour:

Kolkata customers responded to the seller's activities through three ways - Cognitive reaction, Emotional reaction, and Behavioural reaction.

**Cognitive Reaction:** We found that customers aware of sensory activities like fragrance, music and colours in restaurants/cafe have a response towards the cognitive thought process. They have the assumption that cafes will apply sensory marketing, and thus, if they are missing, the experience becomes substandard for modern day customers.

**Emotional Reaction:** Emotions, moods, and feelings of the customer are directly affected. Fragrance marketing is one of the most influential as people react instantly to smell. Tasting and smelling are almost equally effective. The customer is first attracted by the smell and then retained through taste. Cafes use colour to give a soothing feeling to the customer.

**Behavioural Reaction:** The seller uses sensory marketing to enhance service and this response is essential for the restaurant. The customer responds by revisiting, spending more, staying longer, and recommending others.

#### Tale of the Tape - Objective Findings

**Vision:** We found that using colour alone does not have an impact on customer behaviour. In restaurants and cafes, blue colour lightens the mood and brings about relaxation. To create the ambience, a warm-coloured atmosphere is more efficient for the consumer to feel soothed. It can cause behavioural reactions of staying longer and spending more money.

**Music:** Classical and soft music in restaurants passively cause the customers to spend more money on expensive dishes. We often see live music on the violin or piano in high-end restaurants. It gives a feeling of being elite and classy. Speed tempo music generally hastens customers, and soft music increases the propensity to spend.

**Scents:** Aroma is used to form an ambience. It gives a sense of relief and happiness to the customers. Fragrance doubled with music has a very strong impact on the customer's experience.

Heinrich Frieling, a colour psychologist showed that the colour of the food can connect with the scent and can link with the perception of the customer about the odour.

Color	Fragrance
PINK	sweet, mild
LAVENDER	sweet, unerotic
MAGENTA	heavy, narcotic, charmingly, sweet
INDIGO	scentless
BLUE	scentless
MINT	juciy, fresh to salty
GREEN	fresh, fragrant, parfume with green fragrance
OLIVE	musty
LIME GREEN	sour, dry, fresh, bitter
YELLOW	parfume, flower
ORANGE	hearty
RED	sweet hefty, hot
GOLD	sweet, good, stunning
OCHER	sourly, neutral
BROWN	aroma, musty
WHITE	scentless
GREY	bad

Figure 5: Colour-Odour Associations - Henrich Frieling (Source: www.semanticscholar.org)

#### CONCLUSION

First and most importantly, we broke down how the restaurant and cafe industry in Kolkata uses sensory marketing. Taste, colour, aroma, and music are widely exploited to motivate customers to buy more and establish loyalty. In restaurants, white is the most luxurious colour as per our respondents because it makes them feel calm and relaxed. Smell of the food is equally important to attract customers. Music too gives a relaxing atmosphere in the restaurant.

Secondly, the chain of how senses influence customer behaviour is depicted through sensory marketing activities. These activities work through the subconscious of the customer that changes the thought process passively. Kolkata's customers are readily reactionary to sensory activities. Also, other dimensions like experience, age, gender, et al., also have an influence on the behaviour and feelings of the customer.

#### **PRACTICAL IMPLICATION**

Once the target group is exposed to the sensory activities, they are willing to react positively by making changes to their buying patterns, visiting frequently, being ready to pay, and increasing loyalty. Moreover, sensory marketing alone is not adequate to induce reaction. The fundamental still remains to be quality and service. If the service or taste of the food is not good, no amount of sensory marketing can help the entrepreneur run a profitable cafe/restaurant. Customer will always be the king, what changes is the sellers' approach to please him.

#### REFERENCES

- 1. Bagdare, R. J. (2010). Music and Brand Experience in Retail Stores.
- 2. Gardener, M. (1985). Mood states and consumer behaviour: A critical review. The Journal of Consumer Research, 281-300.
- 3. Lindstrom, M. (2005). Brand Sense: How to Build Powerful Brands Through Touch, Taste, Smell, Sight & Sound. Kogan Page Publishers.

- 4. Milliman, R. E. (1982). Using Background Music to Affect the Behaviour of Supermarket. Journal of Marketing, 86-91.
- Shankar, M., Levitan, C. A., Prescott, J., & Spence, C. (June 2009). The influence of color and label information on flavor perception. Chemosensory Perception, 53–58.
- Soars, B. (2009). Driving sales through shoppers' sense of sound, sight, smell and touch. Journal of Retail and Distribution Management, 286-289.
- Unnava, H., & Agarwal, S. (1996). Interactive effects of presentation modality and message-generated imagery on recall of advertising information. The Journal of Consumer Research, 81-88.
- Vicky. (2014, March 3). Sensory Marketing: Using the Senses for Brand Building. Retrieved from Marketing FAQ: http://marketingfaq.net/branding/sensory-marketing-andbranding/
- 9. Wirtz, M. a. (2001). Congruency of Scent and Music as a driver of in-store evaluations and behaviour.
- 10. Yoon, S., & Park, J. (2012). Do sensory ad appeals influence brand attitude? Journal of Business Research, 1534-1542.
- 11. Zaltman, G. (2003). How Customers Think.
- https://www.semanticscholar.org/paper/Scent-Marketing%3A-Subliminal-Advertising-Messages-Emsenhuber/b74403ce7a8d3870c9a54317750fe2d0abff5 063



Minimalist marketing and advertising is a relatively newer concept and, as with all emerging trends in the realm of marketing and advertising, it is essential that marketers conduct significant research to understand the performance of these marketing techniques.



## Impact of Minimalistic Advertising on Consumer Behaviour and Brand Perception

Prof. Aparajita Hembrom Assistant Professor Department of Commerce (Evening)

Avani Mohta Department of Commerce (Evening)

#### ABSTRACT

With the advent of the concept of 'Less is More', marketing strategies are noticing a gradual shift from delivering a message through overcrowded visual elements to a growing focus on simple, clean, yet meaningful messages



through minimalistic marketing. This study aims to interpret the influence of minimalistic advertising on consumer behaviour and brand perception, to determine the market segment to target these advertisements to reap higher profits, and to find the optimal combination of elemental characteristics that make an attractive minimalist advertisement design. Descriptive research using snowball sampling is carried out by disseminating a carefully crafted questionnaire across various platforms. After careful analysis, it can be concluded that marketers should target the Indian millennials with minimalist advertisements and try incorporating simple font styles, limited texts, and more negative spaces in them.

**KEYWORDS:** Advertisement (ad), Minimalistic Advertising, Minimalist Advertisement Design, Minimalist Pool of Respondents, Consumer Preference, Brand Perception.

#### INTRODUCTION

Minimalist marketing and advertising is a relatively newer concept and, as with all emerging trends in the realm of marketing and advertising, it is essential that marketers conduct significant research to understand the performance of these marketing techniqueswhether it is creating a positive impact in the minds of the viewers, whether it is resulting in actual conversions, which segments of the market, if any, are generating a favourable response, what features in these advertisements and promotional efforts are most appealing, et al. Thus, conducting this research will help provide powerful insights into the changing consumer responses and buying behaviour and many of the questions posed above.

#### **REVIEW OF LITERATURE**

According to Suttle (2016), there are many ways by which one can measure how effective an advertisement is. Not only do advertisements need to have a greater reach but also be attractive for the viewers to remember them. It is important to target the right audience and appeal to them. The minimalist lifestyle is a new trend that is emerging worldwide, says Weinswig (2016). We can see that more and more millennials are taking to the 'Less is More' lifestyle. Thus, marketers can better target these segments by using minimalist themes in their advertising activities. By limiting the non-significant elements, minimalism can push key messages to the audience by being concise, according to Shakeri (2013). Minimalism is about using colours in monochromatic themes, simple/classic fonts, leaving negative spaces, and making ideas pop. This is because design choices define what culture guides a particular person - Sinder (2016). Today, minimalism has become one of the most effective tools to advertise with -Rasqiyah (2016). Keeping the designs clean and to the point helps to remove the clutter and focus on what is important.

To sum it up, the pieces of literature reviewed have shown that minimalism is becoming more acceptable and trendier with passing time. The findings of these studies have indirectly shown a positive correlation between minimalist advertising and consumer perception.

#### **OBJECTIVES**

- To determine the preferences of customers between regular advertisements and minimalist advertisements.
- To determine the influence of gender and age on their preferences.
- To determine which target segment to focus minimalist advertising efforts on and which elements to include in advertising design to appeal to them more.
- To interpret the change in consumer buying behaviour and brand perception due to minimalistic advertising.

#### **CONCEPTUAL FRAMEWORK**

In order to conduct statistical analysis, four variable factors were considered, and the participants of the survey were asked to rate each advertisement based on these factors on a scale of one to five. The factors were:

**Likeability:** This refers to the ability of an advertisement to be appealing, attractive, and pleasant to the eye.

**Memorability:** This denotes the quality of an advertisement to be worth remembering.

**Creativity:** This helps evaluate the ability of an advertisement to be out-of-the-box and impactful.

**Brand Retention:** This refers to the ability of an advertisement to create a positive image of the brand in the viewer's mind.

An advertisement with a higher score in the aforementioned factors is more likely to be preferred over one with a lower score. Furthermore, additional tests were conducted to determine whether gender and age plays a role in impacting the scores given by the respondents for each of these factors and thus, indirectly impacting their preferences (see Figure 1).

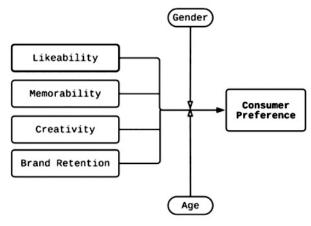


Figure 1: Factors Affecting Consumer Preference

This study also aims to denote whether minimalistic advertisements were preferred over regular advertisements due to their elemental characteristics and if yes, then which characteristics would constitute an attractive minimalist advertisement design (see Figure 2).

#### **Hypotheses Formulation**

**Colour Scheme:** The colour palette used in an advertisement design is chosen very carefully as it possesses the ability to change the mood of the viewers and how they perceive the product. The hypothesis for

this construct is:

H1 = Minimalist advertisement design is not associated with colour scheme.

**Font Style:** The style of typography is another important element capable of affecting the visual appeal of an advertisement. The hypothesis for this construct is:

H2 = Minimalist advertisement design is not associated with font style.

**Text Length:** Text is an important element of any advertisement design. It enables the marketer to convey the brand's message in words. The hypothesis for this construct is:

H3 = Minimalist advertisement design is not associated with text length.

**Space:** This refers to the quantity of air or space that is used up by the elements of an advertisement design. This affects the ability of an advertisement to be visually soothing. The hypothesis for this construct is:

H4 = Minimalist advertisement design is not associated with space.

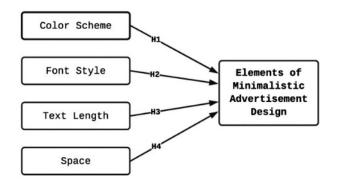


Figure 2: Elements Constituting Minimalistic Advertisement Design

#### **RESEARCH METHODOLOGY**

A questionnaire for online distribution was formulated. The snowball (convenience) sampling technique was used for the purpose of this research. The respondents of the survey had been reached out to personally via acquaintances. A total of 142 individuals participated in this survey, with the data being collected from March 2021 to April 2021 across India. The chi-square test of independence (chi-squared test and chisquared/degrees of freedom, and p-values) test was conducted to test the formulated hypotheses (H1 through H4). The t-test was conducted to analyze the effects of gender and age on the respondents' choices. Other measures of central tendency have also been incorporated through the study.

Catalan	Ranks							
Category	1	2	3	4	5	Average		
Brand	15	49	54	16	8	2.7		
Price	39	49	36	16	2	2.2		
Product Quality and Features	72	27	20	10	13	2.0		
Advertising Design and Packaging Design	11	13	22	85	11	3.5		
Packaging Material	5	4	10	15	108	4.5		

Figure 4: Respondents' Respective Priority During First Purchase (Source: Primary Data)

#### DATA ANALYSIS AND INTERPRETATION

#### Demographic Variables:

Demographics			
	Category	Number of Responses	Percentage (%)
	Below 18		4
	18 - 25	92	65
Age Group	26 - 35	39	27
	36 - 45	3	2
	Above 45	2	1
	Male	72	51
Gender Group	Female	69	49
	Prefer not to say	1	1
	High School	10	7
Educational Qualification Group	Some College	43	30
	Bachelor's Degree	64	45
	Trade/Vocational/Technical Degree	2	1
	Master's Degree	22	15
	Ph.D. or Higher	1	1
	Student	69	49
	Self-Employed	9	6
	Businessperson	16	11
Profession Group	Salaried Employee	45	32
	Homemaker	3	2
	Unemployed	0	0
	Retired	0	0
	Below 12 Lakhs	3	2
Annual Family	12 Lakhs - 15 lakhs	7	5
Income Group	S Lakhs to ₹10 Lakhs	50	35
	Above ₹10 Lakhs	82	58
Area of Residence	Urban	142	100
Group	Rural	0	0

Figure 3: Respondents' Demography (Source: Primary Data)

#### Determining the Impact of Advertising Efforts by Brands on Consumer Perception and Behaviour:

The respondents were asked to rank the various attributes they seek before arriving at a purchase decision. Figure 4 summarizes the same.

The results indicate that although advertising and packaging design play a significant role, the brand name, and the product quality, features and price play a greater role in influencing consumer behaviour and brand perception. However, it is inconclusive due to biases.

To gain a better understanding of the influence of marketing activities on the minds of the consumers, the respondents were asked to choose among 'Yes', 'No', and 'Neutral' for the following set of statements–

**Statement 1:** When I come across appealing advertising or packaging design, my perception of the concerned brand enhances.

**Statement 2:** I am more likely to remember a brand engaged in excellent marketing activities than a generic brand.

**Statement 3:** While evaluating product alternatives, brand marketing plays an important role.

The responses to these statements could indicate that if not directly, marketing activities undertaken by brands and their advertising design and packaging design do play an indirect yet significant role in influencing consumers' brand perception eventually and thus, impacting their buying behaviour.

Statement	Number of Responses					
Statement	Yes	No	Neutral			
When I come across appealing advertising packaging design, my perception of the						
concerned brand enhances.	118	7	17			
I am more likely to remember a brand engaged in excellent marketing activities than a generic brand.	117	13	12			
While evaluating product alternatives, brand marketing plays an important role.	119	8	15			

Figure 5: Representation of responses to Q3 of the survey

(Source: Primary Data)

Here, a 5-point Likert Scale was used to measure the scores given to each advertisement by each respondent. Five points were assigned to 'Excellent'; four points to 'Very Good' and so on.

Figures 6-19 illustrate the findings for each advertisement.

		Nu	umber of Re	Central Tendency Measures				
Understanding	Category						Mean Score	Standard
Consumer		1	2	3	4	5	Wean Score	Deviation
Preferences between	Likeability	8	33	41	53	7	3.13	1.01
Regular	Memorability	10	38	35	49	10	3.08	1.09
0	Creativity	12	25	28	69	8	3.25	1.08
Advertisements and	Brand Retention	6	26	37	61	12	3.33	1.01
Minimalist	·							

Advertisements:

Figure 7: Measuring Central Tendencies for this Advertisement (Source: Primary Data)

A set of six advertisements were displayed, three being minimalist advertisements and three being regular advertisements, and the participants of the survey (respondents) were supposed to rate each advertisement on the basis of four variable factors – namely, Likeability, Memorability, Creativity, and Brand Retention - on a scale ranging from 'Poor 'to 'Excellent'.

#### **Advertisement 2:**



Figure 8: Advertisement Name and Type- Nike Shoes; Minimalist

#### Advertisement 1:

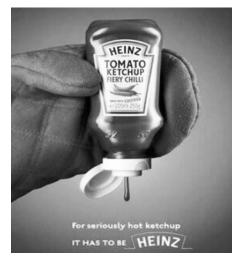


Figure 6: Advertisement Name and Type- Heinz Tomato Ketchup; Minimalist

	Nun	ber of Res	Central Tendency Measures				
Category	1	2	3	4	5	Mean Score	Standard Deviation
Likeability	2	12	34	55	39	3.82	0.98
Memorability	2	11	24	63	42	3.93	0.95
Creativity	1	9	21	60	51	4.06	0.91
Brand Retention	1	8	23	65	45	4.02	0.88

Figure 9: Measuring Central Tendencies for this Advertisement

(Source: Primary Data)

#### **Advertisement 3:**



	Nun	nber of Re	esponses fo	Central Tendency Measures			
Category	1	2	3	4	5	Mean Score	Standard Deviation
Likeability	1	21	59	47	14	3.37	0.88
Memorability	4	23	51	45	19	3.37	1.00
Creativity	5	22	42	45	28	3.49	1.08
Brand Retention	4	19	52	41	26	3.46	1.03

Figure 11: Measuring Central Tendencies for this Advertisement (Source: Primary Data)

Figure 10: Advertisement Name and Type-Nivea Night Cream; Minimalist

	Nun	Central Tendency Measures					
Category	1	2	3	4	5	Mean Score	Standard Deviation
Likeability	38	40	47	14	3	2.32	1.04
Memorability	26	52	45	16	3	2.42	0.98
Creativity	29	44	46	19	4	2.47	1.05
Brand Retention	31	51	39	18	3	2.37	1.03

Figure 13: Measuring Central Tendencies for this Advertisement (Source: Primary Data)

#### Advertisement 5:

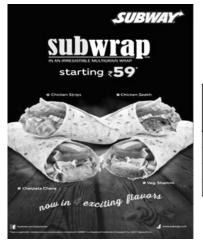


Figure 14: Advertisement Name and Type - Subway Wraps; Regular

Advertisement	4:



Figure 12: Advertisement Name and Type - Old Spice Shower Gels; Regular

	Nu	mber of Re	Central Tendency Measures				
Category	1	2	3	4	5	Mean Score	Standard Deviation
Likeability	52	45	32	11	2	2.06	1.02
Memorability	35	60	23	20	4	2.28	1.07
Creativity	61	52	19	9	1	1.85	0.93
Brand Retention	23	66	28	20	5	2.42	1.03

Figure 15: Measuring Central Tendencies for this Advertisement (Source: Primary Data)

#### **Advertisement 6:**



	Nur	nber of Re	Central Tendency Measures				
Category	1	2	3	4	5	Mean Score	Standard Deviation
Likeability	24	74	25	17	2	2.29	0.93
Memorability	22	74	24	18	4	2.35	0.98
Creativity	38	67	13	21	3	2.18	1.06
Brand Retention	20	66	31	16	9	2.51	1.07

Figure 17: Measuring Central Tendencies for this Advertisement (Source: Primary Data)

Figure 16: Advertisement Name and Type-
Lebron15 Shoes; Regular

Advertisement Name	Туре	Likea	bility	Memo	rability	Crea	tivity	Brand R	etention
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D
Heinz Tomato Ketchup	Minimal	3.13	1.01	3.08	1.09	3.25	1.08	3.33	1.01
Nike Shoes	Minimal	3.82	0.98	3.93	0.95	4.06	0.91	4.02	0.88
Nivea Night Cream	Minimal	3.37	0.88	3.37	1.00	3.49	1.08	3.46	1.03
Old Spice Shower Gels	Regular	2.32	1.04	2.42	0.98	2.47	1.05	2.37	1.03
Subway Wraps	Regular	2.06	1.02	2.28	1.07	1.85	0.93	2.42	1.03
Lebron 15 Shoes	Regular	2.29	0.93	2.35	0.98	2.18	1.06	2.51	1.07

Figure 18: Representation of Central Tendencies for All Advertisements (Source: Primary Data)

Based on the data in Figure 18, the mean scores of the advertisements are illustrated below -

	Likeability	Memorability	Creativity	Brand Retention	Mean
Combined Mean Score for Minimalist Advertisements	3.44	3.46	3.60	3.61	3.53
Combined Mean Score for Regular Advertisements	2.22	2.35	2.17	2.44	2.29

Figure 19: Combined Mean Scores (Source: Primary Data)

The combined mean score for minimalist advertisements is higher than the combined mean score for regular advertisements. Hence, it can be concluded that minimalist advertisements were preferred over regular advertisements by a majority of the population. This answers the first objective of this research.

### Understanding the Influence of Gender and Age on Preference of Minimalist Advertisements:

Out of the 142 respondents, 124 respondents' individual minimalist advertisement score was higher than the regular advertisement score. This implies that these individuals have a greater liking towards minimalist advertisements than the other respondents. The respondents were asked to rate the six advertisements, three minimalist and three regulars, under four categories, with the lowest score being one and the highest being five. For each advertisement, an average score out of five was calculated. To find the overall minimalist advertisement score for each respondent, their average scores for each minimalist advertisement were added - thus, giving us a combined score out of 15, similarly for regular advertisements. Those respondents whose individual minimalist ad scores were higher than that of the regular ad scores have been considered for the next set of analyses. For simplicity in understanding, this pool of respondents will be referred to as the 'minimalist pool of respondents.'

#### Process 1:

A Two-Sample Assuming Equal Variances t-test was conducted to determine the effect of gender on the preferences of the minimalist pool of respondents under each category – likeability, memorability, creativity and brand retention.

Of the minimalist pool of respondents, 62 were males, 61 were females, and one respondent did not prefer to reveal its gender. Hence, the t-test will be performed on this pool of respondents minus the one respondent whose gender remains unidentified.

The Hypotheses for each construct:

**H0** (Null Hypothesis): There is no mean difference between the choices of males and females

Ha (Alternate Hypothesis): There is a mean difference the choices of males and females.

#### Likeability -

	Female	Male
Mean	10.55738	10.83871
Variance	4.117486	3.285034
Standard Deviation	2.029159	1.812466
Observations	61	62
Pooled Variance	3.69782	
Hypothesized Mean Difference	0	
Degrees of Freedom (Degrees of	121	
t Stat	-0.81125	
P(T<=t) two-tail	0.418814	
t Critical two-tail	1.979764	

Figure 20: t-test Results for Likeability (Source: Primary Data)

This implies that no significant difference existed between the group of females (M=10.55738; SD=2.029159) and the group of males (M=10.83871; SD=3.285034); t (121) =-0.81125, p=0.418814 in the given sample.

- Since the t-Stat value lies in the non-rejection region owing to the t-Critical two-tail value, 0 is not rejected.
- However, since  $p > \alpha$  (where  $\alpha = 0.05$ ), the result arrived at is not significant.

Hence, it can be concluded that gender does not play a role in affecting the respondents' preferences here.

#### Memorability-

	Female	Male
Mean	10.67213	10.85484
Variance	4.457377	5.273665
Standard Deviation	2.111251	2.296446
Observations	61	62
Pooled Variance	4.868894	
Hypothesized Mean Difference	0	
Degrees of Freedom (df)	121	
t Stat	-0.45914	
P(T<=t) two-tail	0.646954	
t Critical two-tail	1.979764	

Figure 21: t-test Results for Memorability (Source: Primary Data) This implies that no significant difference existed between the group of females (M=10.67213; SD=2.111251) and the group of males (M=10.85484; SD=2.296446); t (121) =-0.45914, p=0.646954 in the given sample.

- Since the t-Stat value lies in the non-rejection region owing to the t-Critical two-tail value, 0 is not rejected.
- However, since  $p > \alpha$  (where  $\alpha = 0.05$ ), the result arrived at is not significant. Hence, gender does not affect the respondents' preferences in this category here.

#### Creativity-

	Female	Male
Mean	10.98361	11.46774
Variance	4.18306	3.761237
Standard Deviation	2.045253	1.939391
Observations	61	62
Pooled Variance	3.970406	
Hypothesized Mean Difference	0	
Degrees of Freedom (df)	121	
t Stat	-1.34728	
P(T<=t) two-tail	0.180408	
t Critical two-tail	1.979764	

Figure 22: t-test Results for Creativity (Source: Primary Data)

This implies that no significant difference existed between the group of females (M=10.98361; SD=2.045253) and the group of males (M=11.46774; SD=1.939391); t (121) =-1.34728,

p=0.180408 in the given sample.

- Since the t-Stat value lies in the non-rejection region owing to the t-Critical two-tail value, 0 is not rejected.
- However, since  $p > \alpha$  (where  $\alpha = 0.05$ ), the result arrived at is not significant. Hence, it can be inferred that gender does not affect the respondents' preferences here.

#### Brand Retention –

	Female	Male
Mean	11.21311	11.27419
Variance	3.837158	3.415389
Standard Deviation	1.958867	1.848077
Observations	61	62
Pooled Variance	3.624531	
Hypothesized Mean Difference	0	
Degrees of Freedom (df)	121	
t Stat	-0.1779	
P(T<=t) two-tail	0.8591	
t Critical two-tail	1.979764	

Figure 23: t-test Results for Brand Retention
(Source: Primary Data)

This implies that no significant difference existed between the group of females (M=11.21311; SD =1.958867) and the group of males (M=11.27419; SD =1.848077); t (121) = -0.1779, p = 0.8591 in the given sample.

- Since the t-Stat value lies in the non-rejection region owing to the t-Critical two-tail value, 0 is not rejected.
- However, since  $p > \alpha$  (where  $\alpha = 0.05$ ), the result arrived at is not significant. Hence, it can be concluded that gender does not affect the respondents' preferences here.

Therefore, it can be inferred that gender played no role in influencing the decisions of the minimalist pool of respondents.

#### Process 2:

A Two-Sample Assuming Equal Variances t-test was conducted to determine the effect of age on the preferences of the minimalist pool of respondents under each category – likeability, memorability, creativity, and brand retention.

Of the minimalist pool of respondents, the majority of the respondents belonged to either of the two age groups: 18-25 or 26-35. 87 respondents belonged to the 18-25 age group while 27 respondents belonged to the 26-35 age group. Hence, the t-test was be performed on these individuals only.

The Hypotheses for each construct:

H0 (Null Hypothesis): There is no mean difference between the choices of 18-25/26-35 individuals.

Ha (Alternate Hypothesis): There is a mean difference between the choices of 18-25/26-35 individuals.

#### Likeability –

	18-25	26-35
Mean	10.44828	11.55556
Variance	3.785084	3.179487
Standard Deviation	1.945529	1.783112
Observations	87	27
Pooled Variance	3.644499	
Hypothesized Mean Difference	0	
Degrees of Freedom (df)	112	
t Stat	-2.63286	
P(T<=t) two-tail	0.009663	0.2
t Critical two-tail	1.981372	

Figure 24: t-test Results for Likeability (Source: Primary Data)

This implies that a significant difference existed between the respondents belonging to the age group of 18-25 (M=10.44828; SD=1.945529) and the respondents belonging to the age group of 26-35 (M=11.55556; SD=1.783112); t (112) =- 2.63286, p =0.009663.

- Since the t-Stat value lies in the rejection region owing to the t-Critical two-tail value, 0is rejected.
- However, since  $p < \alpha$  (where  $\alpha = 0.05$ ), the result arrived at is significant.

Hence, it can be inferred that age plays a significant role in affecting the respondents' preferences in this category.

#### Memorability –

	18-25	26-35
Mean	10.3908	11.77778
Variance	5.566426	1.948718
Standard Deviation	2.359327	1.395965
Observations	87	27
Pooled Variance	4.726601	
Hypothesized Mean Difference	0	
Degrees of Freedom (df)	112	
t Stat	-2.89589	
P(T<=t) two-tail	0.004547	
t Critical two-tail	1.981372	

#### Figure 25: t-test Results for Memorability (Source: Primary Data)

This implies that a significant difference existed between the respondents belonging to the age group of 18-25(M=10.3908; SD=2.359327) and the respondents belonging to the age group of 26-35 (M = 11.77778; SD = 1.395965); t (112) = -2.89589, p = 0.004547.

- Since the t-Stat value lies in the rejection region owing to the t-Critical two-tail value, 0 is rejected.
- However, since  $p < \alpha$  (where  $\alpha = 0.05$ ), the result arrived at is significant.

Hence, it can be concluded that age plays a significant role in affecting the respondents' preferences in this category.

#### Creativity -

	18-25	26-35
Mean	11.02299	11.92593
Variance	4.464582	2.917379
Standard Deviation	2.112956	1.708034
Observations	87	27
Pooled Variance	4.10541	
Hypothesized Mean Difference	0	
Degrees of Freedom (df)	112	
t Stat	-2.02287	
P(T<=t) two-tail	0.045468	
t Critical two-tail	1.981372	

Figure 26: t-test Results for Creativity (Source: Primary Data)

This implies that a significant difference existed between the respondents belonging to the age group of 18-25(M=11.02299; SD=2.112956) and the respondents belonging to the age group of 26-35 (M = 11.92593; SD = 1.708034); t (112) = -2.02287, p = 0.045468.

- Since the t-Stat value lies in the rejection region owing to the t-Critical two-tail value, 0 is rejected.
- However, since  $p < \alpha$  (where  $\alpha = 0.05$ ), the result arrived at is significant.

Hence, it can be concluded that age plays a significant role in affecting the respondents' preferences in this category.

Brand Retention –	
[	

	18-25	26-35
Mean	10.95402	12.11111
Variance	4.183908	1.641026
Standard Deviation	2.04546	1.281025
Observations	87	27
Pooled Variance	3.593596	
Hypothesized Mean Difference	0	
Degrees of Freedom (df)	112	
t Stat	-2.77071	
P(T<=t) two-tail	0.00655	
t Critical two-tail	1.981372	

Figure 27: t-test Results for Brand Retention (Source: Primary Data)

This implies that a significant difference existed between the respondents belonging to the age group of 18-25 (M=10.95402; SD=2.04546) and the respondents belonging to the age group of 26-35 (M =12.11111; SD =1.281025); t (112) =-2.77071, p=0.00655.

- Since the t-Stat value lies in the rejection region owing to the t Critical two-tail value, 0 is rejected.
- However, since  $p < \alpha$  (where  $\alpha = 0.05$ ), the result arrived at is significant.

Hence, it can be concluded that age plays a significant role in affecting the respondents' preferences in this category. Therefore, from the tests conducted above, it can be inferred that age had a significant role to play in influencing the decisions of this subset of the minimalist pool of respondents, with the age group 26-35 (due to the higher mean) being more positively impacted by minimalist advertisements as compared to the age group 18-25.

## Determining the Descriptive Characteristics of Minimalist Advertisement Design:

The following analysis has been performed to denote whether minimalistic advertisements were preferred over regular advertisements due to their elemental or descriptive characteristics and if yes, then which characteristics would make the minimalist advertisement design the most attractive and appealing to the target audience.

Chi–squared tests of independence have been conducted to understand whether the choices made by the minimalist pool of respondents were impacted by the following characteristics.

The Hypotheses for each construct:

H0 (Null Hypothesis): Minimalist advertisement design is not associated with descriptive characteristics.

Ha (Alternate Hypothesis): Minimalist advertisement design is associated with descriptive characteristics.

#### Colour Scheme –

	Monochromes	Multi-colour	
Observed	72	52	124
Expected	62	62	

α	0.05
p-value	0.07
Test-Statistics	3.23
Critical Value	3.841459

Figure 28: Chi Square Test Results for Colour Scheme (Source: Primary Data)

We can see that there was not a significant association between minimalist advertisement design and colour scheme,  $\chi^2(1, N=124) = 3.23$ , p =0.07.

- The Test-Statistics value is lesser than the critical value, hence, the null hypothesis cannot be rejected.
- However, since the p-value > α, the result arrived at is not significant.

Font Style –

We can see that there was a significant association between minimalist advertisement design and colour scheme,  $\chi 2$  (1, N = 124) = 67.40, p=1.43439 E-16.

The Test-Statistics value is greater than the critical value, hence, the null hypothesis can be rejected.

However, since the p-value  $< \alpha$ , the result arrived at is significant.

	Simple Font	Decorative Font	
Observed	99	25	124
Expected	62	62	

α	0.05
p-value	3.02403E-11
Test-Statistics	44.16129044
Critical Value	3.841458821

Figure 29: Chi Square Test Results for Font Style (Source: Primary Data)

#### Space –

We can see that there was a significant association between minimalist advertisement design and colour scheme,  $\chi^2$  (1, N =124) = 44.16, p=3.02403 E-11.

- The Test-Statistics value is greater than the critical value, hence, the null hypothesis can be rejected.
- However, since the p-value  $< \alpha$ , the result arrived at is significant.

Observed	102	22
Expected	62	62
	α	0.05

**Negative Space Little Negative Space** 

α	0.05
p-value	6.75959E-13
Test-Statistics	51.61306269
Critical Value	3.841458821

Figure 31: Chi Square Test Results for Space (Source: Primary Data)

We can see that there was a significant association between minimalist advertisement design and colour scheme,  $\chi 2$  (1, N = 124) = 51.61, p = 6.75959 E-13.

- The Test-Statistics value is greater than the critical
  - value, hence, the null hypothesis can be rejected.

124

• However, since the p-value  $< \alpha$ , the result arrived at is significant.

Therefore, it can be concluded that the respondents were unaffected by the colour scheme of the advertisement design, even if monochromes are associated more with minimalism in general.

#### Text Length-

	Limited Text	Large Para	
Observed	108	16	124
Expected	62	62	

α	0.05	
p-value	1.43439E-16	
Test-Statistics	67.39648382	
Critical Value	3.841458821	

Figure 30: Chi Square Test Results for Text Length (Source: Primary Data)

Simple font, limited text, and greater negative (empty) space are preferable. This answers the second part of the third objective of the study.

#### CONCLUSION

The responses of the participants in the survey to the factors that affect their purchase decisions indicate that the marketing and branding efforts of companies play an indirect yet significant role in influencing their perception of the brand and long-term purchase decisions. Statistical analysis was conducted to interpret the impact of minimalistic marketing and advertising on their behaviour and perception. The results showed that all minimalist advertisements received a higher combined mean score, on Likert scales than the combined mean scores of the regular advertisements. Based on the demography, a major part of the minimalist pool of respondents consisted of individuals belonging to age groups 18-25 and 26-35 (millennials). T-test results (on the minimalist pool of respondents) indicated that while gender [male (51 per cent) and female (49 per cent)] did not play a significant role in affecting the responses of the participants, age [18-25 (65 per cent) and 26-35 (27 per cent)] played a significant role in impacting the preferences of the participants - with the age group of 26-35 being more positively impacted by minimalist advertisements. Chisquare tests of independence indicated that apart from colour scheme, all the other elemental characteristics played a significant role in appealing to the minimalist pool of respondents and an attractive minimalist ad design would constitute simple font styles, limited texts, and greater negative space.

Hence, marketers should focus their minimalistic marketing efforts on Indian millennials, particularly the age group of 26-35. Their advertisement designs should have more negative or empty space, with a greater focus on the message of the brand, and classy visual appearance – using simple fonts, limited texts and making their advertisements less crowded.

#### REFERENCES

- 1. Advertising. In: Zabkar V., Eisend M. (eds) Advances in A d v e r t i s i n g R e s e a r c h V I I I . EuropeanAdvertisingAcademy.SpringerGabler,Wiesbaden.R etrievedfrom:https://doi.org/10.1007/978-3-658-18731-6\_1.
- 2. Amitava Chattopadhyay and Prakash Nedungadi (1990). Ad Affect, Brand Attitude, and Choice: The Moderating Roles of Delay and Involvement, Journal of Consumer Research, Vol.19. Retrieved from: https://www.jstor.org/stable/ 2489185.
- 3. Garaszczuk, Michael, 'Attentional-Capture Efficacy and Brand Qualities of Minimalist Packaging Design'.
- 4. Impressions. Journal of Marketing, 72(3), 64–81. Retrieved from: https://doi.org/10.1509/JMKG.72.3.064.
- Margariti K., Boutsouki C., Hatzithomas L., Zotos Y. (2017) A xypology of Minimalism.
- Mitchell, A. A., and Olson, J. C. (1981). Are product attribute beliefs the only mediator of advertising effects on brand attitude? Journal of Marketing Research, 18(3), 318–332.https://doi.org/10.2307/3.
- Niazi, Chulam Shabbir Khan and Siddiqui, Javaria and Shah, Burhan Ali and Hunjra, Ahmed Imran, 2011. 'Effective advertising and its influence on consumer buying behavior', 'MPRA Paper' 40689, University Library of Munich, Germany.
- 8. Orth, U.R., and Malkewitz, K. (2008). Holistic Package Design and Consumer Brand.
- Rick Suttle (2016). 'The Disadvantages of Target Marketing'. Retrieved from: smallbusiness.chron.com,https:// smallbusiness.chron.com/disadvantages-target-marketing-36131.html.
- Wren, C.R., Reynolds, C.J. Minimalism in ubiquitous interface design. Pers UbiquitComput8,370–373(2004). Retrieved from: https://doi.org/10.1007/s00779-004-0299-2.
- 11. (2015). Undergraduate Honors Theses.21. Retrieved from: https://ir.lib.uwo.ca/psychK\_uht/21.



[[]

Although words like anxiety, depression, and mental instability had come into existence in the 14th century, their prevalence and knowledge among the people has spread in recent years.



## Electronic Overload: Is Your Screen Time Affecting Your Mental Health?

Prof. Arpita Dey Assistant Professor Department of Commerce (Evening)

Ansu Bagri Department of Commerce (Evening)

'The biggest challenge currently is the rodomontade and boastful showcasing of an individual's lifestyle on social media which induces a feeling of jealousy and reduces one's self-esteem.'

#### ABSTRACT

The word 'digitalization' brings to our mind a pictorial representation of everything being operated with a single tap on the screen and with ease. At the outset, the growing digital world seems like the biggest progress towards development, but on looking closer, it has somewhat destroyed the inner emotions and made people hollow both from their mind and body. The growing exposure towards digital screens has a direct ill effect on both the physical and mental health of the younger generation. Starting from reduced physical activities to creating inner battles within humans like depression, screen time has been playing its part very effectively.

Although the evolution of digitalization has made our task easier, it has given birth to three R's of emotions: Restlessness, Rebellious and Resentment. Out of these three emotions, restlessness has taught the world a new phenomenon – 'The 30-Second Effect'. The COVID-19 pandemic has further infused the usage of screens in our daily lives. Currently, different varieties of people, differentiated by age, profession and other parameters, record different screen time usage. Given the current scenario, the future of the human race, with increasing screen time, seems blurry and scary. This digital solution, created to solve other problems, seems like a problem in itself. Yet, the hope that we will find some way around must not subside.

**KEYWORDS:** Digitalization, Screen Time, Mental Health, Restless.

#### INTRODUCTION

Humans, the evolving bodies of knowledge and curiosity, are getting engaged in an immense and addictive use of digital products for performing their everyday activities. Screen time, in general, is an umbrella term for the time that an individual spends in front of the screens of their electronic devices. 'The Blue Screen of Death', a term coined for the big television and digital screens, is affecting the mental health and ability of the people. Given the revolutionary digitalization of every activity possible, the need and want of using these devices has increased incessantly. On comparing the current and the past generations, we have seen that mental sanity and health have diminished universally. According to a general survey, an average individual currently spends more than five to six hours of the day in front of a screen. The mental well-being of individuals is not given due attention. Although words like anxiety, depression, and mental instability had come into existence in the 14th century, their prevalence and knowledge among the people has spread in recent years.

Mental health is starting to get serious as the years pass by, and is correlated to the concurrent increase in screen time. The lives of those in the current young generation revolve around screens. Right from playing video games to attending online classes, they use mobile devices excessively and are constantly in contact with screens, which are affecting them mentally and physically.

Good mental health means a mind free of problems like anxiety, depression, overthinking and other psychopathological symptoms. Currently, excessive screen time has inculcated a feeling of restlessness and impatience among users. The growing existence of social media usage is not only emerging as an addiction, but also as a barrier to a healthy mind. The rodomontade and boastful showcasing of an individual's lifestyle on social media induces a feeling of jealousy and reduces one's self-esteem. Not having the means to acquire something does not only frustrate an individual, but also makes them gloomy. Keeping in mind that a good mind is a good life, the world needs to start keeping a check on their screen time.

#### LITERATURE REVIEW

- Jean M. Twenge (2020) observed in his work, how digitalization has led to an increase in the prevalence of diseases like anxiety, depression and suicidal thoughts among adolescents residing in the United States. He brought forward a comparison on how the mental health of the young generation has been diminishing from the 2000s to the 2010s, due to the excessive use of digital sources.
- Xiaoyan Wu et al. (2016) in their study, assessed the

impact of the increase in screen time on college students residing in China. They brought to light a striking analysis, that an increase in the screen time by two hours per day led to a concurrent increase in the index for anxiety, depression and psychopathological symptoms from 1.12 to 2.83, 1.25 to 1.93 and 1.22 to 1.83 respectively. Although the degree of impact was not found, they deduced that it had some impact on mental health.

- Amber Berthope et al. (2016) observed that the time spent on social media had a great impact on the increasing risk of depression and self-harm. They surveyed through questionnaires and deduced that by a 30-minute increase in social media screen time, the risk of self-harm would increase approximately by 15 per cent. They also found that excessive use of social media could lead to a reduction the selfesteem in females by 12 per cent.
- TS Piola et al. (2015) studied that due to increasing digitalization and easy access to the internet and social media, the level of physical activity performed by the youth has decreased severely. It was observed that the screen time among females was high and that there was a decreasing trend in the physical activities undertaken by them.

#### OBJECTIVES

In this project, I would like to frame inferences on the following parameters:

- To observe the impact of the increase in screen time on the health of the younger generation.
- To understand the three R's of emotions, developing due to increased screen time.
- To discuss the new age phenomenon: 'The 30-Second Effect'.
- To confer various mediums that account for their daily screen time of people of different generations.
- To discuss how screen time would have a lasting impact on the present and the future generations, with the future significantly differing from the current scenario.

#### **RESEARCH METHODOLOGY**

The research was conducted to collect information on the digital usage and well-being of people. The research made to shape this paper was exploratory, descriptive and analytical.

#### **Research Data**

#### Data Type

The methodology adopted for procuring information is based on primary data as well as secondary data. Primary data has been collected through a survey using questionnaires, on the basis of which analytical inferences have been drawn. Journals, research papers, columns and other articles have been used to collect secondary data for the research paper. Secondary data has been used along with primary data to draw final conclusions.

#### **Sampling Procedure**

Primary data has been obtained using a questionnaire, prepared and shared using Google Forms.

#### Sample Size

The primary data used in shaping the project was based on the responses of 178 respondents.

#### Area of Study

The study is primarily based on the residents of Kolkata, West Bengal, India. The residual response was received sporadically from other cities in India and abroad.

#### Tools and Techniques Used

Various analytical techniques like Data Mining and What-If Analysis have been used to bring out a few findings. Other analytical tools like pie charts and histograms have been used to show various ratios and inferences.

### Impact of Screen Time on the Health of the Young Generation

#### **1. Reduced Physical Activities**

The current companion of each and everyone is their mobile phone. The excessive and addictive use of mobile devices, for any purpose, has shifted people's need and will to do any physical activity. Outdoor football has been replaced with FIFA PlayStation games and body workouts have been replaced with being lazy and scrolling through social media platforms.

On comparing with the previous generations, the time invested to play outdoor sports has clearly shown a downtrend. This subtraction of physical activities from daily life has not only made people lazy, but has also led now hampered because people have started directing their time towards unwanted content consumption.

On being asked what activity an individual would prefer after having spent hours in front of a screen, only five people per 100 respondents replied that they would be in the mental space to study anything post the long screen view.

to them suffering from health problems like acute back pain and other muscle pains at a very early age.

According to the survey conducted, 50.3 per cent of the respondents stated that their physical activities have died down, with the same being replaced by their screen time.

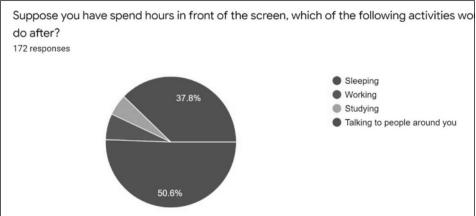


Figure 2: Collective Response Depicting How Post-Excessive Screen Time Hampers Concentration (Source: Primary Data)

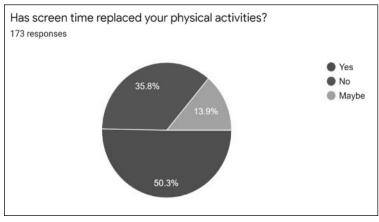


Figure 1: Representing the Reduction in Physical Activities Due to Increase in Screen Time (Source: Primary Data)

#### 2. Academic Problems

The excessive use of electronic devices is making people, and in particular students, have a laid-back attitude towards their work and studies. The prevalence of 'phone addiction' has led students to deviate their focus from studies. The once undivided attention is

#### 3. Violence

Gaming is one of the most addictive aspects relating to screen time. There have been instances when young adults dwelling in the world of gaming, were trapped in its whirlpool and ultimately lost their lives. Moreover, there have been cases of individuals committing suicide because of their defeat in a game. Games like 'Pokemon Go' and 'PubG' have been banned because of their addictive and negative nature.

#### 4. Behavioural Change

Humans become what they see, watch, observe, and surround themselves with. This human tendency of adapting and changing according to what they see, is one of the prime factors of any behavioural change that takes place because of an increase in screen time. In the survey conducted, it was seen that more than 50 per cent of the respondents, who spend more than one hour per day on social media platforms, reported that they get angry and agitated easily. Exposure to social media, where anyone and everyone tries to put a better picture of the reality, makes the users viewing it feel low, due to which their self-esteem gets hampered. The regular view of people living their best lives fills the mind of the viewer with indirect frustration and jealousy. The same is vented by them through the behavioural change of being mean and rude to other people.

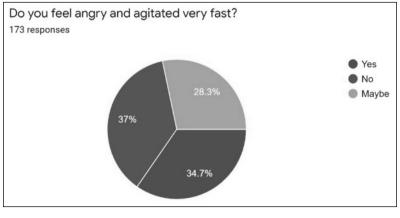


Figure 3: Response on Whether the Respondents Get Easily Angry (Source: Primary Data)

#### 5. Depression

Since the advent of digitalization, there has been a spike in the cases of people suffering from depression. This is one of the alarming side effects of excessive screen time usage. The constant use of social media, where people generally tend to portray the better part of their lives, makes the viewers feel low about themselves.

Cyberbullying is one of the causes of depression among renowned individuals. The comments and opinions

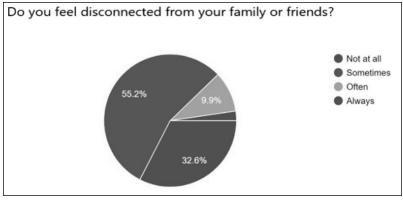


Figure 4: Response on Feeling Disconnected from Family or Friends (Source: Primary Data)

posted online often lead to individuals questioning their existence. According to the survey conducted, 95 of the respondents stated that they often feel detached from their families.

#### The Three R's of Emotion

The booming screen time usage has planted the seeds of three R's of emotion: Restlessness, Rebellious and \_\_\_\_\_\_ Resentment.

#### Restlessness

#### The growth of the social media industry and the influence it has had on people has been immense. The constant use of social media by different age groups has led to the growth of varied emotions in them. The new age updates in social media in the form of short videos, such as 'Reels from Instagram', 'TikTok videos' and 'Facebook stories' have trained the minds of the

viewers to consume something new every 30 seconds or less. This habitual quick shift in focus and attention has resulted in the users becoming more and more restless. The urge to consume new content with every passing second makes their mind fickle. The same

every passing second makes their mind fickle. The same users who consume such social media content every day, when denied access to it, get restless. This affects their normal working behaviour too. From not being able to wait for an extra second, to skipping the content if it's too long, the users become restless with time.

#### Rebellious

Studies have proved that excessive usage of digital

screens can make a mind frustrated and agitated. The same frustration gets directed in one's normal life. People using mobile phones excessively, tend to remain frustrated and start to rebel against everything that comes their way. This rebellious nature is merely the result of the agitation that gets bottled up while they look at their screen. This particular nature is developed quickly in kids of tender age. Through the survey, it was observed that kids, who tend to have a higher screen time in their tender age, become more rebellious and ill-mannered. Their mind becomes fickle and they become less attentive.

#### Resentment

The growing attachment with the virtual world has made physical contacts less welcomed. People have started to indulge in the virtual world to such an extent that any physical presence seems bothersome, uncomfortable and unwanted. This has made people start feeling less connected, with a feeling of resent coming into the picture. The hollow world of social media showcases the best of all people, which makes the viewers jealous, and causes them to question their self-esteem. This feeling of jealousy makes people resent each other and feel detached from their friends and family.

#### The 30-Second Effect

Scrolling through social media platforms causes one striking problem - frustration. The 30-second videos created by the people, when consumed on a regular basis, can force our minds to feel frustrated more often. The reason behind this, even though simple, is either ignored or often goes untraced by people.

The reason for this frustration is that this consumption trains the mind to expect new content every 30 seconds. In life, it is not humanly possible to get something new every 30 seconds or less. This lack of new content creates a feeling of vagueness within the individual and thus, forces indirect frustration and emptiness. The same has been majorly seen in young adults and kids.

According to the analysis, around 40 per cent of the people had, at some time or the other, fought with their loved ones because of mental frustration. On digging deeper, it was deduced that two age groups that had contributed significantly to the total percentage, ranged from 20 to 40 years. Further, it was observed that more than 80 per cent of the above category uses social media for approximately two to five hours a day.

This effect is more visible and harmful for kids. Through observation, it was seen that kids who watch videos available on online platforms like YouTube and others, tend to get frustrated even in a split second of low network connectivity. The choice available to them to watch something new by pressing a button every 30 seconds, makes them addictive and develops in them the thirst of consuming 'new content' every other moment. Thus, it affects their time away from the screen too.

#### What can be Considered as Healthy Screen Time?

The answer to this particular question is quite subjective as, due to digitalization, the want to use an electronic device has been replaced by a need to use these devices.

When the same question was asked to the respondents, the replies received were quite varied and differed among different groups.

Thus, the following screen time has been considered as an average screen time:

#### Based on the Age:

- 1. Below 20 years: The average ideal screen time perceived by this group is two to five hours per day.
- 2. 20 to 30 years: The average ideal screen time perceived by this age group is zero to three hours per day.
- 3. 30 to 40 years: The average ideal screen time perceived by this age group is two to five hours per day.
- 4. 40 and above: The average ideal screen time perceived by this age group is zero to three hours per day.

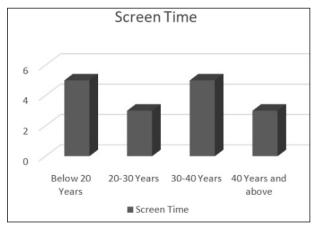
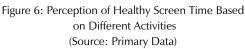


Figure 5: Perception of Healthy Screen Time Based on Different Age Groups (Source: Primary Data)

### **Based on Activity**

- 1. Online Classes: Those who regularly attend online classes responded that four to six hours per day can be considered as the average ideal screen time.
- 2. Working from Home: Those who work from home responded that five to seven hours per day can be considered as the average ideal screen time. The reason behind the extra hours is simple working from home solely depends on one's electronic devices which are linked to servers or clouds.
- 3. Watching Videos: Those who spend more than an hour watching online videos on a daily basis reverted that two to five hours could be considered as appropriate screen time, on average.





### Where Are We Spending Our Screen Time?

This poses as one of the prime objectives of the study. A comprehensive analysis has been made using the primary data to draw an outline of how people spend their time on screen.

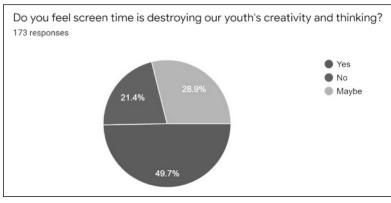
1. Working: Approximately five to seven hours are spent by individuals who work from home, in front of their laptops. Since the respondents primarily belong to the age group of 10 to 20 years, limited or negligible working hours were reported by them, still recording high screen time. On the other hand, 20 per cent of the working-class group, who work from home on a daily basis, reported a daily average of eight to ten hours in front of the screen.

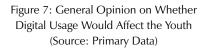
- 2. Due to paperless working and e-commerce, the need of using electronic devices has become indispensable.
- 3. Online Classes: In the current scenario, a student spends approximately two to five hours per day attending online classes. This medium has found prevalence since the birth of the COVID-19 pandemic. The hours spent for e-learning are used for regular schooling, university learning and private tuition.
- 4. Online Engagements: Platforms like YouTube and TikTok are quite addictive. It has been observed that the majority of the individuals between the age of 15 to 30 years, spend at least one hour on such platforms every day.
- 5. OTT Platforms: This is the most trending and emerging industry. It caters to all age groups in general, along with young adults and adults in particular. People tend to binge-watch on these platforms excessively.
- 6. Gaming: This is an industry where the impact of the games available and accessed is huge. There have been cases of attempted suicide merely due to facing defeat in a game. Such games are quite addictive and affect the mental health of an individual. The age group of 10 to 20 years is most sensitive to such mediums, where every game has control and power over the mind of the gamer.

### What Does Our Future Hold?

On comparing different generations, it is quite evident that the use of electronic devices is increasing incessantly, along with a simultaneous increase in the screen time per individual. If individuals continue to increase their screen time for every new task performed, there will come a time when people will stop connecting personally and everyone will have to find solace in their own virtual bubble. If things move on at this pace, the mental space of our future generation will be disrupted. When the respondents were asked about their opinion on whether screen time affects the youth's creativity, more than 50 per cent of them agreed. The ignorance of not regularly checking and regulating one's screen time can pose harm to people in the long run, both physically and mentally.

According to the survey conducted, 58.4 per cent of the respondents do not check their screen time, and only 24 per cent of them keep a check on their daily screen time. The remaining respondents check and regulate their screen time a few times a year.





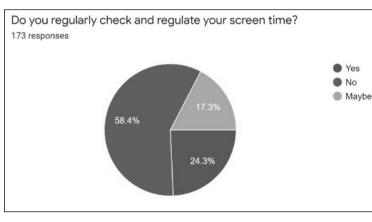


Figure 8: Response on Asking Whether They Regularly Check Their Screen Time (Source: Primary Data)

#### CASE STUDY

The future of mankind can be dark due to excessive screen time, and this can be elucidated through a case study observed during the project. During the research, a peculiar case of a three-year-old kid was brought to notice. The background of the case is that the kid, before the age of one, was given full-day access to a tablet phone. This led to excessive use of electronic gadgets, with no boundaries. The tactic of keeping the child engaged with a device has now proven to be the biggest curse in her life. The kid, although belonging to a joint family, hardly interacts with anyone else other than her parents, even so for everyday essential purposes. The life of the kid has been contained in a 16-by 23-

ty and thinking? The conditions observed are: The only communication

The only communication made and initiated by her is with her parents, with no one else around. There is almost negligible interaction with her peers and other members of the family.

Due to lack of interaction, the vocals and speech of the kid have not fully developed with her age. This has limited her capacity to speak, resulting in her speaking less in

comparison to the other children of her age.

Since the kid's life revolves around a rectangular screen, the ignorant behaviour of others' existence was seen in

full force. Distant from reality, the kid lives her life in a virtual space, where there is no two-way communication.

A fall back in day-to-day working and other habits has been seen as compared to other children of her age group. It is not possible to provide proper nutrition to her due to the child's adamant and stubborn behaviour. The willingness to eat food is missing and other inedible mediums are being used by the kid to eat.

Thus, it can be concluded that this unregulated screen engagement of the kid, harmed and violated her mind. This basic fault of not giving due attention to the screen time of the child, which is common among young parents these days, has resulted in such a case. Such instances prove that due to excessive engagement to the reel world, the children forget the real world, which is an extremely alarming fact.

#### Inferences

To sum up, it can be deduced that although converting everything into an online platform has helped reduce cost and redundancy, along with improving the quality of work, the effect of the concurrent increase in screen time of individuals is immense.

The mental health of the individuals is being compromised without them even knowing about it. Cases of depression, anxiety, panic attacks and low selfesteem are the by-products of the increase in screen time. The feeling of worthlessness and unwantedness has increased due to immense exposure to social media.

It can be deduced that even though screen time affects our mental health, its presence cannot be omitted completely. Although digital presence is close to being indispensable in people's lives, it is also advisable to regularly check the screen time. Currently, fewer people are seen to be regulating their screen time, but one must always strive to improve these figures.

#### RECOMMENDATIONS

1. It is advisable to regularly check and regulate one's screen time. This would not only increase self-awareness, but would also alert the person through self-realization regarding the immense screen time.

- 2. The average screen time varies; depending upon the activity one performs using devices. It would be better to cut down the screen time to three to four hours per day, for the younger generation.
- 3. Those who are working from home should take some time off from the screen to give rest to both their eyes and their mind.
- 4. Parents and adults of the family should regularly keep their wards' digital exposure in check. Rules and boundaries must be set to give space to the children while at the same time not letting them hinder their mental sanity.

#### REFERENCES

Research Papers:

- 1. Martin, K. (2011). Electronic overload: The impact of excessive screen use on child and adolescent health and wellbeing. Perth, Western Australia: Department of Sport and Recreation.
- 2. Twenge, J. M. (2020). Increases in Depression, Self-Harm, and Suicide Among US Adolescents After 2012 and Links to Technology Use: Possible.
- 3. Mechanisms. Psychiatric Research and Clinical Practice, 2(1), 19-25.
- Wu, X., Tao, S., Zhang, S., Zhang, Y., Chen, K., Yang, Y.,... & Tao, F. (2016). Impact of screen time on mental health problems progression in youth: a 1-year follow-up study. BMJ Open, 6 (11) Amber Berthope, Tela Dolson, ... & Jaren Wilson Impact of Screen Time and wellbeing. Berlin, Germany: Berlin University of Psychology.





(11

As buyers are increasingly performing exercises recently controlled by organizations, the whole promoting scene is evolving.

# A Study on How Social Media Affects the Behaviour of the Consumers

Dr. Sourav Tarafder Assistant Professor Department of Commerce (Morning)

Dewans Gopalka Department of Commerce (Morning)

#### ABSTRACT

Social media has modified the game for many industries and disciplines, such as consumer behaviour. It examines how emotions, attitudes, and choices influence the buying conduct of consumers. It is hard to achieve brand loyalty these days, no matter how positive the response for a product or

,,,

YOUTHINK • 2022 • Vol. XVI

service. There is an ongoing publicity to gain advantage over the competitor's products and services and a consistent conflict for the consumer's interests. This results in a new trigger, and it gets more difficult to close the loyalty loop. Owing to the strength granted by using the internet, purchasers nowadays easily hop among unique levels and between multiple businesses.

**KEYWORDS:** Social Media, Consumer Behaviour, EBM Model, Consumer Decision Process, Marketing.

#### INTRODUCTION

'Traditional Marketing is not dying – it's dead!' (Zynman 1999)

Social media is a dynamic wonder. All through the recent years, the World Wide Web has seen an extension of customer-driven web developments like web diaries, interpersonal organizations, and media sharing stages. Everything, when considered, is called web-based media and these advancements have enabled the improvement of customer-made substance, overall neighbourhood, and the circulating of client appraisals (Smith, 2009). This advancement, that is taking place right now, governs the way we utilize the web and has offered stages to popular platforms like Facebook, YouTube, Instagram, and Twitter, where people interact, create and offer substance (Darley et al., 2010).

The online media change has provoked better methodologies for searching and securing information on the enormous number of items and administrations on the lookout. It has allowed customers to partner and discuss brands with each other quickly and successfully (Powers et al., 2012). Buyer notions on items and administrations are continuously overwhelmed by pariahs in online spaces, which consequently sway assessments in the disconnected space. Online media has empowered customers, as promoters have no power over the substance, timing, or frequency of online conversations among purchasers (Mangold and Faulds, 2009). The usage of web-based media by purchasers is anxiously followed by promoters, yet very little is thought about what it means for the customers' dynamics.

The Traditional EBM Model (Engel et al., 1990) is picked to consider the clients' decision because of its straight imposition and adaptability. The model involves five stages: need recognition, data search, evaluation of choices, purchase decision and post-buy conduct. The investigation attempts to find the meaning of the model in the setting of online media use.

#### Stage 1 – Need Recognition

Need recognition is the principal phase of the purchaser choice interaction. Inner improvements or outer improvements (for example, commercials) cause the customer to understand that there is a contrast between their present status and their ideal state. This is largely viewed as a trigger that starts a buy choice cycle and is also the forerunner of all resulting customer started exercises like data search, assessment, and buy.

#### Stage 2 – Data Search

Following needs affirmation - a buyer accepts a search into memory to choose, if enough is known to make a choice. If inward data is not sufficient, an external pursuit is expected to upgrade the existing data. Outside search is consistently embraced through up close and personal sources (for example, partners and family), business sources (for example, advancements and sales representatives), and public media sources (for example, papers, magazines, television, and web).

Customer reviews on websites like Amazon.com or TripAdvisor are seen as giving a more complete and stronger thinking examination.

#### Stage 3 – Evaluation of Choices

At whatever point information has been assembled, the purchaser uses it to evaluate and reach a purchase decision. The elective appraisal and information search stages are presented autonomously and are unusually entwined during a dynamic. The customers routinely move to and from between the two. Elective appraisal incorporates the decision of choice alternatives and evaluative guidelines.Once determined, the performance of the decisions is analyzed along the remarkable models. Lastly, choice principles are applied to limit the choices and make a last determination. This stage prompts the development of convictions, perspectives, and aims, prompting the resulting phase of procurement.

#### Stage 4 – Purchase Decision

Purchase decision identifies with the last choice or assurance made regarding which product or service to buy. The show of acquisition is the last stage, with the customer choosing what to buy, where to buy, and how to pay. Purchase is a component of assumptions, biological effects, and individual conditions.

#### Stage 5 – Post-Buy Conduct

In the post-buy stage, customers assess the item's exhibition depending on their assumptions, and arrive at a condition of fulfilment or disappointment. Results are thought about against assumptions in an abstract assessment, which takes one of the three main structures: positive confirmation or fulfilment, straightforward affirmation or unbiased reaction, and negative disconfirmation or disappointment. Customers who contribute a ton of time, exertion, and cash into a purchase may experience intellectual discord on whether a correct choice was made.

#### Most Well-Known Social Media Stages

#### 1. Facebook

Facebook remains the best online media stage (with basically 1.7 billion customers), even though it has had shocks and disputes lately. Edison's research's infinite dial concentrate from mid-2019 showed that 62 per cent of U.S. long haul olds are Facebook customers, down from 67 per cent in 2018 and 79 per cent in 2017.

#### 2. Instagram

Instagram is an astounding stage for brands since it provides them with endless opportunities to parade their content: photos, stories, showcases, and channels. 73 per cent of the youth say that Instagram is the best course for brands to reach them with new things or progressions.

#### 3. Twitter

Twitter is a wellspring of exposure for certain people. Fledgling Social shows that 53 per cent of purchasers propose associations in tweets, while a further 48 per cent go ahead with completion of purchase of those things or organizations.

#### 4. YouTube

There is a conversation on whether YouTube is a social media stage or positively a streaming stage or substance stage. Considering everything, it is conceivably the most acclaimed arranger out there. A steadily expanding number of people are engaging on the stage.

'Marketing is not the art of finding clever ways to dispose of what you make. It is the art of creating value' - Philip Kotler (2011)

#### Ways Social Media Influences Consumer Behaviour

#### 1. Builds Product Awareness

Online media has a gigantic effect on buyers when they are endeavouring to construct mindfulness about a specific item. At the point when individuals deal with an issue, they begin to look for an answer. In any case, a large portion of the individuals do not know which item or administration will tackle their issue. A huge part of the crowd becomes more acquainted with the image of the substance that is circulated via online media.

## 2. Social Proof as a Greater Force for Buying Decisions

Online media has brought about the advancement of social confirmation as a more prominent power for purchasing choices. A social confirmation has arisen because of the propensity of individuals to copy the conduct of individuals around them, or individuals impersonating those who have an impact on them. Social advertisers hoping to sell their items ought to have a strong social confirmation in terms of contextual analyzes, pictures, video, case cast meetings, and influencers as a component of their selling procedure.

#### 3. Promotions, Discounts and Deals on Social Media

When customers see advancements, limits, and arrangements on social media, it impacts their purchasing conduct. 64 per cent of online shoppers hold on to purchase things until they go available to be purchased. Social media is an inexpensive stage that gives brands moment reach to billions of dynamic online media clients. Purchasers are bound to purchase when they get suggestions from an individual they trust. The facts confirm that 49 per cent of customers look for direction from social media influencers prior to settling on a purchasing choice. A positive impact will urge the purchaser to purchase the item. Influencer advertising can do some incredible things for your image by pulling in more clients. Numerous advertisers are supplanting big names with YouTube, Instagram, and Snapchat influencers.

#### **RESEARCH PREMISES**

#### Objective

The objective of this research is to investigate the job of online media in purchasers' dynamic cycle for dynamic purchases – those portrayed by basic brand contrasts, high customer incorporation and hazard, and which are costly and uncommon. The model uses the information search, elective assessment, and buy choice stages from the conventional EBM model. The objective of the investigation is to explain why, when, and what online media has meant for the purchaser choice interaction. The speculative construction lays on the writing of client decision-making measures, web-based media and past examinations related to online media publicizing.

A quantitative survey is used as the end goal of this research. This examination gives clarification on how people are joining in, handling, and choosing the data via social media before a purchase.

#### **Literature Review**

Dr. Sourabh Chaturvedi et al., (2014) indicates how online media locales turned into a significant mechanism for firms and buyers to meet people for the trading of data about items. It additionally proposes that the impact of online media on client purchasing conduct is colossal. The purchasing conduct in informal organizations is impacted by sexual orientation, schooling, pay, age, and so on. According to Aindrila Biswas, et al., (2014) innovation acceptance model was received to track down the online media use insights. The workers of the multinational organizations in India are examples of the examination. A condition demonstration was utilized to test the qualification of the model. The outcomes express that the clients of social media have more buy expectations than a periodic client.

Ethel Lee (2013) indicated how shoppers are associated with the way of getting together required data through social media prior to acquiring an item. The discoveries reveal that shoppers effectively partake in the pursuit of data for an item via social media; when contrasted with broad communications, the pursuit is more abstract, specific and emotional.

Kotler and Armstrong (2014) characterized purchasing conduct along with two tomahawks: high or low shopper contribution, and huge or barely any brand differences. Complex purchasing implies high danger, and consequently, data social affairs and assessment of item decisions expect more noteworthy significance. It contrasts from cacophony decreasing conduct, likewise high danger, in that there are critical brand contrasts, and would have the shopper going through all phases of the choice interaction. Subsequently, this examination revolves around complex purchasing circumstances where the impact of web-based media is attempted to be generally apparent.

There are numerous approaches to demonstrate customer conduct, contingent upon the objective of the research, yet a helpful strategy is the choice interaction approach which examines the occasions that go before and follow a buy, and that clarifies the way choices are made (Karimi, 2013).

The idea of verbal Word of Mouth (WOM), presented during the 1950s, has been rejuvenated by the web. As per Arndt (1967), WOM is an 'individual to individual correspondence between a recipient and a communicator whom the beneficiary sees as nonbusiness as to brand, item, or administration.' WOM is an essential wellspring of data for purchaser purchasing choices, moulding mentalities, insights, and assumptions for brands, items, and administrations (Kimmel and Kitchen, 2014), and affecting all periods of purchaser dynamic: from item attention to choice and post-buy assessment. Content produced by web clients, who are shoppers, is for the most part seen to be free of business impacts (Bronner and Hoog, 2010). This trust makes shoppers go to discussions, websites and other fair online media sources to accumulate data for purchase choices (Powers et al., 2012).

As indicated by Alsubagh (2015), clients are continually presented with these various commercials that attempt to get people's consideration. Kumar (2004-2005) clarified that search devices are currently used to investigate pre-buy item data, like value, style, audits and so on. Web will, in general, be the essential wellspring of data for most clients on customary premise and informal organizations permit clients to assess items, make proposals and make status refreshes. These clients can undoubtedly share their thoughts, sentiments, and encounters while associating with others on the web peers (Nolcheska, 2017). Online life is an organizational framework and correspondence stage. Making a voice for your association through these stages is critical in assimilating your association. Customer's esteem understanding that when they post comments on your pages, they will get a redone response rather than a robotized message. Having the choice to perceive each comment shows that you are aware of your visitors' necessities and intend to give the best agreement.

Riegner (2007) clarified that ordinary clients are expanding their job in the business commercial center, while utilizing the web as an instrument for relational correspondence and business suggestions. Alsubagh (2015) clarified that the web is important for the regular day-to-day existence of the total populace influencing another type of correspondence through friendly organizing destinations. The web offers openings for getting pre- and post-buy data. Its principal advantage is the measure of data accessibility and independence from actual contact (Jepsen, 2007).

As indicated by Hajli (2014), the accessibility of the web has furnished people with the chance to utilize interpersonal organizations, like Twitter and Facebook, to cooperate without the requirement for actual gatherings. Through informal channels, organizations can build brand mindfulness, positive verbal deals, and create more noteworthy help. As per Nolcheska (2017) these social media stages have empowered a two-way stream of data that permits organizations to impact the buying choice of designated gatherings. With extended porousness, your business obtains open entryways for change. Each blog, passage, picture, video, or comment might lead watchers to your association's site and augment traffic. Online social organization publicizing, licenses your business, to give a positive impression through a variation factor.

Jackson (2009) said that one more space of displaying network communication concerns what organization means for conduct. Moreover, as indicated by Nolcheska (2017), a client's social cooperation affects purchase choice, beginning from the issue of acknowledgment, looking at pertinent data, assessment of choices, last buy choice, and post buy fulfilment. As per Dellarocas (2002), digital marketing has permitted people to make their own idea available to other local areas of internet clients. Individuals from a specific local area can, with no expense, present their viewpoints with respect to certain items, themes or local areas and these online surveys significantly affect clients' purchase aims (Zhang et al., 2014).

#### **Research Methodology**

The current research lies in the perspective of consumers' buying behaviour and their satisfaction in the Indian market. Sources of collecting primary and secondary data are discussed here. The questionnaire is utilized for the purpose of gathering primary data. The secondary data have been gathered from the companies' releases, business magazines, business dailies, textbooks, and websites.

The present study includes the utilization of the 'survey method'. For quantitative data collection, the personal cum online survey methods are used. The sample size was 156, their nationality being Indian, mainly residents of West Bengal. The age group of the samples was divided in three categories, i.e., below 20, then 21-40, and above 41 years.

#### Limitations

- 1. Test size was small which shows restricted generalizability of the examination led.
- 2. Individuals who took an interest in the overview were essentially from West Bengal and the

investigation can be led on a more extensive scale.

- 3. As the investigation is restricted to a particular time, it cannot be utilized to investigate conduct over a period.
- 4. Information was gathered from individuals from the populace who were accessible and took an interest in the investigation.

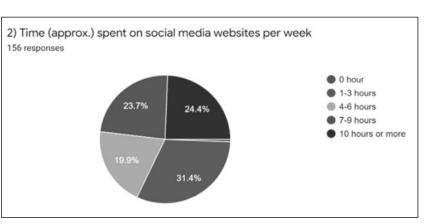
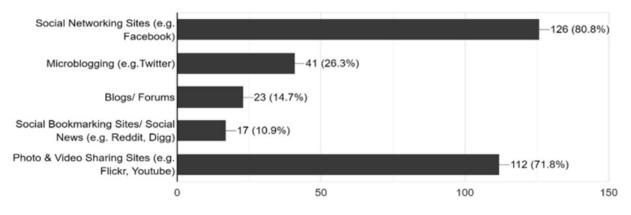


Figure 1: Time People are Spending on Social Media Per Week (Source: Primary Data)

#### DATA ANALYSIS AND FINDINGS

The accompanying area presents an investigation made on the information gathered from the poll. Three diverse age groups are covered, under 20 years of age, 21 – 40 years of age, and over 41 years of age. Of the respondents, 39.1 per cent were female and 60.9 per cent were male. Since the gathered information covers individuals from various age gatherings, inclinations, and sex, the accompanying examination is completed in evaluating the overall customer conduct in West Bengal.

The tables and charts being presented here have been taken from the personal survey conducted for this research using Google forms and based on the responses, the charts are depicted accordingly. From Figure 1, it is evident that 31.4 per cent of individuals went through one to three hours/week of their experience via online media. Moreover, 24.4 per cent of them went through over 10 hours/week via web-based media, 23.7 per cent individuals went through seven to nine hours/week via web-based media, 19.9 per cent of individuals went through four to six hours/week via web-based media, with 0.6 per cent going through zero hour/week via online media. The development of online media has made it simple for a person to impart progressively with various individuals. Thus, one can expand their float of online allies to any degree with the usage of web-based life.

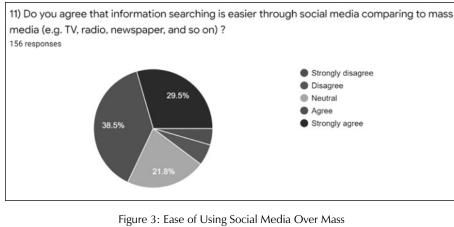


1) Which of the following social media websites you are using on a daily basis? 156 responses



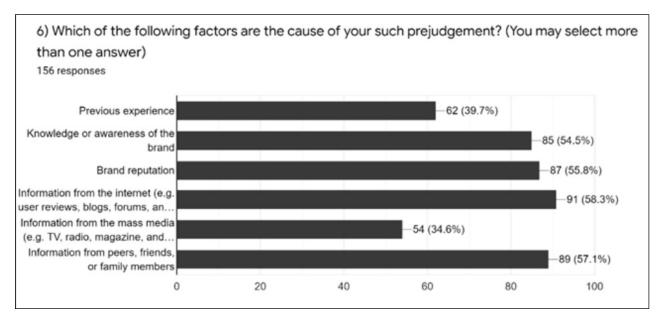
It is understood from Figure 2 that among the three age groups, social networking sites are being utilized generally (80.8 per cent), and social book-marking locales are being utilized the least (10.9 per cent); the rest were online journals and discussions (14.7 per cent), micro-blogging (26.3 per cent), and photographs and recordings (71.8 per cent). It shows that the examples of utilizing a few web-based media stages among various age groups are comparable to that of informal communication locales are generally utilized on standard premise. From Figure 3 we can see that 38.5 per cent of the populace agrees that data looking is simpler through online media, while 29.5 per cent strongly agree, 21.8 per cent are impartial in such a manner, 5.8 per cent differ and 4.5 per cent firmly oppose this idea. Webbased media gives all the applicable data about an item like about its determinations, quality, individual audit, and so on. It has made another scene in supporting the socialization of data.

Among the rundown of variables, Figure 4 determines that 57.1 per cent of respondents communicate that

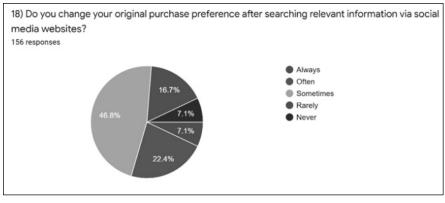


(Source: Primary Data)

data from their companions and relatives are one of the reasons for their prejudgment, in which the believability of wellspring of data is high. In opposition to the wellspring of data from broad communications, 58.3 per cent of the respondents asserted that data from the web, (for example, client surveys, blog posts, discussions, et al.) are one of different components that impacted their perspectives towards an item or administration.







populace and 9 per cent of populace are in fact affected to a t t e m p t n e w i t e m s , administrations, or brands due to the client produced substance accessible on the online media.

In Figure 7, the study shows that 48.7 per cent of the respondents agree and 9.6 per cent strongly agree that their choice was affected by social media. It is on the grounds that numerous individuals have the propensity to

Figure 5: Influence of Social Media on Consumer's Original Purchase Preference (Source: Primary Data)

From Figure 5, we can see that data accessible via online media impacts purchaser conduct; an adjustment of mentality (positive or negative) can be made before buying. In like manner, organizations can use the stages

see online audits and remarks about that item to pick the ideal brand and cost. 26.3 per cent of the respondents had an unbiased assessment in such a manner.

via web-based media to interface with clients to make progress towards developing a superior and more grounded relationship. In addition, 46.8 per cent of the respondents have concurred that occasionally their underlying inclination changes after looking through additional information about an item.

The discovery in Figure 6 has shown that online media has given an incredible stage where new items, benefits, or even new brands can be seen in the commercial center. This does not imply that online media impacts shoppers to attempt these items and administrations. In the gathered information, it mirrors that 43.6 per cent of the

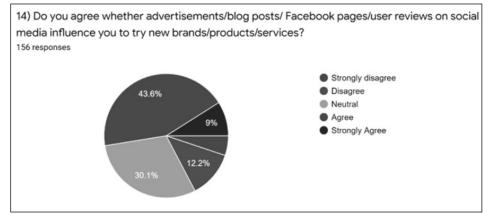
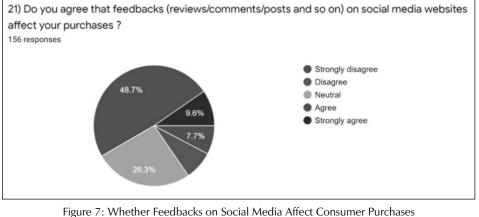
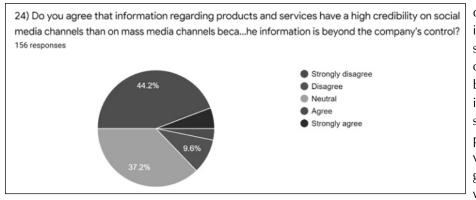


Figure 6: Influence of Others Reviews to Try New Products or Brands (Source: Primary Data)



#### A Study on How Social Media Affects the Behaviour of the Consumers

#### PROJECTS



differ to this reality. The information from the review shows practically 55.8 per cent of the respondents follow brands on social media. The information from the study shows that social media page/site influenced their vision of the brand. As the greater part of the shoppers who shop online read audits about the brands of the items.

Figure 8: Credibility of Information on Social Media Over Mass Media

(Source: Primary Data)

they are purchasing which may influence their vision of that brand. The information from the review shows that social media assumes a significant part in advancing a

Figure 8 shows responses where they were approached to refer to their convictions in how tenable the data via web-based media is contrasting with those on broad communications. 44.2 per cent of respondents concur and 5.8 per cent emphatically concur that data accessible via webbased media have a higher validity than those on broad communications. It communicates their perspective that data accessible via web-based media are accepted to be 'impartial, more basic, trustcommendable, genuine experience, and with less business premise.'

Figure 9 shows how much a buyer's choice is influenced by online media advertising. 46.8 per cent individuals concur that web-based media impacts the buy, while 19.2 per cent individuals are impartial in this and 34 per cent of individuals

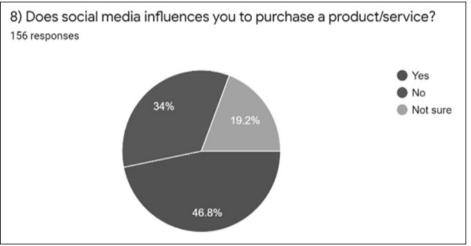


Figure 9: Influence of Social Media on Consumer's Purchase Decision (Source: Primary Data)

25) In your opinion, which stage of your buying decision has been affected mostly because of social media?

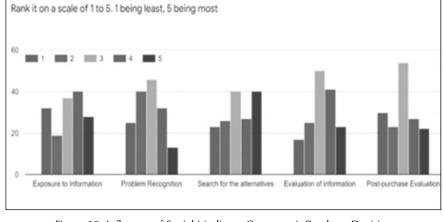


Figure 10: Influence of Social Media on Consumer's Purchase Decision (Source: Primary Data)

brand as it helps increment the measure of openness which empowers the brand to create leads and increment deals.

Results in Figure 10 shows that web-based media utilization impacts purchaser satisfaction in the periods of information search and elective assessment with satisfaction getting upgraded as the buyer moves along the cycle towards definite buy choice and post-buy assessment. The revelations showed that individuals seek a unique part in information search by means of online media, diverging from wide interchanges; yet, information receptiveness is specific and dynamic all through information search.

#### RECOMMENDATION

Based on research it is recommended that if the customers are making purchase choices, they must precisely look at what a business is as compared to its contenders. In specific classifications, loved ones have a major impact on purchasing choices. The impact of assessment pioneers has been around for quite a while. Furthermore, presently, assessment pioneers from different nations would now be able to have an impact on Indian clients. This can happen on long range informal communication destinations, examination shopping locales and audits, for instance.

Social elements fundamentally affect client conduct. Culture is the most fundamental reason for an individual's needs and conduct. While growing up, youngsters learn essential qualities, discernment, and needs from their families and other significant gatherings. A client's purchasing conduct is additionally affected by friendly factors, for example, the gatherings in which the client has a place and societal position.

#### CONCLUSION

As buyers are increasingly performing exercises recently controlled by organizations, the whole promoting scene is evolving. In this way, organizations need to better comprehend the changing behaviour of purchasers, in request to make common advantages from the utilization of social media.

Moreover, they should attempt to enhance their image considerably in front of clients, by posting frequently and reliably. The advertisers should try and make a compelling passionate bond with their customers, thereby strengthening the relationship with them. They should also react rapidly and appropriately, as each client issue is unique and hence, should be dealt with in a like manner. Clients these days depend immensely on social media networks for client assistance and administration; hence, organizations should make themselves noticeable in advanced media platforms so that such assistance can be provided to the customers. This would help them ensure that their brand image remains in the eyes of the public. Lastly, the advertisers should build an exhaustive and attainable arrangement of objectives, which they should try to measure, at the same time examining how far they have been effective in their image building.

Considering the limited time and scope of this research, many theories related to the topic are covered, but from a general point of view, to provide readers with an overview on the topic. So, if further investigation is possible, it should be understood in depth for the purposes of tackling the objective of the research. It is undoubtedly useful and interesting to use the case of a company as a reference for research. By studying the company's case, we can provide a comparison between the problem that the company thinks it is solving and its perception of the consumer. Will the results reflect different views on social media and the decision-making process in two different ways? The results can help the company gain clear insights and determine the real strategy to solve this situation.

Nonetheless, if further research could be conducted for companies, theories can be implied more accurately because some of the theories are proposed and developed to help companies improve their position in the transition from the traditional marketing methods to the new market thinking. In that case, findings and conclusions could be drawn unambiguously.

#### REFERENCES

- 1. Arndt, J. 'Role of Product-Related Conversations in the Diffuse on of a New Product', Journal of Marketing Research, Vol. 4, No. 3, pp.291–295 (1967).
- Ashman, R., Solomon, M.R. and Wolny, J. 'An Old Model for a New Age: Consumer Decision-Making in Participatory Digital Culture', Journal of Customer Behaviour, Vol. 14, No. 2, pp.127–146 (2015).
- 3. Bronner, F. and Hoog, R. 'Consumer-Generated Versus Marketer-Generated Websites in Consumer Decision Making', International Journal of Market Research, Vol. 52, No.2, pp.231–248 (2010).
- 4. Darley, W.K., Blankson, C. and Luethge, D.J.: 'Toward an Integrated Framework for Online Consumer Behaviour and Decision-Making Process: A Review', Psychology and Marketing, Vol. 27, No. 2, pp.94–116 (2010).
- 5. Engel, J.F.: Blackwell, R.D. and Miniard, P.W. Consumer Behaviour, 6th ed., The Dryden Press, Chicago (1990).
- Karimi, S., Papamichail, K.N. and Holland, C.P. 'The Effect of Prior Knowledge and Decision-Making Style on the Online Purchase Decision-Making Process: A Typology of Consumer Shopping Behaviour', Decision Support Systems, Vol. 77, pp.137–147 (2015).
- 7. Keller, K.L. Strategic Brand Management: Best Practice Cases in Branding: Lessons from the World's Strongest Brand. Pretice Hall, USA. Vol. 28, pp.24–78 (2001).

- 8. Kotler, P. and Armstrong, G.: Principles of Marketing, 15th ed., Pearson Education, London. Vol. 7, pp.10–14 (2011).
- 9. Lee, E.: Impact \_ Of \_Social \_Media \_On \_Consumer \_Behaviour– Decision Making Process, Vol. 2, pp. 6-23 (2013).
- Mangold, W.G. and Faulds, D.J.: 'Social Media: The New Hybrid Element of the Promotion Mix', Business Horizons, Vol. 52, No. 4, pp.357–365 (2009).
- Powers, T., Ad vincula, D., Austin, M.S., Graiko, S. and Snyder, J.: 'Digital and Social Media in the Purchase Decision Process', Journal of Advertising Research, Vol. 52, No. 4, pp.479–489 (2012).
- 12. Punj, G. 'Consumer Decision Making on the Web: A Theoretical Analysis and Research Guidelines', Psychology and Marketing, Vol. 29, No. 10, pp.791–803 (2012).
- Schwartz, B., Ward, A., Monterosso, J., Lyubomirsky, S., White, K. and Lehman, D.R. 'Maximizing Versus Satisficing: Happiness Is a Matter of Choice', Journal of Personality and Social Psychology, Vol. 83, No. 5, pp.1178–1197 (2002).
- 14. Smith, T.: 'The Social Media Revolution', International Journal of Market Research, Vol. 51, No. 4, pp.559–561 (2009).
- Voramontri, D. and Klieb, L.: 'Impact of Social Media on Consumer Behaviour', Int. J.Information and Decision Sciences, Vol. X, No. Y, pp.2-7 (2018).



[[]

With the current pandemic scenario, rising consumer awareness, and availability of internet connectivity in smartphones, there have been several changes in consumer behaviour.



Prof. Santa Ghosal Assistant Professor Department of Commerce (Evening)

Mahima Kumari Department of Commerce (Evening)

#### ABSTRACT

'A customer is the most important visitor on our premises. He is not dependent on us. We are dependent on him. He is not an interruption in our

work. He is the purpose of it. He is not an outsider in our business. He is part of it. We are not doing him a favour by serving him. He is doing us a favour by giving us an opportunity to do so.' - Mahatma Gandhi

Consumer Behaviour is the study of how individuals, groups, and organizations select, buy, use, and dispose of goods, services, ideas, or experiences to satisfy their needs and wants (Kotler and Keller, 2006). Although the customer-oriented approach is applicable in all kinds of businesses, from Multinational Corporations (MNCs) to accounting firms, our research study will focus on local apparel shops, commonly known in the local dialect as 'kapda dukaans', in Bihar. Amidst the pandemic, in the present scenario, the consumers' way of purchasing clothes has shifted. Customers are purchasing cautiously, as well as trying to ensure safety first. There is a rising shift towards online buying and 'trust shopping'.

This study tries to look into the alterations in the buying behaviour of consumers in the state of Bihar when it comes to purchasing garments. It provides recommendations based on this so that the local garment shops situated there can benefit from the same, adjusting themselves to recent requirements.

**KEYWORDS:** Consumer Behaviour, Pandemic, Digital Payments, Online Shopping.

# INTRODUCTION

From fibre to fashionable garments, the textile industry is like the backbone of the modern world economy, with millions earning bread from it. As per Grand View Research's recent report, the global textile market size was valued at \$961.5 billion in 2019, and is estimated to exhibit a Compound Annual Growth Rate of 4.3 per cent from 2020 to 2027, owing to increased demand for apparel, especially in developing countries such as China, India, Vietnam, and Bangladesh. Presently too, as per India Brand Equity Foundation's report, the Indian textile industry contributed 13 per cent to the industrial production in the Financial Year (FY) 2020. Moreover, it contributed 2.3 per cent to India's GDP. Coming to the retail sector, it was projected that the revenue would rise by ₹1-1.2 billion in FY20 in the offline retail sector (also known as brick-and-mortar retailers). Post liberalization, the Indian offline retail sector has been facing numerous challenges, earlier from MNCs, and now, from the online platforms too. Therefore, the study of alterations in consumer buying behaviour becomes necessary to ensure consumer satisfaction.

Amidst the pandemic, in the present scenario, the consumers' way of purchasing clothes has shifted. Although the customer-oriented approach is applicable to all kinds of businesses, from MNCs to accounting firms, our research study will focus upon local apparel shops, commonly known in local dialect as 'kapda dukaans', in Bihar. The district is full of showrooms of Raymond, Manyavar, Vmart, as well as shops of street vendors involved in the retailing of garments. The prolonged closure of stores and postponement of various marriage events due to the pandemic affected their revenue. However, with the relaxation of the pandemic-induced restrictions, things are getting normal. Customers are often purchasing cautiously as well as trying to ensure safety first. They are also focusing on time-saving services and there is a surge in the online mode of purchases.

The state of Bihar has confronted a new challenge recently with rising urban to rural migration, where labourers, students and many working professionals with their family, are returning back to their native villages and suburban districts. With the current pandemic scenario, rising consumer awareness, and availability of internet connectivity in smart phones, there have been several changes in consumer behaviour. To tackle these changes, local shopkeepers came up with listing products on Amazon, Meesho, Facebook, et al.

However, in fragmented pieces, there is a lack of definite suggestions as to how to provide better services and survive, especially in districts like Nawada, in Bihar.

# **RESEARCH GAP**

It is observed that most of the work related to altering buying behaviour in terms of retail garment shops of India has been done in the past, not catering to the current situation and the environment i.e., the

#### PROJECTS

pandemic. Moreover, very limited research on this subject has been conducted in locations like the suburban districts of Bihar. There are limited studies catering to the recent changes in the behaviour of consumers and a list of recommendations to tackle the same.

Hence, in this study, an attempt has been made to study the alterations in the pattern of shopping garments among the consumers in Bihar and come up with a list of recommendations. These recommendations, if executed by the shops, would help them to thrive in the future, which is ever-changing and dynamic.

### LITERATURE REVIEW

 Bloemer José and Ruyter (1998), 'On the relationship between store image, store satisfaction, and store loyalty', European Journal of Marketing.

The study explored the relationship between store satisfaction, store loyalty, and store image. The study was conducted in a major Swiss city; in a German-speaking part of Switzerland. The study found that store loyalty is built by store satisfaction, while store satisfaction is built by store image. Store image is a term, first coined by Martineau (1958), which means the image, impression or idea of the store in the mind of customers.

2. Aaker and D.J. Joachimsthaler (2000), 'Brandleadership', The Free Press – New York.

The study showed that the visual appeal of retail stores could influence a customer's decision to buy. It also concluded that consumers prefer buying brands that help define their personality, showcase their status and satisfy their psychological needs, in addition to the functional benefits.

3. Newman and Cullen (Eds) (2002). Retailing: Environment and Operations: Thompson Learning.

The Book studied the effective mantras for retailing, especially in the United Kingdom. It observed that retailers needed to understand their market well. They needed to formulate clear objectives and ensure proper execution. 4. Mittal Amit and Mittal Ruchi (2008), 'Store Choice in the Emerging Indian Retail market: An Empirical Analysis', IBSU Scientific Journal.

The paper studied the store choice criteria in the context of apparel retailing in India. It investigated how various attributes of apparel stores impact and are evaluated by the customers before buying. The study was based in Delhi and nearby areas of Faridabad and Gurgaon.

5. Dr. K Balanaga Gurunathan (2013), 'Factors Influencing Apparel Buying Behaviour in India: A Measurement Model', Paripex Indian Journal of Research.

The study examined buying behaviour through five dimensions viz. consumer characteristics, reference groups, store attributes, promotion, and product attributes. The study was conducted in Coimbatore City Corporation, Tamil Nadu. Its findings recommend those factors, which are extremely actionable for Indian retailers to formulate a better strategy.

6. Renuka P.M. and Kuloli Sadhana (2016), 'A Study on Consumer Buying Behaviour in Retail Readymade Garment Shops', J. Farm Sci, 29(1) (149-150).

The study examined the behaviour of consumers and investigated changes concerning retail readymade garment shops. The study was conducted in the Hubli-Dharwar Corporation area among 150 respondents. It found women as key influencers and festivals as major periods when purchase is at its peak.

#### **OBJECTIVES OF THE STUDY**

- 1. To study the channels used by customers for placing orders while purchasing garments.
- 2. To analyze the pattern followed while shopping for garments.
- 3. To examine which incentives are more effective.
- 4. To understand factors that are considered by the customers before buying from a particular shop.
- 5. To understand which payment mode is preferred more by the customers.

#### **RESEARCH METHODOLOGY**

In order to study the alterations in the behaviour and expectations, a questionnaire was circulated containing ten questions which were randomly distributed. It included multiple-choice questions to check the way respondents purchase clothes and what their preferences are while purchasing garments from local retail shops. Following is a brief overview:

#### **Primary Data:**

- Sample Frame: It primarily focuses upon individuals of the age-group 18-30, i.e., young population comprising the employed, unemployed, students, as well as homemakers.
- Sample Size: It consists of 125 respondents consisting of individuals from different educational and employment backgrounds.
- Location of Research: Locations of research are various suburban districts of Bihar.
- Method of Sampling: The sampling technique used is non-probability convenience sampling and snowball sampling.
- Research Instrument: The survey has been conducted using online surveys, telephonic interviews, and emails, due to time and cost constraints.
- Data Collection Techniques: The primary data was collected by distributing questionnaires to respondents online, over various social media platforms like Telegram, WhatsApp, Facebook, and so on.

#### Secondary Data:

- 1. Various reports, articles and journals.
- 2. Research papers related to similar topics.
- 3. Books and case studies of various authors.

#### ANALYSIS

Over here, analysis is based on the data collection taken place via the questionnaire circulated, and through various electronic means. The responses were collected from 125 respondents constituting the sample population.

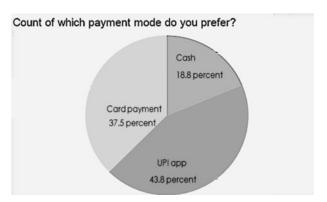


Figure 1: Pie chart Showing Preferred Mode of Payment (Source: Primary Data)

#### Interpretation

43.8 per cent of the respondents use UPI Apps such as Google Pay as a mode of payment. 37.5 per cent of the respondents have cards as the preferred mode of payment. The least preferred payment mode is cash.

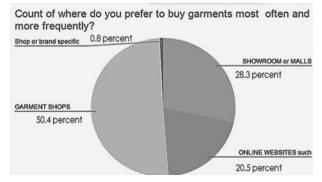


Figure 2: Pie chart Showing Preferred Choice of Purchase (Source: Primary Data)

#### Interpretation

50.4 per cent of the respondents preferred visiting garment shops, followed by 28.3 per cent of them preferring showrooms, and 20.5 per cent preferring online websites. Brand-specific websites are the least preferred choice of purchase at 0.8 per cent.

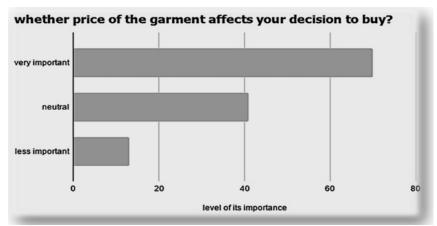
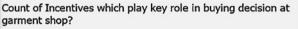


Figure 3: Pie chart Showing Importance of Price as a Determinant While Making Purchase Decisions (Source: Primary Data)

#### Interpretation

70 respondents considered price as a very important factor while making the purchase decision. 40 people remained neutral, while 15 respondents considered it as a less important factor compared to the quality of the garment they buy.



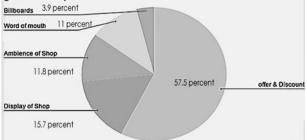


Figure 4: Pie chart Showing Incentives that Play a Key Role while Making Purchase Decisions (Source: Primary Data)

#### Interpretation

57.5 per cent of the respondents agreed that offers and discounts play a key role in their buying decision, followed15.7 per cent of them agreeing that the display of the shop would play a key role. The Ambience of the shop influenced 11.8 per cent of the respondents, and for 11 per cent of the respondents, word-of-mouth advertisements acted as an incentive. Billboards affected the least, only 3.9 per cent.

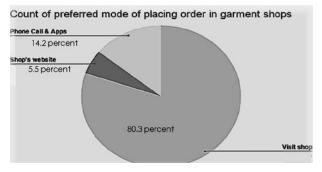


Figure 5: Pie chart Showing the Preferred Mode of Placing Order (Source: Primary Data)

#### Interpretation

Majority of the respondents, i.e., 80.3 per cent preferred visiting the shops to place their order. Recently, there has been a rise in placing orders via phone calls and social media apps, such as WhatsApp (by a virtual display of garments). 5.5 per cent of the respondents preferred placing orders via the shop's website, which is quite new.

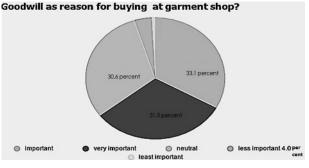


Figure 6: Pie chart Showing Importance of Goodwill (Source: Primary Data)

#### Interpretation

Goodwill is important, as can be inferred from the above chart, for only 30.6 per cent of the respondents are neutral, and 4.8 per cent of the respondents have denied its importance. This shows that people make repeat purchases from a shop for which they consider goodwill as very necessary. Goodwill enhances faith and ensures consumers are loyal and go for word-ofmouth advertisements as well as repeat purchases.

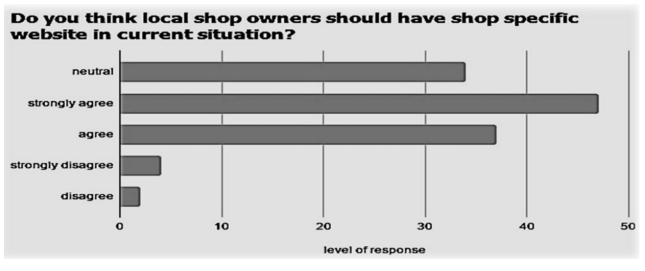


Figure 7: Statistics Showing Whether Shop Owners Should Have Their Own Website in the Current Situation (Source: Primary Data)

#### Interpretation

With the influx of young students and salaried employees 'working from home' in the suburban districts of Bihar, we see a recent trend where people are expecting even local shops to have a digital presence. 47 people strongly agreed to local shops having an online presence, whereas 37

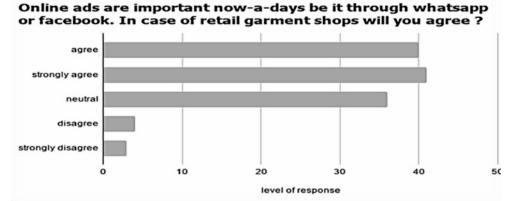


Figure 8: Statistics Showing Importance of Online Ads and Display (Source: Primary Data)

agreed to the proposal, out of 125 respondents. 34 respondents remained neutral while only seven respondents denied its importance.

#### Interpretation

Out of the 125 respondents, 40 respondents agreed, and 41 strongly agreed that the online ads were important for retail garment shops. 36 respondents remained neutral, while seven respondents denied it.

#### FINDINGS AND OBSERVATIONS

The results from the survey show that the majority of the respondents preferred visiting shops for buying their garments. The survey shows that the majority of the respondents felt that offers and discounts are key incentives while making purchase decisions in a garment shop. This is followed by the display of the shop. It is also inferred that the majority of respondents prefer to pay for their clothes using digital modes of payment i.e., UPI apps and cards. Salaried employees and students majorly comprised the population which opted for the above-mentioned modes of payment. Cash was the least preferred mode of payment. This will require the small firms to train themselves to be technologically aware and embrace the new modes of payment, as the young population is fast moving towards cashless modes of payment. The results of the study show that with rapid digitalization respondents consider it important for the local shop-owners to have a shop-specific website for presenting their clothes, and also displaying advertisements of offers and other information. However, a significant percentage of the respondents remained neutral towards online ads but they agreed over the importance of display of the products and their prices online.

It was interesting to find that though customers preferred ordering online over visiting the shop, trust and goodwill are still vital for a local shopkeeper, as claimed by the majority of respondents. With the influx of students, work-from-home employees and migrants returning to suburban districts of Bihar, there is an opportunity for the shopkeepers to expand their customer base.

#### RECOMMENDATIONS

Post the analysis of the data, the following are certain recommendations to help retail sellers survive and grow in the current scenario:

Increase emphasis on enhancing presence on social media platforms and shop-specific websites.

For this, various apps are available, which provide free as well as paid premium services, like Shopify. Making a formal shop-specific website, which the consumers can visit and use to place their orders, will give them a sense of excitement, especially to the young population who are 'trysumers.' It will also build the reputation of the shop.

• Invest in time-saving shopping methods and quality after-sales services.

Use social media platforms to display offers, and new brands and products. This will help customers make their purchase decisions even before they reach the shop, and therefore, they will have a satisfactory and time-saving buying experience. Provide decent tailoring services along with the garments. Moreover, the provision of after-sale services to customers in the price range of ₹ 500 and above will also act as an incentive for repeatpurchase and create goodwill.

• Personal mass messaging to inform about festive offers and coupons.

Have well-designed offers other than the festive offers, like giving beautiful gift hampers along with an emotional message against an annual purchase of a particular amount.

• Ensure a unique display of the shop.

Improve the display as well as the ambience of the shop, and alter the look as per changing festive seasons or some local events. This will portray a unique image, and customers will retain the image of the shop as they pass by.

• Provide other benefits apart from selling quality garments.

Shop owners can tie up with local tailors and designers to provide better customization and unique designs. Constantly updating with changing trends can help gain the first-mover advantage. Ensure higher employee retention, and hire customer-friendly and well-mannered employees. This will not only create value for the customers but also add to the goodwill. Also, personalized messaging should be used to greet people and update them on any important or new information to be the first option in the mind of customers, whenever they think of buying garments.

### CONCLUSION

The present study has analyzed various dimensions, starting from the role of brand, price range, and frequency of purchase, to various changes consumers would like the shop owners to adapt.

In the primary survey which was conducted, we observed that there is a shift among the consumers as they are choosing innovative ways of buying based on reviews and the collection which they evaluate before buying. Therefore, shops need to push their sales by better displaying not only offline, but also online, by using a user-friendly interface. This will give them an edge over their competitors by allowing consumers to shop conveniently.

When interrogated for additional suggestions, people pressed upon the importance of good behaviour and time-saving purchase experience. They responded positively towards surprises and greetings, which they received as add-ons to the product they bought. Reasonable prices can be ascertained by going through the market rates and the average price people intend to spend, thereby matching the aspirations of both sides and satisfying the demand. In the current emergency and lockdowns, making all regular and festival items available at reasonable prices and quality, and displaying them online will add to the satisfaction of the people, who will, in turn, find it easy and comfortable to shop.

Due to the current pace of digitalization and the pandemic, consumer behaviour has modified. Therefore, shop owners need to be vigilant and cooperative to provide the best possible service, imparting maximum satisfaction.

There is a need to come up with the best possible product, price, distribution, and promotion policies to handle the stiff competition, not only from other shops but also from e-commerce giants like Amazon, Myntra, Meesho, et al.

Therefore, if a retail garment shop wants to prosper and increase its profitability, it needs to go beyond the boundaries of 'brick and mortar shop', and it needs to ensure that:

- The Pricing strategy is flexible to suit the expectations of majority buyers and potential customers, over and above the cost.
- The Product strategy is based on the location and on basic regular demands of local people, within 2-5 km range of the potential target customers.
- The Place strategy is accommodative and accepts orders online and provides the facility of home delivery service. Where necessary, the additional cost can be included in the product.
- The Promotion strategy is a mix of unique offers, which ensures repeat purchase and unique display of the shop, and other necessary promotion mixes.

Therefore, shop owners should be ready for the new changes and user-friendly techniques to attract customers and give them the best buying experience, thereby ensuring repeat purchase.

### LIMITATIONS OF THE STUDY

- 1. This primary survey conducted is mainly restricted within certain suburban districts of Bihar, comprising Rajgir, Arrah, Nawada, Hisua, Rajauli, Begusarai, and a few more. Thus, in this case, findings, analysis, and results of one area may be different from another area of the Indian subcontinent. (But using a similar survey, one can get relevant information of other locations.)
- 2. The sample size of the primary survey is 125 only. As compared to the population, it is very small.
- 3. Limitations of snowball sampling and nonprobability convenience sampling: This is an inherent limitation, as due to paucity of time and lack of sophisticated tools and software, a simple and suitable survey, based upon convenience, was undertaken.
- 4. Limited to the garment retail sector only: Since it catered to the garment retail shops only, the study cannot recommend other retail stores dealing in grocery, medical, books, et al.

However, efforts have been made, and all possible and adequate measures have been undertaken to eliminate

as well as avoid the above-mentioned limitations and derive accurate results on the altering buying behaviour, obligating reforms in garment retail shops.

#### REFERENCES

- Amrita Pani, M. S. (2012), 'Emerging Trends in Fashion Marketing: A Case Study of Apparel Retailing in India', IJBMT, 1-8.
- 2. Binoy Mathew 'A Study on Changing Trends in Online Shopping of Indian Consumers in Apparel Segment' International Journal of Applied Research 2015; 1(9): 207-214.
- 3. Churchill, Gilbert A. and Carol Suprenant, 'An Investigation into the Determinants of Customer Satisfaction', Journal of Marketing Research.
- 4. Dr. Anita Rani, I. T. (2015), 'Apparel Retailing in India', Journal of Marketing and Consumer Research, 1-6.
- 5. Kotler P. 'Marketing Management', Grada, Praha, 10th edition; ISBN 80-247-0016-6, 2001.
- 6. Pick D. and Muller D. (2010), 'Retailing in India -Background, Challenges, Prospects.' Berlin, Germany. European Retail Research.

- 7. Sinha and P.K. Banerjee (2002), 'Deciding Where to Buy: Store Choice Behaviour of Indian Shoppers', Vikalpa, 27(2), April-June, pp.13-28.
- 8. Solomon Mr. Consumer behaviour, Buying, Having and Being. Pearson Prentice, 2004.
- 9. Zimmer, M. and Golden, L. (1998), 'Impressions of Retail Stores: A Content Analysis of Consumer Images', Journal of Retailing, 64(3), pp. 265-293.
- 10. Websites Used:

www.ibef.com www.mainstreethost.com www.grandviewresearch.com www.nawada.nic.in www.coursehero.com www.libellulamedia.co.za www.studymode.com

PROJECTS





While an individual country's rational effort to advance the standard of living of their people is palpable, various awry situations may crop up in the trajectory of capturing economic growth.

# A Study on the Nature of Environmental Kuznets Curve in the Context of Four East Indian States for the Period 2013-2019

Prof. Shirsendu Roychowdhury Assistant Professor Department of Commerce (Morning)

Avinaba Sarkar Department of Commerce (Morning)

# ABSTRACT

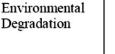
In economic literature, the Environmental Kuznets Curve (EKC) depicts the relationship between environmental quality and economic growth. The

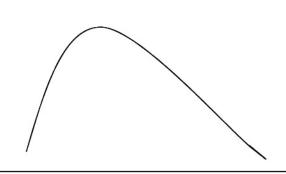
YOUTHINK • 2022 • Vol. XVI

theory refers to the increase in pollution levels with the rise in Gross Domestic Product (GDP) initially, and after it reaches a turning point, it falls as income rises. Named after Nobel laureate Simon Kuznets, this hypothesis predicts the existence of an inverted U-shaped curve, which we have investigated in our study in the context of four East Indian states - West Bengal, Bihar, Jharkhand and Odisha, for a period of seven years from 2013 to 2019. In an attempt to empirically verify the EKC hypothesis, we have presented an econometric framework to be tested using state-wise panel data. We have taken sulphur dioxide (SO<sub>2</sub>) concentration as a measure of environmental quality or dependent variable and expressed it as a polynomial function of per capita Net State Domestic Product (NSDP). Results presented in this study suggest that growth in per capita NSDP is accompanied by rising levels of emissions to a certain extent, and then it falls.

**KEYWORDS:** Environmental Kuznets Curve, Turning Point, Panel Data, Per Capita Net State Domestic Product.

#### INTRODUCTION





Per capita Income

Figure 1: Environmental Kuznets Curve

While an individual country's rational effort to advance the standard of living of their people is palpable, various awry situations may crop up in the trajectory of capturing economic growth. Environmental degradation can be such a dreaded by-product of development that a critical issue for several decades was recognizing the appropriate form of relationship between environmental quality and economic growth.

Simon Kuznets (1955), in his breakthrough work titled 'Economic Growth and Income Inequality', propounded that with a rise in Per Capita Income (PCI), income inequality also increases initially, but then, after attaining a threshold level, begins declining.

Grossman and Krueger (1991), provided an optimistic understanding that environmental degradation can be unravelled through economic growth. This opinion is in conformity with the 'Environmental Kuznets Curve hypothesis', which purports that with continuing growth in GDP, pollution at first upsurges, attains a ceiling, and then declines.

Our study looks at whether the 'EKC hypothesis' is at all applicable to the eastern regions of India, specifically the four states – West Bengal, Bihar, Jharkhand, and Odisha. The Indian states are putting more and more emphasis on accomplishing high economic growth, urbanization, developing infrastructural facilities, and so on. But this study quests after the question of whether these development initiatives have

unfavourably affected the environmental quality.

# **REVIEW OF LITERATURE**

This section presents a broad-spectrum survey of the total domain of the economics of environment-growth relationship.

1. Grossman and Krueger (1991)	The analysis of the EKC relationship was done in the context of the much-debated North American Free Trade Agreement, as many people feared that environmentally intensive factories will try to escape the stricter environmental standards of Canada and the United States of America (USA) by shifting such industries in countries with low environmental standards such as Mexico. However, the researchers came up with a different hypothesis, and they proposed that free trade would protect the environment. In order to explain this phenomenon, they developed a cross-country panel of various measures of air pollution, which they took from the Global Environmental Monitoring System (GEMS) dataset, and explored the relationship between economic growth and air quality. Their sample consisted of SO <sub>2</sub> for 42 countries, smoke or dark matter for 19 countries, and suspended particulates for 29 countries. They held constant identifiable geographic characteristics of different cities, a common global time trend in the levels of pollution, and the location and type of the pollution measurement device. They found that ambient levels of both SO <sub>2</sub> and dark matter suspended in the air, increase with per capita GDP initially, at low levels of national income, but decrease with per capita GDP at higher levels of income. These findings provided statistical evidence and formed the background for the existence of an EKC relationship for these two
2. Shafik and Bandyopadhyay (1992)	indicators of environmental quality. Their study was produced as a background paper for the World Development Report (1992). The objective of their study was to explore the basic relationship between environmental quality and income controlling for country-specific 'fixed effects', such as endowment. Indicators of environmental quality were used as dependent variables in panel regressions, using data from up to 149 countries, for the period 1960-90. Environmental quality indicators used were the lack of clean water, lack of urban sanitation, ambient levels of Suspended Particulate Matter (SPM), ambient SO <sub>2</sub> , change in forest area between 1961-1986, the annual rate of deforestation, dissolved O <sub>2</sub> in rivers, fecal coliforms in rivers, municipal waste per capita, and carbon emissions per capita. Three basic models were tested - log-linear, quadratic and cubic, to explore the shape of the relationship between income and each environmental indicator. Some very clear patterns of environmental indicators improve with rising incomes (water and sanitation), others worsen and then improve (particulates and sulphur oxides), and the remaining worsen steadily (dissolved oxygen in rivers, municipal solid wastes, and carbon emissions).

3. Panayotou (1995)	Panayotou (1993) first coined the term 'Environmental Kuznets Curve' (EKC) because of its resemblance to the Kuznets hypothesis. In his study, he investigated the Environmental Kuznets Curve relationship for deforestation, $SO_2$ , oxides of nitrogen, and SPM. He found that the turning-point income for deforestation occurs at around \$800 per capita; the turning point is \$3,000 for $SO_2$ , \$4,500 for suspended particulates and \$5,500 for oxides of nitrogen. He argued that environmental degradation overall is worse at levels under \$1,000 as both the economy and environmental degradation undergo a dramatic structural change from rural to urban, and from the agricultural sector to industrial sector, between \$1,000 and \$3,000, and as countries surpass a per capita income of \$10,000 and begin to shift from industry to service sector.
4. Stern (2004)	In his paper, Stern presents a critical history of the Environmental Kuznets Curve (EKC). He concluded that recent evidence shows that developing countries are addressing environmental issues, sometimes adopting developed country standards with a short time lag, and sometimes performing better than some wealthy countries, and that the EKC results have a very flimsy statistical foundation.
5. Dinda (2004)	According to Dinda, the possible explanations for the EKC are: (i) the progress of economic development from a clean agrarian economy to a polluting industrial economy to a clean service economy; (ii) the tendency of people with higher income to have a higher preference for environmental quality, et al. The evidence of the existence of the EKC has been questioned from several corners. He further concluded that only some air quality indicators, especially local pollutants, show evidence of an EKC.

Table 1

# OBJECTIVES

The aim of the study is to analyze the relationship between per capita NSDP (at constant price) and environmental quality (considering  $SO_2$  as an indicator) in Eastern India. The specific objectives are –

- To examine the existence and applicability of the EKC hypothesis in the four East Indian states, namely, West Bengal, Bihar, Jharkhand and Odisha, for the pollutant  $SO_2$ .
- To identify the nature of the relationship between environmental quality and economic growth in East India (through Quadratic and Cubic Model).

# RESEARCH METHODOLOGY AND ECONOMETRIC FRAMEWORK

Empirical studies examine the EKC hypothesis using the following general reduced-form model, which is administered by most researchers, from Shafik and Bandyopadhyay (1992) to S. Pandey (2018), all of whose researches have been closely followed for the context of this study. Here, the environment-income indicator is usually a quadratic or cubic function of income.

Let us consider the basic cubic model:

 $Eit = \beta 0 + \beta 1Yit + \beta 2Yit2 + \beta 3Yi3t + \beta Zit + \eta i + \gamma t + \varepsilon it \dots (1)$ 

Where *Eit* and *Yit* respectively denote a certain variable that is used as a proxy for the environmental degradation and some wealth measure (e.g., income) in state i, at time t;  $\beta$  represents a row vector of coefficients containing other non-income (social/demographic/economic) explanatory variables *Zit*;  $\eta i$  refers to an individual specific effect (state or other geographical units);  $\gamma t$  refers to a time-specific factor; and  $\varepsilon it$  is the usual error term.

Now, we shall specifically address, for the purpose of this research project, the following forms:

 $Eit = \beta 0 + \beta 1NSDPit + \beta 2NSDPit 2 + \varepsilon i \dots (2)$  (Quadratic Form)

 $Eit = \beta 0 + \beta 1NSDPit + \beta 2NSDPit 2 + \beta 3NSDPit 3 + \epsilon i \dots (3)$  (Cubic Form)

Where *E* stands for environmental pollutant, i.e.,  $SO_2$  emission; NSDP denotes per capita Net State Domestic Product; *i* refers to states and time.

This model is taken to explain the nature of the environment-growth relationship that may exist for our chosen pollutant, 'sulphur dioxide'. According to a report released by Greenpeace on August 19, 2019, India is the largest emitter of  $SO_2$  (excluding all-natural sources) in the world, primarily because of the expansion of coalbased electricity generation over the past few decades. Since  $SO_2$  is a significant contributor to air pollution, we have chosen  $SO_2$  concentration as a proxy for environmental quality.

Now, different combinations of coefficients  $\beta 1$ ,  $\beta 2$  and  $\beta 3$  can show distinct shapes and interpretations of the environmental pollution-income (E and Y) relationship, which can be rendered in the following scenarios:

<u>Case 1</u>:  $\beta 1 > 0$  and  $\beta 2 = \beta 3 = 0$ 

- The environmental pressure exhibits a monotonically increasing trend with economic development.
- Thus, a straight line with a positive slope  $\beta 1$  can be drawn for the environmental pressure against income.

<u>Case 2</u>:  $\beta 1 < 0$  and  $\beta 2 = \beta 3 = 0$ 

- The environmental pressure tends to decrease as income grows.
- Thus, the shape of their relationship is likely to be a straight line with a negative slope,  $\beta 1$ .

<u>Case 3</u>:  $\beta 1 > 0$  and  $\beta 2 < 0$  and  $\beta 3 = 0$ 

• An inverted U-shaped relationship (quadratic) between E and Y may be found. It depicts the EKC pattern. The peak of this curve is attained at the turning point.

<u>Case 4:</u> $\beta$ 1 < 0 and  $\beta$ 2 > 0 and  $\beta$ 3 = 0

• A U-shaped relationship (quadratic) between E and Y may be found with a turning point.

PROJECTS

<u>Case 5</u>:  $\beta 1 > 0$  and  $\beta 2 < 0$  and  $\beta 3 > 0$ 

• It refers to a cubic polynomial relationship that is N-shaped, and environmental pressure gravitates to decline after the economy hits a threshold level of income, but takes an upswing after another level of income is reached. So, E increases as a country/state develops; decreases once the certain threshold wealth is attained, but then it resumes increasing, as income further continues to rise.

<u>Case 6</u>:  $\beta 1 < 0$  and  $\beta 2 > 0$  and  $\beta 3 < 0$ 

- It refers to a cubic polynomial relationship between environmental pressure and income, which may be shown by an inverted N-shaped curve.
- A negative relationship between E and Y is only a transitory phenomenon, because the Up-phase of the EKC is followed by a phase where environmental degradation decreases.

<u>Case 7</u>:  $\beta 1 = \beta 2 = \beta 3 = 0$ ; it denotes an insignificant relation between E and Y.

Since we have to investigate the variations in each economic and environmental indicator within the cross-section unit in the same time series, the whole sample data is essentially panel data. Generally, the processing of the panel data is done by establishing the Fixed Effects model (F.E) and Random Effects model (R.E). In order to determine which model to apply for the analysis, a Hausman Test needs to be performed.

#### DATA ANALYSIS AND FINDINGS

Nature of the data: 'Secondary'.

Panel Data for four East-Indian states (West Bengal, Bihar, Jharkhand, and Odisha), for the period 2013-2019, is analyzed for the purpose of this study (refer to Table 1).

The annual data for 'sulphur dioxide' emission, which is an indicator for environmental quality, is collected from the Central Pollution Control Board. The SO<sub>2</sub> concentration data is available from the 'Manual Monitoring under National Ambient Air Quality Monitoring Programme', conducted over a period of seven years in various zones, districts, cities, towns, and localities of all the states in India. The number of days for which monitoring took place is different for each place and time. So, in an attempt to unify this data for each state, a weighted average has been taken for 'the annual average SO<sub>2</sub> concentrations' for all the places within a state where monitoring has been done (considering the 'number of days of monitoring' as weights).

It is worth mentioning that these data have been used in this study as an indicator of environmental degradation, or a dependent variable in the model.

• The data of net state domestic product at factor cost (at constant prices) (Base: 2011-2012) is taken from the Reserve Bank of India's 'Handbook of Statistics on Indian Economy'.

States	Time	SO2Concentration	NSDP	
	1	(ug/m3)		
WB	2013	10.55222	53157	
WB	2014	8.116253	53811	
WB	2015	6.89477	54520	
wв	2016	9.362267	57255	
WB	2017	6.988635	60618	
WB	2018	7.204419	64007	
WB	2019	8.567233	67300	
BIHAR	2013	5.954357	22201	
BIHAR	2014	6.615385	22776	
BIHAR	2015	4	23223	
BIHAR	2016	4.577114	24064	
BIHAR	2017	9.592157	25820	
BIHAR	2018	11.29125	26699	
BIHAR	2019	10.43553	28668	
JHARKHAND	2013	22.2685	44176	
JHARKHAND	2014	13.97	43779	
JHARKHAND	2015	19.24304	48781	
JHARKHAND	2016	20.90743	44524	
JHARKHAND	2017	22.91903	48826	
JHARKHAND	2018	21.72454	52277	
JHARKHAND	2019	21.64558	54982	
ODISHA	2013	3.933959	51087	
ODISHA	2014	4.709605	54762	
ODISHA	2015	5.034974	55123	
ODISHA	2016	6.076164	58838	
ODISHA	2017	6.330885	67821	
ODISHA	2018	6.497085	72760	
ODISHA	2019	6.759895	76417	

Figure 2: Data Summary (Source: Author's Compilation) Per capita NSDP, its square, and its cube (for the quadratic and cubic model, respectively) for the aforementioned four eastern states are to be used as explanatory variables in order to identify the kind of environment-growth relationship that may exist.

(For the purpose of the analysis of data, a statistical software package 'EViews 11 Student Version Lite' has been used.)

# **EKC ANALYSIS**

Hausman Test:

Null Hypothesis: R.E. Model is appropriate; Alternative Hypothesis: F.E. Model is appropriate.

In other words, if we get the statistically significant p-value (<5 per cent), we shall use the fixed effects model, otherwise a random effects model is to be used.

Cubic (adal (D. E)

# For Quadratic Model,

Quadratic Model(F F)

The calculated p-value from performing the Hausman Test is 0.0224 (2.24 per cent); hence the result is significant, and the null hypothesis can be rejected.

• The Fixed Effects Model is suitable for this purpose.

Both quadratic and cubic forms have been verified to illuminate the form of relationship between  $SO_2$  concentration as a pollutant and NSDP as a proxy for economic growth.

Now, in case of the 'Cubic Model' from the above table, we get  $\beta 1 > 0$  and  $\beta 2 < 0$  and  $\beta 3 > 0$ .

• It denotes an N-shaped relationship between the dependent and explanatory variables. It is evident that environmental pressure gravitates to decline after the economy hits a threshold level of income, but takes an upswing after another level of income is

reached. So, E increases as the eastern region develops; decreases once certain ceiling wealth is attained, but then it resumes increasing as income further continues to rise.

For, 'Quadratic Model' the table discloses  $\beta 1 > 0$  and  $\beta 2 < 0$ .

• An inverted U-shaped relationship (quadratic) between E and Y may be found. It depicts the EKC pattern.

Figure 3: Results for Panel Data of the Eastern Region of India
(Source: Author's Compilation)

For Cubic Model, The calculated p-value from performing the Hausman Test is 0.1025 (10.25 per cent); hence the result is not significant, and the null hypothesis cannot be rejected.

• The Random Effects Model is suitable for the purpose of this study.

# CONCLUSION AND RECOMMENDATIONS

What is evident from most studies conducted over the past few decades to empirically unravel the EKC pattern of various developing countries and regions (including India), is that the inverted U-shaped curve may not hold

	CubicModel (R.E)	
Constant	-104.2703	-19.97151
NSDP ( <b><i>β</i>1</b> )	0.007905 (>0)	0.001614 (>0)
NSDP <sup>2</sup> (β2)	-1.61E-07 (<0)	-1.84E-08 (<0)
NSDP (\$3)	9.99E-13 (>0)	
Hausman Test (p-value)	0.1025	0.0224
<b>R</b> <sup>2</sup>	0.460759	0.489044
Adjusted R <sup>2</sup>	0.393354	0.273904
<b>F</b> -statistic	6.835679	2.273147
D.W Stat	0.503986	0.366585
EKC pattern (if applicable)	N-shaped curve	Yes/ Inverted U-shaped

for specific nations and provinces. A specific focus on East India in the context of our study of EKC analysis for local pollutants like  $SO_2$  is seldom found in the existing studies.

Over the years, along with a rise in per capita income, the environmental quality in Eastern India has also changed, evidenced by the analysis of the quadratic model. The inverted U-shape in the eastern region is seemingly revealed from the data on SO<sub>2</sub> concentration and per capita NSDP.

Now, in the case of the cubic model, we have observed an N-shaped curve, which suggests that the declination of the environmental quality is bound to happen postthreshold, along with the income rise. The observed results appear to corroborate the theoretical aspect of the topic under discussion, i.e., the hypothesized Environmental Kuznets Curve. Due to the small period of time (only seven years) that has been taken into consideration for the purpose of this study, we might have come across a transitional phase where a turning point is found.

The EKC hypothesis, in spite of being controversial in nature, happens to affect the environmental policy design for any country or regime to a great deal. Results presented in this study suggest that growth in per capita NSDP is accompanied by decreasing levels of emissions to a certain extent, and for a better environment, the Central Government and the State Governments in the eastern region should adhere to the EKC pattern predicted to formulate policies regarding environment and industry. Lastly, it can be said that in the light of this study, a cleaner growth trajectory is the correct way to go ahead.

#### LIMITATIONS OF THE STUDY

One of the major issues in the context of this study is that in developing nations such as India, data on pollutants (e.g.,  $SO_2$ ) is scarce and insufficient. Inadequate monitoring of information pertaining to air quality data is a huge concern for empirical researchers who can barely agree that the EKC provides a good fit for the prevailing data, even for conventional pollutants like  $SO_2$ . Also, the available data sometimes exists in such a form that is not amenable to treatment in studies. The time period for which the data is taken is also not sufficient. Additionally, had the focus of our inquiry been the whole of India, considering all the states, our findings would be more transparent and wholesome.

The panel data set under consideration (for this study) faced an issue worth mentioning. Following the footsteps of our predecessors, when we went for a logarithmic transformation of our data set, it evidently exhibited multicollinearity, due to which the statistical application 'E-views' was unable to provide an analysis (as least square techniques failed).

#### REFERENCES

- 1. Beckerman W., 1992. 'Economic growth and the environment: Whose growth? Whose environment?' World Dev., 20, pp. 481–496.
- 2. Dinda S. et.al, (2000), 'Air Quality and Economic Growth: An Empirical Study', Ecological Economics. Vol 34: pp. 409-423.
- 3. Dinda S., 2004. 'Environmental Kuznets Curve Hypothesis: A Survey', Ecological Economics, Vol 49 (4): pp. 431-455.
- 4. Grossman G.M., Krueger A.B., 1995. 'Economic growth and the environment.' Quarterly Journal of Economics 110, pp. 353–378.
- 5. Grossman G.M., 1995. 'Pollution and growth: what do we know?' In: Goldin I., Winters, L.A. (Eds.), The Economics of Sustainable Development, Cambridge University Press.
- 6. Kuznets S., 1955. 'Economic growth and income inequality.' American Economic Review 45, pp. 1–28.
- Panayotou T., 1995. 'Environmental degradation at different stages of economic development.' In: Ahmed I., Doeleman J.A. (Eds.), Beyond Rio. The Environment Crisis and Sustainable Livelihoods in the Third World. MacMillan Press Ltd.
- 8. Pandey S., 2018. 'Economic Growth and Environmental Quality A study in the context of Indian States.'
- 9. Shafik N. and Bandyopadhyay S. 1992, 'Economic Growth and Environmental Quality: Time Series and Cross-country Evidence', Background Paper for the World Development Report 1992. Washington, DC: The World Bank.

PROJECTS



(11

It's high time that India, as a country, known for its potential and promise, starts achieving all these objectives to become a dominant economic force on the global stage.



# Deglobalization and its Impact on Indian Economy

Prof. Anirban Ghosal Assistant Professor Department of Commerce (Evening)

Ankit Kumar Singh Department of Commerce (Evening)

# ABSTRACT

This research paper studies the impact on deglobalization trend in the after effect of the current pandemic. Disruptions in supply chains, restrictions on travel among other reasons saw countries focusing more on local resources to meet their demands in absence of any other option. The topic is not only relevant in the recent times but also an area which is not known to many. The aim through the research along with the included questionnaire is to inform people and make them aware about the recent developments in the global economy among which deglobalization is a prominent one. The main

#### PROJECTS

objective behind the research study is to find answers to some prominent questions with respect to the deglobalization trend such as the reasons behind decreasing pace of globalization in the world economy, countries favouring deglobalization, its implications, and the measures undertaken by India, as a country to reduce dependency on other nations.

**KEYWORDS:** Deglobalization, World Trade, Exchange, Resources.

#### **INTRODUCTION**

Deglobalization, a reverse trend gaining momentum in recent times has attracted a lot of attention in a global perspective. Global trade and exchange of resources among nations has taken a downward trend. Countries have become more and more wary of the threats arising from global imports and their potential lasting impacts on the local markets. The countries are shifting their focus more and more on the local manufacturers and their cause to serve the general public, rather than depending on foreign goods. This focus has facilitated increasing production-linked incentives to the manufacturers along with increased subsidies and tax reliefs. The infrastructure expenditures of the nations have also increased over the years to attract foreign investors in the form of Foreign Portfolio Investments (FPIs) as well as Foreign Direct Investments (FDIs) to allow manufacturing firms to set up factories which will have a direct positive impact on country's employment, Gross Domestic Product (GDP), and the self-reliance aspect. Thus, the concept of globalization, which once was the dream and aim for many across the world, does not anymore enjoy the same level of popularity and fame. This uncanny situation has been fuelled even more by the current COVID-19 pandemic and the rumoured role that China played in the same.

The term deglobalization was first used in a paper called 'Deglobalization - Ideas for a New World Economy', published in the year 2005 by Walden Bello. The writer is of the opinion that deglobalization would bring about a huge modification in the current model of economic governance.

The advent of deglobalization has sparked off

numerous debates. Most of the economists around the world refer to this concept as 'impractical', 'absurd', 'superficial' and 'anachronistic'. The two diverging processes have given rise to lot of curiosity in the global market - on one side, there is globalization with so much happening around it while on the other hand, deglobalization which has just begun to make its presence not only in the economy as a process, but also in literature as a concept. However, the attempt should not be to address these two concepts with opposite school of thoughts, rather to study the relationship that exists between them. What really should be the prime objective of such study, or a discussion is whether deglobalization is actually a long-lasting phenomenon or just a phase before the countries put their differences aside and carry forward with trade openness and free exchange of resources.

#### DEGLOBALIZATION TRENDS AND THEIR CAUSES

The world economy is very dynamic in nature with new trade policies (with respect to individual countries or the world as a whole), new tax and duty regimes, currency value fluctuations taking place frequently. In such a volatile environment, the reasons of deglobalization are not only recent but can also be considered to be triggered by a host of factors which have happened in the past. Some of the prominent such factors (both recent and past) are as follows:

#### Unequal Distribution of Globalization Benefits:

The benefits (mostly financial) arising from globalization are received primarily by the developed and developing economic markets of countries like India, the United States of America (USA), China etc. leaving the underdeveloped economies collectively sharing a very small portion of these benefits. This inequality is contributing to the reducing popularity and efforts towards globalization.

#### **Global Slowdown:**

A decrease in the pace of economic activities over the years has led to countries adopting more protectionist measures against trade and other activities and focusing more on local manufacturing and infrastructure.

# Increasing Job and Other Restrictions in Foreign Countries:

An increase in terrorism, cross-boundary security threats combined with the fact that people from developing countries benefit the most by working in Multinational Corporations (MNCs) has led to a perception that they are stealing jobs from residents of the country. All this led to stricter visa regimes and even relocation of industries, casting a threat on international exchange of resources.

#### The COVID-19 Pandemic:

The current pandemic saw disruptions in global supply chain making the countries depend on the local goods with no other substitute. The countries are now looking inwards for economic growth and stability. The increasing hesitance towards Chinese goods especially during and after the pandemic has fuelled the reverse trend of deglobalization.

#### **Reduction in the Foreign Direct Investment:**

The FDI growth was quite significant and uninterrupted in the last two decades starting from the 90s. The growth was the highest in the 90s which can be attributed to the opening of several markets following the liberalization policies. During that period, the FDIs increased at an average rate of 20 per cent per year. However due to the recession that followed in 2001, the FDIs took a serious hit and average rate of growth fell to 8 per cent. It decreased by as much as 23 per cent in the year 2017 and 13 percent in 2018.

#### WORLD TRADE SCENARIO

Figure 1 clearly indicates the various phases of globalization in the world which eventually has given rise to a period of deglobalization. Convergence shows the difference in the level of per capita GDP of low- and middle-income countries with respect to high-income countries. The convergence was negative in the initial phases of globalization demonstrating the inequality in distribution of financial benefits. However, initial stages of deglobalization show a more positive convergence. The current global environment is one where the supply chains are stretched more than the optimum limit, international co-operation is technically absent and alliances among nations are questioned every day. All these factors accompanied by international security threats and health hazards have led to protectionist policies being adopted, which are all acting as a step backward from a global economic integration. According to a report published by World Trade Organization, international trade in the year 2020 was expected to reduce by around 30-32 per cent. According to analysts at Nomura, the current pandemic will trigger a more tense US-China ties, with Emerging Markets (EMs) looking at a more medium-term outlook. The US dollar might have to face a decreasing global presence which they have enjoyed in the past with reducing imports.

#### THE ROLE OF CHINA IN DEGLOBALIZATION



Figure 1: Period of Deglobalization and Slowing Convergence (Source: World Bank's World Development Indicators)

A very striking feature of this current wave of

deglobalization is that among other factors, China as a country is at the center of things. Increasing skepticism about China and its means of conducting business are leading to several countries having reservations with respect to having business ties with China. Almost all the global nations are of the opinion that China had a role to play in the release of the virus, it being the primary center of release of the novel coronavirus. Businesses across countries are reassessing the role being played by China in global supply chains, with most of them focusing on shifting their business transactions from the country to some other option. In some ways, China itself is responsible for putting itself in such a the EMs such as India, Brazil, Argentina et al. This will also be due to the availability of cheap labour in these countries. As we know, due to the large population, India may be the only country which can equal China in terms of the labour force that too at a cheaper rate.

itself is responsible c o m p l i c a t e d situation. The way China cancelled the delivery of rare earth supplies to the electronic industry of Japan in 2010 due to a dispute over certain islands is fresh in everyone's mind. In other words, China have attempted to weaponize trade since a long time.

Table 1: Major Ite	ems of India's Balance o	r Payments					
					(U	S\$ billion	
	Apri	April-June 2020 P			April-June 2019		
	Credit	Debit	Net	Credit	Debit	Net	
A. Current Account	122.4	102.6	19.8	160.7	175.7	-15.0	
1. Goods	52.3	62.3	-10.0	82.7	129.5	-46.8	
Of which:							
POL	4.9	13.1	-8.3	11.1	35.4	-24.2	
2. Services	46.8	26.3	20.5	52.2	32.1	20.1	
3. Primary Income	5.1	12.8	-7.7	5.8	12.1	-6.3	
4. Secondary Income	18.2	1.2	17.0	20.0	2.0	18.0	
B. Capital Account and Financial Account	126.8	146.1	-19.3	138.3	123.7	14.6	
Of which:							
Change in Reserves [Increase (-)/Decrease (+)]	0.0	19.8	-19.8	0.0	14.0	-14.0	
C. Errors & Omissions (-) (A+B)		0.5	-0.5	0.4		0.4	
P: Preliminary							

Note: Total of subcomponents may not tally with aggregate due to rounding off.

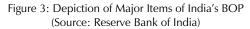


Figure 2 shows the declining scenario of China's exports over the years which have shown further signs of decrease in the recent times. Few countries (including India) have imposed complete bans on Chinese products, services, and even mobile apps. As evident from the Figure 3, India's current account balance showed a surplus of \$19.8 billion which is approximately 3.9 per cent of the country's GDP in the first quarter (April - June) of 2020-21. The surplus for the same quarter in the previous year (2019-2020) was only

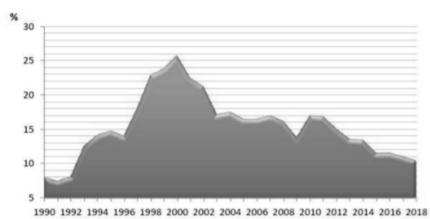


Figure 2: Foreign Value Added in China's Export (Source: United Nations Conference on Trade And Development (UNCTAD) Eora Data Basis)

#### INDIA AND DEGLOBALIZATION

India as we know is one of the EMs in the world economy. US-China stand-off and the probable role played by China in spreading the virus might see the MNCs diversify their investments and shift their focus to \$ 0.6 billion, being approximately 0.1 per cent of country's GDP. According to a statement passed by Reserve Bank of India (RBI), this surplus was brought about by a marked decrease in the country's trade deficit to an amount of approximately \$10 billion. This significant decline was the result of the country's reduction in imports in comparison to the previous fiscal year with respect to exports on a year-on-year basis. The Government of India is leaving no stones unturned for making India a manufacturing hub, and their efforts have indeed shown bright

results in the initial phases. Campaigns like Atmanirbhar Abhiyaan, Make in India have contributed to the cause as well and have made the countrymen aware of the benefits of a self-sustaining and self-reliant economy. The budget for fiscal year 2021-22 saw the Finance Minister, Nirmala Sitharaman increasing the fiscal har deficit to support infrastructure expenditures. The resprominent component of such expenditure included for setting up a DFI (Development Financial Institution) Sucwith a capital outlay of \$200 billion. The NIIF (National Investment and Infrastructure Fund) was also allotted \$50 billion to enable it to acquire infrastructure assets. pot The Government is also incorporating favourable policy regimes to make the country an attractive destination a r for foreign investments in the form of both FPIs and FDIs. These measures can further strengthen the infrastructure sector and finally help India to compete with economies like the USA and China in terms of exports. According to recent estimates by this

Confederation of Indian Industry (CII) and Ernst & Young (EY), India is expected to attract FDIs worth \$120-160 billion by the end of year 2025.The past 10 years has seen an increase in GDP of around 6.8 per cent, while the FDI to GDP ratio has increased by 1.8 per cent. According to many prominent authorities such as United Bank of

such as United Bank of Switzerland (UBS), India might be the only economy that can match with respect to abundance of labour. However, India has to go a long way before it can be considered as a perfect replacement of China, but this will be as good a chance as any country will get to assert its global presence.

CONCLUSION

The benefits that are reaped from the globalization phenomenon in comparison to its cost is a matter of contention not only among the governments, academics, and scholars but also among the general public. On the basis of the research, it can be concluded that the global economy is on the brink of a major change from an economical perspective. It is however important to realize that a study on deglobalization would be difficult since the phenomenon being a new one, there aren't any tools available for conducting sch a study. Although, the 'globalization index' can come in handy for the initial stages of the study until the researchers are able to establish enough groundwork for a more appropriate measure for deglobalization. Such a measure is important to predict the phases of economic reversal which might result in the deglobalization symptoms and understand the potential impacts that it can have on world trade. The negative implications of the deglobalization will include a reduced co-operation among countries, increasing conflicts. The absence of cheap labour from countries such as China, India will increase the cost of production and the era of cheap globalized goods might be over. Most of the countries (including India) are not ready for

Most of the countries (including India) are not ready for this shift in the world economy owing to their limited infrastructure, low level of manufacturing, high dependence on exports et al. This change might leave the under-developed countries crippled as they do not have the means to carry themselves by their own as of now and depend on the developed countries for goods, borrowings etc.

Rank	1981	1991	2001	2011	2020E	2030E	USD to
1	United States	33.3					
2	Japan	Japan	Japan	China	China	China	28.3
3	Germany	Germany	Germany	Japan	Japan	India	6.5
4	France	France	United Kingdom	Germany	Germany	Japan	4.0
5	United Kingdom	United Kingdom	France	France	France	Germany	4.0
6	Italy	italy	China	United Kingdom	United Kingdom	United Kingdom	2.9
7	Canada	Canada	Italy	Brazil	India	Brazil	2.8
8	Mexico	Spain	Mexico	Italy	Italy	France	2.5
9	China	China	Canada	Russia	Brazil	italy	1.6
10	Spain	Brazil	Spain	India	Canada	Canada	1.6

Figure 4: Top 10 Economies' Nominal GDP (Source: UBS)

# RECOMMENDATIONS

The major reason why countries like India have to depend on foreign imports is because we as a country are focused more on assembly of raw materials being imported rather than manufacturing the same in first place. More than 32 per cent of goods imported by countries across the globe are used as a value addition for final goods being produced which are then again exported. Hence, India should focus on manufacturing of the raw material required by its various industries. If it

#### PROJECTS

is able to bridge the gap between the raw materials and final goods, it can reduce its trade deficit and stand as a major contender to economies like the USA, China, Saudi Arabia, Singapore et al. For achieving this milestone, India should aim at better returns and higher flow of capital. The U.S.-China trade tensions and the global pandemic have opened a window for India which it must capitalize on.

What can work for India in comparison to other non-China competing countries is its ever growing and large domestic market which has the potential to consume a large portion of the goods manufactured hence the industries don't have to worry much for the wastage of its outputs. According to estimates, by the year 2030 more than one-fifth of the world's working-age population comprising of 15- to 64-year-olds will belong to India. Despite having huge land resources, cheap labour India has failed to fulfill its manufacturing potential in the past. Hence, its high time that India, as a country known for its potential and promise, starts achieving all these objectives to become a dominant economic force at the global stage.

#### QUESTIONNAIRE

In this section, I have made an analysis on the basis of the questionnaire I circulated among the working professionals and business owners to seek their opinion on the deglobalization trend and the potential impact. The analysis is based on 40 respondents.

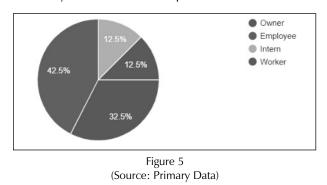


Figure 5 represents the profile of the respondents with majority of them being employees.

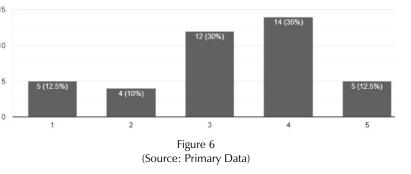


Figure 6 represents the response on how much their organizations will be affected if India stops import/export activities with one being fully affected and five being not at all.

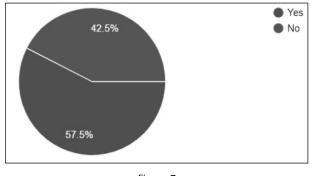
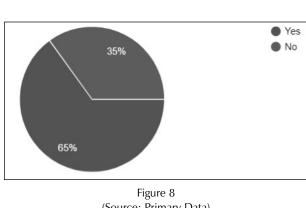


Figure 7 (Source: Primary Data)

57.5 per cent of the organizations surveyed are engaged

in import/export activities



(Source: Primary Data)

65 per cent of the people think that Atmanirbhar Abhiyaan Campaign is feasible for a country like India.

Deglobalization and its Impact on Indian Economy

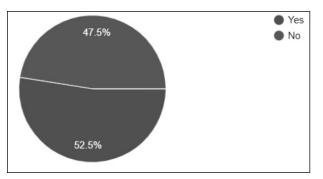


Figure 9 (Source: Primary Data)

52.5 per cent of the people think that India should cut all trading ties with China.

### REFERENCES

- An article on deglobalization on www.business-1 standard.com.
- 2 An article on how the pandemic triggered deglobalization on www.piie.com.
- 3 An article on why is deglobalization gaining momentum on www.bloomberg.com.
- An article on deglobalization on www.business-4 standard.com.
- 5 An article on deglobalization on www.wikipedia.org.
- An article on impact of deglobalization on 6 www.moneycontrol.com.
- 7 A research paper named 'Two Waves of Globalization' written by R Baldwin and P Martin.
  - 8 A research paper named 'China and Deglobalization of World Economy' written by Natasa Stanojevic and Katarina Zaic.
  - 9 A research paper named 'Deglobalization - Ideas for a New World Economy' written by Walden Bello.
  - 10 A press release on India's BOP Account for the year 2020-2021 published on the official website of RBI.

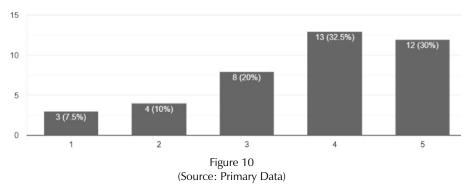


Figure 10 shows the response on how much they favour deglobalization with one being fully against and five being fully supportive.

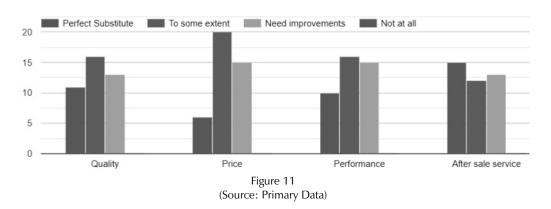


Figure 11 indicates the response on the quality of Indian products with comparison to foreign ones across different criteria.

# PROFESSOR'S DESK



(11

Nowadays due to globalization and increased crosscultural trends, every organization tries to find out talents who are versatile enough to fit and blend in with the existing work culture.

# Talent Analytics: A Game Changer for Organizations

Dr. Tapalina Bhattasali Assistant Professor Department of Commerce

#### ABSTRACT

Our young generation wants to achieve everything like money, fame, position within the shortest possible time. If it is not achieved, it may lead to impatience, frustration, demotivation, intolerance, and stress. This mentality of the younger minds forces them to continuously search for result-oriented jobs. They are reluctant to stay at their jobs when there is no possibility of improvement. This may lead to incidents of frequent job change, which in turn gives rise to less employee engagement, demotivation, and job dissatisfaction. This instability is very alarming in the job market and challenging for organizations. It becomes very difficult for the organization to meet its objective without having the right person at the right place, at the right time. Deadlines may not be fulfilled either because of a lack of talented employees or due to the shortage of employees. Consequently, organizations suffer as these scenarios affect the overall performance. If the financial benefits of the organizations are less, it results in increased employee turnover. Unsatisfied talents cannot see any hope of getting benefits from the organizations or any scope for career development. This type of situation can be easily handled by the organizations by incorporating proper selection, recruitment, employee engagement, career development opportunity and performance management of the employees. Here, talent analytics plays a major role. The main concept of talent analytics is considered on the basics of predictive analytics, which is very helpful to get an insight of what the employee is thinking, whether he/she is planning to quit or he/she is demotivated or he/she is satisfied or whether his/her promotion is due and so on. The main aim of this research is to throw light on the fact that talent analytics is a game changer for organizations. It is so powerful that with its help, the entire organization can be transformed into a better and happy place to work by taking better employee-friendly decisions in terms of

recruitment, employee engagement, performance management, career development, and less employee turnover. Talent analytics leads to job satisfaction. Here, the right decision can be taken based on systematic analysis rather than intuition.

**KEYWORDS:** Talent Analytics, Predictive Analytics, Game Changer, Organization.

anyone because it has the most intelligent brain which can think about several things at the same time. Humans are also blessed with emotions. Consequently, it is the most difficult work for anyone to understand them completely. In this scenario, it becomes very difficult for an organization to fully understand its employees.

# INTRODUCTION

Talent analytics is the analysis of a huge set of employee data, facilitated by the use of statistics and technology, with the purpose of making better organizational and operational decisions. It can select the best talent on the basis of collected information without applying any biasness (Nocker et al., 2019). It considers the following major components. Hiring analytics can provide insights into the hiring process by analyzing skills. Consequently,

organizations can make impartial decisions based on the facts. Feedback analytics can consider the existing workforce to determine whether employees in the organizations are performing well or not; whether they have the right skills or not; whether they have the right talent in the right place or not. Optimization analytics includes data and predictions to ensure organizations can make internal processes as robust as possible. Decision-making is equipped with predictive analytics that describes the method of using current and historical data for future prediction of human behaviour. Predictive analytics studies the pattern of the data and tries to find out if there is a chance of occurrence of the same pattern in human behaviour.

In today's modern world, everything is data-driven. Here, more and more HR managers with the help of machines are analyzing big data and are trying to predict and overcome future problems in terms of human behaviour. Talent analytics is the need of the hour. Human being has been considered as the most challenging and complicated entity to be handled by

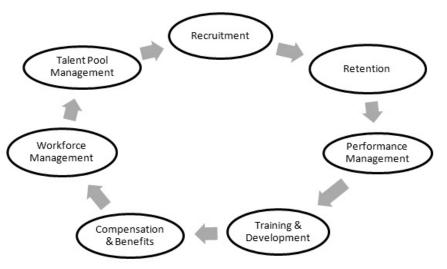


Figure 1: Talent Analytics Value-Chain for Organizational Effectiveness

It is very challenging for the organization to make every employee happy. Organizations need to tackle innumerable resistances from the employees when authorities try to implement any new policy or want to take any kind of decision regarding any issue. People may also try to leave the organization. These types of scenarios create a lot of pressure on the organization to get a substitute for the existing employee. It may affect the objective of the organizations, which may push it towards less productivity as it is not possible for the organizations to fulfill deadlines. Through talent analytics, these kinds of problems can be tackled by analyzing the large data available, systematically. It is possible to generate a feasible solution regarding talent acquisition, employee engagement, employee retention, and performance management. Necessary decisions can be taken based on a statistical analysis of data so that organizations become a much better place to work, talents are not deprived, and responsibilities are given to the employees based on their skills without any biasness or assumptions.

#### IMPORTANCE OF TALENT ANALYTICS

#### **Best Talent Acquisition**

Any organization can grow and stand apart in the crowd by hiring the best talent available in the market. Nowadays due to globalization and increased crosscultural trends, every organization tries to find out talents who are versatile enough to fit and blend in with the existing work culture. This trend can easily be taken care of with the help of talent analytics (Saputra, 2021). The traditional process of scanning through a huge amount of data to find out the right cultural fit can be done easily using analytics, that can do this job and do the background checking of the deserving candidates in the shortest possible time. Organizations can hire the best talent in the organization within a very short duration.

#### **Increased Productivity**

Once the right talent is hired, it is the responsibility of the organization to maximally help the talent in realizing its potential and utilize it in the productivity boost of the organization. Talent analytics can easily determine which employee is suitable for which type of work in the organization and keep a watch on the performance and progress of employees, which in turn increases the productivity of the organization. As collected data can help to select the right person for the right job, organizations can keep a track of the performance of the newly recruited employees and can increase employee productivity. It can also improve the overall efficiency of the group.

#### **Deeper Employee Engagement**

Deeper employee engagement can only take place if employees are satisfied. Employee satisfaction is an intangible aspect that is very hard to measure. Traditional solutions like surveys and feedbacks are not so efficient in finding out the extent of employee satisfaction. In this case, predictive analytics is of great help. If employees are satisfied with their designations and jobs, they will be more engaged. If authorities have a clear idea about the problems among the employees or limitations in the selection procedure, they can try to sort out the problems. Talent analytics along with predictive analytics, the reasons behind the problems among employees can be determined within the shortest possible time, which is beneficial for the employees as well as the organization.

#### **Targeted Retention**

One of the most challenging jobs for the organizations is the retention of topmost employees for a longer period. The reasons behind this situation include lack of proper recognition, low motivation, lack of career development facilities, et al. Analytics based on available historical data can precisely predict the mentality of employees. With the help of attrition and data related to performance, employee loyalty can be predicted and employee beneficial programmes can be made so that those employees who are achievers can be retained in the organization for a longer period.

#### **Talent Forecasting**

Talent analytics can help in predicting the required characteristics of those hired and deciding which recruitment would be an asset for the company in terms of knowledge, experience, efficiency, skills et al. (Sivathanu, 2020). Once the best fit is found, further steps of recruiting these employees for a particular post are made and the right talent is recruited. The right talent would help in further progress and profit generation for the organization.

#### **Decreased Employee Turnover**

Talent analytics can help organizations in future predictions regarding employee turnover. The reasons behind the mentality of employees for leaving the job or sticking to the job in terms of resignations, terminations, performance appraisal, career development, et al. can be easily determined. Improvement of these causes can lead to increased satisfaction and in turn, lead to decreased employee turnover. Decreased employee turnover can save money and time of the organization as it is not spent in the recruitment process repeatedly.

#### HYPOTHESES

1. H0 = Talent analytics is not actually a game changer for an organization.

H1 = Talent analytics is actually a game changer for an organization.

2. H0 = Talent analytics has no role in effective recruitment and decreased employee turnover in an organization.

H1 = Talent analytics plays an important role in effective recruitment and decreased employee turnover in an organization.

3. H0 = Talent analytics has no contribution in employee retention in an organization.

H1 = Talent analytics has a contribution in employee retention in an organization.

#### **RESEARCH METHODOLOGY**

Here, a descriptive research design has been considered to test the hypotheses. Exploratory research is considered to formulate the hypothesis and variables of this research. This research is basically considered as a mixed research approach. 54 respondents from various organizations were selected across India using the purposive sampling technique. This survey was conducted using Google Forms with close-ended Nominal and Likert scale questions. The questionnaire was based on three elements - talent acquisition, employee retention, and employee turnover. Statistical package for the Social Sciences is used for data analysis and statistical hypothesis testing. The following questions were included in the questionnaire:

- Q1: Talent analytics plays an important role in effective talent acquisition.
- Q2: Talent analytics can decrease employee turnover in the organization.
- Q3: Talent analytics effectively helps in employee retention in the organization.
- Q4: Talent analytics can be used for talent forecasting in the organization.
- Q5: Talent analytics is helpful in employee engagement.
- Q6: Talent analytics helps in employee performance management.
- Q7: Talent analytics is useful in increasing productivity.

#### DESCRIPTIVE DATA ANALYSIS

Mean analysis is done to find out the logical outcome to justify this study. Opinions of the authorities of various organizations were collected on a 5-point Likert scale to understand the role of talent analytics and its impact on the organizations. The agreement level for all measurement variables is considered as follows:

1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

Mean more than three and close to five indicates the agreement of respondents for the parameter and mean less than three and close to one indicates their disagreement.

	Ν	Mean	Std. Dev	Variance
Q1	54	3.80	1.155	1.335
Q2	54	3.74	0.994	0.988
Q3	54	4.02	0.789	0.622
Q4	54	3.85	0.856	0.732
Q5	54	3.93	0.866	0.749
Q6	54	3.96	0.931	0.867
Q7	54	3.93	0.929	0.862

Table 1: Descriptive Statistics (Source: Primary Data)

#### **Observations:**

- Mean more than three for all parameters of talent analytics indicates that talent analytics plays an important role for organizations.
- The role of talent analytics in effective recruitment and increased employee turnover in an organization is proved, as the observed mean is 3.80.
- Contribution of talent analytics in employee retention in an organization is very significant, as the observed mean is 4.02.
- The role of talent analytics along with predictive analytics in talent forecasting is proved, as the observed mean is 3.85.

- Mean of 3.93 proves that talent analytics is helpful in employee engagement.
- Importance of talent analytics in employee performance management in the organization is proved, as the observed mean is 3.96.
- Contribution of talent analytics in increasing productivity is proved, as the observed mean is 3.93.

#### HYPOTHESIS TESTING

One sample t-test statistics is used to test the hypotheses of this research. Mean analysis is done to find out the logical outcome to justify the objectives of this research study. Opinions of respondents were collected on a 5-point Likert scale to understand the role of talent analytics and its impact on the organizations.

The agreement level for all measurement variables was taken measuring 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. Mean more than three and close to five indicates the

agreement of respondents for the parameter and mean less than three and close to one indicates their disagreement. T-distribution of the responses was estimated as depicted in Table 2:

	r			
	Ν	Mean	Std. Dev	Std. Error Mean
Q1	54	3.80	1.155	0.157
Q2	54	3.74	0.994	0.135
Q3	54	4.02	0.789	0.107
Q4	54	3.85	0.856	0.116
Q5	54	3.93	0.866	0.118
Q6	54	3.96	0.931	0.127
Q7	54	3.93	0.929	0.126

Table 2: One-Sample Statistics (Source: Primary Data)

The agreement level of respondents for all measurement variables was taken measuring 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. Mean more than three and close to five indicates agreement of the respondents for the particular parameter and mean less than three and close to one indicates their disagreement.

	Test Value = 3							
	Т	T df	Sig.(two-tailed)	Mean Difference	95 per cent Confidence Level of Difference			
			-		Lower	Upper		
Q1	5.064	53	0.000	0.796	0.48	1.11		
Q2	5.476	53	0.000	0.741	0.47	1.01		
Q3	9.488	53	0.000	1.019	0.80	1.23		
Q4	7.315	53	0.000	0.852	0.62	1.09		
Q5	7.861	53	0.000	0.926	0.69	1.16		
Q6	7.602	53	0.000	0.963	0.71	1.22		
Q7	7.327	53	0.000	0.926	0.67	1.18		

Table 3: One-Sample Test (Source: Primary Data)

#### **Observations:**

All the significant values of t-distribution and mean more than three for the parameters measuring the respondents' opinion indicate the rejection of null hypotheses mentioned below:

- 1. H0 = Talent analytics is not actually a game changer in HR in an organization.
- 2. H0 = Talent analytics has no role in effective recruitment and decreased employee turnover in an organization.
- 3. H0 = Talent analytics has no contribution in employee retention in an organization.

#### **Findings:**

• It is found that talent analytics plays a significant role in an organization.

- Talent analytics can play an important role in effective talent acquisition.
- Talent analytics can play an important role in decreasing employee turnover in the organization.
- Talent analytics can be used for talent forecasting in the organization.
- It is found that talent analytics is helpful in employee engagement.
- Talent analytics helps in employee performance management in the organization.
- Talent analytics plays an important role in increasing productivity.
- Talent analytics has an impact on employee retention in an organization.
- Talent analytics is actually a game changer for an organization.

### CONCLUSION

This research work proves that talent analytics is an effective tool to solve most of the disturbing problems of the organization in terms of employees, with respect to talent acquisition, motivation, retention, performance management, employee engagement, et al. Talent analytics along with predictive analytics can forecast the sentiments and emotions of employees and can effectively predict which employee is not happy and is

planning to leave the organization. With the help of analytics, organizations can easily find out those employees who are planning for a job change and the reason behind the same. Through timely actions, authorities can stop those employees from leaving an organization and can inculcate a sense of engagement and loyalty towards the organization; so that employees will not leave and become motivated and start giving their hundred per cent so that it is beneficial for both the employee and the organization. This aspect proves the fact that talent analytics is truly a game changer in organizations.

#### REFERENCES

- Nocker, Manuela, and Vania Sena. (2019), 'Big Data and Human Resources Management: The Rise of Talent Analytics' Social Sciences 8, no. 10: 273. https://doi.org/10.3390/ socsci8100273
- 2. Saputra, A., Wang, G., Zhang, J.Z. and Behl, A. (2021), 'The framework of talent analytics using big data', The TQM Journal, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/TQM-03-2021-0089
- Sivathanu, B. and Pillai, R. (2020), 'Technology and talent analytics for talent management – a game changer for organizational performance', International Journal of Organizational Analysis, Vol. 28 No. 2, pp. 457-473. https://doi.org/10.1108/IJOA-01-2019-1634

#### PROFESSOR'S DESK



# (11

The coordinated industry responses have been deemed necessary to deal with the issues such as demand or supply chain disruptions and shortages of essential products and services.

# Whether Competitor Collaboration During Pandemic Amounts to Anti-Competitive Conduct under the Indian Competition Law

Prof. Oyndrila Ganguly Assistant Professor Department of Commerce

# ABSTRACT

The article aims to address the question of whether collaboration between different corporate entities making identical products (horizontal arrangement) for fulfilling their supply and demand requirement would amount to an anti-competitive arrangement within the legal framework of the competition law in India. The article has further analyzed the legal framework of the competition law within India and tried to apply the said provisions of law to fictitious case study situations which are prevalent within the industry at large, in India, especially during the COVID-19 pandemic crisis. The directive of Competition Commission of India (CCI) pertaining to collaborations of corporate entities during COVID-19 crisis has also been discussed and analytically applied to the case study situations. In order to gauge the international response to the said subject, the article has further tried to analyze the legal framework of the European Union (EU) and various initiative it has taken, whereby certain relaxations have been provided for the said collaboration or exercises, specifically taking into account the COVID-19 pandemic situation and the constraints faced by businesses thereafter.

**KEYWORDS:** Competitor, Collaboration, Products, Anti-Competitive.

#### INTRODUCTION

The COVID-19 pandemic has created a unique situation wherein there have been severe business and commercial disruptions, affecting all sectors. The coordinated industry responses have been deemed necessary to deal with the issues such as demand or supply chain disruptions and shortages of essential products and services. The authorities are, in turn, also faced with the challenging task of determining and ensuring that the businesses in the implementation of collaborative projects to tackle the crisis do not take advantage of the situation by engaging in anti-competitive conduct.

'It has been acknowledged by authorities and industry experts in general that next to Government interventions, co-operation between private firms may be one of the easiest and fastest way to address one major short-run market failure characterizing this particular crisis: the sudden and severe disconnect between demand and supply. The mutual agreements between private competitive parties has been deemed to effectively overcome shortages of essential products and fix disruptions of supply or logistics chains, without any need for State intervention or other costly remedy'.<sup>1</sup> The competition authorities of various countries throughout the world have acknowledged that certain conduct that may, under normal circumstances, be anti-competitive could be allowed at least on a temporary basis.<sup>2</sup> Such tailoring and softening of existing anti-trust principles may allow for a more flexible response to the crisis. The basis of competition law is to promote fairness and transparency in a market economy so that each entity (market player) can compete with another player in a fair and judicious manner. The framework for each country regarding anti-trust laws (competition laws) have been drafted accordingly and the author has tried, as a sample, to analyze two of such jurisdiction namely, India and the European Union.

#### Analytical Framework of the Risks that are Posed by Cooperation between Competitors

In real-time, business models that are followed by various commercial entities, the restrictive horizontal practices may reduce actual or potential competition, firms' ability and incentives to compete and thus increase the likelihood of collusive outcomes and lastly, put the parties' actual or potential competitors at a disadvantage leading to market foreclosure. For example, in times of a severe crisis such as the one provoked by COVID-19, co-operation between competing firms may benefit consumers in many ways, such as, by assuring an essential service (e.g., transport) or by distributing scarce but essential goods (e.g., maintaining the food chain). Co-operation may be necessary in research and development projects related to the development of vaccines and medicines, activities which can entail substantial investments and risks for a single firm. For these reasons, such practices are often subject to close scrutiny by competition authorities. Competition authorities consider horizontal practices as by object or per se infringement or as restriction by effect depending on their nature. For the most serious infringements the authorities apply an object approach, which makes it easier to prove the anti-competitive nature of the conduct but, at the same time, makes it more difficult or unavailable for firms to argue that the conduct creates efficiency gains.<sup>3</sup> Such efficiencies are more easily considered for other (nonhardcore) forms of co-operation between competitors. This framework remains valid throughout the Covid-19 crisis.

#### Legal Framework of the Competition Law in India

The legal framework in India regulates a free and fair market and controls anti-competitive practices as under Competition Act, 2002. (Hereinafter, 'the Act')

'The objective of the Act can be further gathered from its preamble which states as follows - 'An act to provide, keeping in view of the economic development of the country, for the establishment of a Commission to

<sup>1.</sup> Co-operation between competitors in the time of COVID-19. available at: www.oecd.org/daf/competition/ Co-operation-between-competitors-in-the-time-of-COVID-19.pdf

OECD Competition Policy Responses to Covid-19 (2020), available at:https://read.oecdilibrary.org/ view/?ref=130\_130807-eqxgniyo7u&title=OECD-competition-policy-responses-to-COVID-19.

<sup>3. &#</sup>x27;Co-operation between competitors in the time of COVID-19', OECD(2020), Available at: https://www.oecd.org/competition/Co-operation-between-competitors-in-the-time-of-COVID-19.pdf

prevent practices having adverse effect on competition, to promote and sustain competition in markets, to protect the interests of consumers and to ensure freedom of trade carried on by other participants in markets, in India...'<sup>4</sup>

Section 3 of the Act states that any agreement which causes or is likely to cause an Appreciable Adverse Effect on Competition (AAEC) in India is deemed anticompetitive. Section 3(1) of the Act prohibits any agreement with respect to 'production, supply, distribution, storage, and acquisition or control of goods or services which causes or is likely to cause an appreciable adverse effect on competition within India'<sup>5</sup>.

In light of the above understanding in law, let us now analyze the fact that if due to a pandemic situation or any other unforeseen situation, if multiple competitors manufacturing identical or similar products enter in an arrangement whereby, they would mutually collaborate for better logistics and storage support owing to the limited resources.

#### CASE STUDY 1

'A', a public limited company manufacturing Fast Moving Consumer Goods (FMCG) products situated mainly in North India enters into an arrangement with 'B' and 'C' which are other public limited companies, who are manufacturing identical or similar products situated mainly in West India. Due to the coronavirus pandemic, they agree to help each other in logistics and storage support for proper distribution and carrying the contractual obligations to its customers within the allotted time lines. The question arises that whether such arrangement between the parties would amount to anti-competitive agreement/practice.

The author is of the view that in the above case study, the said arrangements are not falling under the scope of anti-competitive agreement, as given in the definition of Section 3 of the Competition Act, 2002 and correspondingly not falling within the purview Section 4(2)(c), which states that a dominant enterprise is abusing its dominant position, if it: 'indulges in practice or practices resulting in denial of market access in any manner', because as per the case study there is no use of dominant position by any of the enterprises. It has already been explained that Section 3(1) of the Act prohibits any agreement with respect to 'production, supply, distribution, storage, and acquisition or control of goods or services', which causes or is likely to cause an appreciable adverse effect on competition within India. The essentials for the above provisions therefore are following:

- A. any agreement with respect to 'production, supply, distribution, storage, and acquisition or control of goods or services'
- B. The same ought to cause appreciable adverse effect on competition within India.

In the above case study, the essential no. (A) is being satisfied but the essential of clause (B) i.e., the arrangement causing appreciable adverse effect on competition (hereinafter referred as 'AAEC') within India is not satisfied. It is to be appreciated that although the Act does not define AAEC and nor is there any thumb rule to determine when an agreement causes or is likely to cause AAEC, Section 19(3) of the Competition Act, 2002 specifies certain factors for determining AAEC under Section 3 namely:

- a. creation of barriers to new entrants in the market;
- b. driving existing competitors out of the market;
- c. foreclosure of competition by hindering entry into the market;
- d. accrual of benefits to consumers;
- e. improvements in production or distribution of goods or provision of services;
- f. promotion of technical, scientific and economic development by means of production or distribution of goods or provision of services.

The language in section 19(3) states that the Competition Commission of India (CCI) shall have 'due regard to all or any' of the aforementioned factors.<sup>6</sup> In general, it can be analyzed that the collaboration would be mostly between players producing identical items entering into horizontal agreements. Therefore, as per

<sup>4.</sup> Competition Law in India.A report on Jurisprudential Trends. available at: http://www.nishithdesai.com/fileadmin/user\_upload/pdfs/Research%20Papers/Competition\_Law\_in\_India.pdf

<sup>5.</sup> The Competition Act. 2002. Available at: https://www.cci.gov.in/sites/default/files/cci\_pdf/ competitionact2012.pdf

Case Study 1, since there is a genuine need for collaboration to carry on its business obligation using each other's organizational logistics, machinery and other means among themselves and as such none of the above indicators seem to be attracted. Therefore, such collaboration among competitors, taking into effect such exceptional circumstances, is not amounting to AAEC as per Section 3 of the Competition Act, 2002. Once we have analyzed the above case study, let us also examine a second case study.

#### CASE STUDY 2

'A', a public limited company manufacturing FMCG products situated mainly in North India enters into an arrangement with only one of its competitors namely'B' which is another company (who is manufacturing identical or similar products situated mainly in West India) whereby, they agree to help each other in logistics and storage support for proper distribution and carrying the contractual obligations to its customers, within the allotted timelines due to the disruptions caused in corona pandemic. On the other hand, when 'C' another smaller company manufacturing identical products approaches both these companies for similar arrangement for its own logistical support and they refuse and ensure that this company does not get any such support from others in the same industry thereby, causing disruption in the business of company 'C'. In this also, again the question arises that whether such arrangement between the parties would amount to anti-competitive agreement/practice.

The author is of the view, that Case Study 2 is a case of anti-competitive agreement as per Section 3 of the Competition Act, 2002, since the above would have AAEC and it attracts Section 4(2)(c), which states that a dominant enterprise is abusing its dominant position, if it: 'indulges in practice or practices resulting in denial of market access in any manner', which is conducted by company A and B against company C. It is to be noted that horizontal agreements relating to activities referred to under Section 3(3) of the Competition Act, 2002', are presumed to have an AAEC within India. Section 3(3) of the Act provides that agreements or a 'practice carried' on by enterprises or persons (including cartels) engaged in trade of identical or similar products are presumed to have AAEC in India if they-

- Directly or indirectly fix purchase or sale prices;
- Limit or control production, supply, markets, technical development, investments or provision of services;
- Result in sharing markets or sources of production or provision of services;
- Indulge in bid-rigging or collusive bidding.<sup>77</sup>

'The first three types of conducts may include all firms in a market, or a majority of them, coordinating their business, whether vis-à-vis price, geographic market, or output, to effectively act like a monopoly and share the monopoly profits accrued from their collusion.'<sup>8</sup> In Case Study 2, the said arrangement aims to limit and control the supply of goods from its competitor by two major players of a geographical region in India. Therefore, the refusal to treat all its competitors similarly and providing a level playing field to all similar players within identical product industry would amount to an anti-competitive agreement.

It is therefore to be appreciated that even though the two case studies are having pretty similar facts but the observation for case study 1 is that there is no anticompetitive arrangement or competitor and abuse of dominant position but for Case Study 2, where the benefit of collaboration is being denied to one player, with an aim to restrict his operations and market reach then that would amount to anti-competitive agreement and abuse of dominant position within the legal framework of competition law.

#### Advisory of Competition Commission of India (CCI) Acknowledging the Disruption in Supply Chains Caused by COVID-19

Once we have analyzed the practical case studies, the author would also like to point out and it ought to be counted that the Competition Commission of India (CCI) has issued an advisory dated 19th April, 2020 acknowledging the disruption in supply chains caused by COVID-19 and recognises that businesses may need to coordinate certain activities to deal with the adverse effects of COVID-19 and ensure fair and continuous distribution of products. The CCI advisory mentions

<sup>6.</sup> ibid

<sup>7.</sup> ibid

that the Competition Act has in-built safeguards to protect businesses from sanctions i.e., coordinated arrangements which result in increase in efficiencies. It mentions that Section 19(3) of the Competition Act enables the CCI to have due regard, amongst others, to the accrual of benefits to consumers, improvement in production or distribution of goods or provision of services and promotion of technical, scientific and economic development by means of production or distribution of goods or provision of services. The CCI has in its advisory also cautioned companies to not take advantage of COVID-19 crisis and indicated that only such coordinated conduct of businesses, which is necessary and proportionate to address the COVID-19 crisis, would be considered. In other words, the CCI has cautioned against opportunistic collaborations by enterprises seeking to take advantage of the crisis as against collaborating to overcome the effects of the crisis in the larger public interest.

Therefore, the above advisory also points out that coordinated effort to counter COVID-19 disruptions is not breach of the provisions of Competition Act, 2002, but opportunistic collaborations by enterprises seeking to take advantage of the crisis as against collaborating to overcome the effects of the crisis, in the larger public interest, is barred by law and would be taken note of by the CCI. (As given in Case Study 2)

# Impact of Fair Collaboration: A Template for Sustainable Future

It is an established fact that the in the European Union (EU), the European Commission and national competition authorities have been highly suspicious of any activity that brings competitors or even potential

competitor into contact with each other. The main principle under EU law that we need to analyze while investigating prohibition of anti-competitive practices is Article 101(1) of the Treaty on the Functioning of the EU (hereinafter referred as 'TFEU'), which prohibits agreements and practices between competitors that could do harm to competition.<sup>9</sup>

It is to be noted that Article 101(3) of the TFEU has recognized that there are certain restrictive agreements or practices which may be permissible if they lead to improvements or efficiencies in the market, or promote technical or economic progress. The said article provides that they allow consumers a fair share of the resulting benefit, and do not impose restrictions that are not indispensable or that eliminate competition for a substantial part of the products involved. It is to be considered that the anti-trust law in the EU framework has changed in almost 20 years since self-assessment of companies' compliance with the agreements and practices in Article 101(1) were introduced. It has become, intentionally, far more economics focussed and legal authorities have taken into account the additional flexibility for business corporations. In addition to the above restriction, it is also to be pointed out that Article 101(1) includes an 'ancillary restraints' doctrine, which recognizes that certain restraints do not restrict competition, if they are required to protect parties' legitimate interests. During the recent global pandemic, there were disruptions caused in the supply chain mechanisms of every corporate entity, the European Commission has also allowed certain relaxations to such entities and has published a Communication, setting out a temporary framework for assessing anti-trust issues related to business co-

- (a) directly or indirectly fix purchase or selling prices or any other trading conditions;
- (b) limit or control production, markets, technical development, or investment;
- (c) share markets or sources of supply;
- (d) apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;
- (e) Make the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

Competition Law in India. A report on Jurisprudential Trends. Available at: http://www.nishithdesai.com/fileadmin/user\_upload/pdfs/Research%20Papers/Competition\_Law\_in\_India. pdf

<sup>9.</sup> Refer to Article 101 reads as - '(1) The following shall be seen as incompatible with the internal market: all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the internal market, and in particular those which:

operation, in response to situations of urgency stemming from the current COVID-19 outbreak. Usually, business co-operation which aims at allocating production or exchanging sensitive information is considered as anti-competitive.

On one hand, COVID-19 EU framework sets out the main criteria that European Commission will follow to assess crisis cooperation by taking into consideration the actual degree of interaction between companies. The European Commission points out that business cooperation through trade associations should not raise any difficulties under EU competition law, if it is subject to sufficient safeguards as set out in the Commission's guidelines on the applicability of Article 101 of TFEU to horizontal cooperation agreements. However, if companies wish to go further in their co-operation, it should be:

- objectively necessary to increase the production of essential products in the most efficient way;
- limited in time, i.e., to be applied only as long as there is a risk of shortage or in any case during COVID-19;
- proportionate to achieve the objective of addressing or avoiding the shortage of supply.<sup>10</sup>

In near future beyond this pandemic, 'it is evident that competitor collaboration is one of the major weapons in a great arsenal of options that will be needed to face a threat as pervasive and systemic as the climate crisis, and to realise the United Nations (UN) Sustainable Development Goals (SDGs) that are needed to address this and other fundamental global issues.'<sup>11</sup>

It is to be considered that 'co-operation between companies has the potential to effect real change. Systemic risk requires a systemic response and companies' understandable reluctance to engage in collaborative efforts for fear of first-mover disadvantage will inevitably hinder innovation. The coronavirus outbreak has demonstrated that competitor collaborations can be beneficial, and also that competition regulators can be flexible and show both dynamism and common sense, when faced with a sufficiently serious threat. The reaction to COVID-19 could well provide a template for an approach to sustainability justified competitor cooperation, and the flexibility shown by anti-trust regulators is encouraging. The European Commission, for example, has demonstrated an implicit recognition that the approach to assessing the effects of potentially restrictive agreements and their benefits for technical and economic progress and for consumers can evolve beyond pure economic welfare considerations to include environmental, social and societal objectives.

That is not to say that the pandemic has provided a prepackaged solution that can be perfectly transposed to help achieve sustainability goals. Regulators' efforts so far were necessarily reactive to the particular nature of the COVID-19 crisis, and nominally temporary. The immense challenge of climate change and the commitment made by many companies to work meaningfully to achieve the UN SDGs requires a preemptive, more permanent solution.

In Europe, the Commission has now at least recognized in the corona virus context that self-assessment does not provide sufficient legal certainty for companies seeking to develop and implement novel ideas requiring cooperation and cost-sharing with other competitors. The return to a comfort letter procedure is not a panacea, as there is unlikely to be sufficient administrative capacity to handle the number of requests the Commission could expect to receive. However, it is at least a starting point, and could be

<sup>(2)</sup> Any agreements or decisions prohibited pursuant to this article shall be automatically void.

<sup>(3).</sup> The provisions of paragraph 1 may, however, be declared inapplicable in the case of: any agreement or category of agreements between undertakings, any decision or category of decisions by associations of undertakings, any concerted practice or category of concerted practices, which contributes to improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit, and which does not:

<sup>(</sup>a) impose on the undertakings concerned restrictions which are not indispensable to the attainment of these objectives;

<sup>(</sup>b) afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products in question

<sup>10.</sup> Paragraph 15 of the COVID-19 EU Framework

<sup>11.</sup> Covid-19 and Antitrust Competition. Available at: https://www.whitecase.com/.i

extended to provide a way for companies to protect themselves, particularly for novel or far-reaching initiatives.

At the very least, concrete guidance is needed from the Commission and other competition authorities on how they will treat agreements and practices, which are put in place for environmental or sustainability purposes. Agreements among competitors to develop and adhere to high environmental or welfare standards, or information sharing mechanisms to reduce environmental impacts should not fall at the hurdle of competition law: nor should companies be able to point to the competition law risk as a justification for failure to move on to sustainability initiatives. Explicit direction on how the wider societal benefits of cooperation agreements will be assessed is necessary, including detail on the kind of evidence that will be required to demonstrate the benefits of an initiative for it to be permitted under Article 101(3). This involves a movement away from a strictly economic review of consumer welfare towards a more holistic understanding of the concept. The Commission recently began a review of its horizontal cooperation guidelines and the two exemptions currently in place are for certain research and development and specialization agreements. This is an ideal opportunity for a full-scale review of the current landscape. A block exemption covering certain sustainability focussed agreements would provide companies with the kind of practical, legal certainty on collaborative initiatives they need, while also leaving scope for self-assessment and the possibility for comfort letters to be sought in exceptional circumstances for something falling outside the block exemption guardrails.'12

#### CONCLUSION

The author concludes that in a pandemic situation or in case of any other global emergency situation where mutual cooperation among market players are anything but logical then such cooperation/ collaboration ought to be promoted, as is evident from the advisory of the CCI, provided the main principles of competition law are maintained, i.e., adverse effect on competition, to promote and sustain competition in markets, to protect the interests of consumers and to ensure freedom of trade. The main test to consider an arrangement as anticompetitive is whether the same is having any adverse effect on competition of the particular relevant market of goods or services. If the same is not evident by any substantial data or proof then such an arrangement is perfectly alright and may not, in general, raise any preliminary investigation also from the CCI as is evident from its said advisory. Further, in analyzing the EU legal framework and the relaxations given under the same law, it can be seen that the general trend is that the regulators have understood that mutual collaboration among corporations of similar businesses in the time of pandemic is a feasible option and therefore, with certain restrictions, has allowed such collaboration irrespective of the business sector of the said corporation.

#### REFERENCES

- 1. CAMPBELL, BLACK HENRY, 'BLACK'S LAW DICTIONARY Definitions of the Terms and Phrases of American and English Jurisprudence, Ancient and Modern';4th edition.
- 'Co-operation between competitors in the time of COVID-19', OECD(2020), Available at: https://www.oecd.org/ competition/Co-operation-between-competitors-in-thetime-of-COVID-19.pdf
- 3. Competition Law in India. A report on Jurisprudential Trends. Available at: http://www.nishithdesai.com/ fileadmin/user\_upload/pdfs/Research%20Papers/Competiti on\_Law\_in\_India.pdf
- Competitor/Collaborator Analysis Service Grant. Available at: https://taprootfoundation.org/sites/default/files/whatis \_CCA.pdf
- 5. COVID-19 and antitrust competition. Available at: https://www.whitecase.com/
- 6. Kapoor, N.D., 'Elements of Mercantile Law'; 29th Edition, 2008.
- OECD Competition Policy Responses to Covid-19 (2020), Available at https://read.oecdilibrary.org/view/?ref= 130\_130807-eqxgniyo7u&title=OECD-competitionpolicy-responses-to-COVID-19.
- 8. Singh, Avtar, 'Contract and specific relief'; 12th Edition, 2017.
- THE COMPETITION ACT, 2002 Available at: https://www.cci.gov.in/sites/default/files/cci\_pdf/competitio nact2012.pdf.
- 10. WSG Article: COVID-19: Impact of Force Majeure in Indian Commercial Contracts - Kochhar & Co. Advocates & Legal Consultants.





[[]

Business communication must be a balance between regional languages and English, as this is how communication will foster both operational efficiency as well as global expansion. Role of Communication Language in Business

Dr. Madhu Agarwal Agnihotri Assistant Professor Department of Commerce

Prof. Arkajyoti Pandit Assistant Professor Department of Commerce

## ABSTRACT

Communication, as an aspect of business, has been established as an inevitable factor. At the heart of communication lies language, its most widely used medium. However, when it comes to the Indian business scenario with its wide range of linguistic diversity, the role of regional language in business communication has not been properly articulated. The retail market of India is valued at \$1.1 trillion and boasts of having 40 million participants coming from diverse linguistic backgrounds (Joshi, 2019). It is very natural that in a country like India, where linguistic diversity is noted every 15 to 20

kilometers, there are bound to be market participants having a wide range of mother tongues (Saba, 2011). However, in contrast to this scenario, most of the business processes, transactions, and financial statements are produced in English; a language that forms the mother tongue of only 10 per cent of the entire population (Joshi, 2019). Besides, according to the National Census Report of 2011, only 28 per cent of the total population of the country receive their education in English (Census Report of India, 2011).

Under such a scenario, the need for regional language as a medium of business communication and transaction needs to be determined. The use of regional languages in accounting work has its own benefits. English is the operational language and is considered a standard for business communication. However, it has also been seen that many businesses are running successfully despite them conducting operations in their regional language. There are many factors such as educational qualifications, medium of education and work experience that affect the language preferred by a business practitioner. Against this backdrop, the current research paper tries to assess whether regional languages used in business communication and general business transactions like purchase, sale et al., have any significant role to play. It also analyzes how the use of regional language facilities helps in customer satisfaction.

**KEYWORDS:** Regional Language, Business, Communication, Linguistic Diversity, Retail Market.

## INTRODUCTION

The retail market of India consists of 40 million participants coming from largely diversified linguistic backgrounds. This scenario can be said to be an evident conclusion of variations in the mother tongues present throughout the country. Moreover, India as a country portrays linguistic diversity every 15 to 20 kilometers. However, contrary to the multifariousness of language, the Indian business scenario has the practice of producing financial statements and information mostly in English, a language only 10 per cent of the population is well versed with (Joshi, 2019). It is quite obvious that business information must be communicated with adequate clarity to the market participants. There must be a thorough understanding of the same. However, the dominance of English as the prima facie language of business communication often leads to ambiguous doubts in the interpretation of financial statements, particularly by non-English speakers (Kuiper, 2007). In the background of such linguistic heterogeneity, if business communication and preparation of business statements are facilitated through regional language, then it not only becomes convenient for the users of accounting information to interpret but also makes the preparation of accounting statements easier. It is certain that facts shared through an unknown language will always be more relevant when shared through a known vernacular. Accounting facts, figures and disclosures, being very pertinent to the stakeholders of trade and business, cannot be an exception.

The clarity of business communication, no doubt, plays a significant role in decisions regarding investment, portfolio management as well as corporate management. Nevertheless, if such communication becomes indecisive owing to language barriers, then this will lead to faulty investments, which will result in lesser cash flow in the economy. As Indians are better versed in their regional languages, there is a dire need for analyzing the utility of regional languages in business communication, both from the point of view of makers and users of business statements. In this background, the current research papers assesses the relevance of regional language in business communication both at the intra-and inter-level. The research also tries to highlight how the presence of regional language helps in better customer satisfaction through more clarified communication with them.

## LITERATURE REVIEW

A substantial amount of research has been conducted on the role of communication in business; however, research on the relevance of regional languages as the medium of communication in business is rare. Among the few established pieces of research, mention can be made of the works of Adair and Okumura (2001), who have very vividly pointed out the role of language in business negotiations, when parties from different cultures are involved (Wendi L Adair, 2001). The role of language skills in corporate communication has been very lucidly explained in the work of Andersen and Rasmussen (Helle Andersen, 2004). The research work of Danet B and Herring S highlights the efficiency of the multi-language facility in e-commerce transactions (B Danet, 2007). The pros and cons of using English as the sole language of international transactions have been

provided by Alison Kuiper in her research paper published in 2007 (Kuiper, 2007). The role of language in informal communication in the business scenario has been highlighted by the study of Chien Wen Yuan (Yuan, 2013). A clear understanding of the multifaceted role of language in

global business transactions has been clearly defined in the research work of Mary Yoko Brannen and Rebecca Piekkari (Brannen, 2014). The role of language in making accounting information lucid enough to be understood by all can be found in the works of Ximo Garnell's 'Multilingual Information Management' (Garnell, 2015). A mention must be made of the laudable study on the impact of accounting software on business performance by Wickramasinghe M. (Wickramasinghe, 2017). The role of language in international business has been vividly stated in the research paper of Tenzer and Terjesen (Helene Tenzer, 2017). The research on Public Utility Accounting by Farber B. and McDonnell highlights the need for accounting to be lucid enough to be understood by laymen (Farber, 2018). The utility of the multi-language facilities in government sector business transactions has been highlighted in the report on 'Multilingual Computing and Heritage Computing' by the Center for Development and Advanced Computing (Centre for Development and Advanced Computing, 2019).

The progression of literature review shows an interesting trend, whereby it can be said that research on the relevance of language in business communication started gaining momentum in 2001.

The scenario received further impetus from 2007 to 2015, when research regarding the utility of multilanguage facilities in corporate communication was conducted. It was only after 2015 that research works were conducted to determine the utility of language in making business communication more lucid and available to a greater span of population. The same trend in research can be shown with the timeline shown in Figure 1.

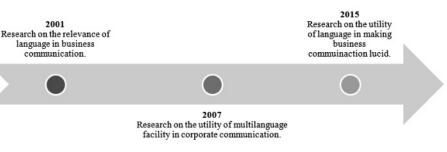


Figure 1: Relevance of Language in Business Communication Research (Source: Author's Compilation)

## **RESEARCH GAP**

The role of communication as an effective tool of business has been very vividly pointed out by many researchers. It must be remembered that effective communication takes place only when the process gets adequate clarity and thorough understanding. In this regard, the utility of language, which is by far the most widely used medium for communication, is immense. However, in India, the tools of business communication like financial statements, profitability analysis charts et al., are mostly produced in English, a language in which only 10 per cent of the population is well versed (Joshi, 2019). Added to this, the massive diversity of language spread across the entire subcontinent makes it complex for non-English speakers to interpret business communication in English. The backdrop calls for a thorough analysis, which will help realize the significance of regional language in diminishing the gap in business communication. If business communication is facilitated through regional languages, then communication will be more lucid and widely spread. Though studies have proclaimed the role of language in business communication as well as the importance of communication in the business scenario, a theoretical relationship regarding the effect of the use of regional languages in business communication is rare. This very

#### PROFESSOR'S DESK

aspect forms the agenda for determining the utility of regional language in business communication.

The second research gap lies in the fact that accounting practitioners in India have mostly received their education in vernacular languages (Saba, 2011). Such groups of practitioners will be more fluent in business communication using a language they have been taught. This very reason also calls for assessing the utility of regional languages in business communication.

## **RESEARCH OBJECTIVE**

- To assess the utility of regional languages in facilitating business communication.
- To understand the role of business communication in regional languages to meet customer satisfaction.

### **RESEARCH METHODOLOGY**

The paper uses primary data collected from 112 respondents who have been associated with business or accounting professions for at least six months in the state of West Bengal. As financial statements of business enterprises are the main source of communication regarding the enterprise's financial health, the opinions of accounting professionals, who are well-versed in the preparation of these statements have been taken into account. The selection of the respondents was done using the Snowball sampling technique. For the convenience of the research, the respondents were classified into three categories based on their work experience, as shown in Table 1. All the respondents were asked 20 questions, divided into two sets. In the first set, ten questions regarding their personal information like the medium of education, educational qualification et al., were asked. In the next set, nine questions were asked to the respondents, where they had to use Likert's 5-Point scale to express the degree to which they agree to a particular question. These nine questions subsequently formed the variables for the research. The analysis was conducted using the method of descriptive statistics, whereby the mean score for each variable of each category of respondents was studied to determine the degree of agreeability of that category of respondents towards that concerned variable. The findings are shown numerically in Table 2

Role of Communication Language in Business

Category	Work Experience	No. of Respondents
Category I	Six months to five years	48
Category II	More than five years and up to ten years	38
Category III	More than ten years	26
	112	

and graphically in Figure 2.

Table 1: Categories of Respondents (Source: Primary Data)

### ANALYSIS

The mean score for each category of respondents, pertaining to each variable, as well as the overall mean score for each variable are shown in Table 2. A category having a greater mean for a particular variable symbolizes a greater degree of agreeability towards that variable.

The mean score of each of the respondent categories as well as the overall mean score is graphically represented in Figure 2.

## INFERENCE

A primary study of Table 2 and Figure 2 proves that almost all the categories of respondents are in favor of using a regional language as a mode of business communication. The high overall mean score of each variable (in most cases, is four or above on a scale of one to five) proclaims the respondents' high degree of agreeability for using a regional language over English, when it comes to business communication and transactions. However, a deeper insight into and analysis of each category of respondents is necessary for the concluding remarks.

#### Inference from Respondent Category I:

The youngest set of respondents agree that regional languages are relevant in business communication. Their high score of more than 3.5 in almost all the cases has proved this beyond doubt. However, it must be understood that the degree of agreeability of this category, for all of the variables, is less than that of the

Sr. No.		Mean Score of Each Category of Respondents		Overall Mean	
	Variables	Six Months to Five Years	Above Five Years and up to Ten Years	Above Ten Years	Score for Each Variable
Vr.1	For internal communication, a regional language is preferred over English.	3.43	4.54	4.20	4.06
Vr.2	For external communication, a regional language is preferred over English.	4.06	4.19	3.90	4.05
Vr.3	Accounting statements prepared in a regional language help in retrieving classified information by the Auditor.	4.10	4.31	4.05	4.15
Vr.4	Preparation of business documents in a regional language helps in better communication with the supplier.	4.12	4.45	4.2	4.25
Vr.5	Invoices in a regional language are more preferred by customers than those prepared in English.	3.23	4.34	4.03	3.87
Vr.6	Quotations in a regional language are more convenient over quotations prepared in English.	4.30	4.37	4.3	4.32
Vr.7	Payback terms, customer reward or any incentive given in a regional language is more appealing to customers than the same conveyed in English.	3.75	4.75	4.2	4.23

is greater than the overall average mean score, which very clearly signifies their affinity towards using a regional language over English as the mode of business communication.

## Inference from Respondent Category III:

The third category of respondents is a bit indifferent regarding the use of regional language as the medium of business communication. They are the most experienced of the lot and strongly believe that when it comes to internal communication, regional languages do help. However, their scores of agreeability dramatically reduced when it came to the question of using regional languages for external communication.

## FINDINGS

The inferences obtained from the responses of all the categories of respondents have confirmed beyond doubt that all of them favour regional language as a mode of business communication. However, there has been a fair amount of diversity in the

Table 2: Mean Score Obtained by Each Category of Respondents for Each Variable (Source: Primary Data)

other categories, as well as less than the overall average, in most of the cases. It is only when it comes to the preparation of quotations in regional languages that respondents in this category agree, being at par with all the others. The mean score of 4.3, in this case, proclaims the same.

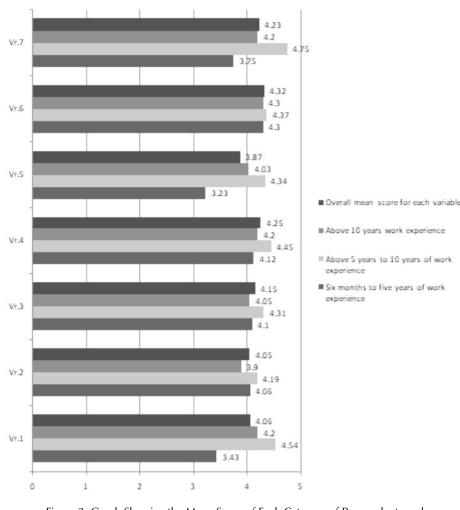
## Inference from Respondent Category II:

This group is the one that has favoured the utility of regional language in business communication to the greatest extent. In almost all the cases, their mean score responses, which instigates the need for finding the reason for the same along with the need for a detailed discussion on the responses of each category of respondents.

## Findings Pertaining to Category I:

The respondents of Category I have agreed that it is convenient to use regional languages as a mode of business communication, but their degree of agreeability is a little less as compared to the other

#### PROFESSOR'S DESK



#### Findings Pertaining to Category II:

This group has favored the use of regional language in business communication to a greatest extent. This category is more experienced than Category I and has dealt with a greater number of customers. As a result, their opinions are more customercentric. The group opined that customers are better off if accounting information is explained to them in a regional language rather than in English. They believe that this would help the customers to be at ease with the company and assist the company in brand value creation. Moreover, most of the respondents in this category have received their education in a vernacular language and were less acquainted with the accounting software in which the language of operation is mostly English. They firmly believe that the presence of a regional language facility in

Figure 2: Graph Showing the Mean Score of Each Category of Respondents and the Overall Mean Score (Source: Primary Data)

categories. On exploring the reason, it was found that most of the respondents in this category have received their education in English and are more comfortable with accounting and business terms in English. The very fact that they disregard the preparation of financial statements in regional languages is because they believe that their entire education, having been in English, and which makes it difficult for them to decipher accounting terms in a regional language. However, this category strongly believes that regional languages are preferred when it comes to external communication. They believe that all the readers of the financial information may not be well versed with accounting terms in English and this language may pose a problem for them.

accounting software would be more convenient for the progress of any business.

## Findings Pertaining to Category III:

Category III comprises of the most experienced respondents who have handled more clients than anyone else. According to these candidates, a regional language is, indeed, necessary for business communication, but when it comes to international business, there must be a common language for communication and English serves the purpose. This group concludes that there must be a balance between English and regional languages when it comes to business communication. The reason for such a perspective is that this group of respondents has become well versed in English during their tenure of work. Moreover, these respondents possess the knowledge of regional languages as well. This group's client and colleague base have more diversity than the previous two groups. To them, business communication and customer satisfaction can be ensured both by regional languages and English, depending on the sphere of accounting concerned.

## CONCLUSION

The utility of regional languages in business communication has been proven, without doubt, after taking into account the opinions of the respondents. But the utility and practicality of the use of a regional language alone as a medium of communication is debatable. Operational efficiency does require clarity among the members of the internal environment of a business, but when the question of global expansion arises, the importance of English, the most widely used language for business communication, crops up.

For the users of financial data, clarity is a must. However, as most of the financial statements are produced in English, a language in which only 10 per cent of the population is well versed (Joshi, 2019), the need for preparing statements in regional languages is extremely essential to bridge the gap of business communication.

Accounting information, being highly relevant for decision making, the need for clarity of such information is extremely essential for investors. It is evident that for the non-English speaking investors, information produced in regional languages will have more clarity than the same produced in English. This very aspect highlights the utility of regional languages in business communication. However, when it comes to the translation of accounting terms in regional languages, the information becomes complex. This is because professional accounting terms are better conceived in English rather than in a regional language. This phenomenon proclaims that business communication in a regional language is very important. However, it does not eliminate the requirement of English as a mode of communication.

Business communication must be a balance between regional languages and English, as this is how communication will foster both operational efficiency as well as global expansion.

## REFERENCES

- 1. B Danet, H. S. (2007). The Multilingual Internet: Language, Culture, and Communication Online. Oxford Scholarship Online.
- 2. Brannen, M. P. (2014). The Multifaceted Role of Language in International Business: Unpacking the Forms, Functions and Features of a Critical Challenge to MNC Theory and Performance. Journal of International Business Studies.
- 3. (2011), Census Report of India.
- 4. Centre for Development and Advanced Computing. (2019). Multilingual Computing and Heritage Computing.
- 5. Farber, B. (2018). Public Utility Accounting. American Public Power Association.
- 6. Garnell, X. (2015). Multilingual Information Management. Chandos Publishing.
- Helene Tenzer, S. T. (2017). Language in International Business: A Review and Agenda for Future Research. Management International Review.
- 8. Helle Andersen, E. R. (2004, September). The Role of Language Skills in Corporate Communications. Corporate Communications: An International Journal, 231-242.
- 9. Joshi, S. K. (2019). Linguistic History and Language Diversity in India: Views and Counterviews. Journal of Biosciences, 44.
- 10. Kuiper, A. (2007). English as the Language of International Business Communication. Business Communication Quarterly.
- 11. Saba, N. (2011). Linguistic Heterogeneity and Multilinguality in India: A Linguistic Assessment of Indian Language Policies.
- 12. Wendi L Adair, T. O. (2001). Negotiation behaviour when cultures collide: The United States and Japan. Journal of Applied Psychology, 86.
- 13. Wickramasinghi, M. (2017). Impact of Accounting Software for Business Performance. International Journal of Information System and Engineering, 6 (1), 1-26.
- 14. Yuan, C. W. (2013). Understanding Informal Communication in Multilingual Contexts. ACM Conference on Computer Supported Cooperative Work.

## LOOKING BACK





(11

A place where dreams thrive, development bolsters and destiny is moulded, this is where we find peace and where our hearts reside this is our home, the Xavier's Commerce Society.

# Living through the Timeless Treasures

Megh Gupta and Yash Haralalka Joint Secretaries Xavier's Commerce Society

We walked through the doors of St. Xavier's as complete strangers, unaware of what was lying ahead of us, filled with doubts and anxiety. However within a few months, we depart as individuals embodied with a feeling of conviction and perseverance. We never thought that what started off as only attending early morning classes and seminars would eventually finish like this, leaving us with countless memories and experiences to cherish forever.

We still recall seeing a group of passionate individuals wearing black t-shirts with Xavier's Commerce Society (XCS) imprinted boldly on them, standing out from the multitude and working tirelessly near the green benches. They drew our attention right away, and as subsequent events unfolded, the name XCS continued to arouse an inherent desire to be one of these individuals. The desire to wear the black t-shirt was not only to flaunt it on our backs, but also to ignite in us the sense of determination and responsibility that the black t-shirt evokes.

Every person has a strong suit and XCS provides multifarious opportunities for people to discover their strengths and fulfill their potential. To be able to multitask, to advocate for insightful thinking on a regular basis, to comprehend how to make the right decisions, and work with utmost focus and zeal, an XCSer is someone who not only values others but also embraces constructive criticism. An XCSer is someone who strives to attain perfection and the epitome of professionalism in all his endeavours. An XCSer is someone who is ready to step out of their comfort zone and prepared to take on unprecedented challenges and every action taken by an XCSer is for the holistic growth of the college's students and advancement of the society. Thereby, it is integrity, discipline, and dedication that actually constitutes an XCSer.

Our journey as XCSers had its own shares of ups and downs, with innumerable memories to cherish, and countless experiences to learn from. Whatever mistakes we made and what we learnt, we did it as a team; a team full of countless ideas, willing to transcend the boundaries of knowledge and striving to accomplish significant feats. Today, when we reflect back on the three most incredible years of our lives, we view ourselves as people who have been instilled with a sense of professionalism, precision, and passion.

In the first year, our transition from mere students of St. Xavier's College to the Working Committee Members of Insignia 2020, made us realize that our college life had much more in store for us than we had ever expected. From being one among the hundreds to being a part of the society that represented those hundreds, nothing had ever felt better than to don the black t-shirt that we had been looking up to for so long. It is often that our seniors used to tell us, 'You never forget your first Insignia.' At that time, we used to think that this had everything to do with the scale at which this business fest was conducted, or with it being the flagship event of the society. But later, we went on to realize that the reason one can never forget their first Insignia is that it is the beginning of a bond shared between a remarkable group of people, who later go on to forge friendships that last forever.

As our second-year journey embarked, there were new responsibilities on our shoulders altogether. With an

increase in the expectations people had from us, we had now become individuals who represented one of the most renowned societies of the college. Despite the many challenges we faced in conducting events virtually, we left no stone unturned in carrying forward the 15-year old legacy and in living up to the ideals of the Xavier's Commerce Society. Although not being able to experience what it was like to traverse the corridors of the college wearing the black t-shirt came as a disappointment, we never let our enthusiasm and passion towards the society waver.

The entire shift to the online mode was difficult for all of us, but we also realized that if we could capitalize on the advantages that came with this shift, we could continue our legacy of always staying ahead of others. One can overcome any adversity as long as the right people are around to support them. With a team of confident individuals who always have each other's back, we continued to devise innovative ways of overcoming any hardship that came our way. It is said that one should never let go of those who stand by them during tough times, and with everything all of us have gone through together, we are fairly certain that there is no other group of people we would have wished for spending this journey with.

Today, not only do we lead a group of 43 individuals, but we also represent thousands of those belonging to the Department of Commerce. It is a matter of great pride to have so many people look up to you and respect you, and to have yourself associated with innumerable events that students look forward to. This is what the Xavier's Commerce Society has given us, a sense of belonging and a sense of recognition. The responsibility we hold does not allow us to give way to the slightest of errors and has enabled us to keep striving for excellence in everything, living up to the ideals the society was based upon, which is something we will always be grateful for. It seems like yesterday when we walked into college with a dream, met a group of wonderful people who continuously strived towards development, and took a step closer to our destiny by actually becoming a part of the family we were once inspired by. With the most inspiring seniors, we could learn immensely from, an incredible group of teammates we have shared our memories with, and the

most diligent set of juniors whom we have had the privilege of mentoring, the entire experience that we have had with the XCS family will remain etched in our hearts forever.

For any organization to achieve success, it needs individuals whose guidance and support helps it overcome all impediments which it may face in its journey to be successful. We would like to thank the President of the Xavier's Commerce Society, Rev. Dr. Dominic Savio, SJ, under whose mentorship XCS has strived to reach the pinnacle of perfection. We are grateful to Rev. Fr. Joseph Kulandai, SJ, and Rev. Fr. Peter Arockiam, SJ, for believing in us and encouraging us in all our endeavours. None of our activities would have been successful without the support of Dr. Amitava Roy and Dr. Soheli Ghose who have guided us and motivated us to perform better. None of our events would be successful without the support of our professor-in-charge, Prof. Shaunak Roy, and our mentor, Dr. Sumona Ghosh. They have been our constant pillar of support and the backbone of the society. We are also grateful for the support that XCS continues to draw from its alumni members. Our gratitude goes out to the entire faculty of the B.Com Department and the support staff who have helped us in all our endeavours. Lastly, we would like to thank the entire student body of St. Xavier's College (Autonomous), Kolkata for their active participation in all our events and for providing their valuable feedback which ensures we deliver our best every time.

From an outsider's perspective, we thought XCS would seem like just any other society and an addition to one's resume. But on the inside, to us, XCS is more than just that, it is a family - a family of 43 individuals having different ideas, multiple talents, diverse skills, unique perspectives, and distinct personalities; but each of them having one common goal - the love and attachment towards the society and the strive to keep the flag of XCS flying high.

It would be difficult for any member to define this society merely through words, because XCS provides people with an exhilarating journey that they never seem to forget. XCS cannot just be defined by the events it conducts or the corporate exposure it provides, it can be defined by the friendships it nurtures, the adventure it bestows, and the wisdom it instills. It is said that, 'There is no other comfort that can be compared to the comfort of being home.' A place where dreams thrive, development bolsters and destiny is moulded, this is where we find peace and where our hearts reside - this is our home, the Xavier's Commerce Society.

Myh Gyta

Megh Gupta

Yash Horalal Ka

Yash Haralalka

## TRIBUTE

 $\times$ 

# FLASHBACK



## PINWRIGHT'S PROGRESS

1946 13+ 1 Season A comedy series that entailed the charades of a pompous shopkeeper, J. Pinwright and his progress from one disaster to another, becoming the first television sitcom to be aired in the world.

DOWNLOAD



## THE FLINTSTONES

1960 13+ 6 Seasons

A series that takes place in a romanticized Stone Age setting with its oxymoronic modern everyday concerns whose popularity has made it the most financially successful and longest-running animated television series.

Play

Play

Play





PREVIEW

 $\times$ 



## THE SIMPSONS

1989 14+ 33 Seasons

A parody on the American culture and social condition harmonized by strong profanity, epitomized to be the highest grossing sitcom in the world till date as well as a billion dollar merchandising industry. It is perceived by all as the golden age of the sitcom world.

DOWNLOAD

365

PREVIEW

TRIBUTE

# FLASHBACK



## THE OFFICE

2005 12+ 9 Seasons

The most streamed sitcom of 2020 was adapted from its British counterpart by Greg Daniels. The mockumentary soon became a cultural touchstone with its grappling storyline and absence of laughing tracks.

DOWNLOAD



## IT'S ALWAYS SUNNY IN PHILADELPHIA

2005 18+ 15 Seasons

'The Gang' of five misfits whose modus operandi of vengeance, manipulation and egotism culminates to be a pact of toxic dependency ultimately rendering the world's longest running live-action sitcom.

Play

Play

Play





PREVIEW

Х

PREVIEW

 $\times$ 

 $\times$ 



## THE BIG BANG THEORY

2007 16+ 12 Seasons

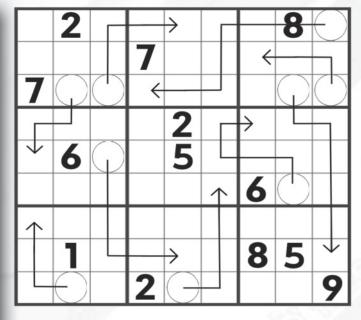
The show's journey towards becoming a global powerhouse and emerging as one of the most viewed sitcoms initiated with easily digestible narratives along with its accessible brand of humour. The usage of witticisms and infusion of science with comedy worked in its favour.

DOWNLOAD

YOUTHINK • 2022 • Vol. XVI

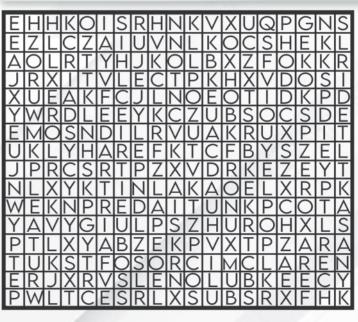
## SOLVE THE SUDOKU TO OBTAIN CLUES FOR THE WORD SEARCH

Each number inside the circle denotes the question number. The number at which the arrow is pointing denotes the length of the answer to that question.



- 1. Which computer company launched a Patent Tracker in 2013?
- 2. The first human-made object to venture into interstellar space was launched by this agency.
- 3. Which manufacturer of automobile produces its own comedy cartoon, called Tooned, which it uses to promote its drivers in F1?
- 4. Which brand has already experienced nine revitalizations of design expression?

- 5. Which company was first known as Sanders Court & Café?
- 6. Name the mechanism intended to assist producers in developing nations to establish long-term and equitable trading connections.
- 7. The original name of this company was 'Quantum Computer Services.'
- 8. This company spends more money on health insurance than on their raw materials.
- 9. The private equity firm which has acquired 60% stake in Ramky Enviro Engineers for \$530 million.



STRIKE THE ANSWERS IN THE GIVEN WORD SEARCH

TO REVEAL THE LOGO OF A FAMOUS COMPANY

Answers: Answers: 3. Microsoft 2. NASA 3. McLaren 4. Santander 5. KFC 6. Fairtrade 7. AOL 8. Starbucks 9. KKR 2. Starbucks 9. KKR Actuators Educational Institute



# BEST TRAINING CENTRE IN INDIA FOR FINANCE & ANALYTICS

# Modes of Teaching :

## Face 2 Face / Live Online / Recorded



 Centre Location : 8 Ho Chi Minh Sarani Kolkata - 700071
 Contact : 9830953113 / 8100598543

f

# THE EDITORIAL BOARD

# JOINT EDITORS-IN-CHIEF



Aleya Ghosh



Saksham Dalmia

## EDITORIAL BOARD MEMBERS



Anjali Dugar



Meghan Ann D'Souza



Muskan Jain



Pratham Mittal



Ronit Sanghai



Vanessa Chung



Yash Sanghvi

## **MBA-entrance training : CAT & GD-PI**

## Experience a premier **Business School** before / without going to one.

## **CLASSROOM**

## **VIDEO ROOM**

## **ONE-TO-ONE SESSION**



Genesis of Crystal Clear Concepts

COMPUTER LABORATORY



At last the mouse bells the CAT

## PERSONAL INTERVIEW



**Backup Classes** 

CORPORATE PRESENTATION



Soft Skills Development

## **FUTURE READY**



Personalised & Customised Guidance

CONFERENCE ROOM



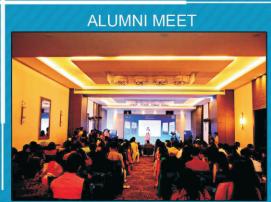
Group Discussion and Brainstorming



360° Appraisal



Training for life



Eternal emotions and memories

All the images are real and any resemblance to any TCC student is purely intentional.



**TCC MANAGEMENT SYSTEMS** Home of Crystal Clear Concepts