2024 EDITION

DSTREET

ANNUAL BUSINESS AND
INVESTMENT JOURNAL VOLUME III

DRAVYA

NAVIGATING THROUGH YOUR INVESTMENT JOURNEY

ACKNOWLEDGEMENT

The release of the third edition of our annual business and investment journal, Dravya, reaffirms our dedication to maintaining the legacy of excellence and growth synonymous with our esteemed institution. The process of crafting this journal has been a comprehensive experience, enhancing our knowledge and skills while imparting invaluable lessons in teamwork and perseverance. We extend our sincere thanks to all who supported us throughout this transformative journey.

Foremost, we express gratitude to the committed writers and researchers whose contributions significantly propelled the success of this journal. Their insightful articles, thought-provoking essays, and creative ideas brought forth a journal that truly reflects our institution's ethos. Further, we acknowledge the experts and notable individuals in the corporate field who graciously shared their time and insights, contributing to the diversity and dynamism of perspectives within the journal.

A special acknowledgment is reserved for our dedicated team, whose unwavering efforts, passion, and commitment played a pivotal role in bringing this journal to fruition. Through their hard work, we present a journal that instils genuine pride. Lastly, we extend deep appreciation to our teacher-in-charge, Mr. Anil Kumar, whose guidance and mentorship were instrumental in our journey. His continuous support served as a wellspring of inspiration, and we are truly grateful for his invaluable contribution to this project.

Our heartfelt thanks to all who supported us in our quest to produce a journal reflective of our institution's spirit. We trust that readers will find Dravya informative, engaging, and inspiring—an embodiment of our commitment to excellence and growth.

ABOUT OUR SOCIETY

D-Street at Shri Ram College of Commerce, an illustrious society within the University of Delhi, proudly upholds a rich legacy, dedicated to providing its members with unparalleled opportunities for skill enhancement and fostering an environment steeped in excellence. Our unwavering commitment to continuous learning and growth is further fortified by the steadfast support of our devoted team and the unwavering encouragement from the college authorities.

We express our profound gratitude for their instrumental role in orchestrating noteworthy events, including Asia's Largest Undergraduate Stock Market Event Bullzire, Shri Ram Trading Challenge, and Shri Ram Finance Summit. Serving as a dynamic platform for intellectual discourse, D-Street conducts enlightening panel discussions featuring distinguished personalities, providing our members with diverse learning experiences. Through these initiatives, we aim to transform individuals into confident and well-informed professionals deeply versed in the intricate realms of the financial world.

Being an integral part of this vibrant and dynamic community, we take pride in contributing to an environment that fosters creativity, innovation, and excellence. It is our collective aspiration to empower every member of D-Street to evolve into the best version of themselves, equipping them to navigate the challenges and seize the opportunities presented by the ever-evolving landscape of business and investment.

TIMELINE

Dravya 2.0 Launch - 25th January 2024
In a moment of great anticipation, **Mr. Shakil Rataeeya**, State Wealth Head & VP of IndusInd Bank, took center stage to unveil the much-awaited annual journal, **Dravya.** His presence marked a significant milestone, adding prestige to the launch of this insightful publication.

16th-18th February 2024- Equity Research & Valuation Bootcamp'24

The three-day Bootcamp offered finance enthusiasts a chance to learn from top industry experts. Featuring speakers from **IIM Ahmedabad, ISB, Accenture, and JP Morgan,** the event provided invaluable insights into equity research, valuation techniques, and market dynamics, equipping participants with essential finance skills.

27th & 28th Feb- Bullzire'24

Bullzire'24, **Asia's largest stock market festival,** brought finance enthusiasts together for an immersive D-Street experience. The event featured innovative games, interactive simulations, and expert sessions, with industry leaders **Mr. Ramesh Damani** and **Mr. S. Sriniwasan** sharing insights on trading, investment, and market dynamics. Hands-on learning and expert guidance made it a truly transformative experience.

2nd June 2024- Cabinet Recruitment

The cabinet positions at D-Street, SRCC are awarded annually based on a member's contribution and dedication to the society. This year, **Tanishq Sureka** has been appointed as **President**, while **Vansh Gupta** takes on the role of **Vice President.** The cabinet for this year comprises proficient leaders and talented associates, each excelling in their respective domains, ready to drive D-Street to new heights.

24th Sep- 4th Oct 2024 - SRTC'24

The Shri Ram Trading Challenge 2024, in collaboration with **Moneycontrol**, brought the financial world to life with an exhilarating **online mock-stock competition.** Participants engaged in a dynamic test of investment acumen, navigating a virtual battlefield of portfolios and real-time market conditions, all while competing for total rewards worth one lakh.

11th Sep- 20th Oct 2024 - Recruitment

D-Street, SRCC's recruitment drive was an exciting search for future leaders. Welcoming the exceptional **27/28 batch**, we ensured their initiation into finance was insightful and engaging. A lively **mock stock session** introduced market dynamics, while a perceptive orientation provided key financial insights and foundational skills. With this immersive start, our new members are ready to explore, learn, and lead in the dynamic world of finance!

Research Sessions

Various research sessions covering topics such as **derivatives, technical analysis**, and **fundamental analysis** were conducted by cabinet members to enhance the understanding of junior analysts. Additionally, discussions on topics such as **RBI repo rate** cut and its effect on Indian economy were organized to sharpen the critical thinking skills of its members.

Research Reports & Market Insights

Several **reports** were presented, including an **in-depth analysis** of the landmark merger between Reliance Jio and Disney Star, marking the beginning of a new era in entertainment and unlocking a wealth of possibilities. The **company profile report on Nykaa** examined how the brand disrupted the market by embracing omnichannel retail and fostering a loyal community of shoppers.

Making of Dravya 3.0

The **inception of Dravya 3.0** stands as a testament to the innovative vision of D-Street, SRCC, the premier stock market-oriented society of the University of Delhi. This edition plays a crucial role in fostering knowledge across business, investments, financial markets, policy, economics, and geopolitics, offering deep insights into global market dynamics. The relentless efforts of our **PR and editorial teams** shine through in their meticulous content curation.

Bullzire'25: The Stock Market Festival

We are gearing up for **Bullzire'25,** our flagship event, where finance and trading take center stage like never before! As the pinnacle of financial excellence at D-Street, Bullzire'25 is set to deliver an unmatched experience, bigger and better than ever. With meticulous planning and an unwavering commitment to innovation, we promise an electrifying journey into the heart of the financial world. Stay tuned for an unforgettable experience!

WORDS FROM THE

PRINCIPAL

MS. SIMRIT KAUR

It is with immense pleasure and pride that I extend my heartfelt greetings to each one of you on this special occasion—the 13th anniversary of D-Street, the pioneering society at Shri Ram College of Commerce. As a premier institution of Commerce and Economics, our college has consistently pursued excellence in both academia and extracurricular activities. D-Street, SRCC, has been a shining example of our commitment to fostering a holistic learning environment. The society has not only produced outstanding academic scholars but has also carved a niche for itself in the realm of practical financial knowledge. Under the exceptional leadership of Dr. Anil Kumar, the Convenor of D-Street, our students have tirelessly worked to deepen their understanding of financial markets. The society's journey has been marked by numerous milestones, including the successful organisation of events such as 'Bullzire' and the initiation of groundbreaking projects like Shri Ram Trading Challenge. These initiatives have played a crucial role in bridging the gap between theoretical concepts and real-world applications. Today, on the 13th anniversary of D-Street, I am thrilled to congratulate the entire team on the launch of the third edition of 'Dravya'—The Annual Business and Investment Journal. As the first stock market-oriented society in the University of Delhi, D-Street continues to set the bar high with 'Dravya,' showcasing research papers, articles, and reviews in diverse fields, including Business, Investments, Financial Markets, Policy, Economics, Geopolitics, and Global Economy. May this edition of 'Dravya' stand as a testament to the unwavering dedication and passion of the D-Street team. I am confident that it will not only uphold the rich tradition of disseminating financial knowledge but will also inspire future generations of scholars and practitioners. May the society continue to scale new heights and contribute significantly to the world of finance.

WORDS FROM THE

TEACHER IN CHARGE

MR. ANIL KUMAR

As the teacher in charge of D-Street, it is with great pleasure and excitement that I extend my heartfelt congratulations on the occasion of the third edition of 'Dravya' – The Annual Investment and Business Journal. This marks yet another significant milestone in the journey of our esteemed society, and I take this opportunity to reflect on the remarkable strides we have made together. Economic globalization has presented both challenges and opportunities, and amidst this intricate landscape, the emergence of stock markets in developing countries, notably in India, has been a transformative phenomenon. D-Street, the largest stock market-oriented society in the University of Delhi, has embraced the challenge of equipping undergraduates with the skills required to navigate this dynamic financial landscape. Through premium speakers' sessions by industry leaders, organising the prestigious Bullzire festival, and publishing insightful materials, D-Street has consistently worked towards spreading stock market literacy among students. With the yearly publication of 'Dravya,' our Annual Investment and Business Journal, D-Street has added a new dimension to its commitment. This journal aims to publish research articles and review articles in the fields of investments in the financial markets, providing a platform for scholarly discourse and intellectual exploration. I applaud the students of D-Street for their initiative and dedication in taking this venture forward. Your commitment to top-notch research work is commendable, and I am confident that this edition of 'Dravya' will once again showcase the intellectual prowess of our students and make Shri Ram College of Commerce proud in every way possible. As we embark on this exciting journey of the third edition of 'Dravya,' I encourage the students to continue their outstanding research efforts and contribute to making this edition even more enriching and impactful. Wishing you all the success in this endeavour.

WORDS FROM THE

EDITOR IN CHIEF

MR. SIDDHANT MANGLA

With great excitement and a sense of pride, I welcome you to the third edition of Dravya – The Annual Investment and Business Journal of D-Street, SRCC. This edition symbolizes our society's relentless pursuit of financial excellence and commitment to fostering a culture of informed discourse in the dynamic realms of business and investments. My journey with D-Street has been an enriching and transformative experience. From stepping into the society as an eager learner to serving as the Editor-in-Chief of this esteemed publication, every moment has been marked by invaluable learning, collaborative growth, and a shared vision of excellence. D-Street has not only been a platform to explore my passion for the stock market but also a community that has continually inspired me to push boundaries and embrace the nuances of financial knowledge. Curating this edition of Dravya has been an extraordinary journey. Each article within these pages reflects the collective efforts of our talented writers, editors, and contributors – a blend of rigorous research, diverse perspectives, and thought-provoking insights into the dynamic world of business and investments. This edition aims to serve as a beacon for anyone with a curiosity for finance, providing a comprehensive outlook on both contemporary trends and timeless principles. I would like to express my heartfelt gratitude to the entire editorial team, our esteemed faculty, and contributors whose dedication and hard work have brought this vision to life. As you delve into the pages of Dravya, I hope you find inspiration, knowledge, and a renewed passion for the world of finance. Here's to empowering minds and igniting conversations – welcome to Dravya 3.0.

Happy Reading!

WORDS FROM THE

EDITOR IN CHIEF

MS. VAISHNAVI

As I sit down to write this note for Dravya 3.0, I can't help but reflect on the incredible journey that has led to this moment. When I first took on the role of Editor-in-Chief at D-Street SRCC, I knew it would be a challenging yet rewarding experience. However, nothing could have prepared me for the whirlwind of learning, collaboration, and growth that came with bringing this edition to life. Dravya, the flagship financial and investment journal of D-Street, has always been a testament to the power of research, insight, and analysis. With each edition, we strive to push boundaries, explore evolving financial landscapes, and deliver content that resonates with market enthusiasts and industry professionals alike. Dravya 3.0 has been no exception—it represents months of hard work, countless discussions, and a shared vision to present a publication that is both informative and thought-provoking. This edition delves into some of the most pressing financial trends, market dynamics, and investment strategies shaping the world today. From in-depth analyses of economic policies to emerging investment avenues, Dravya 3.0 reflects the dedication and intellectual rigor of our team. The journey has been nothing short of transformative. Coordinating with contributors, refining research, and ensuring the highest editorial standards has not only strengthened my leadership skills but also deepened my understanding of the ever-evolving financial world. I am immensely grateful to my incredible editorial team, the research analysts, designers, and every single member of D-Street who contributed their time and effort. Your passion and commitment have been the driving force behind this publication. A heartfelt thanks to our faculty mentors and industry experts for their invaluable guidance. To our readers, your support drives our mission to educate and inspire. We hope Dravya 3.0 sparks curiosity in finance.
Here's to many more editions and the continued pursuit of financial excellence!

WORDS FROM THE CABINET

Tanishq Sureka (President)

D-Street has been more than a society; it has been a journey of learning, leadership, and passion for finance. My journey began as an eager member, driven by curiosity, and was soon shaped by the responsibility of leading as the Event Head for two major events during my junior tenure. These experiences honed my ability to strategize, collaborate, and execute with precision, laying the foundation for my leadership today. As President, I take immense pride in our thriving community that fosters intellect, innovation, and resilience. Dravya stands as a testament to our dedication, featuring insightful articles and diverse perspectives from brilliant minds. This edition encapsulates our commitment to financial literacy and excellence, reflecting the hard work of our team. I hope this magazine inspires and enriches your understanding of the financial world, encouraging you to explore new dimensions of finance. Welcome to Dravya!

Amidst the turbulence of college and merciless arena of finance, D-Street emerges not just as a society but a lifeline and family. Here, finance is not just a field of study, but a strategic blueprint to engineer dominance. Every learning curve in this society taught me that nothing is arbitrary and weaponizing chaos is the only way to transform risk into opportunity. Every challenge that was thrown towards me was helpful in forming and redefining the belief system that will help in the lifelong quest for success. This sculpted a lifelong attitude of adaptability and collaboration, albeit while remaining unaffected by the circumstances unfolding around me. As we launch our 3rd edition of Dravya, D-Street continues to reflect finance's ever-shifting terrain, sparking dialogues and innovations that challenge the status quo of the financial world. As we march forward, I urge readers not to remain mere spectators, as finance only rewards the risk taker.

Vansh Gupta (Vice-President)

WORDS FROM THE CABINET

Mitali Sharma
(Chief Coordinator)

Our experiences shape who we are, and my journey with D-Street has been nothing short of transformative. Over the past two years, this society has been instrumental in my personal and professional growth, instilling values of teamwork, leadership, and a deep passion for finance and economics. As we launch the third edition of Dravya, I feel immense pride. With Dravya, we aim to provide insightful discussions and fresh perspectives, enriching our readers and strengthening our passion for business and investments. As we unveil this edition, I am honored to carry forward the legacy we have built together, and I look forward to seeing it inspire many more in the years to come.

D-Street has been a transformative part of my journey, shaping both my personal and professional growth with invaluable lessons and guidance. More than just a society, it has become a close-knit community where I've found recognition, knowledge, and lifelong connections. The insights I've gained extend well beyond the stock market, teaching me resilience, strategic thinking, and the importance of balance in life. As we proudly unveil the third edition of Dravya, our annual business and investment journal, I feel privileged to contribute to the legacy we've built. Dravya serves as a platform for thought-provoking insights, fostering learning and growth within our community.

Taniya Modi
(Chief Coordinator)

Sri Ritish Kumar Reddy
(Secretary)

D-Street has always been more than just a society to me—it has been my comfort space, a family where I've found unwavering support and endless learning. This journey has been nothing short of extraordinary, an experience I will always cherish. I want to take a moment to express my heartfelt gratitude to my peers, seniors, and the incredibly supportive members of the Cabinet. The commitment and perseverance of our members have been truly inspiring, and I deeply appreciate the effort that every writer and editor has poured into making this journal a reality. With that, I am incredibly proud to present the third edition of Dravya. Dive in, explore, and immerse yourself in the world of finance and stock markets. Wishing you a great read ahead!

WORDS FROM THE CABINET

Tanishq Ray (Director of Public Relations & Tech)

Reflecting on my journey with D-Street at SRCC fills me with immense pride and gratitude. It all began two years ago when I walked into my first interview for the society, fueled by a passion for finance and a desire to learn. Little did I know that this would mark the beginning of a transformative experience. As I progressed from a junior role to becoming a Director of Public Relations and Tech, D-Street grew not only to become an institution but also a family for me that helped me learn and build lasting relationships and embraced opportunities that challenged and inspired me. This edition of Dravya not only showcases the dedication and hard work of our contributors but also reflects the invaluable lessons I've learned along the way.

D-Street has been more than just a society—it has been a transformative journey of learning, leadership, and collaboration. It has given me the opportunity to grow alongside some of the brightest minds. With great pride, we present the latest edition of Dravya, SRCC's Annual Business & Investment Journal—a product of unwavering dedication, meticulous research, and creative vision. Behind every page lies the hard work of our incredible team—our seniors who guided us, our juniors who brought fresh perspectives, and my peers who stood by every step of the way. Their tireless efforts have made Dravya a reflection of excellence. May this edition challenge your ideas, spark curiosity, and inspire a deeper understanding of the financial world.

Ritul Jain (Director of Public Relations & Tech)

Shagun Koul (Director of Public Relations & Tech)

D-Street has greatly influenced my personal and professional growth, offering continuous support and guidance. More than just a society, it feels like a family that has given me recognition, knowledge, and unforgettable experiences. The lessons I've gained go beyond the stock market, teaching me the value of balance, resilience, and adaptability in life. As we present the third edition of Dravya, our annual business and investment journal, I am proud to carry forward the legacy we have built. Dravya serves as a platform for sharing ideas, insights, and diverse perspectives, helping readers deepen their understanding of the financial world.

WORDS FROM THE CABINET

Abhinandan (Director of Research)

D-Street has served as a great platform acting as a stepping stone into the world of finance. From being a person with very limited knowledge in this domain, D-Street has infused in me a profound understanding of the intricacies of this field. We are extremely delighted to launch the third edition of Dravya- The Annual Business and Investment Journal. This edition is a culmination of various scholarly works which are targeted to instigate and kindle the finance enthusiast in you. We firmly believe that this edition will act as a thrust for your flight towards the ever expanding horizons of the finance world. This journal encapsulates a diverse range of perspectives, offering deep insights into market dynamics, investment strategies, and emerging financial trends. With contributions from seasoned professionals and budding analysts alike, this edition serves as a repository of knowledge that bridges theory with real-world applications. As we unveil this carefully curated collection, we hope it inspires you to explore, question, and innovate in the realm of finance. Let this edition of Dravya be more than just a read—let it be a catalyst in your journey towards financial acumen and success.

I fall short of words when it comes to expressing my gratitude towards D-Street. It gave me the opportunity to transform my interest in finance into a genuine passion that has transcended into ever increasing curiosity. This two year journey with D-Street has been filled with wonderful memories whether it be organising Bullzire as a junior member or contribution to the publication of Dravya as the Research Director. D-Street also provided me with the opportunity to collaborate with some of the most passionate and hardworking individuals which has expanded my perspective. I hope to carry forward the legacy our ever helpful seniors passed on to us and do justice to the position. I owe a significant part of my personal growth to the society because every moment spent working on research reports, giving research sessions and pulling off successful events has taught me something valuable and has helped me gain immense knowledge while forming close bonds that I'll cherish for long. As we unveil the third edition of Dravya, I'm proud to say that every reader will be able to feel and appreciate the months of hardwork and dedication put into curating this fine piece of knowledge.

Pavani Mishra (Director of Research)

WORDS FROM THE CABINET

Akshat Sogani (Director of Corporate Communications)

Communication is the bridge between ideas and impact, and my journey with D-Street has been about building that bridge. As Corporate Communication Director, I've had the privilege of shaping narratives, fostering engagement, and bringing our society's vision to life. The third edition of Dravya – The Annual Business and Investment Journal is more than just pages of analysis—it's a reflection of our relentless pursuit of financial insight and excellence. I hope this edition challenges perspectives, sparks meaningful conversations, and reinforces D-Street's role as a thought leader in the world of finance.

D-Street has been a significant part of my college journey, shaping my understanding of finance beyond textbooks. My role as the Corporate Communications has been a rewarding experience, allowing me to interact with finance enthusiasts and industry experts. With immense pride and excitement, we present the third edition of Dravya - The Annual Business and Investment Journal that upholds D-Street's legacy of knowledge and excellence. This edition brings together thought- provoking articles, in-depth research, and unique perspectives, offering readers a glimpse into the dynamic world of finance. We are hoping that this edition broadens your perspective and fuels your curiosity about finance.

Diksha Agrawal (Director of Corporate Communications)

Riddhi Sachdeva (Director of Corporate Communications)

D-Street has been more than a society to me; it has been a journey of growth, learning, and collaboration. From being a junior member to leading the Corporate Communications Department, I have witnessed firsthand how meaningful conversations, strategic thinking, and teamwork shape financial intellect. Beyond numbers and markets, D-Street has taught me adaptability, leadership, and the importance of balance. Now, with immense pride we introduce Dravya, a research initiative honoring D-Street's decade-long legacy of excellence. With this edition of Dravya, we bring you a compelling compilation of insights, research, and perspectives that reflect our unwavering commitment to financial excellence.

WORDS FROM THE FORMER CABINET

Saesha Banga (President)

D-Street was more than just an experience—it was a journey that defined my time at SRCC. From stepping in as a curious junior to leading as President, every challenge and milestone shaped me into the individual I am today. It wasn't just about the markets; it was about leadership, resilience, and the incredible community that made it all worthwhile.

Seeing the current team take this legacy forward with such passion is truly rewarding. As they launch the 3rd edition of Dravya, a journal that reflects their hard work and vision, I couldn't be prouder. Wishing them continued success in pushing boundaries and elevating perspectives!

My tenure at D-Street has been an exhilarating journey brimming with thought-provoking events, fests, and profound market conversations. The joy of contributing to this dynamic team has been a privilege. Every moment has been an emotional crescendo. It's a journey that has propelled my passion for finance and kindled lasting friendships. From inception to now, D-Street's evolution showcases our unwavering commitment to financial excellence. I am immensely proud of our collective growth and excited for the 3rd edition of Dravya and its promising future. It continues to be a beacon in the ever-evolving world of business and investment. As I reflect on this journey, I look forward to sharing more profound financial dialogues and insights with you through Dravya.

Mohammad Arham Yusuf (Vice-President)

WORDS FROM THE FORMER CABINET

Hiten Goyal
(Secretary)

D-Street has taught me many things that I can't even sum up in a few words. I want to take a moment to express my gratitude to my peers and seniors for their incredible support and dedication. The past year was challenging, but the unwavering commitment of the members was truly inspiring. I deeply appreciate the hard work and time that every writer and editor has put into creating this journal. I am immensely proud of my juniors for their efforts this term and for carrying forward the legacy with such dedication. It brings me great joy to present the third edition of Dravya to you all.. Have a great read ahead!

I firmly believe that our life experiences shape us into the individuals we are meant to be. When I reflect on my two years at D-Street, I'm overwhelmed with gratitude for the privilege of being part of this incredible journey. This period has been instrumental in my personal growth, instilling in me the values of teamwork and leadership, and providing a dynamic platform to explore the world of finance and economics in exciting ways. I'm excited and eagerly looking forward to the launch of the third edition of Dravya, which is a testament to the commitment of D-Street to foster knowledge and innovation in finance and economics.

Nidhish Dhoundiyal
(Chief Coordinator)

Jatish Ahuja
(Chief Coordinator)

D-Street was the defining chapter of my journey at SRCC—an experience that blended learning, leadership, and camaraderie. It was here that I found my passion, honed my skills, and built friendships that will last a lifetime. From being an enthusiastic member to spearheading initiatives that left a lasting impact, every moment was a lesson in resilience and innovation. It wasn't just about understanding markets, it was about shaping ideas, fostering connections, and creating something bigger than myself. Seeing the society grow stronger with each passing year fills me with immense pride. Wishing the current team success as they take D-Street to even greater heights!

WORDS FROM THE FORMER CABINET

Manya Goel (Editor In Chief)

D-Street has been an integral part of my SRCC journey—a place where passion met purpose. From curating impactful content to orchestrating large-scale events, every experience shaped me both personally and professionally. It was never just about finance; it was about fostering critical thinking, building resilience, and collaborating with some of the sharpest minds.Seeing the current team take Dravya to new heights fills me with immense pride and confidence. Their dedication, creativity, and pursuit of excellence have been truly inspiring.

Watching them bring the 3rd edition to life is incredibly rewarding. I am certain that this edition will not only uphold the legacy but also set a new benchmark with its depth, insights, and perspectives. Wishing the team continued success in driving meaningful conversations and pushing boundaries—onwards and upwards!

D-Street has been far more than just a society — it has been a journey of personal and professional growth, marked by challenges, achievements, and unforgettable experiences. Serving as the former Director of Public Relations & Tech gave me the incredible opportunity to lead impactful projects, collaborate with some of the most talented individuals, and forge connections that will last a lifetime. Every moment spent here has been a learning experience, shaping my perspective and equipping me with invaluable skills.

With the release of the 3rd edition of Dravya, I am incredibly proud to witness how the team has upheld and elevated the society's legacy. Their dedication to producing thought-provoking research, embracing diverse viewpoints, and pushing the boundaries of financial discourse is truly commendable. This edition stands as a reflection of their passion and unwavering commitment to excellence.

I'm confident that Dravya will continue to inspire, inform, and ignite curiosity in readers. Wishing the entire team every success as they continue this remarkable journey and take Dravya to even greater heights!

R. Keerthana Badavath (Director of PR & Tech)

WORDS FROM THE FORMER CABINET

Mohammed Sinan (Research Director)

D-Street has been a big part of my time at SRCC—one that shaped my thinking, challenged me, and introduced me to some of the brightest minds in finance. From research discussions to mentoring juniors, every experience here has been rewarding in ways beyond just markets.

Seeing the 3rd edition of Dravya come to life is a proud moment. The team has done an incredible job in pushing the conversation beyond just stocks and numbers, bringing in fresh perspectives.

From late-night brainstorming sessions to intense debates over market trends, every moment with this community has been invaluable. The passion and dedication of the team continue to inspire, and I have no doubt that Dravya will set new benchmarks this time.

The effort and thought that have gone into curating this edition reflect the team's commitment to excellence. It's amazing to see how Dravya has evolved, capturing the dynamic world of finance in a way that resonates with both enthusiasts and professionals. Looking forward to seeing the impact it creates and how it continues to grow in the years ahead!

One of the best things that happened to me in SRCC has been D-Street as it is not just a society but an environment that provides the experience of the financial world to the new college entrants. The journey that I have gone through from being a stock market enthusiast to organizing multiple events with significant footfalls have honed my leadership, technical and networking skills.

The third edition of Annual Business Magazine - Dravya - takes the legacy forward and would surely provide meaningful insights and enrich the reader's knowledge. It is a feeling of immense pride with which the team is launching the next edition and they have worked really hard to ensure an experience worthwhile.

The team has put in incredible effort to make this edition truly impactful, and it fills me with immense pride to see it come to life. Their dedication and vision will undoubtedly make this a remarkable publication. Wish them success for their future endeavours!

Manav Mangla (Research Director)

WORDS FROM THE FORMER CABINET

Vaibhav Chadha (Director of Corporate Communications)

Being in D-Street at SRCC has been a transformative journey. From starting as a junior member to now leading corporate communication, every step has contributed immensely to my personal and professional growth. My involvement with D-Street, SRCC, has truly surpassed expectations, offering enriching experiences and a prestigious platform to be part of Asia's premier undergraduate stock market fest. It has been a journey of learning and evolving, from insightful virtual meetings to engaging in heartfelt discussions, building invaluable connections and gaining practical exposure. Now, with immense pride and excitement, we introduce Dravya, a remarkable research initiative that stands as a tribute to D-Street's decade-long legacy of excellence. This edition is set to deliver an extraordinary compilation of articles and research contributions, meticulously crafted by some of the most brilliant and insightful minds across the nation. With expert perspectives, thought-provoking insights, and in-depth analysis, this volume guarantees a captivating and enlightening read that will undoubtedly ignite curiosity, broaden perspectives, and inspire a deeper understanding of the financial world.

Marisha Gandhi (Director of Corporate Communications)

D-Street will always hold a special place in my heart, shaping some of my most cherished SRCC memories. It was a journey of both bullish and bearish moments, not just in markets but in life itself — one that refined my communication skills, strengthened my resilience, and connected me with a dynamic network of finance enthusiasts. The return on investment, both personally and professionally, has been truly invaluable. From late-night brainstorming sessions to the adrenaline rush of organizing Asia's premier undergraduate stock market fest, every experience has been a stepping stone to growth and learning.

The vibrant discussions, strategic decision-making, and collaborative spirit have left a lasting impact. D-Street has been more than a platform for financial exploration; it has been a gateway to understanding diverse perspectives and building lifelong connections.

As my juniors unveil the 3rd edition of Dravya, I couldn't be prouder. This journal reflects their dedication, perseverance, and passion for exploring ideas beyond the stock markets, embracing diversity and thought leadership.

MEET THE TEAM

Left to Right Standing

Vinayak Agarwal **Devansh Solanki** **Srishti Kumar**

Siddhant Mangla **Vaishnavi** **Ritul Jain** **Tanishq Ray**

Kumar Aryan **Mukund Mohan Agrawal** **Aakarsh Kakkar**

Left to Right Sitting

Pratham Grover **Ayushh Kumar** **Nihal Saini** **Kush Agarwal**

Mehul Kumar Lunawat **Siddharth Mittal**

Nikhil Bajaj **Prayank Jaiswal**

- FISCAL FOCUS
- UPCOMING MARKETS AND INDUSTRIES
- INVESTING & STARTUP
- SCHOLARLY SPOTLIGHT
- GEOPOLITICS
- DIVERSE DYNAMO

FISCAL FOCUS

India's Fiscal Policy in FY 2023-24 and Beyond

By: Bala Vardhan Tummalacherla

FISCAL POLICY AND ECONOMIC GOALS: Fiscal policy, the use of government spending and tax policies to influence economic activity, plays a crucial role in India's development. The government leverages this policy to achieve key objectives like:

Economic Growth: Stimulating economic activity by increasing aggregate demand through targeted spending or tax cuts.

Resource Mobilization: Ensuring sufficient revenue collection to fund government programs and infrastructure development.

Equitable Income Distribution: Addressing income inequality through progressive taxation and social welfare schemes.

Price Stability: Controlling inflation by managing government spending and influencing consumer demand.

Infrastructure Development: Investing in critical infrastructure like roads, bridges, and power plants to support long-term economic growth.

TYPES OF FISCAL POLICY:

- **Expansionary Fiscal Policy:** Used during economic downturns, it increases government spending or reduces taxes to boost aggregate demand and stimulate economic activity. An example could be increased spending on infrastructure projects during a recession, creating jobs and injecting money into the economy.
- **Contractionary Fiscal Policy:** Implemented during periods of high inflation, it aims to decrease aggregate demand by reducing government spending or increasing taxes. An example could be raising taxes on luxury goods to dampen consumer spending and reduce inflationary pressures.

The Union Budget plays a vital role in maintaining the economy of the nation. The following key aspects of the Union Budget 2023-24 have shown a profound effect on the Indian economy.

KEY ASPECTS OF THE UNION BUDGET 2023-24: The annual Union Budget serves as the roadmap for the government's fiscal policy for the upcoming financial year. The FY 2023-24 budget outlined several initiatives aimed at achieving long-term development under the "Amrit Kaal" vision. Here are some key aspects and their potential impact:

Focus on Infrastructure and Social Development:

- Increased budgetary allocations for agriculture not only improve access to essential agricultural resources but also encourage advancements in agricultural technology. This promotes sustainable practices, reduces dependence on imports, and strengthens the agricultural sector's contribution to GDP.
-
- Healthcare initiatives like establishing new 157 medical colleges can lead to a significant increase in the number of qualified medical professionals. This, in turn, improves access to quality healthcare for citizens across the country.
- Investment in education goes beyond primary and secondary education. The budget should also prioritize vocational training and skill development programs to equip individuals with the skills needed for the evolving job market.

Boosting Innovation:

Initiatives like Centres of Excellence for Artificial Intelligence and labs for developing 5G applications aim to propel India into the technological forefront.

- **Government initiatives like Start-Up India** provide crucial support for budding entrepreneurs, fostering innovation and creating new job opportunities in emerging sectors like artificial intelligence (AI) and renewable energy.

#startupindia

- **Promoting research and development (R&D)** through tax breaks and funding for research institutions is vital for fostering technological advancements and creating a knowledge-based economy.

Green Initiatives:

Measures like allocation for clean energy transition and the Waste-to-Wealth program highlight the government's focus on environmental sustainability.

- **Allocating funds for the clean energy** transition could involve subsidizing the adoption of solar panels and electric vehicles, incentivising investments in renewable energy infrastructure, and promoting green energy research.

- **The Waste-to-Wealth program** can encourage innovative waste management practices, reduce environmental pollution, and create new business opportunities in the waste-to-resource sector.

Investment in Youth:

According to a World Bank report, India has a young population exceeding 600 million. By equipping this demographic with relevant skills, the government can create a skilled workforce to drive future economic growth.

- **Apprenticeship programs** not only provide essential on-the-job training but also bridge the gap between theoretical knowledge and practical experience, enhancing youth employability.

Tax Reforms:

The budget introduced several changes to the tax regime, aiming to simplify the structure and provide relief to various taxpayer segments. These include an increased rebate limit for personal income tax, reduction in tax slabs, benefits for startups and MSMEs, and a lower

tax rate for new manufacturing cooperatives. However, these reforms are estimated to result in a net revenue loss of around ₹35,000 crores.

IMPACT OF FISCAL POLICIES OF UNION ON BUSINESSES:

Increased spending: When the government spends more on infrastructure, education, or research and development, it can create new business opportunities in those sectors. For example, increased infrastructure spending could lead to contracts for construction companies and suppliers of building materials.

Business Confidence: Fiscal policy decisions can influence business confidence. If businesses believe the government's policies will create a favorable economic environment, they are more likely to invest and expand. Conversely, if they perceive policies as unfavorable, they might become hesitant to invest and take risks.

Expansionary fiscal policy (increased spending, tax cuts) generally aims to stimulate economic growth, which benefits businesses as demand for goods and services increases. Contractionary fiscal policy (decreased spending, tax increases) aims to slow inflation or reduce the deficit, but it can also dampen economic activity.

Tax cuts: Tax cuts can increase disposable income for individuals and businesses. This can lead to higher consumer spending and investment, which benefits businesses.

Tax increases: Tax hikes can reduce disposable income and corporate profits. This can lead to decreased demand for goods and services, potentially forcing businesses to cut costs or raise prices.

All these initiatives for the development of the country highly impact the economic growth in the long term.

FISCAL DEFICIT MANAGEMENT:

India's fiscal deficit, the difference between government revenue and expenditure, is a key factor for estimating its fiscal health. The estimated deficit for FY 2023-24 was 5.9%. Pleasingly, the government managed to bring it down to 5.1%, demonstrating progress towards fiscal consolidation (Choudhary, S. (2024, May 31). India's fiscal deficit in FY24 improved to 5.6% of GDP: Govt data).

Factors for this contribution:

- **Subsidy Rationalization:** Reduction in subsidies for food, fertilizer, and petroleum helped control expenditure (source: PRS India Union Budget 2023-24 : Analysis of Major Demands. (n.d.). PRS Legislative Research.).
- **Revenue Management**: While details are awaited, improved tax collection efficiency or other revenue-generating measures might have also played a role.

The government aims to further reduce the deficit to 4.9% in FY 2024-25 (Kumar, R. (2023, September 4). India's first-quarter gross domestic product (GDP) growth for FY24 has just been unveiled, and the figures are promising.).

LOOKING AHEAD:

The final Union Budget for FY 2024-25 was released on July 23rd, 2024.
Main priorities of Union Budget FY 2024-25 are:

1) Productivity and resilience in Agriculture
2) Employment & Skilling
3) Inclusive Human Resource Development and Social Justice

4) Manufacturing & Services
5) Urban Development
6) Energy Security
7) Infrastructure
8) Innovation, Research & Development
9) Next Generation Reforms

Some key aspects in Union Budget which contribute a major part for economic growth:

Agriculture and Rural Development: The budget places a strong emphasis on agricultural transformation and rural development. Initiatives include introducing 109 high-yielding, climate-resilient crop varieties, promoting natural farming among one crore farmers, and establishing bio-input resource centers. These measures aim to enhance agricultural productivity, ensure food security, and improve farmers' livelihoods.

Youth Empowerment and Skill Development: Recognizing the potential of India's youth, the government has unveiled a comprehensive skilling initiative. This includes upgrading 1,000 Industrial Training Institutes, providing financial support for higher education, and introducing a new centrally sponsored scheme to skill 20 lakh youth. These efforts are crucial for creating a skilled workforce and driving economic growth.

MSMEs: This scheme is designed to support small manufacturers and make it easier for them to expand and succeed, which benefits the entire economy. It will allow term loans for purchasing machinery and equipment. The guarantee cover will be up to Rs 100 crore. Entrepreneurs who have paid loans previously will have the limit of Mudra loans increased from Rs 10 lakh to Rs 20 lakh.

Infrastructure Development: A substantial allocation has been made for infrastructure development, focusing on transportation, energy, and urban development. Projects like the Amritsar-Kolkata Industrial Corridor, new expressways, and power plants will improve connectivity, create jobs, and boost economic activity.
(Union Budget 2024-25 Analysis. (2024, September 14). PRS Legislative Research.)
These key areas of focus are expected to

contribute significantly to India's economic growth and development.

BUDGET HIGHLIGHTS:

- **Increased Expenditure:** The government has committed to a significant expenditure increase of 8.5% compared to the previous year, indicating a robust approach to public spending.
- **Focus on Capital Expenditure**: A considerable portion of the budget is earmarked for capital expenditure, signaling the government's intent to boost infrastructure development and long-term growth prospects.
- **Changes in customs duty:** Customs duty rates have been changed for several goods. It has been reduced for goods such as: (i) gold and silver and (ii) mobile phones and their chargers/adapters. Certain items used in the textile, steel, and capital goods sectors have been exempted from customs duty. Customs duty has been increased for solar glass (used in manufacture of solar cells or modules) and certain chemicals.
- **Fiscal Consolidation:** The government has reaffirmed its commitment to fiscal discipline by targeting a lower fiscal deficit of 4.9% of GDP, indicating progress towards debt sustainability.

- **Tax Reforms**: The budget introduces changes to the capital gains tax regime, aiming to strike a balance between revenue generation and investor sentiment.
- **Tax deducted at source:** Rate of tax deducted at source (TDS) is proposed to be reduced from 5% to 2% for several items such as payment of insurance commission, payment of life insurance policy, rent payment, and payment of commission or brokerage. TDS on payment of proceeds of sale by an e-commerce operator to an e-commerce participant will be reduced from 1% to 0.1%.

(Union Budget 2024-25 Analysis. (2024, September 14). PRS Legislative Research.)

While the budget outlines ambitious plans, several challenges need to be addressed: .

- Inflation Management: Balancing growth and inflation is crucial. The government must monitor inflationary pressures closely and adopt appropriate measures to mitigate risks.
- Effective Implementation: Successful implementation of the proposed schemes and reforms will be critical for achieving desired outcomes.
- Revenue Generation: The government needs to ensure consistent and strong revenue generation to meet the increased expenditure commitments

Fiscal Deficit Management:
The Union Budget for FY 2024-25 aims to maintain fiscal discipline. The government has targeted a fiscal deficit of 4.9% of GDP, lower than the previous year's revised estimate of 5.9%. This reduction is caused due to increased tax revenue and controlled expenditure. Achieving this target is crucial for macroeconomic stability, but balancing it with the government's objectives remains a challenge.

- **References**

- Choudhary, S. (2024, May 31). India's fiscal deficit in FY24 improved to 5.6% of GDP: Govt data.
- PRS India Union Budget 2023-24 : Analysis of Major Demands. (n.d.). PRS Legislative Research.
- Kumar, R. (2023, September 4). India's first-quarter gross domestic product (GDP) growth for FY24 has just been unveiled, and the figures are promising.

India's Fiscal Motion: Moving Towards Developed Economy

By: Swarna Pal

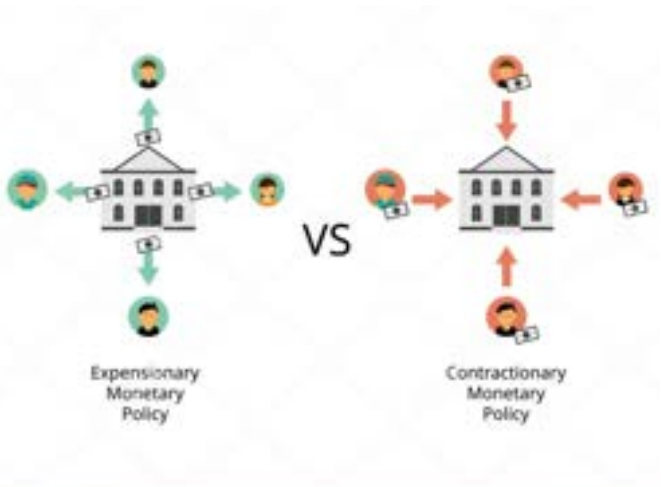
ABSTRACT

This paper traces the highs and lows of fiscal policy dating back to the eve of independence, 1947, to the present financial year, 2024. In the initial years after independence, public expenditure was increased to finance the goals of the five-year plan and focused on promoting industry, infrastructure, and social welfare. Progressive taxation was implied with higher taxes on wealthy and large corporations. The following years were affected by the Cold War and decolonization that influenced the focus on self-sufficiency through import substitution, 1990 onwards was a major turning point for the Indian economy by the introduction of LPG reforms but the debt-GDP ratio reached 80% during the mid-1990s. Gradually, India entered its golden growth era, where India ranked 63rd in the World Bank Ease of Doing Business 2020 report. The setting up of Special Economic Zones (SEZs), attracted foreign investment with an increase in foreign direct investment inflows. The research indirectly exhibits the importance of balance and perseverance that a government (focused on the Government of India) must adhere to while forming fiscal policies as it directly affects individuals, businesses, and the overall economy.

INTRODUCTION

Every nation is strengthened by a robust public sector that receives support from its corresponding government, which also develops and implements a range of policies pertaining to public debt, taxation, and expenditure.

Together, these measures are referred to as fiscal policy. The government uses these tools to monitor and impact a country's economy by modifying tax rates and expenditure amounts. The foundation of fiscal policy is the theory of Keynesian economics which says that changes in taxation and public expenditure can affect aggregate demand and the level of economic activity. There are two types of fiscal policies, namely, Expansionary Policy and Contractionary Policy.



Expansionary policy cuts down taxes and increases government expenditure which increases the money supply and ultimately the purchasing power of the individuals leading to a rise in aggregate demand and price levels. Overuse of expansionary policy can also lead to cases of inflation. On the other hand, contractionary policy is used to normalize the effects of expansionary policy by increasing taxes and decreasing government expenditure which thereby reduces money supply, reducing money in the hands of individuals and ultimately declining aggregate demand and price levels.

Taxes are the mandatory payments paid by individuals and businesses to the government without any expectation of immediate benefit in return. Both tax revenue and non-tax revenue make up the government's revenue receipts that they receive in their regular work. Government-imposed direct taxes, such as income tax, corporation tax, interest tax, etc., directly impact people's purchasing power and income levels, hence influencing the level of aggregate demand. Indirect taxes are the taxes whose burden can be shifted to another individual such as Goods and Services tax. Another form of revenue which is non-tax revenue includes borrowings, recovery of loans, etc., which creates liability for the government.

Mostly, developing countries have a tendency to surpass their expenditures over receipts which leads to Fiscal Deficit.
Fiscal Deficit = Total Expenditure-Total Receipts.
Or
(Revenue Expenditure-Revenue Receipts) + (Capital Expenditure-Capital Receipts excluding borrowings)

Non-tax revenue sometimes may create fiscal problems for an economy. In 2019-20, India's fiscal deficit increased to 6.5% of GDP leading to a rise in debt servicing costs and crowding out of private investment due to excessive borrowings.

The Reserve Bank of India (RBI), the nation's central bank, develops and carries out monetary policy in India. The fundamental goals of monetary policy are to preserve economic growth and price stability through the use of instruments including open market operations, cash reserve ratios, statutory liquidity ratios, repo rates, and reverse repo rates.

The tug of war between fiscal and monetary policy sometimes leads to over dominance of fiscal policy which in turn negatively affects the macroeconomic aspects of a country. In the 1980s, India's fiscal dominance led to high inflation rates peaking at 17.2% in 1989-90.

Proper creation, application, and implementation of each tool to work in our favour is necessary. Therefore, for any policymaker, it is necessary to go through and research all the aspects of an economy ranging from micro to macro perspectives, to create an ideal policy system. The Fiscal Year is the one-year term used by the government, companies, and other commercial organizations for accounting and reporting their financial results.

FISCAL FRAMEWORK OF INDIA

The levels of government that are involved in the formation of fiscal policies of India are: Central, State, and Local (Municipalities and Panchayats).

The Indian Finance Minister presents the union budget, which is prepared by the Central Government and projects expected income and expenses. It is primarily controlled by the Ministry of Finance and seeks to distribute funds as efficiently as possible to other departments and ministries in order to promote fairness, stability, and economic growth in society.

Law and order, public health, irrigation of water supplies, agriculture, and fisheries are under the purview of the State Government. Currently, certain authorities are being more and more

outsourced to city, town, and village administrations.

The Central Government's taxation authorities include customs duties, excise taxes on products produced (except alcohol), income taxes (apart from agricultural income), and taxes on interstate sales of goods. The ability to tax land and structures, sales of products (apart from interstate transactions), agricultural revenue, and alcohol taxes is granted to the State Governments. State Government enacted fiscal measures, such as decentralization and VATs.

Economic reforms known as Liberalisation, Privatisation, and Globalisation (LPG) were brought in by the Central Government in 1991 and they had a profound impact on the Indian economy. The Public Accounts Committee, Fiscal Responsibility and Budget Management (FRBM), and the Comptroller and Auditor General are the three core institutions.

With the goal of increasing transparency and lowering fiscal deficit to 3% of GDP by 2008–2009, the FRBM was established in 2003. The 101st Constitutional Modification Act, of 2016 was the constitutional modification that allowed India to implement the Goods and Services Tax (GST). This reduced the complexity and compliance costs by replacing several indirect taxes, including VAT, Service Tax, Excise Duty, and others with a single tax..

A country's aims for social and economic development over a five-year period are outlined in the form of national development plans called Five-Year plans. In 1928, the Soviet Union introduced the idea of Five-Year Plans, which subsequently spread to other nations, including India. In order to reduce poverty and inequality, raise living standards, achieve self-reliance and independence from foreign aid, and encourage rapid economic growth and industrialization, eleven five-year plans that take into account India's economic, social, political, and technological aspects have been developed between 1951 and 2022.

With the assistance of the Planning Commission, which was founded in 1952, Jawaharlal Nehru, the country's first Prime Minister, introduced the first Five-Year Plan (1951–1956).

The Planning Commission, which is now NITI Aayog, was in charge of determining the requirements and resources of the nation, establishing development priorities, assigning funds and resources, and tracking and analyzing results.

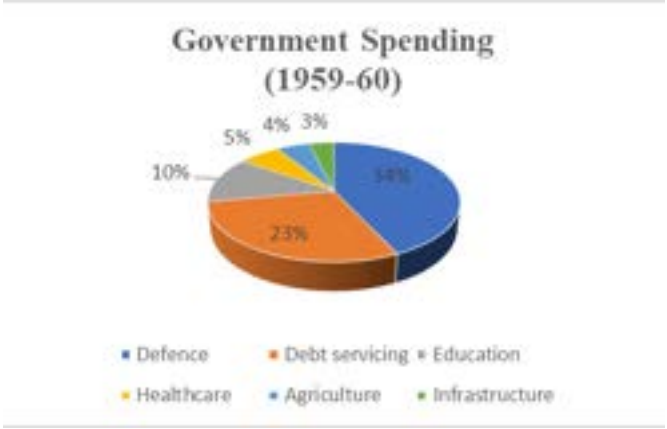
INDIAN FISCAL GROWTH FROM 1951 TILL 1991

The social, economic, and financial circumstances facing Indian citizens were appalling at the time of their freedom. India was characterized as having a low per capita income, high inflation, and few job possibilities. The underprivileged and weaker segments of society were negatively impacted by food scarcity, which was caused by an overreliance on food imports and a lack of food grains. Connectivity, trade, and access to essential services were hampered by inadequate roads, trains, and communication networks.

The fiscal status of the country in 1947 stated that GDP was 6,339 crores ($1.3 billion USD) in 1947. The inflation rate is extremely high compared to the status of individuals was 20-30%. Fiscal Deficit amounted to 143 crores

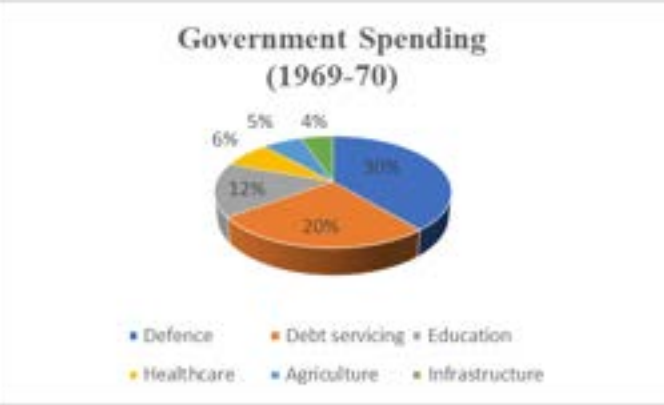
(approximately $29 million USD), and tax revenue was ₹345 crores (approximately $71 million USD) leading to extremely low budget for government expenditure. India's revenue collection in 1947-48 was ₹174 crores, which was insufficient to meet the government's development goals.

The 1951–1961 five-year plans were primarily concerned with post-independence quick industrialization and economic expansion, as well as rehabilitation and reconstruction. Income tax was first imposed in 1947, with a top marginal rate of 25%. In 1950, rates were raised to a maximum of 37.5%. It was noted that government revenue, particularly in rural areas, was greatly influenced by land revenue. The socialist strategy for constructing a nation resulted in a robust public sector, government management of the economy, and tax laws that prioritized social welfare and income redistribution.



Key taxation policies were introduced which included high tax rates (up to 90% on high-income earners), and a complex tax structure with multiple taxes (Income Tax, Wealth Tax, Property Tax, etc.) which led to a heavy tax burden on the middle class and businesses which reduced incentives for investment and entrepreneurship.

To increase revenue, the government introduced new taxes, such as the Wealth Tax Act (1947) for taxing wealth above ₹5 lakhs at 1-5% and the Excess Profits Tax Act (1947) that taxed excess profits of companies at 50-60%. The income Tax Act, of 1948 expanded the tax base. Also, tax evasion and avoidance were widespread due to high rates and complexity.



Customs duties and Excise duties were high, up to 300% and 150% respectively (1947-1960). Government Revenue through its expenditure programs (around 20-25% of GDP) increased from ₹1,044 crores in 1947-48 to ₹2,311 crores in 1959-60 and fiscal deficit averaged around 1-2% of GDP during this period.

In spite of all the positive implications, high government spending increased inflation (around 10-15% per annum). Also, India fought two wars with Pakistan (1965 and 1971) and a war with China (1962), leading to increased defense spending and economic crises, including a severe drought in 1965-66, a global oil price shock in 1973, and a balance of payments crisis in 1985.

This decade witnessed the establishment and introduction of three notable events:

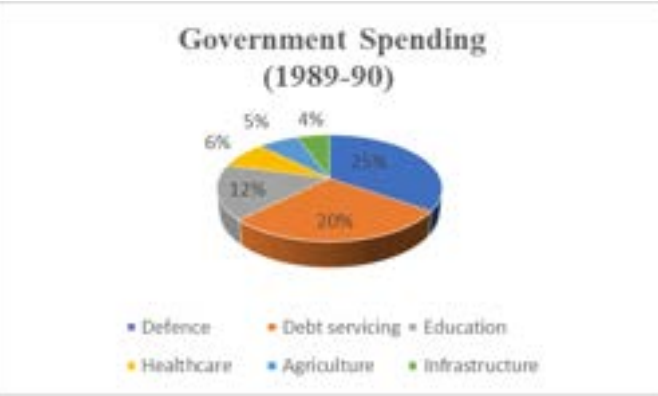
- Introduction of the Banking Companies (Acquisition and Transfer of Undertakings) Act, 1969
- Establishment of the Industrial Development Bank of India (IDBI) in 1964
- Introduction of the Monopolies and Restrictive Trade Practices (MRTP) Act, 1969

IDBI facilitated industrial financing, provided assistance to entrepreneurs and small-scale companies and funded infrastructure projects, including telecommunications, power, and transportation, all of which promoted economic growth. Between 1964 and 1970, IDBI backed 5,000 small-scale industries, resulting in ₹500 crores in revenue and 2,00,000 jobs. In contrast, the MRTP Act promoted competition and discouraged monopolies. Additionally, it controlled tie arrangements, exclusive transactions, and predatory pricing. Between

1969 and 1974, it stopped the emergence of 20 monopolies, increasing competition, lowering prices by 15%, and helping to boost GDP growth by 5% between 1970 and 1975. Between 1965 and 1975, the MRTP Act's regulations and IDBI's funding contributed to a 15% rise in industrial growth. Between 1965 and 1975, the GDP grew by 10%, thanks to the efforts of both institutions, promoting economic growth and raising living conditions.

During this time, direct taxes were the main type of taxation, and different tax brackets, surcharges, and cesses were formed. The rates of income tax varied from 30% to 70%. The fifth five-year plan (1974–1979) placed a strong emphasis on social welfare, import substitution, and self-sufficiency. The sixth five-year period (1980–1985) focused on social fairness, poverty alleviation and economic growth. State-owned firms were enlarged and made a better contribution to the growth of the industrial sector, even though these activities raised government revenue from 1429 crores (1970–71) to 24,619 crores (1989–90).

However, huge fiscal borrowings also contributed to the debt trap. Growing spending, particularly on welfare and subsidies, led to a rise in fiscal imbalances. The fiscal deficit was 8.4% of GDP (35,617 crores) in 1980; by 1990–91, it had increased to 10.4% of GDP (43,719 crores).



Fiscal mismanagement resulted from protectionist measures including high tariffs (120%) and quotas (60 percent of imports). Additionally, the assumption, that public sector businesses could persevere and thrive in the face of losses, contributed to fiscal deficits, since 240 core public sector businesses had to deal with losses totaling 1400 crores. The most famous calamity was the foreign exchange crisis, which decreased to $1.1 billion as a result of debt buildup as the external debt rose from $20 billion in 1985 to $40 billion in 1990. This amount was only sufficient for imports for two weeks. When something goes wrong, more things tend to go wrong to make it worse. The 1979 oil price shocks and the 1990 global economic downturn reduced GDP growth by 2%.

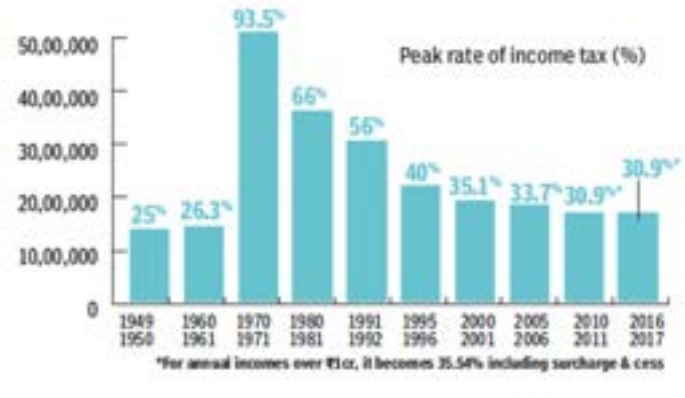
Due to the high interest rates (up to 20%) brought on by these financial issues, it is now more difficult for firms to borrow money and grow. Due to the erosion of profit margins and the decline in people's purchasing power caused by high inflation (about 12%), many small and medium-sized businesses were forced to close. The Government of India's Ministry of Industry reports that over a million MSMEs closed between 1989 and 1991. The Labour Bureau reports that unemployment increased from 6.1% in 1989 to 10.3% in 1991 and the Reserve Bank of India reports that loan growth decreased from 15.6% in 1989 to 3.4% in 1991.

ADVANCEMENTS IN THE FISCAL POLICIES (1991 ONWARDS)

To solve the extremes of negativity of the Indian economy, the Liberalisation, Privatisation, and Globalisation (LPG) policy was introduced by the Indian Government, under the leadership of Prime Minister P.V. Narasimha Rao and Finance Minister Dr. Manmohan Singh. As a result of India's approach to the International Monetary Fund (IMF), the budget for the fiscal year 1991–1992 was published, introducing a number of reforms and liberalisation measures such as lowering tariffs and quotas and promoting foreign investment.

The establishment of the Tax Reforms Committee (TRC) in 1991 had a major impact on the tax system in India. The TRC suggested combining several tax laws into one and made contributions to tax procedural simplification by introducing electronic filing, cutting paperwork, and streamlining tax procedures

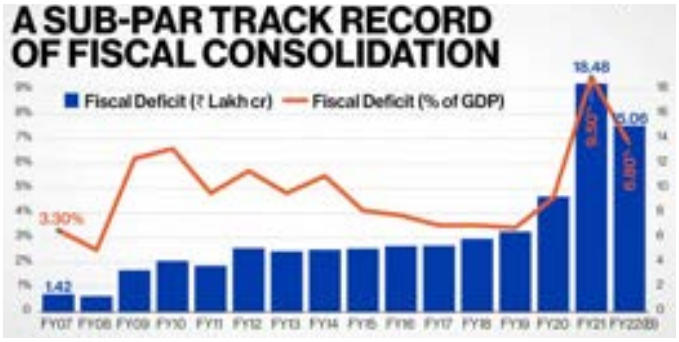
The committee's efforts resulted in the 1961 Income-tax Act, which unified a number of different tax legislation. Sales tax and other indirect taxes were replaced with Value-Added tax (VAT). The tax-to-GDP ratio improved to 11.4% as a result of tax reforms, which increased tax income from 35,917 crores (1990–91) to 1,13,908 crores (1997–98). When the VAT was first implemented in 2005, it expanded over 90% of the economy and resulted in a 20% increase in revenue collection in the first year of operation (2005–6). The tax base grew as transparency improved. Taxpayers increased from 20 million (1990-91) to 40 million (1997-98) and personal income tax rates reduced from 50% to 30%.



The combination of monetary policies, reforms, liberalization efforts, export-driven growth, and fiscal policies raised India's GDP growth rate to 9.2% in 2007–2008, the highest level in more than ten years. India saw a golden growth in 2007–2008 as a result of government spending in the 2000s, on developing policies and programs. Since the establishment of Special Economic Zones (SEZs) in 2005, which offered infrastructure support and tax advantages to firms, focused on exports and therefore, India's exports increased by 21.8%, to $145.9 billion in 2007–2008. The 2001 National Highway Development Program (NHDP), helped the economy thrive, as seen by the GDP growth rate rising from 4.3% in 2001 to 9.2% in 2007. India's highway network was improved, enhancing connectivity and promoting trade. NHDP generated employment for over 1 million directly and indirectly and increased tax revenue by over 20% between 2001-2010 because of the higher level of aggregate demand and money supply due to the increased employment.

The term "Fiscal Consolidation" describes the government's attempts to lower its debt and fiscal imbalance by combining measures to increase revenue and cut spending. The Indian Government responded to the growing fiscal deficit—which had risen to 5.8% of GDP in 2011–12—by implementing a plan for fiscal consolidation in 2012.

By 2013–14, the intention was to bring the deficit down to 3.5%. The 2012 Union Budget, which was unveiled by Mr. Pranab Mukherjee, the Finance Minister at that time, sought to stimulate economic growth and lessen the budget deficit. Dr. Vijay Kelkar, who chaired the 13th Finance Commission from 2007 to 2009, suggested a fiscal consolidation plan that would aid in the restoration of India's economic health. The Rangarajan Committee (2012) also requested more tax collection and a decrease in subsidies



Raising the income tax exemption ceiling from 1.8 lakhs to 2 lakhs resulted in lower tax obligations for low-income earners and more disposable income for individuals. The government was able to raise large amounts of income, thanks to the 2% increase in the service tax and excise duty rates, which also improved business margins.

Total subsidy expenditure (fuel, food, fertilizer, others) was 3,05,000 crores which was 3.4% of GDP. The fiscal deficit at that point of time was 5,19,000 crores forming 5.8% of GDP. Therefore,

subsidies as a percentage of Fiscal Deficit were: (3,05,000 crores/5,19,000 crores) *100 = 58.7% which made it necessary to decrease expenditure on subsidies. Numerous taxes, such as value-added tax, central excise duty, octroi, and others, made the tax system complex and problematic for Indian business owners and entrepreneurs.

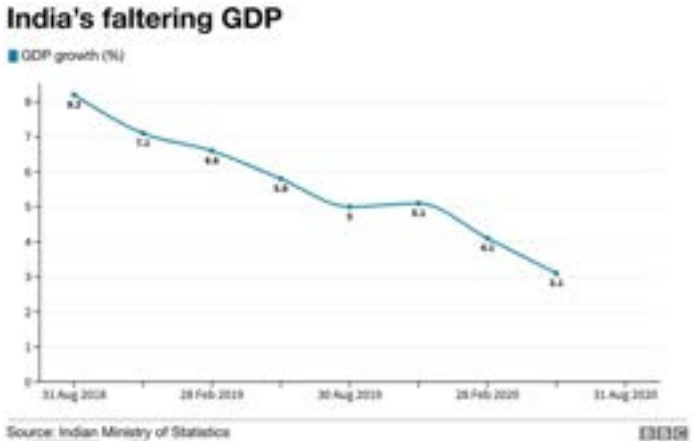
As the production costs rose, these taxes reduced their profit margins, forcing them to raise commodity prices that put a strain on the general public's wallets. To combat these problems, the Goods and Services Tax was introduced in India by the then Finance Minister Mr. Arun Jaitley. The GST structure and design were finalized by an empowered committee of state finance ministers and the GST council was established in 2016 to oversee the GST's implementation. GST was implemented in India on 1st July, 2017.

The Income Declaration Scheme (IDS), 2016 declared 67,382 crores of black money, which led to the decision of Demonetisation, taken by Prime Minister Shri Narendra Modi. On November 8, 2016, the 500 and 1000 currency notes, which made up nearly 86% of the total currency in circulation, were demonetized in an effort to combat black money, counterfeit currency, and terrorism financing. This marked a significant turnaround in India's fiscal history. It had both beneficial and negative effects on individuals and corporations.

COVID-19 HIT HARD

The viral respiratory disease COVID-19 caused a 3.3% contraction in the world economy in 2020, costing $3.8 trillion in output and 33 million more jobs lost globally. Prime Minister Shri Narendra Modi declared a nationwide lockdown that lasted 21 days, ending on April 14th, 2020, and on March 24th, 2020 (The Hindu).

This sickness had a devastating effect on people and businesses. Businesses were compelled to close, which resulted in a 30–40% drop in revenues, a loss of productivity of 10 lakh crore, the loss of jobs for 12.2 crore people, and an increase in unemployment to 23.5% in 2020. Over 1.5 lakh businesses were forced to shut down permanently. Rising unemployment and debt depleted the savings by 40%, unlike debt which rose by 12%. The GDP growth rate declined from 4.2% in 2019-20 to -7.3% in 2020-21 and the fiscal deficit widened to 9.3% of GDP.

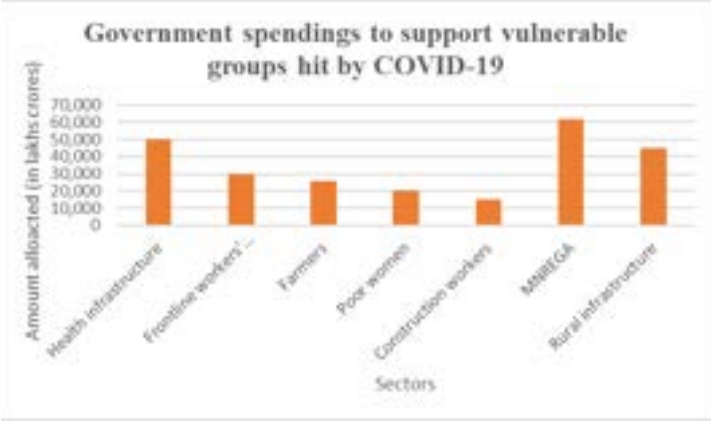


To boost the economy, the government launched a fiscal stimulus program of 20 trillion rupees, or 10% of GDP (brookings.edu). In order to pursue expansionary monetary policies, the Reserve Bank of India lowered interest rates and made emergency loans available (brookings.edu). In order to assist small and medium-sized businesses (SMEs), the government also introduced the Atmanirbhar Bharat Abhiyan (ABA), a 20 lakhs crore package that included the Emergency Credit Line Guarantee Scheme, which offered 100% guarantee coverage for loans up to 3 trillion rupees.

In order to give rural workers job chances, the government also raised financing for the National Rural Employment Guarantee Scheme (NREGA). RBI lowered the repo rate by 115 basis points, which would facilitate personal lending by lowering interest rates and increasing the

amount of money in circulation. Lowering the GST rates and lowering personal and corporate income taxes relieved tax burdens.

When compared to other years, India's present fiscal policies and developments display a mixed bag of results. The goals of the policies for 2024 will most likely be to achieve stability, economic growth, and fair resource and income distribution. According to the Economic Survey 2023–24 press, the Union Government's fiscal deficit dropped from 6.4% of GDP in FY23 to 5.6% in FY24. India's external sector is skillfully handled in terms of foreign exchange, with comfortable reserves that stood at USD 44.1 billion during FY24 compared to net outflows in the previous two years (Economic Survey 2023-24 press).



CONCLUSION

The Earth is yet rotating on its axis and the world is yet alive because of a scientific and socialist phenomenon, balance. Everything works in one's favor only when it has a balanced utilization. Overconsumption of even diet food can lead to obesity and so is the care of our government in the form of policies. Fiscal policies have been obviously devised for the betterment and nourishment of the country and our resources. Borrowing money and taking loans up to a limit brings no damage and the limit varies from person to person.

Similarly, policies and their exhaustion vary from country to country. Standing at the phase of developing the Indian economy, we cannot expect our policies, like expenditures and borrowings to be like that of the USA. We have come so far and have analyzed all the cases and phases of our economy with reference to fiscal policies. The goals of the 1991 New Economic Policy (NEP) were to encourage growth, boost competition, and liberalize the economy. As a result, India's GDP growth rate increased, with the country's economy expanding at an average annual rate of 8% between 2003 and 2011. Productivity rose across the board, particularly in the industrial and service sectors, as a result of lower tariffs and more competition.

Foreign Direct Investment (FDI) increased as a result of NEP, rising from $0.1 billion in 1990 to $43.9 billion in 2019. It has also resulted in a change in the economy from one that is mainly agrarian to one that is more service-oriented, with the services sector accounting for over 60% of India's GDP and increasing government revenue through tax collections from 10.4% of GDP in 1990 to 17.7% in 2019.

India's fiscal policies have impacted the economy in a variety of ways; some have had beneficial effects while others have had unfavorable effects. According to the RBI, the fiscal deficit as a share of GDP grew from 4.5% in 2013–14 to 6.5% in 2019–20. Consumer price index (CPI) inflation increased from 3.7% in 2019 to 6.2% in 2020 as a result of expansionary fiscal policies, which also decreased purchasing power and raised living expenses (RBI). The RBI notes that a fall in gross fixed capital formation (GFCF) as a proportion of GDP from 31.3% in 2013–14 to 28.5% in 2019–20 can be attributed to the crowding out of private investment by high government borrowing.

Source: Centre for Monitoring Indian Economy
*First Advance Estimates of National Income, 2016-17

In the words of Amartya Sen, "Economic growth is not an end in itself, but a means to an end. The end is to improve the quality of life for all citizens." The Indian government's fiscal

In the words of Amartya Sen, "Economic growth is not an end in itself, but a means to an end. The end is to improve the quality of life for all citizens." The Indian government's fiscal policies are a step towards achieving this end, all that is required is to maintain a balance.

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Shadownomics: Where finance meets the twilight zone

By: Abhinav Kad

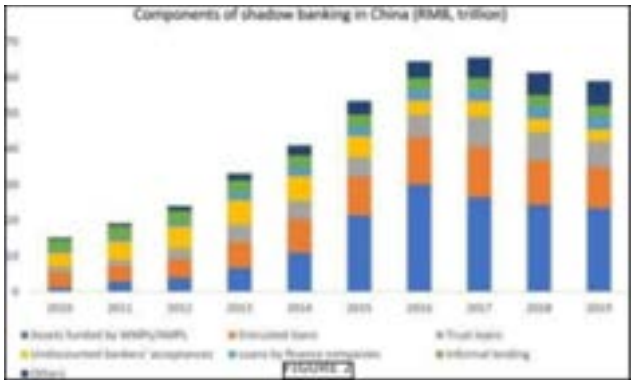
As they say, " If it looks like a duck, quacks like a duck, and acts like a duck, then it is a duck." However, what about a business that functions and appears like a bank? Mostly it is a shadow bank rather than a bank. The vast network of financial markets and institutions that provide services comparable to commercial banks but are exempt from the regulations that traditional banks must go by, is known as the "Shadow Banking System."

Recently China's leading wealth management firm Zhongzhi Enterprise Group declared itself insolvent with liabilities of over 460 billion yuan ($64.37 billion) but as bad things come in threes. It is just another episode of China's real estate crisis. However, you might be wondering what role shadow banking plays in all of this. We will explore the realms of shadow banking through the ongoing crisis shadow banking and real estate crisis in China

WHAT'S HAPPENING IN CHINA?

Shadow banks constitute a $3 trillion business (as much as $12 trillion if asset management products and consumers loans are included) in the Chinese economy and China's real-estate contribution to GDP is around 13% It is evident from the data that the property sector has boomed in China in the last 2 decades.

To cope with the demand and leverage from this boom China's builders have decided to extensively invest in this sector. To keep up with investment they borrowed heavily from banks and shadow banks. So, one may wonder what exactly constitutes the shadow banking industry in China? Let's have a look. According to



research published by Wiley, 2020. Figure 2 shows the main components of the shadow banking industry in China.

WHAT'S CONTRIBUTED TO THE RISE OF SHADOW BANKS IN CHINA?

Many researchers have analyzed the success of shadow banks in China. According to Hachem and Song (2017), the main reason for the rise is regulatory arbitrage. China introduced the 75% loan to deposit ratio in 1995 i.e. the banks can't lend more than 75% of their deposits to the general public this law was made more stringent in 2008. Circumventing these policies Chinese banks introduced Wealth management products (WMPs), the interesting part of the story is that these WMPs can be issued "of the balance sheets" and these funds can be funneled to a trust company that makes investments on behalf of the bank.

The second factor can be linked to the People's Bank of China (PBoC), China's central bank, decision to impose lending quotas to commercial banks in specific restricted areas (e.g., the real estate industry and overcapacity industries). Because of the rigorous control on

lending to the real estate sector and local government financing platforms, there has been a significant gap between financing demand and bank loans in these industries.

WHAT WENT WRONG?

This property fiasco recently gained the heat when the Xi administration announced the "**3 RED LINES".** All property developers are asked to

a) Keep their liabilities (debt) at less than 70 percent of their assets

b) Maintain a debt-to-equity ratio of less than 100 percent

c) Keep the ratio of cash to short-term debt of at least 100 percent

Boom! That's it! The end of the housing bubble in China and overleveraged developers losing access to finance. China's 100 biggest developers had a 29% decline in sales in September 2023 compared to the same month the previous year. Country Garden saw an 81 percent decline in sales. This combined with slower economic growth—due to the pandemic and the repressive lockdowns. The aging of the population, financial repression, and the ongoing global crisis have led China into deep shadows of economic slowdown.

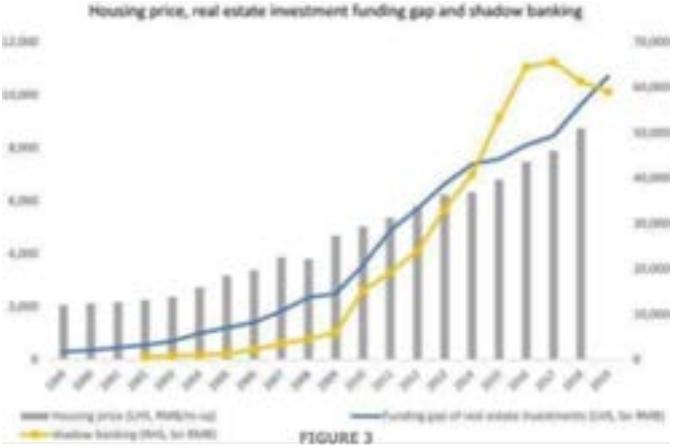


FIGURE 3

WHY TO BLAME SHADOW BANKS?

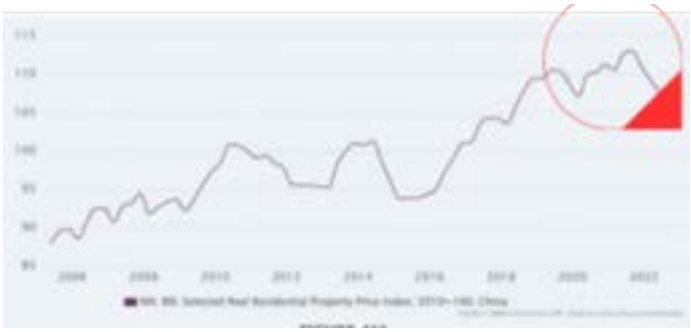
Shadow banks share significant blame for the current real estate crisis in China due to several key factors:

Fueling Excessive Risk:

- Unregulated lending: Shadow banks operated outside the strict regulations of traditional banks, allowing .them to offer riskier loans with higher leverage.
- Moral hazard: Because shadow banks offered easily accessible capital, developers were less incentivized to handle their money sensibly, which exacerbated the bubble.

Spreading the Illness:

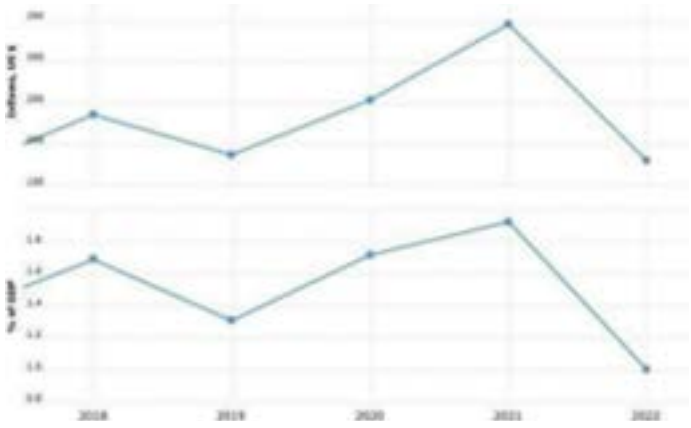
- Interconnectedness: State-owned banks, investment enterprises, as well as shadow banks, were deeply entwined with the conventional financial system. Losses and instability spread throughout the broader financial system when defaults began to cascade inside the shadow banking industry.



THE REPERCUSSIONS OF THE SHADOW BANKING CRISIS

In August, US Vice President Joe Biden referred to China as a 'ticking time bomb'. This comment was made in response to concerns about China's infrastructure industry collapsing due to its opaque and uncontrolled debt servicing. The crisis spooked investors, leading to capital flight. FDI inflow has been reduced significantly since 2021 after the Evergrande crisis. Increased selling pressure on the CNY caused the currency to depreciate in the short term, particularly in mid-2023 (figure 8). As a result, the yuan is currently trading at about 7.32 vs the dollar. As investors continue to be concerned about the status of the economy and the real estate market, capital flight out of China has increased. Recently, the rate of capital flight from China reached a record-breaking monthly low since early 2016, depreciating the value of the yuan in the process. About $54 billion was transferred abroad on behalf of bank customers. According to a survey by the US-based financial think tank Peterson Institute for International Economics (PIIE), foreign investors

have repatriated cash over $100 billion in the first three quarters of 2023, indicating that they are now significant "net sellers" of their current assets in China, depicting the loss in investors' confidence.



IS THERE A WAY OUT?

Normally, a government would seek to promote consumption and demand in the economy by cutting interest rates, but because consumers are already overleveraged due to mortgage loans, they have very little room to borrow.

For decades, the property boom fueled spending by China's growing middle class, who kept a great portion of their wealth in real estate and felt confident when their homes increased in value but now people are hoarding cash as a result of the "negative wealth effect" caused by declining housing values, which has reduced their propensity to spend.

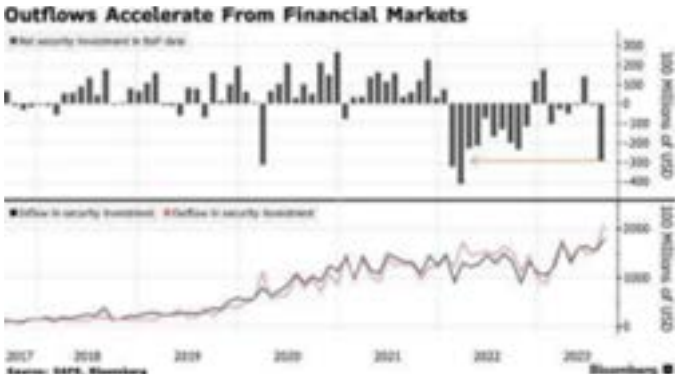
By June, households' bank deposits totaled a record 132 trillion yuan ($18 trillion), surpassing China's entire GDP for last year, according to data from the People's Bank of China. Household savings surged by 17.84 trillion yuan ($2.6 trillion) in 2022, up 80% from 2021. That's more than one-third of their total income. Before the pandemic, people saved about a fifth of their income.

According to Capital Economics, declines in the stock market and housing prices would cause China's net personal wealth to drop by 4.3% in 2022. It was the first decline of that kind in over 20 years.

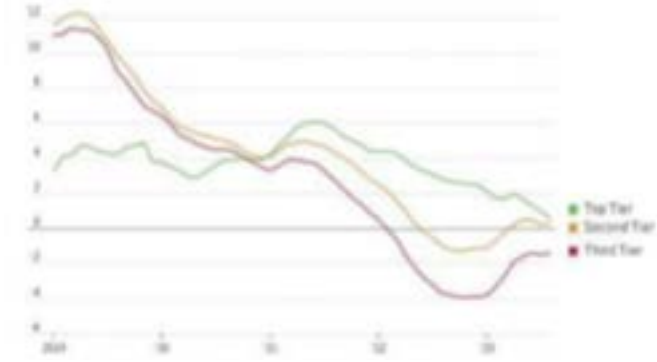
THE WAY FORWARD

Shadow banks are not a new problem. They have had a significant hand in the Global Financial Crisis of 2008. In China too, it is important to regulate the activities of these financial institutions or as discussed it can hurt the growth targets of a country and of course, there is always a human cost involved in this crisis. Currently, China is not only facing a property crisis but also, there is also an "investors' confidence crisis" that needs to be addressed at the earliest. Learnings from the Indian experience

A few years back India witnessed a shadow banking crisis when IL&FS defaulted on payments but it was handled in an extremely swift manner by RBI and it can become a learning model for China, the RBI's policies like the "Special Liquidity Scheme", creation of "Credit Guarantee Enhancement Corporation" or tightened "Asset-liability management (ALM)" norms for NBFCs or creating a "Health Score Card for NBFCs" as discussed by Economic Survey 2020.



So, it's upon the Xi administration how they handle this situation, but surely, they need to take some stringent actions and create policies that can curtail the further damage done by these shadow banks.



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Financial Sector Development and Impact on GDP of India

By: Moosa Talha

ABSTRACT

The economic growth of any country is a complex metric that is affected by many variables. In this paper, I have focused on how developing the banking industry has affected the growth of the developing economy of India. This paper analyses the relationship between the development of the banking sector in India and the consequent effects on the economic growth in the country [GDP] with a focus on some of the challenges and some measures to address these challenges to develop and grow the financial services sector, thereby growing the economy.

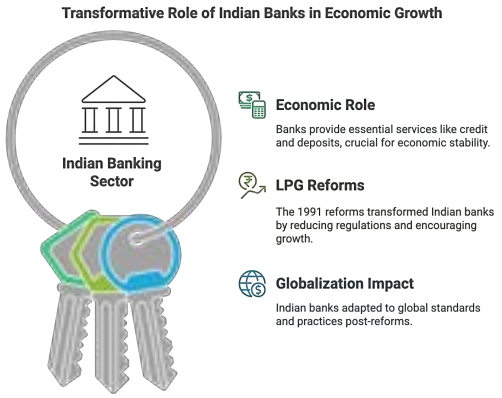
For this purpose, a regression analysis has been used and then followed up with a correlation matrix to identify the nature of the relationships between the dependent variable, GDP (current USD) and the relevant independent variables; broad money (% of GDP), inflation (consumer prices)(annual %), Market capitalization of listed domestic companies (% of GDP), Lending interest rate (%), Total Debt Service (% of GNI), Domestic credit to private sector by banks (% of GDP) with time series data, collected from the Data Bank of the World Bank.

INTRODUCTION

One of the most important sectors that contribute to the growth of any country is the Banking Sector since banks are the ones that are responsible for many vital parts of the economy such as providing access to credit to all other industries and service providers along with the function of accepting deposits, collecting interest, and investing these deposits in the economy. Some have rightly said that banks are the bloodline of any economy. Without a strong backbone and foundation in the form of prudent and efficient banks, a country cannot have a strong and/or a growing economy.

Indian Banking Sector has seen tremendous growth in recent times, with many of the biggest changes and growth coming from the LPG reforms of 1991 under former Prime Minister P.V. Narsimha Rao (Liberalization, Privatization and Globalization). These reforms are seen as a turning point by many since India had a major crisis in the balance of payments along with the added pressures of sky-high inflation, high fiscal deficit, and a major shortfall in forex reserves. The Gulf War added to these pressures by increasing the prices of crude oil which had a major negative impact on India since forex reserves were already at an all-time low.

This is when the LPG reforms were implemented to open up the economy and there was a focus on developing and removing the excessive regulations on Indian banks as banking sector is the sector from which other parts of the economy are dependent on for all financial and monetary purposes.



This paper attempts to analyze the strength of the relationship between the development of the Indian banking sector and the growth of the Indian economy.
For this purpose, I have chosen independent variables that portray the metrics behind the development and expansion of the banking sector and to observe the consequent relationship, the dependent variable is the GDP (current USD) which portrays the economic growth of India.

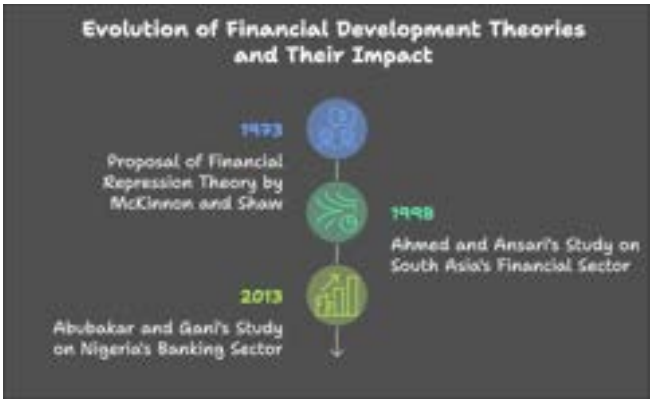
LITERATURE REVIEW

McKinnon (1973) and Shaw (1973) proposed the financial repression theory, which argues that the supply-leading hypothesis is hindered in a repressed financial system characterized by interest rate ceilings, directed credit policies, and high reserve requirements. They maintained that this phenomenon leads to low levels of saving, credit rationing, and low investment, which impede economic growth. They recommended financial liberalization to allow the real rate of interest to rise, thereby increasing financial savings.

Ahmed and Ansari (1998) examined the impact of financial sector development on economic growth in South Asian countries. They used the Cobb-Douglas production function framework and estimated several regression equations. Their results from the causality analysis indicated that financial sector development causes economic growth in the Granger sense. This suggests that the supply-leading hypothesis is valid. The regression results based on time-series and cross-sectional observations also reinforced the findings of the causality analysis, indicating that financial sector development has made a significant contribution to economic growth in South Asian countries.

Abubakar and Gani (2013) conducted a study on the impact of banking sector development on economic growth with a focus on Nigeria wherein they used a Vector Error Correction Model to reexamine the long-run relationships between financial development indicators and economic growth in Nigeria throughout 1970-2010.

The findings of their study concluded that in the long run, liquid liabilities of commercial banks and trade openness exert significant positive influence on economic growth, conversely, credit to the private sector, interest rate spread and government expenditure exert a significant negative influence and they recommend that there is a need to deepen the financial sector of Nigeria to allow entrepreneurs more credit accessibility and further economic growth for the country. Petkovski and Kjosevski (2014) also conducted a study on whether the banking sector influences economic growth in 16 transition economies from Central and South Eastern Europe (Albania, Belarus, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia, Moldova, Poland, Romania,

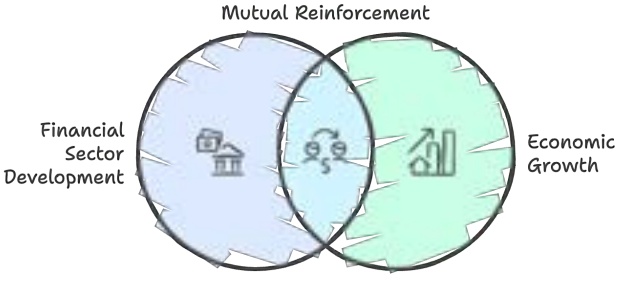


Slovak Republic, Slovenia and Ukraine) over the period 1991–2011, where they used a generalised method of moments (GMM) dynamic panel method to conclude that credit to the private sector and interest margin (IM) are negatively related to the economic growth, while RQM (ratio of Quasi Money) is positively related to economic growth. They conclude that the banking sector was found to be lacking in analysed samples, and therefore the contribution of the relatively underdeveloped credit markets to growth was rather limited, with only a minor positive effect of RQM of financial development.

King and Levine (1993) researched whether Schumpeter might be right in their paper titled "FINANCE AND GROWTH: SCHUMPETER MIGHT BE RIGHT*". Here, they examined whether Schumpeter's argument that the services provided by financial intermediaries-mobilizing savings, evaluating projects, managing risk, monitoring managers, and facilitating transactions are essential for technological innovation and economic development. For this, they studied the relationships between financial development and long-run output growth and reported that higher levels of financial development are positively associated with faster rates of economic growth, physical capital accumulation, and economic efficiency improvements both before and after controlling for numerous countries and policy characteristics. Their results suggest an important link between financial development and long-run growth as suggested by Schumpeter back in 1911.

Paul Wechtel (2001) in his research titled "Growth And Finance: What do we know and How do we know it?" also came to a similar conclusion "There is no doubt in my mind that there is ample empirical evidence to make a convincing case that financial sector development promotes economic growth.". He collected and summarized a lot of the consensus and agreements regarding financial sector development and growth in economies and did find significant levels of evidence that suggest a positive link between the development of the financial sector and the development of a country's economy.

Synergy Between Finance and Economic Growth

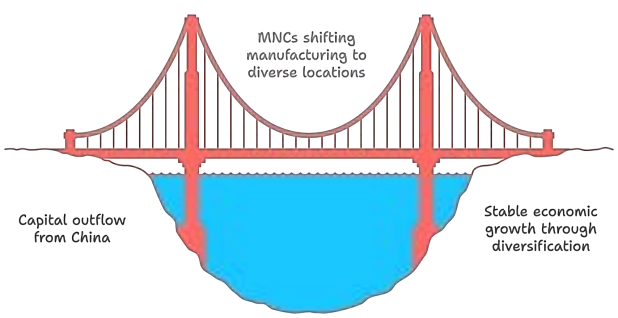


Research Methodology
Variable Analysis

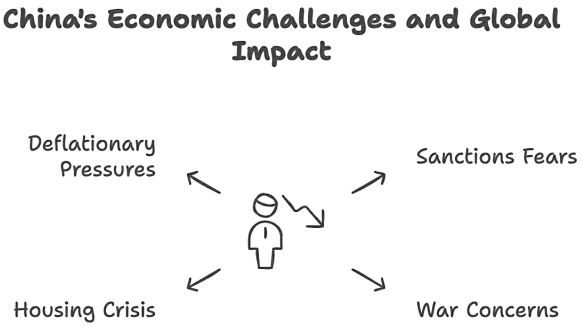
DEMYSTIFYING THE REASONS:
The sudden outflow of capital being witnessed by China is all the aftermath of various events, policies and factors. And one of the most significant factors is the China plus one strategy. China, commonly known as the manufacturing hub or factory to the world is now at the risk of losing its tag. Various MNCs shifted their manufacturing to China for it had cheap labour and favourable government policies, but the emergence of COVID-19 and the stringent implication of zero COVID policy by China have made the businesses realised that they have kept all their eggs in a single basket. Thus now, the MNCs are diversifying their manufacturing destinations or even completely shifting out of China. It is not the climax but the trailer of the movie.

To understand the rationale behind the cease of being an opportunistic destination for production, we need to emphasise to what made China the manufacturing hub. The double digit growing economy, with cheap labour, low production costs, and most importantly the humongous domestic consumer base of the country, which used to be the most populous country of the world. But now, all these factors have turned unfavourable with the labour demanding more wages, autocratic political system of China and the domestic demand getting plunged. The most important aspect for an emerging economy, if it wants to remain less dependent on its exports, which are the function of geopolitical tensions and events, is its internal demand. But China, today seems to be on the path of Japan. China's total natural population dropped by more than 2 million in 2023. These dramatic demographic trends make China's long term economic prospect doubtful.

Diversify Manufacturing to Sustain Growth



Investors, high net worth individuals and industrialists are reluctant to invest in Chinese economy and market because of the fears of sanctions and a potentially upcoming war. Today and for future, the biggest challenge for the US to stop the bipolarity is China. The plunging demand in the country is evident by the housing crisis and the deflationary pressures faced by China. And now here comes the bigger picture.



Multiple reports and geopolitical analysts predict that China may attack Taiwan in the next two to three years and this catastrophe is the thing that dreads everyone. If attacked Taiwan, China may face sanctions and even a front war with the US. All these factors ranging from economics to geopolitics have created a negative environment for businesses in China and the returns of the Chinese stock market stand out as its testimony. China's SSE Composite Index would have eaten 11% of one's investment in one year, as it gave negative returns.

WHERE DOES INDIA STAND? :

Today, India has a resilient economy in these uncertain global circumstances, where countries are facing recessionary trends; and strong macroeconomic fundamentals. The global GDP grew at 2.7% in 2023, but the Indian economy with robust domestic demand, grew at a whopping rate of 8.2% in FY 2023-24. World's most populous country with an average age of 28 years has a great potential to produce and consume. The inflation has eased down to 3.5% which is under RBI's target of 4%. India, with a strong banking sector, where non performing assets (NPAs) have almost vanished, with focus on improved infrastructure, ease of doing business, and with exports and manufacturing as its focal points,

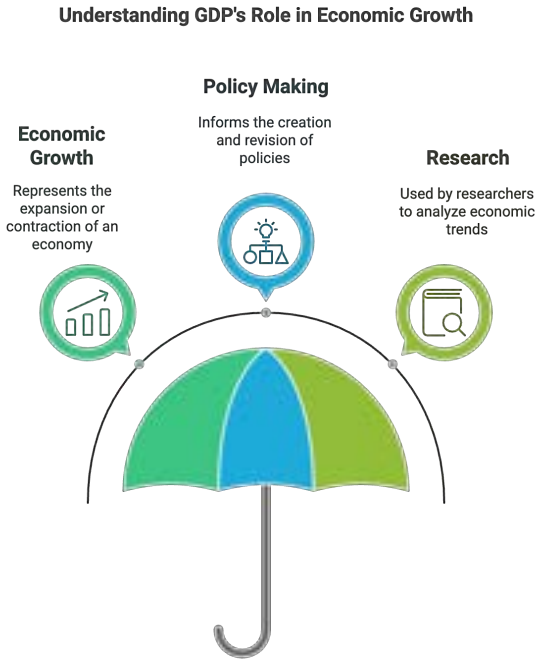
The data has been collected and sourced completely from the Data Bank provided by the World Bank.

The data covers a period from 2000 to 2020 and a consequent regression analysis along with a correlation analysis has been performed on the collected data to identify any potential relationships and the strength of these relationships between the variables.

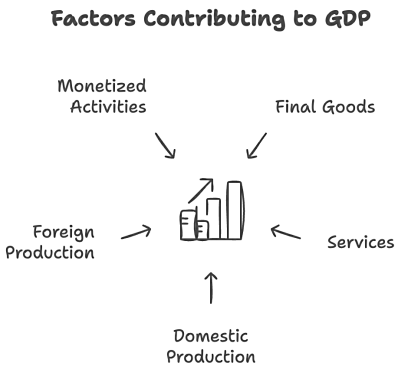
The regression analysis is based on a panel data time series-based approach and both the regression analysis with the correlation matrix were formulated using Microsoft Excel (Data Analysis ToolPak). The Dependent Variable taken in this regression analysis is the GDP (current USD).

- GDP (current USD): -

The entire concept of economic growth is a complex one and can be portrayed by several metrics, but one of the most common and widely used is the GDP or the Gross Domestic Product of the country. The changes in GDP (growth or decline) are used as indicators to assess whether an economy is actually growing or contracting with time. GDP is also used by policymakers, politicians, and researchers to investigate the impacts of existing policies and to revise or create newer guidelines based on the data under this metric.



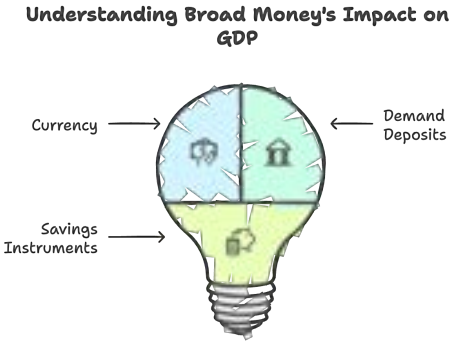
It represents the total value of all goods and services produced within a country's borders over a specific period, typically a year. It includes all final goods and services, whether they are produced by domestic or foreign companies. However, GDP is not the perfect indicator of the state of any economy or the way the wealth is distributed in the economy and GDP only accounts for transactions and financial activities that are monetised, so it leaves out unpaid work such as household chores, caregiving actions, etc here.



The Independent Variables used in the regression analysis are as follows:

- Broad Money (% of GDP): -

Broad Money represents the total liquidity available within the economy, including currency, demand deposits, and various savings instruments. It reflects the overall money supply, which can drive economic activity by enabling spending and investment. The relationship between Broad Money and GDP is expected to highlight how changes in liquidity influence economic output.



- Lending Interest rates (%): -

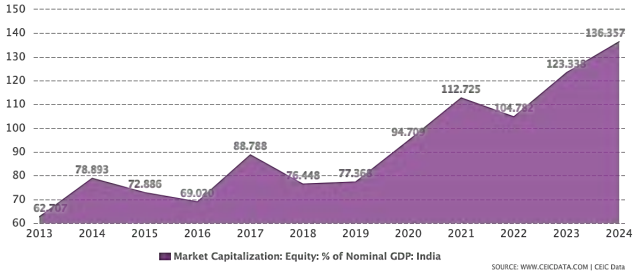
Lending interest rates represent the cost of borrowing for the private sector. These rates vary based on creditworthiness and the objectives of financing and are crucial in determining the level of investment and consumer spending. Typically, higher interest rates are expected to suppress economic activity by making borrowing more expensive, which can reduce investment and consumption, leading to slower GDP growth. Conversely, lower rates are thought to stimulate growth by making credit more accessible.

- Total Debt Service (% of GNI): -

Total debt service is the sum of principal repayments and interest actually paid in currency, goods, or services on long-term debt, interest paid on short-term debt, and repayments (repurchases and charges). This variable, in short, measures the total repayments of principal and interest on long-term debt relative to the country's Gross National Income (GNI). High levels of debt service are often viewed negatively, as they tend to put a strain on public finances and limit the government's ability to invest in growth-promoting activities. This can then have a dampening effect on GDP, as funds that could be used for development are diverted to debt repayment.

- Market capitalization of listed domestic companies (% of GDP): -

Market capitalization (also known as market value) is the share price times the number of shares outstanding (including their several classes) for listed domestic companies. Market capitalization reflects the total value of publicly traded companies and is an indicator of the health of the stock market. Conventionally, a high market capitalization is associated with a robust economy, as it signals investor confidence and corporate growth. A healthy stock market can contribute positively to GDP by facilitating investment and enhancing economic activities.



- Inflation, consumer prices (annual %): -

Inflation, as measured by the consumer price index, indicates the rate at which the cost of goods and services increases. In simpler terms, inflation is the increase in the general levels of prices of goods and services over time. Moderate inflation is often seen as a sign of a growing economy, as it encourages spending before prices rise further. However, high inflation is generally viewed negatively because it can erode purchasing power, reduce consumer confidence, and destabilize economic growth, thereby negatively impacting GDP.

- Domestic credit to private sector by banks (% of GDP): -

This variable captures the financial resources provided to the private sector by banks. It reflects the level of credit available for businesses and individuals to invest, grow, and expand economic activities. Conventionally, higher levels of credit to the private sector are associated with greater economic growth, as increased access to credit further supports business expansion and consumer spending, which in turn drives GDP growth.

HYPOTHESES:

Null Hypothesis [H0]: There is no significant relationship between the dependent variable (GDP (current USD)) and the independent variables (broad money (% of GDP)).
Alternative Hypothesis [HA0]: There is a significant relationship between the dependent variable (Overall GDP) and the independent variables (broad money (% of GDP)).
Null Hypothesis [H1]: There is no significant relationship between the dependent variable (GDP (current USD)) and the independent variable (Market Capitalization of Listed Domestic Companies (% of GDP)).
Alternative Hypothesis [HA1]: There is a significant relationship between the dependent variable (Overall GDP) and the independent variable (Market Capitalization of Listed Domestic Companies (% of GDP)).
Null Hypothesis [H2]: There is no significant relationship between the dependent variable (GDP (current USD)) and the independent variable (Lending Interest Rate (%)).
Alternative Hypothesis [HA2]: There is a significant relationship between the dependent variable (Overall GDP) and the independent variable (Lending Interest Rate (%)).

Null Hypothesis [H3]: There is no significant relationship between the dependent variable (GDP (current USD)) and the independent variable (Total Debt Service (% of GNI)).
Alternative Hypothesis [HA3]: There is a significant relationship between the dependent variable (Overall GDP) and the independent variable (Total Debt Service (% of GNI)).
Null Hypothesis [H4]: There is no significant relationship between the dependent variable (GDP (current USD)) and the independent variables (inflation (consumer prices) (annual %)).
Alternative Hypothesis [HA4]: There is a significant relationship between the dependent variable (Overall GDP) and the independent variables (inflation (consumer prices) (annual %)).
Null Hypothesis [H5]: There is no significant relationship between the dependent variable (GDP (current USD)) and the independent variable (Domestic Credit to Private Sector by Banks (% of GDP)).
Alternative Hypothesis [HA5]: There is a significant relationship between the dependent variable (Overall GDP) and the independent variable (Domestic Credit to Private Sector by Banks (% of GDP)).

RESULTS AND DISCUSSIONS
Data Analysis and Interpretations

Regression Statistics	
Multiple R	0.956603831
R Square	0.91509089
Adjusted R Square	0.878701272
Standard Error	2.80195E+11
Observations	21

Table 1

Table 1 provides the result obtained after running a regression analysis with the dependent variable (GDP (current USD)) and the independent variables (broad money (% of GDP), inflation (consumer prices, annual%), lending interest rates (%), total debt service (% of GNI), Domestic credit to private sector by banks (% of GDP), and Market capitalization of listed domestic companies (% of GDP)) for India over the time period of 2000-2020.

The results show that the Multiple R value is 0.956 which suggests a strong positive correlation between the dependent and independent variables.

The R Square value of 0.91509 tells us that approximately 91.509% of the variations in the dependent variable (GDP (current USD)) can be explained by the variations in the Independent variables.

The multiple R Value of 0.9566 suggests a relationship wherein as the independent variables tend to increase, the GDP (current USD) also tends to increase.

The Adjusted R Square takes into account the number of independent variables used in the model and accordingly adjusts to better fit the model. In this case, the value of 0.8787 suggests that the model output generated is reliable and there is a good fit between the dependent and the independent variables.

ANOVA	df	SS	MS	F	Significance F
Regression	6	1.18457E+25	1.97428E+24	25.14703168	9.81684E-07
Residual	14	1.09913E+24	7.85093E+22		
Total	20	1.29448E+25			

Table 2

Table 2 is the ANOVA (Analysis of Variance) output generated which has a significance F value of 9.81684E-07 which is much smaller than the generally accepted alpha of 0.05. This suggests that the regression model is reliable and can be analysed for further interpretations.

The overall regression model was significant F (6,14) = 25.147, p<0.001, R2 = 0.915.

Parameters Intercept	P-value 0.6833	Significance
Broad money (% of GDP)	0.3438	Not Significant
Market capitalization of listed domestic companies (% of GDP)	0.8120	Not Significant
Lending interest rate (%)	0.0282	SignificantA
Total debt service (% of GNI)	0.3356	Not Significant
Inflation, consumer prices (annual %)	0.0012	Significant
Domestic credit to private sector by banks (% of GDP)	0.0434	Significant

Table 3

Table 3 gives a more detailed analysis of the roles of each of the individual independent variables in explaining and predicting the variances in the dependent variable (GDP (current USD)). I have mentioned whether or not an independent variable is significant by comparing the p-value with a generally accepted threshold for significance of being less than 5% (p<0.05). Accordingly, domestic credit to the private sector by banks, lending interest rates and inflation are indeed significant with p-values of 0.0434, 0.0282 and 0.0012 respectively.

	Broad money (% of GDP)	Market capitalization of listed domestic companies (% of GDP)	Lending interest rate (%)	Total debt service (% of GNI)	Inflation, consumer prices (annual %)	Domestic credit to private sector by banks (% of GDP)	GDP (current USD)
Broad money (% of GDP)	1.000						
Market capitalization of listed domestic companies (% of GDP)	0.316	1.000					
Lending interest rate (%)	-0.460	-0.161	1.000	1.000	1.000		
Total debt service (% of GNI)	-0.188	-0.117	0.158	-0.618			
Inflation, consumer prices (annual %)	0.571	0.014	-0.072				
Domestic credit to private sector by banks (% of GDP)	0.857	0.978	-0.540	-0.335	0.517	1.000	
GDP (current USD)	0.788	0.411	-0.750	-0.147	0.110	0.839	1.000

Table 4

Table 4 finally gives us the correlation matrix which identifies the degree to which all the variables are correlated with one another.

Here, it is observed that broad money is very strongly and positively correlated with the domestic credit provided to the private sector by banks and the domestic credit that is provided to the private sector is also very strongly responsible for positively influencing the GDP of the economy it can also be noted that there is a very significant level of negative correlation between the GDP and the lending interest rates which can be interpreted as much higher interest rates leading to a contraction in the economic activities that take place which thereby creates a decline in the GDP; this is also generally true, but here it is important to note that the relationship between interest rates and GDP is quite complex and is influenced by many other factors such as government policies, international trade, and market speculation and thereby generated volatility, etc.

Domestic credit provided to the private sector and lending interest rates again are significantly and negatively correlated with one another which can be interpreted to imply that as interest rates increase, the domestic credit that the private sector has access to by banks is restricted because of the increased cost of finance (higher interest repayments); this, thereby reduces the amount of output in terms of monetary value generated in the economy which impacts the GDP. There is a decrease in credit availability when interest rates are raised.

These rates are generally raised to combat economic crises such as inflation. The government begins to follow a "dear money" policy and aims at reducing the amount of money supply thereby curbing the artificial demand thus generating and preserving the purchasing power and value of the domestic currency. This makes it harder for firms to take on loans for investment/expansion purposes or M&A purposes since the cost of credit increases.

Hypothesis Testing

Based on Table2.; further important interpretations can also be drawn:

Based on the ANOVA Output from Table2., we can clearly see that the F-statistic is 25.148 which indicates a statistically significant relationship between the dependent and independent variables. Additionally, the p-value associated with the F-statistic under the column Significance F in Table2. is 9.81684E-07, which is very small, indicating that the probability of obtaining such a large F-statistic by chance or by no connection between the variables is very low.

RESULTS FOR HYPOTHESES:

Broad Money (% of GDP)

The p-value for the variable "Broad Money (% of

GDP)" is 0.3438, which is above the conventional significance level of 0.05. This suggests that the coefficient for this variable in the regression model is not statistically significant.

On the basis of the p-value analysis, we have thus failed to reject the null hypothesis [H0]. There is thus insufficient evidence to reject the null hypothesis in favour of the alternate hypothesis [HA0].

Market Capitalization of Listed Domestic Companies (% of GDP)

The p-value for the variable "Market Capitalization of Listed Domestic Companies (% of GDP)" is 0.8120, which is very high and above the conventional significance level of 0.05. This suggests that the coefficient for this variable in the regression model is not statistically significant. On the basis of the p-value analysis, we fail to reject the null hypothesis [H1] in favour of the alternate hypothesis [HA1].

Here, one of the reasons behind market capitalization not greatly affecting GDP could be that market capitalization is influenced by factors such as stock market liquidity, investor sentiment, and corporate performance, which may not have a direct or immediate impact on the overall economic output measured by GDP.
Additionally, market capitalization may not capture the full spectrum of economic activity or the broader economic context, such as informal sectors or varying investment types, which can also play a significant role in influencing GDP.

Lending Interest Rate (%)

The p-value for the variable "Lending Interest Rate (%)" is 0.0282, which is considerably below the conventional significance level of 0.05. This suggests that the coefficient for this variable in the regression model is statistically significant.
On the basis of the p-value analysis, we can thus reject the null hypothesis [H2] since 0.0282 is below the required confidence level of 0.05. This yields a good basis for accepting the alternate hypothesis [HA2] over the null hypothesis.

Lending interest rates are traditionally known to impact the GDP of any country, due to their effects on financial liquidity in the economy. Higher lending rates make borrowing expensive and thus create a very direct impact on businesses and customers alike, so on one hand there is a tightening of financial liquidity with higher rates, but then, lower interest rates, make credit cheaper and much more accessible, thereby boosting expansion and consumer expenditures.

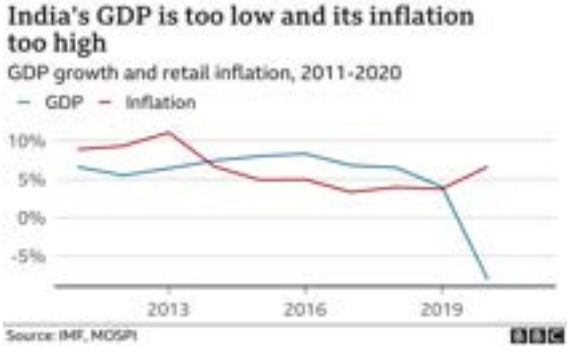
Total Debt Service (% of GNI)

The p-value for the variable "Total Debt Service (% of GNI)" is 0.3356, which is above the conventional significance level of 0.05. This suggests that the coefficient for this variable in the regression model is not statistically significant.

Therefore, based on the p-value analysis, we fail to reject the null hypothesis [H3]. This means there is insufficient evidence to support the alternate hypothesis [HA3].
One possible reason for this lack of significance could be that total debt service may not have an immediate or very strong influence on GDP within the context of this study. Other factors, such as economic conditions or debt management practices, might play a more substantial role in affecting economic output, thereby diminishing the direct impact of total debt service on GDP in this analysis.

Inflation, Consumer Prices (Annual %)

The p-value for the variable "Inflation, Consumer Prices (Annual %)" is 0.0012, which is significantly lower than the conventional significance level of 0.05. This suggests that the coefficient for this variable in the regression model is highly significant in statistical terms.
On the basis of the p-value analysis, we can thus reject the null hypothesis [H4] since 0.0012 is below the required confidence level of 0.05. This implies that there is sufficient evidence to reject the null hypothesis in favour of the alternate hypothesis [HA4].
This strong significance suggests that inflation has a substantial influence on GDP. As inflation rates fluctuate, they directly affect consumer purchasing power and economic stability. High inflation can lead to decreased consumer spending and increased uncertainty in the market, which can, in turn, hinder economic growth. On the other hand, very low inflation is also not good always since it might indicate weak demand or economic stagnation in the country.



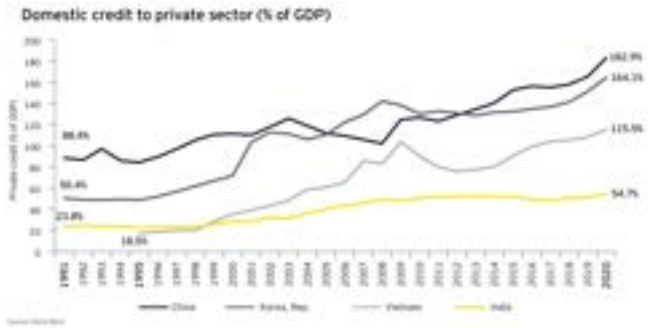
This relative importance and the inherent impact that inflation carries make it one of the most watched economic indicators to gauge the overall economy.

Domestic Credit to Private Sector by Banks (% of GDP)

The p-value for the variable "Domestic Credit to Private Sector by Banks (% of GDP)" is 0.0434, which is below the conventional significance level of 0.05. This suggests that the coefficient for this variable in the regression model is statistically significant.

On the basis of the p-value analysis, we can reject the null hypothesis [H5] since 0.0434 is below the required confidence level of 0.05. This implies that there is sufficient evidence to reject the null hypothesis in favour of the alternate hypothesis [HA5].

The significant relationship between domestic credit and GDP underscores the crucial role that bank credit plays in economic activity. As domestic credit to the private sector increases, it often signifies greater access to financing and credit for businesses and consumers, which in turn, like a ripple effect, stimulates investment and consumption. This, in turn, can drive economic growth.



CONCLUSION

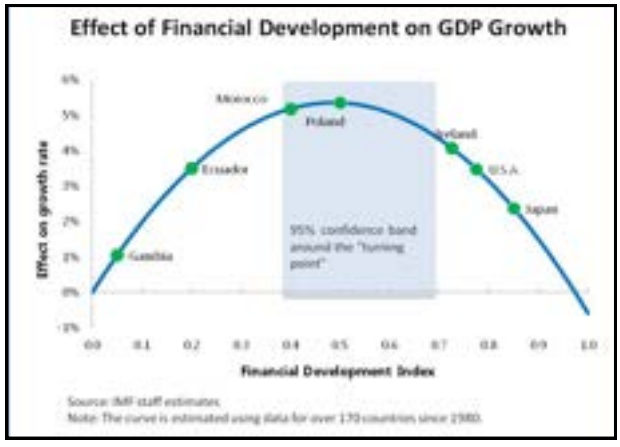
This study has examined the relationship between financial sector development and economic growth in India, focusing on various indicators of financial development and their impact on GDP through regression analysis and correlation matrices.

KEY FINDINGS:

- A strong positive correlation between domestic credit to the private sector by banks and GDP growth, highlighting the crucial role of bank lending in stimulating economic activity.
- A significant negative relationship between lending interest rates and GDP, underscoring the importance of monetary policy in shaping economic outcomes.
- A highly significant relationship between inflation rates and GDP, emphasizing the critical role of price stability in economic growth.

These results support the broader literature on finance-led growth, suggesting that a well-developed financial sector will indeed contribute to economic growth.

However, it's important to also note here that correlation does not imply causation. While this research provides valuable insights, it also has limitations. Future studies could benefit from more sophisticated econometric techniques to address issues such as multicollinearity and heteroscedasticity. Additionally, incorporating a longer time series or even a few cross-country comparisons could provide a more comprehensive understanding of the finance-growth nexus in developing economies.



In conclusion, this study reinforces the importance of continued development and reform in India's financial sector as a means of promoting sustainable economic growth.

Policymakers need to focus on measures that enhance financial inclusion, promote innovation in financial services, and maintain macroeconomic stability to fully leverage the growth potential of the financial sector.

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Credit Crunch: Growth vs Risk

By: Shaziya Subhani

ABSTRACT

This article discusses the phenomenal growth in retail credit in India, its contributory factors, and the risks involved. It speaks about the role of schemes like No-Cost EMIs and Buy Now Pay Later in fanning consumer debt and discusses the implications of a rise in household debt against the backdrop of rising job insecurity. It also alludes to regulatory steps by the Reserve Bank of India and pointed at further prudential steps, which are useful in keeping up financial solidity with the challenges of credit growth in retail lending.

INTRODUCTION

As India moves towards becoming one of the biggest consumer markets, the demand for consumer credit has been on a continuous upward trajectory over the last five years, significantly reaching new heights since the COVID pandemic and exacerbated by the rise in digital payment options. With this, the percentage of unsecured retail and personal loans in bank portfolios has risen significantly, reaching 35% in 2023 from 25% in 2007. The share of borrowers with more than 5 personal loans rose from 1.5% in 2018 to 7.7% in 2023. Over the past 5 years, unsecured retail loans such as credit cards and personal loans have grown at an average annual rate of 23%. Personal loans surged to a year-on-year growth of 32% in 2023, a significant portion of which was hijacked by consumption-based loans. Just recently, as of March 2024, India crossed the 100 million mark for the total number of credit cards issued.

Outstanding credit card spending increased nearly 27% Y-O-Y. This indicates that over time, loans have become easier to avail, which is the reason for the fall in credit standards.

Risks associated with this surge in unsecured loans coupled with the continuously dipping loan-to-deposit ratio (LDR or CDR) were sensed by the RBI. After a long series of cautious warnings, the apex regulatory body decided to take action and increase the risk weight by 25 percentage points, prompting the banks and NBFCs to make changes in their credit assessment procedures and raise the interest rates in order to counteract the higher capital requirements. This step took some time to settle down the surge, but the latest financial stability report still shows slight signs of warnings.

It's essential to weigh the pros and cons of unsecured credit. On one hand, unsecured loans can be good for both banks and consumers under the right circumstances. For banks, these loans offer an opportunity to expand their credit portfolios and generate higher interest income, given the higher rates typically associated with unsecured lending. Credit growth is often seen as a positive indicator of a bank's performance, reflecting its

ability to meet consumer demand and drive profitability. Banks often boast about their credit growth, as it signals their growing customer base and revenue potential.

For consumers, unsecured loans provide easy access to credit, especially for those who may not have assets to offer as collateral. These loans can be a lifeline for individuals needing funds for emergencies, medical expenses, education, or other personal needs. The convenience of obtaining unsecured loans, coupled with the rise of digital lending platforms, has made credit more accessible than ever before.

However, the same factors that make unsecured loans attractive also contribute to their risks. For banks, the absence of collateral means that they bear the full brunt of any default. A rising tide of defaults could quickly erode the profitability that unsecured loans bring, leading to significant financial losses. The concentration of unsecured loans in the portfolios of some banks could expose them to higher risk, particularly if economic conditions deteriorate or if borrowers' financial situations worsen.

From the consumer's perspective, while unsecured loans provide immediate financial relief, they can also lead to a cycle of debt. The ease of access to credit, particularly through products like no-cost EMIs, can encourage over-borrowing. Consumers may underestimate the long-term costs of these loans, leading to financial strain as they struggle to keep up with repayments. This risk is amplified among below-prime borrowers, who may already be financially vulnerable and more likely to default.

WHAT LED TO SUCH A RISE?

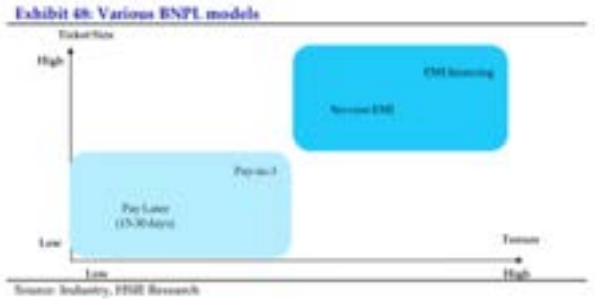
With a large mass of the population aspiring to move upwards on the social ladder but often constrained by income and affordability limits, such convenient payment options enabled consumers to choose big-ticket purchases. Along with the metro cities like Delhi and Bengaluru where more than 220% year-on-year increase in EMI volume was observed in July 2021, transactions in non-metro, tier 2, and tier 3 also showed a staggering growth due to the debit card EMI schemes.

Among these options, the BNPL and no-cost EMI options have gained significant popularity. There's hardly any middle-class household that was not charmed into the benefits of not paying an extra interest amount on their EMIs. But here is the catch! This is such a deceptive way of increasing sales that even before its popularity, RBI had to publish a circular in 2014 that warned companies to properly disclose the hidden charges and interest rates for such transactions.

Now the question arises- are no-cost EMIs just a gimmick? Retailers or lenders may inflate the original price of the product or charge a processing fee to compensate for the interest that would have otherwise been paid over the EMI period. While consumers believe they are getting a deal, they may end up paying more than they realize. While there are certain combinations of scenarios that, when applied in conjunction, would actually reduce the cost of the product in the long run, most of the time it either remains the same as it would with a regular EMI or just increases in the long run.

BNPL is similarly convenient in terms of delaying part of the payment for customers, but at the same time, it creates an illusion of financial stability and is likely to lead to a cycle of debt. Moreover, ease of access to credit through zero-cost EMIs fosters impulsive buying and, hence, a culture of debt dependency. More

often than not, people are likely to purchase things they don't need or are unaffordable for them since the financial burden would seem manageable. This contributes to rising household debt, which has been on a steady rise in India.



THE PROBLEMS

In its latest Financial Stability Report, the RBI has pointed out that the vintage delinquency of retail loans has remained high at 8.2%. This means the percentage of accounts that became delinquent within 12 months of origination of the loans amounted to 8.2%. This is not a big reason for concern for the larger banking sector level because the large retail loans like vehicle loans and housing loans are not being defaulted on, but the smaller loans are. Another major concern for the regulator is that if defaults increase sharply, it would create a ripple effect throughout the financial system.

In 2023-24, retail lending by banks grew at a record pace of 27.5%, whereas private consumption increased by just 8.5%, which is the slowest pace in nearly two decades. This divergence is noteworthy because it highlights a growing imbalance: credit is expanding rapidly, yet consumer spending is lagging. This has given the widest-ever divergence between the pace of growth in retail lending and in private consumption. This divergence was unusually wide in three of the past five financial years. Household debt in India was likely to touch an all-time high of 40.9 percent of GDP in 2023-24 from 30 percent in 2018-19. That does not seem to be happening, however, with this increased leverage coinciding with a fall in household financial savings to 5.3% of GDP to a 47-year low in 2022-23.

Clearly, what the rising share of household income is going toward is the repayment of loans; it could otherwise have been used for consumption and saving. Indeed, the retail loan mix is also witnessing a shift in favor of non-housing loans, growing at an average annualized growth rate of 19.7 percent from 2018-19 to 2023-24. Much of this growth has been attributed to the backdrop of altering consumer behavior, who increasingly seek credit for the purchase of high-end depreciable assets like cars and smartphones.

Therefore, the household DSR as of now probably comes to something like 11-12 percent of income in the current financial year—way above major comparative economies' levels. The high level of DSR shows that the household is feeling the stress, and more of its income is being utilized toward servicing its debt. This perhaps may be contributing to slowing down private consumption despite the massive growth in retail lending.The report further says "The average size of credit is higher for highly rated borrowers except in the case of credit cards. In the case of credit cards, per live borrower credit outstanding is higher for the below-prime borrowers suggesting a higher flow of credit to relatively riskier borrowers."

One more aspect related to delinquency rates could be the level of job security in the country. India has already witnessed large-scale layoffs in recent years. One of the major reasons for the rise of consumer credit is the optimism surrounding job security. People know that they'll be earning enough to pay off their loans in the upcoming months. A 2023 survey revealed that close to 50% of employees feel insecure about their jobs. How is this going to play out with the rising insecurities about income due to large layoffs? Such contradictory data reflects that Indians have been taking loans despite the insecurity surrounding their own incomes.

CONCLUSION

Considering the rapid growth of retail credit in India's economy, it is possible to say that an increasingly healthy diversified customer base coexists with fast-emerging pockets of risk that need very close monitoring. The recent regulatory actions on the part of the Reserve Bank of India, such as increasing the risk weights on unsecured loans, were aimed at containing the potential vulnerabilities within the sector. However, this alone may not be sufficient. In an environment where this is the case, the proliferation of schemes such as no-cost EMIs and BNPL adds another layer of complexity. Such schemes often have consumers borrowing more debt without deliberating on it for the long run, as they make credit quite easily accessible. While such financing modes may ring in additional consumption in the short run and thereby benefit businesses, they also jack up the levels of household debt and may be related to higher rates of delinquency in view of growing job insecurity and economic uncertainty.

Given the rapid growth of consumer credit and related risks—such as rising delinquency rates—some policymakers should consider structural prudential tools.This would include DSR and DTI ratios, which often turn out to be very effective in mitigating systemic risk.

Available tools could be resorted to by lenders to assess and monitor better borrower leverage, including thorough use of emerging technologies like account aggregators. This would not only be conducive to financial institutions' resilience but also conductive of credit growth in tune with sustainable economic conditions.

In conclusion, with continuing retail credit growth, there needs to be a fine balance between heightened regulatory vigilance and state-of-the-art monitoring tools for sustaining financial stability in the system. Just as the economy evolves, so too must the frameworks that support it, ensuring that banks and borrowers can travel through the complexities of credit growth without falling into undue risk.

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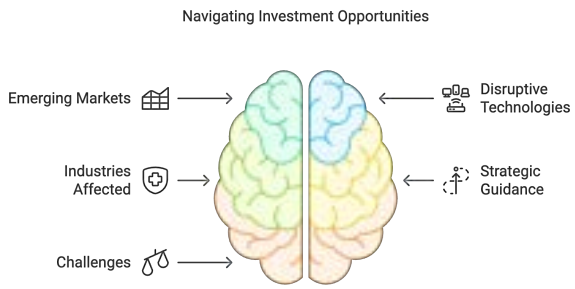
UPCOMING MARKETS AND INDUSTRIES

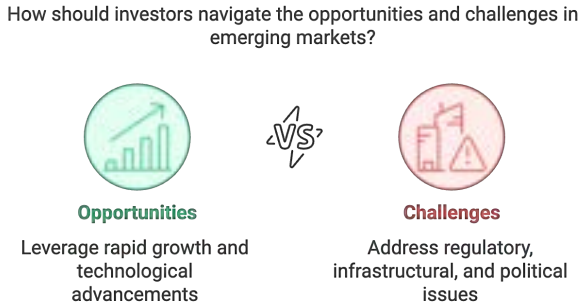
Emerging Markets and Disruptive Technologies: Investment Opportunities and Challenges

By: Pavan Kumar

Abstract

Emerging markets have emerged as significant destinations for global investment due to their robust economic growth potential, access to untapped natural resources, and increasing integration into the global economy. Simultaneously, disruptive technologies such as artificial intelligence (AI), blockchain, and renewable energy are reshaping traditional industries, providing novel opportunities for investors. This paper delves into the convergence of these two domains, examining the implications for businesses and investors as they navigate an evolving landscape. It provides an analysis of key emerging markets poised for technological adoption and assesses the impact of disruptive technologies across various industries such as manufacturing, finance, and healthcare. Through case studies, data from international financial organizations, and expert insights, the paper offers strategic guidance for capitalizing on investment opportunities while addressing potential challenges, including regulatory risks, political instability, and infrastructure gaps. The findings underscore the importance of adaptive investment strategies and highlight the increasing role of emerging markets as global leaders in technology adoption.





Introduction

Emerging markets have long been attractive for global investors due to their rapid economic growth, driven by urbanization, growing middle-class populations, and foreign direct investment (FDI). Markets like India, Brazil, Nigeria, and Vietnam have witnessed significant transformation, fueled by economic reforms, technological advancements, and policy changes. In parallel, disruptive technologies like AI, blockchain, and green energy have gained prominence, reshaping the industrial and financial landscapes of both developed and emerging economies. The convergence of these two trends offers immense opportunities for investors but also poses challenges related to regulation, infrastructure, and political volatility.

The fusion of emerging markets and disruptive technologies creates a unique intersection for growth and innovation. These technologies can accelerate the modernization of infrastructure, improve efficiency, and foster new business models in regions where traditional industries have long dominated. However, the risks associated with investing in emerging markets require an adaptive, risk-mitigated approach. This paper aims to explore these opportunities and challenges, focusing on how investors can capitalize on the rise of emerging markets through strategic investments in disruptive technologies.

Literature Review

Research on emerging markets and disruptive technologies has highlighted the potential of these markets to drive global economic growth. Studies from the World Bank and the International Monetary Fund (IMF) estimate that emerging markets will account for over 60% of global growth by 2030, with countries like India, Brazil, and Indonesia at the forefront. These regions benefit from demographic advantages, increasing access to technology, and governmental reforms that aim to attract foreign investment.

The literature on disruptive technologies, such as AI, blockchain, and green energy, focuses on how these innovations can transform industries. AI, for example, is widely regarded as a tool that enhances efficiency in areas like supply chain management, finance, and healthcare. Blockchain technology offers secure, decentralized systems for financial transactions and data management, which are particularly appealing in markets with underdeveloped banking infrastructure.

However, much of the research has focused on the role of disruptive technologies in developed economies, such as the United States, China, and Europe. Comparatively less attention has been given to how these technologies are transforming smaller and less-developed markets. This paper seeks to address this gap by exploring the implementation of disruptive technologies in emerging markets and assessing their role in shaping the future of these economies.

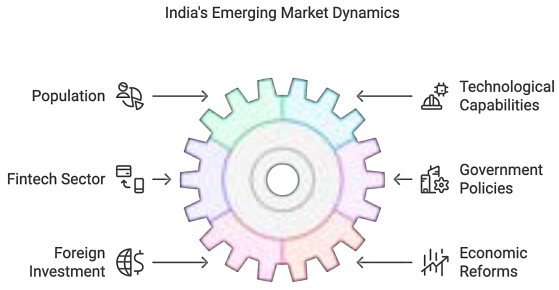
Research Methodology

The research methodology adopted in this paper is qualitative, relying on a combination of case studies, expert interviews, and secondary data from investment reports, financial institutions, and international organizations. The paper examines patterns in technological adoption within emerging markets, identifies key drivers of growth, and highlights the risks associated with investing in these regions.

Data was collected from a variety of sources, including World Bank reports, IMF economic outlooks, and market analysis from financial institutions. Interviews were conducted with venture capitalists, government officials, and industry leaders who have firsthand experience in emerging markets. These qualitative insights are combined with quantitative data to provide a comprehensive overview of the opportunities and challenges presented by the intersection of emerging markets and disruptive technologies.

Key Emerging Markets:

India



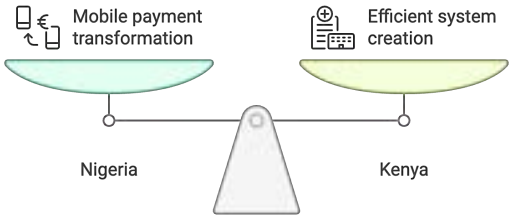
India stands out as a key emerging market due to its large population, strong technological capabilities, and growing middle class. The country's fintech sector, led by companies like Paytm and PhonePe, has revolutionized the payment landscape,

making digital transactions more accessible to millions. Additionally, the Indian government's policies to promote technology adoption in areas such as e-commerce and green energy have attracted significant foreign investment. The country's economic reforms and focus on infrastructure development provide a favorable environment for technological innovation.

Brazil

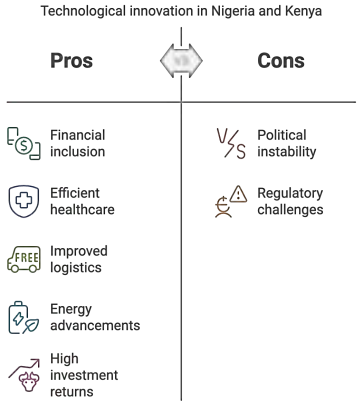
Brazil's economic growth is fueled by its abundant natural resources, a rapidly urbanizing population, and expanding consumer base. The country is also a leader in renewable energy, particularly biofuels, which has attracted investment in sustainable technologies. Brazil's energy sector, which relies heavily on hydroelectric power, is undergoing further transformation with investments in solar and wind energy. Fintech and agritech are two other areas where Brazil has seen substantial technological advancement, presenting investors with diverse opportunities.

Nigeria and Kenya

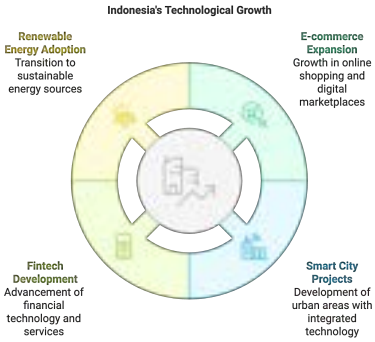


Comparing Technological Advancements in Nigeria and Kenya

Africa is often viewed as the "last frontier" for global investors, and countries like Nigeria and Kenya are emerging as leaders in technological innovation. In Nigeria, mobile payment platforms like M-Pesa have had a transformative effect on financial inclusion, bringing millions of previously unbanked people into the formal economy. Kenya has similarly leveraged technology to create more efficient systems in healthcare, logistics, and energy. While political instability and regulatory challenges remain, the potential for high returns in these markets is significant.



Indonesia

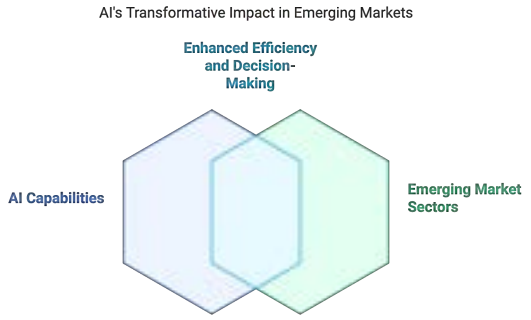


Indonesia is Southeast Asia's largest economy and represents a thriving emerging market. The country has seen remarkable growth in its e-commerce sector, driven by widespread smartphone usage and a young, tech-savvy population. The Indonesian government has embraced digital transformation, promoting initiatives such as Smart City projects, fintech development, and renewable energy adoption. The rapid pace of urbanization and economic reforms make Indonesia a prime candidate for technological disruption in various sectors.

Disruptive Technologies in Emerging Markets:

Artificial Intelligence (AI):
AI is transforming industries by enabling more efficient processes, improving decision-making, and offering personalized customer experiences. In emerging markets, AI-powered solutions are being used to address critical

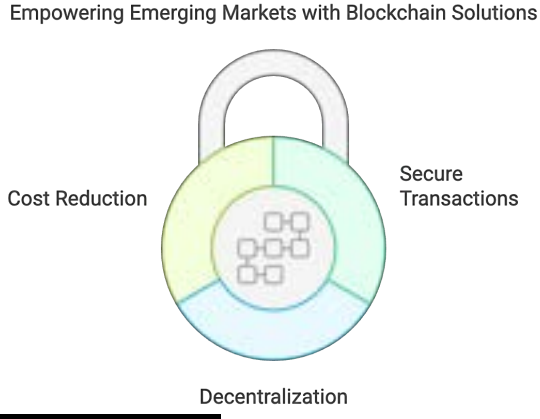
issues such as healthcare shortages and agricultural inefficiencies. For instance, in India, AI-driven platforms help farmers optimize planting cycles by analyzing weather data, while in Africa, AI is used in telemedicine to bridge the gap between rural communities and healthcare professionals.



The potential for AI to revolutionize supply chains, financial services, and manufacturing is immense. AI can automate tasks previously performed by humans, reducing operational costs and improving productivity. As emerging markets continue to develop, the integration of AI into key sectors is expected to create a competitive edge for businesses that adopt these technologies early.

Blockchain:

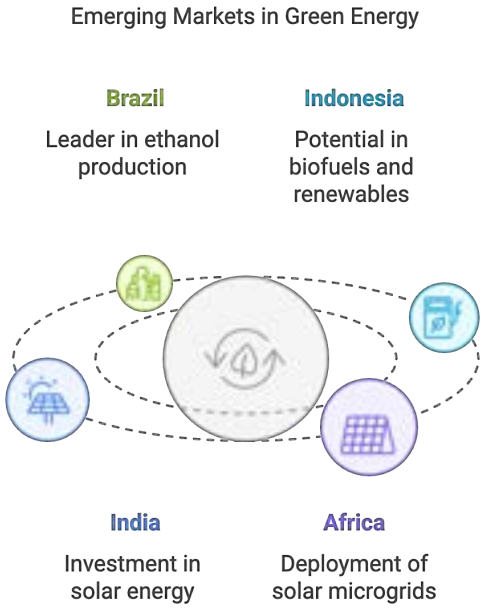
Blockchain technology offers secure, decentralized systems that can provide solutions to challenges faced by emerging markets, particularly in the financial sector. In regions with weak
banking infrastructure, blockchain-based payment systems can enable secure transactions and reduce the cost of cross-border remittances. For example, in Nigeria, blockchain technology is being used to facilitate low-cost, secure remittance transfers, allowing workers abroad to send money home more efficiently.



Blockchain's application extends beyond finance. In supply chains, blockchain can increase transparency and traceability, helping companies in emerging markets ensure the authenticity and quality of goods. Additionally, governments can use blockchain to improve public services by reducing corruption and ensuring more transparent management of public funds.

Green Energy:

As the global demand for renewable energy grows, emerging markets are in a prime position to lead the charge in green energy adoption. Countries like Brazil and Indonesia have vast natural resources that can be harnessed for renewable energy production, particularly biofuels, solar, and wind power. Brazil is already a global leader in ethanol production, while India has ramped up investments in solar energy, with large-scale solar farms and rooftop solar initiatives being promoted nationwide.

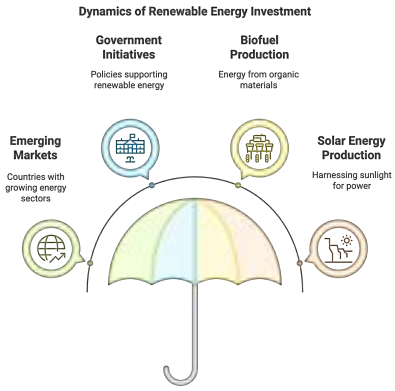


Green energy technologies not only present opportunities for investors but also address key infrastructure challenges in emerging markets. For example, solar-powered microgrids are being deployed in rural Africa, providing electricity to communities that previously lacked access to reliable power sources. This shift to renewable energy reduces dependence on fossil fuels and creates more sustainable development pathways.

Investment Opportunities:

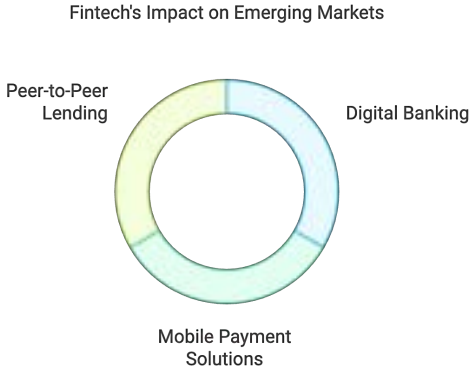
Renewable Energy

The renewable energy sector presents one of the most promising investment opportunities in emerging markets. Countries like Brazil and India are leading the way in biofuel and solar energy production, respectively. Investors can capitalize on government initiatives to increase renewable energy capacity, especially as many emerging markets aim to reduce their reliance on imported fossil fuels and lower their carbon emissions.



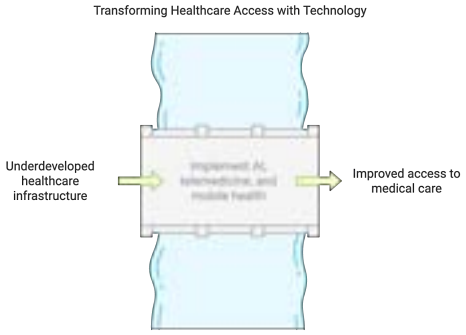
Fintech

Fintech is revolutionizing financial services in emerging markets by providing digital banking, mobile payment solutions, and peer-to-peer lending platforms. In regions like Southeast Asia and Africa, where many people remain unbanked, fintech solutions offer a way to access financial services without traditional banking infrastructure. Companies that provide solutions tailored to local markets have the potential to capture significant market share.



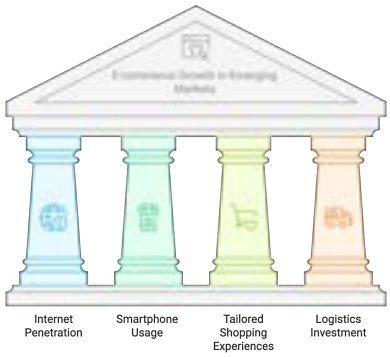
Healthcare

In many emerging markets, healthcare infrastructure remains underdeveloped, but disruptive
technologies are helping to bridge the gap. AI-powered diagnostics, telemedicine, and mobile health platforms are expanding access to medical care, particularly in rural areas. Investors looking to enter these markets should focus on companies that are developing innovative solutions to healthcare challenges, as these technologies have the potential to scale rapidly.



E-commerce

E-commerce is booming in emerging markets like Indonesia, where increased internet penetration and smartphone usage have transformed the retail landscape. Companies that offer tailored online shopping experiences for local consumers stand to benefit from the rapid growth of this sector. Logistics and delivery services are also key areas for investment as the demand for efficient last-mile delivery solutions continues to rise.



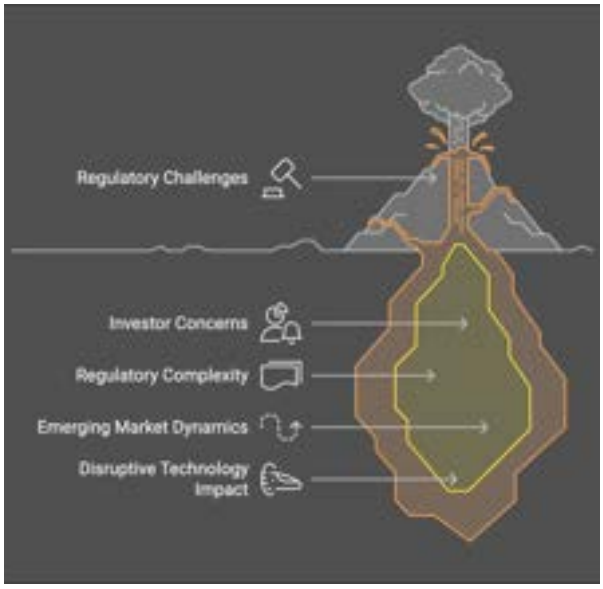
Challenges and Risks

Political Instability

One of the biggest challenges facing investors in emerging markets is political instability. Governments in these regions may implement sudden policy changes, impose new regulations, or experience civil unrest, all of which can create uncertainty for businesses. For example, in countries like Nigeria, frequent changes in government leadership and economic policies can create a volatile investment climate.

Regulatory Uncertainty

While disruptive technologies offer immense potential, regulatory environments in emerging markets are often underdeveloped, making it difficult for companies to operate. In countries where regulations are unclear or change frequently, investors may face challenges in scaling their businesses. Blockchain, in particular, faces regulatory hurdles in many regions due to concerns over data privacy and the decentralization of financial systems.



Infrastructure Gaps

Many emerging markets lack the necessary infrastructure to support the rapid adoption of disruptive technologies. Reliable internet access, electricity, and transportation are critical for the success of digital platforms, AI-driven applications, and green energy solutions. For instance, while solar energy has great potential in rural Africa, limited access to financing and infrastructure hampers its widespread adoption. Investors must be aware of these challenges and consider infrastructure development as a key factor when assessing market potential.

Conclusion

Investing in emerging markets and disruptive technologies presents significant opportunities, but it also comes with inherent risks. The rapid pace of technological innovation, coupled with the unique challenges faced by emerging markets, requires investors to adopt a highly adaptive approach. Success in these markets will depend on a deep understanding of local conditions, regulatory environments, and technological trends.

By focusing on sectors that are ripe for growth—such as renewable energy, fintech, healthcare, and e-commerce, investors can position themselves to benefit from the transformative changes occurring in these regions.

However, they must remain vigilant about mitigating risks related to political instability, regulatory uncertainty, and infrastructure gaps. Emerging markets have the potential to serve as key drivers of global economic growth, and the integration of disruptive technologies will only accelerate this transformation.

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Recent Disruptive Business Models in the Market

By: Yogita Ganesh Kale

Abstract

Innovation lies at the heart of all companies and the best way to do this is by using a disruptive business model. Companies like Amazon, Netflix, Google, and Jio have heavily focused on the internet as a disruptive technology. Disruptive Business Models are the models in the initial phase of business innovation where the prices are lower than those of the traditional ones to enter the market and for customer traction, they also provide the best product and services to the consumer to the minimum profit margin as once they occupy the market they become dominant over the other business person in the market.

This article tells us about the disruptive business model and how it works with the example of world-known companies like (Amazon and Jio). How Amazon started its business innovation from small Books to a well-known company that sells almost all the products in the market, what strategy this company uses and another trending company in India is Jio is the best example of the disruptive business model as initially given free network services and then charge minimum and dominated the whole market of the network today.

Introduction to Disruptive Business Models

Disruptive innovation is an innovation that simplifies and makes more affordable undesirable and ignored products and services. Professor Clay Christensen first wrote about it in the book Innovators Dilemma.

These disruptive terms describe how new products and services enter the market and can disrupt existing markets and existing players who are dominant in the market.

It all starts by introducing a new product or service that addresses a customer segment whose needs are being overmet or not met at all by the existing products and services these new products are typical things that are simpler cheaper and easier to use. They have lower performance when they are actually introduced but quickly improve their performance to disrupt the existing products in the space and slowly all the customer segments move to these new products.

Disruptive Innovation In Amazon Company

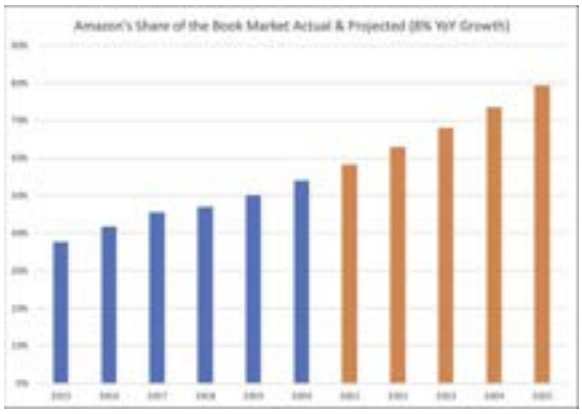
Amazon is an American multinational technology company, engaged in many platforms like e-commerce, computing, advertising, digital streaming, etc. Firstly Amazon company originally started as an online

marketplace directly form wholesalers and publishers. This opportunity in the growing popularity of the internet and its potential to disrupt the traditional retail market.

In the initial phase gaining profit was the struggling part for the company but still thefocus was on "customer service" and "convenience" and it helped them to become a dominant player in the e-commerce industry.

After selling books online Amazon recognized the opportunity to expand this business and launched the Kindle for e-reader, its first foray into the digital product space. This Kindle had a great impact as the price was low compared to the traditional market.

Building on the success of the Kindle Amazon expanded into new product categories like electronics and household goods here they also have competitors like Flipkart, Jio Mart and many more but still Amazon is doing great comparatively. Today Amazon is the largest online retailer in the world, offering different products and services in a wide range by using a disruptive business model.

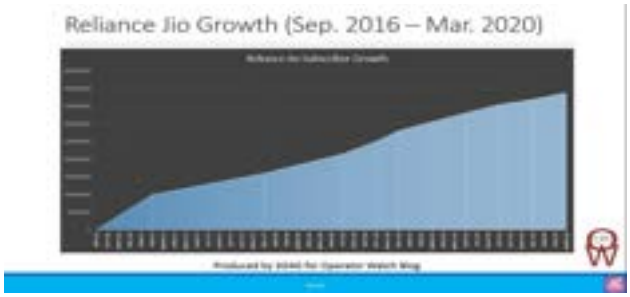


Disruptive innovation in Reliance Jio company

Reliance Jio was founded in the year 2015 and was publically made available in 2016. Jio offers a 4G network and also provides LTE voice-overs to provide voice service. In the initial phase of the business, they used a loss-leading strategy which means that they sold their products and services at a lower price than the market.

In the starting, they also gave free-of-cost data and voice calls to the customer for a long period and this helped them to gain a customer base and higher Market share. Then they lowered the data charges to retain their customers and earn profit while sustaining in the market. With competitors like Airtel, VI, BSNL, etc.

Jio has always come with a variety of offers like the Happy New Year offer, Jio Diwali dhamaka offer, etc. to maintain their customers and provide them service at minimal cost and look after customer satisfaction. As they now dominate the network market, they have started different categories of products like Jio fiber (the internet speed booster) and Jio phone next (which will be fully featured in Android).



This graph shows the Reliance Jio growth in the Network Market.

CONCLUSION

We have seen now how the Disruptive Business Models work and their results along with how the consumers are delightfully forced to change their choice towards the product or services in response to their demands getting noticed and their choices being respected with very low spending that they are purchasing good quality product and services. As in starting, the business persons can face losses but after consumer retention, they can also charge maximum and sustain with the same base and better profits. As a result, the disruptive model is all about entering a new market, making its own space, retaining customers, and then acquiring the dominant position in the market.

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Machine Learning and Algorithmic Trading in India

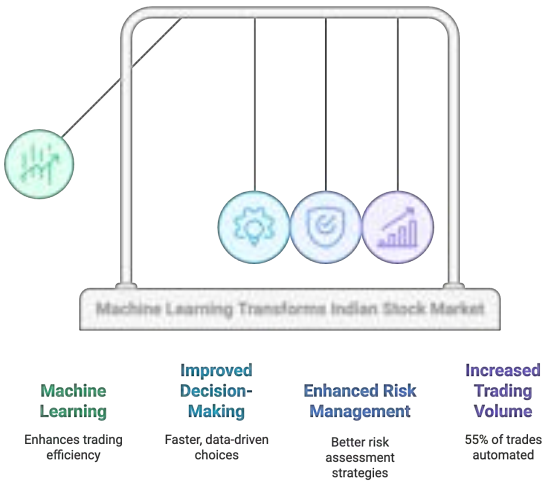
By: Akshat Sogani

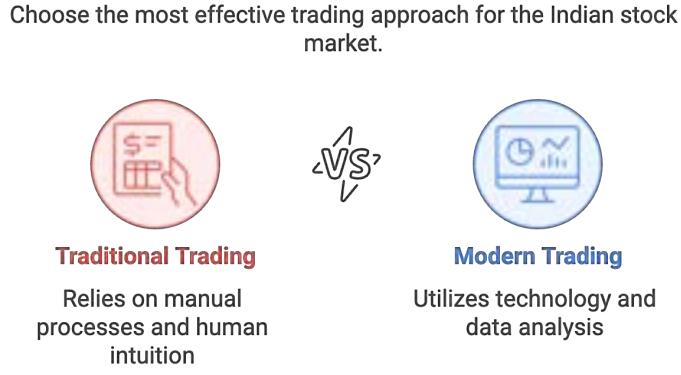
The computerization of professional trading introducing the concepts of machine learning (ML) and algorithms has brought a revolutionary change to the Indian stock market. The following paper examines the effects of these technologies on trading activities with an emphasis on efficiency, decision-making, and risk management. The first focus is to understand the application of ML algorithms in forecasting stock movement, applying it to trading, and the roles of trading algorithms in India. Thus, the approach involves literature research, analysis of data from trading platforms, and examples of effective algorithmic trading strategies. Some research shows that algorithmic trading currently stands at 55% of the total volume of trades in India, which shows the growing popularity of automatic trading systems.

The findings imply that with the advancement of technology, a professional trader needs to stay relevant in the field and propose that they should engage in learning, invest in technology, and be ethical.

Introduction

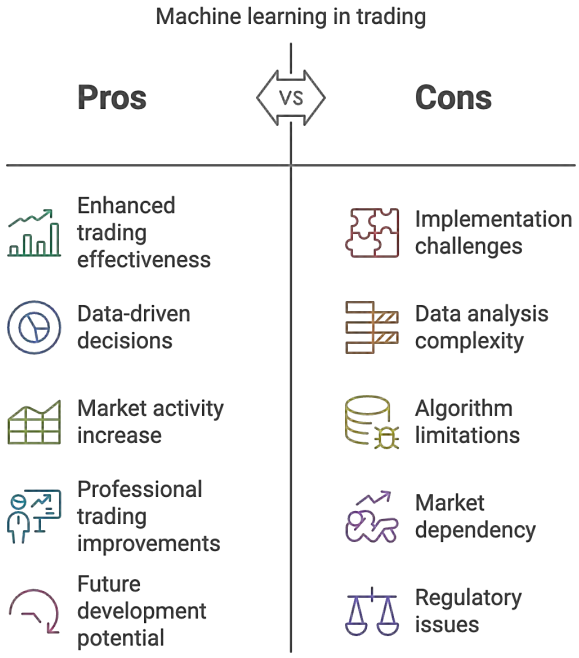
Machine learning and algorithmic trading have become the new norms in the financial markets worldwide, with India being no exception. Traditionally, the stock exchange operation in India was based on manual punching of orders and people's feelings. However, the modern world is characterized using technology and the resultant emergence of analytical approaches to business. The Indian stock market is among the fastest-growing equity markets across





the globe, and retail participation has risen sharply, especially during the COVID-19 period. By August 2024, the BSE Sensex and Nifty 50 index touched higher levels, meaning that the market was quite active. This growth has pushed traders to look for ways to increase trading effectiveness, thus the incorporation of machine learning algorithms that analyse large data sets in making trading decisions.

This study seeks to establish the changes that machine learning and algorithms have brought in the professional trading of securities in the Indian market. This paper analyses the methods used, the results obtained, and the issues encountered, and it also covers the possible directions of the development of algorithmic trading in India.



The Evolution of Machine Learning and Algorithmic Trading in India

Trading using machine learning has received a lot of attention in the last few years. Prior studies focus on the performance of different algorithms including neural networks, decision trees, and support vector machines in forecasting stock prices and generating the best trading strategies. For instance, research shows that using machine learning algorithms for the prediction of the stock market is superior to conventional statistical models because of the former's capability to identify intricate trends in past market data.

Algorithmic trading in India began in the early part of this century and has come a long way. Once exclusive to large investment firms, it has spread to small traders, with about 55% of the trading volume done algorithmically. This change is a result of the enhanced availability of advanced trading platforms as well as the need for higher-frequency trading.

Nevertheless, there are still potential issues. It notes some problems like the fluctuations in the market, the quality of data, and the constant need to update the algorithm. Besides, the regulatory environment creates limitations on the use of high-frequency trading algorithms because SEBI has set specific rules on the use of such tools.

The Role of Machine Learning in Stock Trading

What is Machine Learning?

Artificial intelligence (AI) has a subfield known as machine learning (ML) that specifically deals with creating algorithms that allow a machine to learn and make decisions on data. In stock trading, ML is important in data analysis and data modelling, which will enable the trader to analyse large data sets for patterns and trends. Research has indicated that the accuracy rate of the ML models to estimate the stock prices is around 70-80 % which has greatly improved the traders' decision-making systems.

Applications of ML in Trading

Several specific ML techniques are employed in trading:

- Regression Analysis: Used to estimate values for variables that change with time and are expected to change in the future such as future prices of stocks.
- Classification: Classifies the stocks into 'buy,' 'hold,' or 'sell' depending on the expected returns.
- Clustering: Clusters the similar data to find the stocks that are similar in some way or behave similarly.
- Neural Networks: Other deep learning models like LSTM networks are used in identifying patterns in time series data with some of them having accuracies of more than 85%.

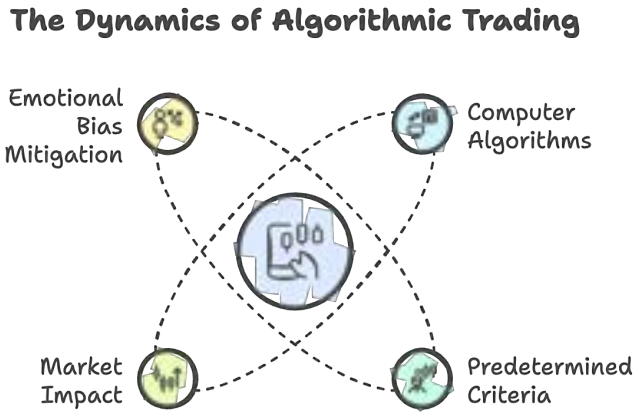
Predictive Analytics

It can be seen that ML has a significant function in the area of predictive analysis in relation to the stock market. Based on past information, the ML algorithms predict trends in the markets, stock prices, and volumes of trading. Some of these applications include HDFC Securities Pro Terminal where real-time information and forecasts are obtained through the use of ML helping the traders in their strategies.

Algorithmic Trading: An Overview

Introduction to Algorithmic Trading

Algorithmic trading is the practice of utilizing computer algorithms to automatically make trading choices according to predetermined criteria. As of 2024, this approach has become very popular in the Indian stock market, representing approximately 55% of the overall trading activity. The importance of algorithmic trading rests in its capacity to execute trades at the most advantageous pricing and mitigate emotional biases.



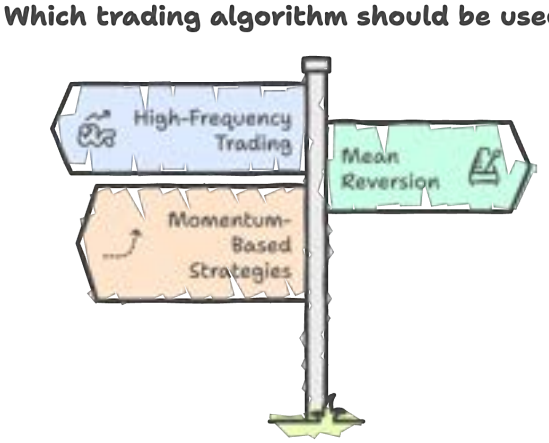
Types of Algorithms Used

Various algorithms are utilized in trading, including Various algorithms are utilized in trading, including:

- High-Frequency Trading (HFT): Carries out many orders quickly, exploiting even the slightest of price differences.

- Mean Reversion: Beliefs that are based on the assumption that stock prices will revert back to the mean hence making a profit out of price differences.

- Momentum-Based Strategies: This is where one buys stocks that are on an upward trend and sells those that are on a downward trend.



Advantages of Algorithmic Trading

- Speed: Algorithmic trading happens at the rate of milliseconds; it is a way to exploit market opportunities.

- Accuracy: Eliminates the chances of making mistakes manually and guarantees that the execution is accurate to the laid strategy.

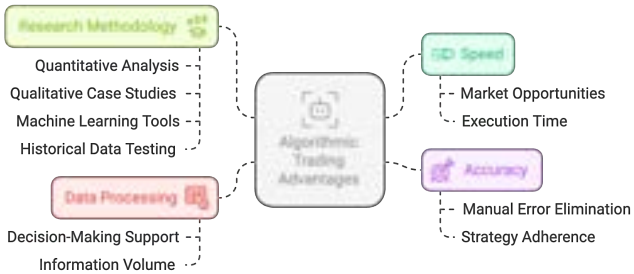
- Data Processing: It is capable of processing huge volumes of information within a short duration of time to help in decision-making that is based on the current state of affairs.

Research Methodology

This research uses both quantitative data analysis and qualitative case studies as the research paradigm. Information was gathered from the trading platforms, financial statements, and other scholarly articles. In the analysis, the emphasis is made on the effectiveness of the machine learning models in predicting stock prices and trading.

Some of the analytical tools used are Python for analytics and big data and machine learning tools like Scikit-learn and TensorFlow. The methodology also includes the testing of trading strategies on historical data in order to determine their profitability. This approach enables one to have an all-around view of the effects of machine learning on trading techniques in the Indian stock market.

Advantages of Algorithmic Trading and Research Methodology



Results/Discussions

It is evident from the research that, the application of machine learning algorithms has a positive relationship with enhanced trading performance. For example, strategies like statistical arbitrage and trend-following are known to yield high returns, and some of the

Aspect	Traditional Trading	Algorithmic Trading
Speed	Slower execution times	High-speed, real-time trading
Decision-making	Emotion-driven	Data-driven
Error Rate	Higher due to manual errors	Lower due to automation
Scalability	Limited to individual traders	Scalable across multiple assets

traders are getting more than 40% annualized return. A comparative analysis between traditional trading methods and algorithmic trading highlights several advantages of the latter:

Some examples of algorithmic trading firms in India and their success stories depict the efficiency of the strategies outlined above. For instance, one of the most important hedge funds applied machine learning to improve the portfolio and achieved 30 percent more in two years.

In addition, it is revealed that the high volatility and the dominance of the retail investors in the Indian market are helpful to algorithmic trading. With the ever-shifting market, it is anticipated that the need for more complex trading algorithms will be on the rise, especially regarding passive investment and ETFs.

Impact of ML and Algorithms on Professional Trading in India

- Efficiency and Speed

The combination of the use of ML and algorithms has led to a drastic enhancement of trading efficiency. It is capable of analysing thousands of data inputs per second so that trades are done at speeds beyond the capability of most humans. This capability enables the trader to respond to market fluctuations in the shortest time possible thus improving the results.

- Risk Management

Sophisticated methods improve the management of risks since it is possible to estimate the losses that may occur. Measures like VAR and stress testing assist traders in managing their risk and coming up with means and ways of minimizing the risk. Algorithmic trading has made firms cut their risk by 30% as compared to the more conventional forms of trading.

- Market Access

ML and algorithmic trading have brought the use of high-quality trading tools to the masses allowing small investors and small firms to engage in trading. large investors.

Challenges and Limitations
Despite the advantages, challenges exist:
- Overfitting: It means that while using ML models, one is likely to arrive at poor decisions when the models are trained on historical data and used on new data.
- Data Quality: It is also important to note that the training data determines the efficiency of the ML algorithms.
- Regulatory Concerns: Algorithmic trading has grown very popular in recent years and has attracted the attention of regulators with rules from SEBI to check the fairness of the practices

Future Trends and Predictions
- Emerging Technologies
New technologies may include quantum computing in trading as it is capable of analyzing large volumes of data in an incredibly short span thus improving the models and strategies.
- Regulatory Landscape
With the advancement of ML and algorithmic trading, it is expected that rules will become more stringent in order to cope with the issues of market manipulation and provide a transparent market.
- Sustainability and Ethical Consideration
The use of technology gives rise to ethical issues concerning market justice and other emerging system-related threats. With the industry developing, the emphasis should be placed on the sustainable approach to trading and such factors as ethical standards.

Conclusions
Thus, this paper establishes that the application of ML and algorithms has revolutionized professional trading in the Indian stock market. Algorithmic trading not only increases the efficiency but also optimizes the decision-making. However, issues like; restrictions by regulatory bodies and the fact that algorithms have to be constantly updated still persist.

The effects are significant for professional traders: the ones who do not come to terms with the changes brought by new technologies will become obsolete. Future studies should focus on the impact of algorithmic trading in the long run on the market and the possibilities of using new technologies in the strategies.

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The Rise of Green Hydrogen: The Promising Market

By: Dia Goyal

Fueling the Future

Imagine a world where the fuel that powers your car, heats your home, and lights your city is as clean as the air we breathe. In the battle against climate change, a silent revolution is underway, turning one of the universe's most abundant elements—hydrogen—into the green fuel of the future. As the world races to reduce its carbon footprint, green hydrogen is emerging as a game-changer, promising a new market and a transformative shift in how we think about energy.

Green hydrogen, frequently touted as the energy source of tomorrow, is generated via electrolysis, a process that splits water into hydrogen and oxygen using electricity derived from renewable sources like wind, solar, and hydropower. Electrolysis involves splitting water (H2O) into its constituent elements—hydrogen (H2) and oxygen (O2)—using an electric current. The resulting hydrogen is termed "green" because the process relies on renewable energy, producing zero carbon emissions. This distinguishes green hydrogen from other forms of hydrogen production, such as grey hydrogen, which is derived from natural gas and results in significant carbon dioxide emissions, and blue hydrogen which depends on fossil fuel sources but utilizes carbon capture and storage techniques to minimize harm to the environment.

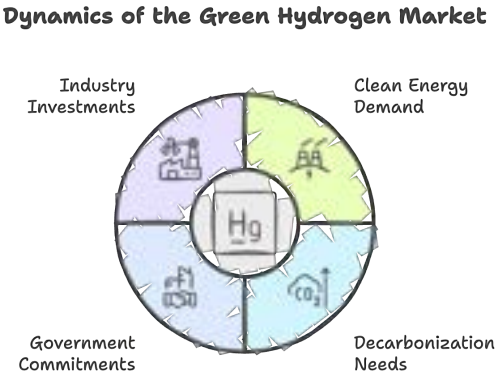
Unlocking the Benefits: Why Green Hydrogen is Key to a Sustainable Future

One major advantage of green hydrogen is its ability to store excess renewable energy. Renewable energy sources such as wind and solar are variable, producing electricity only when the wind is blowing or the sun is shining. Green hydrogen can act as a storage medium, capturing surplus renewable energy during periods of high production and releasing it during periods of low production. This capability enhances grid stability and facilitates the integration of higher shares of renewables into the energy mix . In the industrial sector, green hydrogen offers a pathway to significantly reduce emissions from processes that are currently dependent on fossil fuels. For example, the steel industry, which accounts for approximately 7% of global CO2 emissions, can use green hydrogen to replace carbon-intensive coking coal in the production process. Likewise, the chemical industry can utilize green hydrogen as an eco-friendly feedstock for producing ammonia and other vital chemicals. Additionally, green hydrogen holds the potential to transform the transportation sector. Hydrogen fuel cell vehicles (FCVs) provide several benefits compared to battery electric vehicles (BEVs), such as quicker refueling times and greater driving ranges. Heavy-duty transport, such as trucks, buses, and trains, stands to benefit significantly from the adoption of hydrogen fuel cells, as these vehicles require substantial energy storage that batteries alone cannot efficiently provide.

Exploring Market Potential: The Growing Opportunity of the Green Hydrogen Industry

The green hydrogen market is poised for significant growth, driven by technological advancements, declining costs, and strong policy support. According to a report by the International Energy Agency (IEA), the cost of green hydrogen production could fall by 30% by 2030, making it increasingly competitive with fossil fuel-based hydrogen. This cost reduction is expected to be achieved through economies of scale, improvements in electrolyser efficiency, and the continued decline in the cost of renewable energy sources. One of the key market trends is the increasing focus on developing large-scale green hydrogen projects, often referred to as "gigafactories." These facilities aim to produce hydrogen at a scale that can meet the growing demand from various sectors, including transportation, industry, and power generation. For example, the NEOM project in Saudi Arabia is one of the largest green hydrogen ventures globally, targeting the production of 600 tons of green hydrogen per day using solar and wind power. Another important trend is the expansion of hydrogen infrastructure, including refuelling stations, pipelines, and storage facilities. Countries such as Germany and Japan are making significant investments in developing national hydrogen networks to facilitate the broad adoption of hydrogen as an energy carrier. This infrastructure development is crucial for overcoming the current limitations of hydrogen distribution and enabling its integration into existing energy systems.

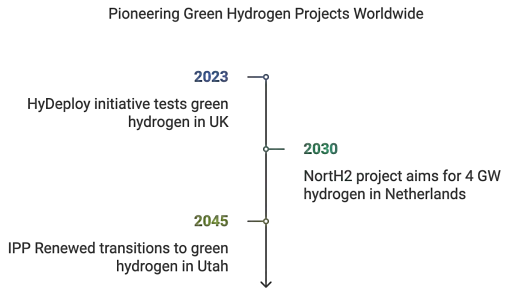
Looking ahead, the green hydrogen market is expected to experience exponential growth, with some estimates suggesting that the global market could reach $2.5 trillion by 2050. This growth will be driven by the increasing demand for clean energy solutions, the need for decarbonization across various sectors, and the ongoing commitment of governments and industry to invest in hydrogen technologies.



Powering Progress: Notable Projects Paving the Way for Green Hydrogen

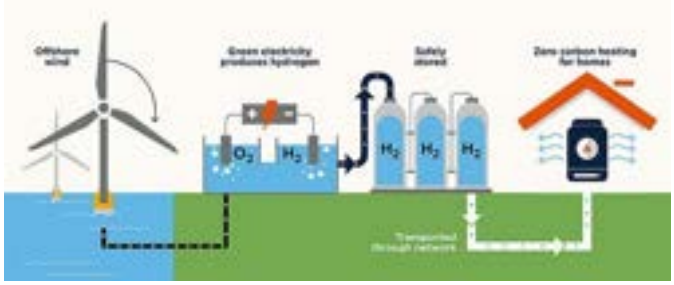
Numerous pilot projects and large-scale deployments are demonstrating the viability of green hydrogen technologies and paving the way for broader adoption. A significant pilot project in the United Kingdom is the HyDeploy initiative, which seeks to mix up to 20% green hydrogen into the natural gas grid. This project is being tested at Keele University and is designed to reduce carbon emissions from residential heating without requiring significant changes to existing infrastructure. The success of HyDeploy could lead to the widespread blending of hydrogen in gas networks across the UK, contributing to the country's net-zero targets. In the Netherlands, the NortH2 project is among the largest green hydrogen initiatives in Europe. The project aims to generate 4 gigawatts of offshore wind-powered green hydrogen by 2030, with the potential to expand to 10 gigawatts by 2040. The project involves a consortium of companies, including Shell, Gasunie, and Equinor, and is expected to play a critical role in decarbonizing the industrial sector in the northern Netherlands . NortH2 is also planning to establish an extensive hydrogen pipeline network to deliver green hydrogen to industrial users. In the United States, the Intermountain Power Project (IPP) Renewed in

Utah is shifting from coal to green hydrogen as its main fuel source. The project involves the construction of a 1,800-megawatt power plant that will initially run on a blend of natural gas and green hydrogen, with a goal of operating entirely on green hydrogen by 2045. This project is expected to provide clean energy to over 1.2 million households in California, making it one of the largest green hydrogen power projects in the world.



Strategic Alliances Driving the Adoption of Green Hydrogen

International collaboration is crucial for scaling up green hydrogen technologies and creating a global hydrogen market. Several initiatives show how working together can advance green hydrogen. For instance, the European Clean Hydrogen Alliance is a major project that brings together industry leaders, governments, and research institutions across Europe. Its goal is to speed up the deployment of green hydrogen by coordinating investments, encouraging innovation, and setting up regulatory frameworks. The alliance plans to install 6 gigawatts of electrolyzers by 2030, capable of producing 1 million tons of green hydrogen each year. Another example is the H2Global initiative, which aims to create a worldwide green hydrogen market by promoting international trade between countries that produce hydrogen and those that consume it. Led by Germany, H2Global seeks to establish long-term contracts with hydrogen producers in regions rich in renewable energy, like North Africa and the Middle East, and supply green hydrogen to Europe. This initiative is supported by a €2 billion fund from the German government to jumpstart global hydrogen trade. These examples highlight the powerful impact green hydrogen can have across various sectors and regions. As more countries invest in green hydrogen technologies and international partnerships, the global hydrogen market is likely to grow quickly, helping us move towards a more sustainable and low-carbon future. One of the biggest hurdles to widespread green hydrogen use is the challenge of storing and transporting it. Hydrogen is a light gas, so it needs to be stored at high pressure or very low temperatures, which requires expensive and complicated infrastructure. Current storage options include compressed hydrogen tanks, liquid hydrogen storage, and chemical carriers like ammonia, each with their own technical and safety issues. Moreover, the natural gas pipeline infrastructure we have today isn't fully compatible with hydrogen, meaning we either need to upgrade it significantly or build new pipelines specifically for hydrogen. Another issue is that the demand for green hydrogen is still in its early stages. Without strong market demand, it's hard to justify large-scale investments in green hydrogen infrastructure and production. On the other hand, without significant infrastructure and production capacity, it's tough to boost demand. This lack of immediate demand also affects whether industries are willing to switch to green hydrogen, as they might be hesitant to invest in new technologies without confidence in their long-term viability and cost-effectiveness. Another problem is that green hydrogen is currently more expensive to produce than "grey" hydrogen (made from natural gas) or "blue" hydrogen (made from natural gas with carbon capture and storage). The high cost of green hydrogen production is mainly due to the price of renewable energy, the efficiency of electrolyzers, and the scale of production. Although renewable energy costs have dropped a lot in the past decade, the overall cost of making green hydrogen is still relatively high, making it less competitive in the energy market.



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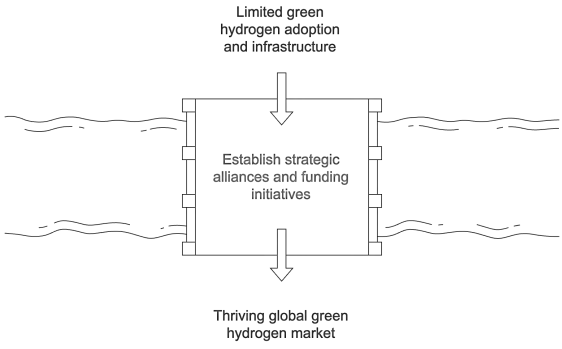
Foster International Collaboration for Green Hydrogen



Looking Ahead: The Future Outlook of Green Hydrogen in a Sustainable World

Green hydrogen holds great promise for a sustainable, low-carbon future, with its potential uses spanning transportation, industry, and energy storage. Countries like Germany, Japan, and Australia are leading the way in green hydrogen adoption through ambitious projects and global partnerships. However, significant challenges remain, including technical and infrastructure limitations, high production costs, and regulatory barriers. Overcoming these obstacles will require ongoing innovation, major investments, and supportive policies. The future of green hydrogen depends on improving electrolyzer efficiency, building strong storage and distribution networks, and promoting international collaboration to create standardized regulations and market frameworks. As these efforts come together, green hydrogen is set to play a key role in the global energy transition, helping to reduce carbon emissions and achieve climate goals.

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Smart Parking

By: Gajendra Lodhi

Abstract

Parking allocation has become a major problem in modern cities for which numerous Smart Parking Systems (SPS) have been developed. This paper aims to comprehensively study SPSs in terms of technological approach, sensors utilized, and service provided. Moreover, the paper provides a clear insight into the suitability of SPSs in various environmental conditions and highlights their advantages/disadvantages. The extensive comparison among multiple aspects of SPSs would enable researchers, designers, and policymakers to identify the best-suited SPS and understand the current trends in this sector.

Introduction

The modern world is changing rapidly which is fuelled by scientific discoveries and technological inventions that facilitate the creation of numerous smart devices, appliances, and systems. These intelligent devices, appliances, and systems include home apparatus, robots, intelligent vehicles, smart transportation systems, automation, smart sensor networks, communication systems, and various other gadgets. Through these technological blessings, human life has become more accessible, flexible, and comfortable.

Over the last few years, the Internet of Things (IoT) has utterly altered habitual human behavior by providing them with numerous facilities andcomfort options to have ease in everyday life. Equipped with an Internet connection and sensor networks, electronic devices in the digital world are connected through IoT technology. Research conducted on the prospects of IoT has figured out an exponential increase in the number of IoT devices. As per estimation, more than 25 billion IoT-based appliances will be connected to the internet by the end of 2020. IoT enables integration, interaction, and communication with digital electronic devices, sensors, and actuators which provide the required services to attain specific goals more efficiently. IoT's security uses various security measures, making it a matrix for other technological advancements.

Smart Parking system (SPS) is an essential element of the transportation system in the smart city concept. In highly compact and densely populated sectors in urban areas, scarcity of parking space is a major problem. Presently, around 30% of the vehicles on the roads of major cities are manually searching for vacant parking lots and it takes around 7.8 min to find a suitable parking lot.

Smart Mobility

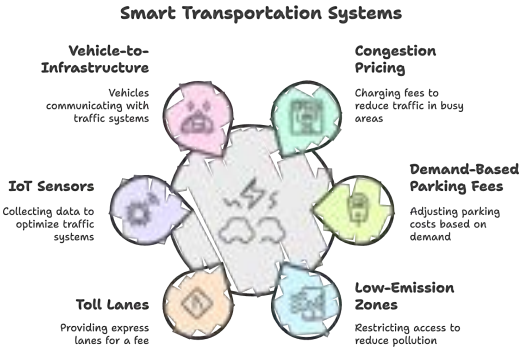
Smart cities are born at the municipal planning level when city officials make a financial and philosophical commitment to building one.

Specific to TDM, some examples of high-impact smart transportation policies include concepts like congestion pricing, demand-based parking fees, low-emission zones, and toll lanes on roads and highways.

. Connected sensors, known as the Internet of Things (IoT) can provide valuable data to city planners. Supported by smart programs, data from IoT can be used to further improve traffic flow and service performance.

• Vehicle-to-infrastructure: This strategy connects the vehicle to traffic infrastructure, which can relay information about traffic conditions and the presence of potential delays or hazards.

• Vehicle-to-vehicle: Cars and trucks can be configured to bounce data between one another in the interests of avoiding accidents and reducing congestion.



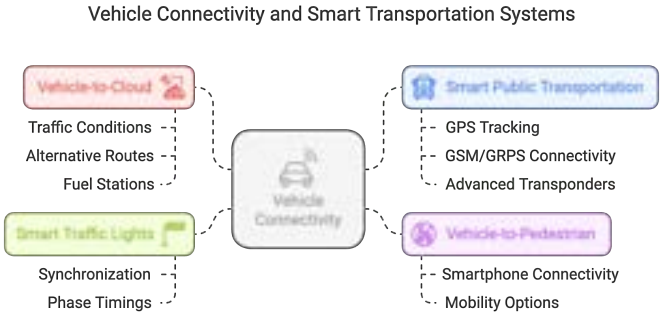
Vehicle-to-the-cloud: Connecting a vehicle to the cloud facilitates the instantaneous delivery of a wealth of information about everything from traffic conditions and alternative routes to fuel stations and available services and retail locations.

• Vehicle-to-pedestrian: In the near future, some experts think it will be common for cars and trucks to be connected to pedestrians through their smartphones. This has great potential to improve pedestrian safety. It may also offer new mobility options

• Vehicle-to-everything: In time, a comprehensive connectivity model will likely emerge in which vehicles are connected to all of the above.

Planners are already using connected technologies to optimize traffic flow, largely through the increased use of next-generation smart traffic lights. These traffic control systems enable lights to synchronize more efficiently during peak periods by altering the sequences and phase timings to meet condition-specific demands. Lights stay green on high-volume roads for longer periods, rather than using pre-set color phase timings contributes to congestion and inefficiency.

• Reducing passenger wait times and keeping traffic moving efficiently are two of the primary goals of smart public transportation for surface-level vehicles. These approaches to smart transportation use a combination of GPS tracking and GSM (Global System for Mobile Communication)/GRPS connectivity to relay real-time data to passengers, allowing them to plan their journeys with pinpoint. Up-to-the-minute precision. Advanced transponders can also communicate with traffic lights, allowing buses and streetcars to relay signals that keep lights green when they would otherwise turn red.



• Clean technology: Transportation moves away from pollution-causing vehicles to zero-emission ones.

• Flexibility: Multiple modes of transportation allow travelers to choose which ones work best for a given situation.

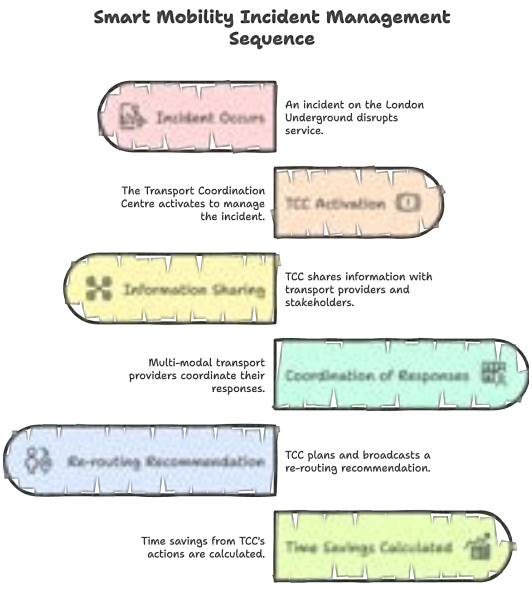
• Efficiency: The trip gets the traveler to their destination with minimal disruption and in as little time as possible.

• Safety: Fatalities and injuries are drastically reduced

• Integration: The full route is planned door-to-door, regardless of which modes of transportation are used.

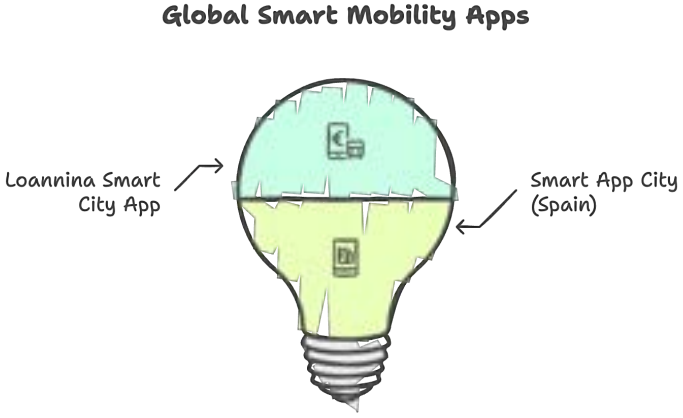
Various Examples of Successful Use of Smart Mobility

During the 2012 Olympic Games in London, the Transport Coordination Centre (TCC) facilitated the active sharing of information and coordinated incident response procedures between multi-modal transport providers (Transport for London, Highways Agency, and London Emergency Services Liaison Panel), existing Traffic Control Centres in London, Games Organisers, and their stakeholders. The value of the TCC was demonstrated during an incident on the London Underground, which caused the complete closure of a section of the Central Line for around five hours. It took 11 minutes for a re-routing recommendation to be planned by the TCC and broadcast across the remaining network and in the Olympic Park. Based on this incident, it was estimated that £86,000 in time savings benefits could be attributed to the TCC for an incident of that scale. If the TCC were to be established permanently, its intervention in one such incident of similar scale each week could contribute around £4.4 million in time savings benefits annually. The approach taken by the TCC is replicable to handle many smaller, everyday challenges, either scheduled or anticipated by analysts.



An initiative of the City of San Francisco, SF Park uses sensor technology (smart parking meters) and wireless communication technology to collect and distribute real-time information about the number and location of available parking spaces in San Francisco. SF Park operates both as an information service in its own right and also makes its data available as an API for use by public and private developers. SF Park uses demand-responsive pricing to open up parking spaces on each block and reduce circling and double-parking in congested areas. Parking fees may vary by block, time of day, or day of the week, fluctuating by no more than 50 cents per hour down or 25 cents per hour up. Rates are determined based on the lowest possible hourly rate to achieve the right level of parking availability. San Francisco set a target occupancy rate of 60-80 percent. In areas and at times where it is difficult to find a parking space, rates will increase incrementally until at least one space is available on each block most of the time. In areas where open parking spaces are most plentiful, rates will decrease until some of the empty spaces fill. Pricing changes are calculated on the basis of a transparent policy.

Mobile Applications



The various mobile-based applications used globally that are involved in some manner in smart mobility are as follows:

1. Loannina Smart City App
2. Smart App City (Spain)

Conclusion

- Automatic Signaling Management: By analyzing real-time traffic volume, and traffic loads on the connecting avenues, and providing a decision support system to regulate the signals.
- Incident Management System: Reduces incident frequency and improves response time by integrating real-time traffic volume, camera feeds, violations, emergency call boxes, etc. Inter-departmental and inter-institutional signal/alert generation facilitates prompt responses.
- Traffic Rule Violation: Monitors speed and signal violations and facilitates the issuance of e-challans to registered vehicles by interlinking traffic signal operations, the RTO database, and CCTV camera feeds.
- Variable Message Boards: Disseminates real-time traffic load information on all arterial roads and at major junctions of the city.
- Parking Management System: Facilitates monitoring and management of parking slots through the dissemination of real-time information on the availability and location of parking slots. Sensor-based monitoring of incoming and outgoing vehicles helps reduce revenue leakages.

Integration with payment gateways reduces cash handling (Request for Proposal for Appointment of Project Management Consultant [PMC] to Design, Develop, and Monitor Supervise Implementation of Works Related to All Smart City Projects Including ICT Infrastructure under Smart City Mission [SCM]). This controlled mobility system will enable the installation of multiple data collection and monitoring sensors on vehicles, facilitating various departments to intertwine and receive data related to their discipline.

Cities require models of smart mobility based on sustainable transport systems to improve economic efficiency, the well-being of citizens, and environmental health. Cities worldwide use about 80% of total energy and create 80% of greenhouse gas emissions, according to a report published by the World Bank.

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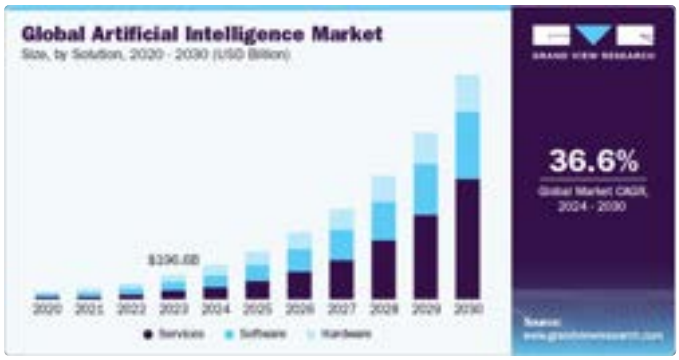
Is AI the booming future or a baby bubble?

By: Ambika Sharma

AI has become the face of the tech industry. The diversification of AI products and the hype surrounding it have helped in the rapid growth of tech companies and led to a transformative acceleration in profits and stock prices. A significant chunk of investors nowadays invest in AI due to its potential to change lives across the globe. This article explores the beginning of AI, how it is transforming the globe, and whether investing in AI would lead to a massive boom or repeat history like the dot-com bubble. It also highlights the importance of researching and knowing financial metrics before investing in financial instruments, particularly AI stocks.

Intelligence is the ability to acquire or infer information and retain it as knowledge to be applied as adaptive behavior within an environment or context. Artificial Intelligence is the intelligence exhibited by machines, particularly computer systems. It has become one of the most discussed subjects in today's world. We have seen its applications in the form of self-driving cars, automated surgery-performing robots, NLP driven chatbots, etc., and how it has helped transform every portion of our lives. The potential opportunity created by the meteoric rise of AI has prompted a wave of corporate investment in the form of stocks, bonds, mutual funds, and ETFs. There has been an ongoing debate on whether AI is the next-gen boom or a baby bubble set to burst within the next few years.The answer lies in the history of AI,the factors influencing investment in AI the similarities and differences between the dot-com era and the AI era, and whether AI will be the upcoming frontier or a destructive bubble. To find out this answer, let us dive into the world of artificial intelligence.

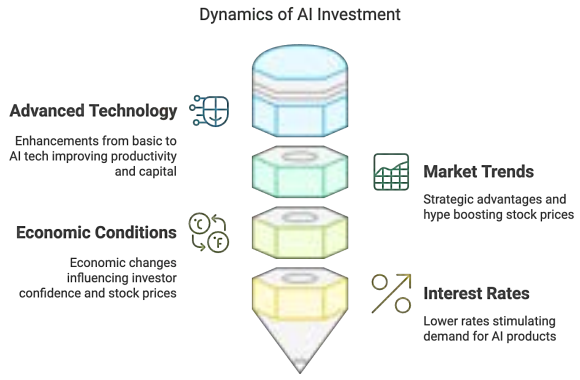


The Early Seeds of AI:
The field of AI research was founded at a workshop at Dartmouth College in 1956. The attendees eventually became the leaders of AI research in the 1960s. This led to the setting up of artificial intelligence laboratories in universities in the US and the UK in the late 1950s and early 1960s. It gained a reputation in the early 21st century, with solutions being developed for specific problems and collaboration in different domains (economics, mathematics, statistics, etc.) The dominance of deep learning started in 2012 and eventually led to AI tools being widely used by 2020. The release of ChatGPT 3.5 in November 2022 led to the beginning of today's AI boom.

Factors behind Investments in AI:

There are various financial instruments like stocks, bonds, mutual funds, ETFs, futures, etc., investment into which helps in rapid growth of our money and one can save the money earned from investing to secure one's future. The AI boom has led to tech stocks bombarding the market and a transformative acceleration in terms of stock prices and profits of leading tech ventures. Some tech companies, including the likes of NVIDIA, Microsoft, Google, and Meta, have grown substantially over the last decade and have topped as pioneers and leaders of growth in terms of innovation and creativity in the AI industry. Various factors have driven the growth of AI companies and influenced investment in financial tools, some of which are as follows:

1. **Advanced Technology:** The upgradation of technology from basic computers to AI has improved capital and productivity, created investment opportunities, and leveraged the tech industry.
2. **Market trends:** Companies leading in AI have a strategic advantage due to the diversification of AI products and services and the hype surrounding it which has attracted more investors and increased stock prices in the market.
3. **Economic Conditions**: Changes in economic conditions (expansion or recession) and management decisions by firms can influence investors' confidence, demand for investments and impact stock prices to a large extent.
4. **Interest Rates:** A decrease in interest rates has ed to reduced borrowing costs which have stimulated investments and increased demand for AI products and services, thereby helping to leverage today's AI industry.

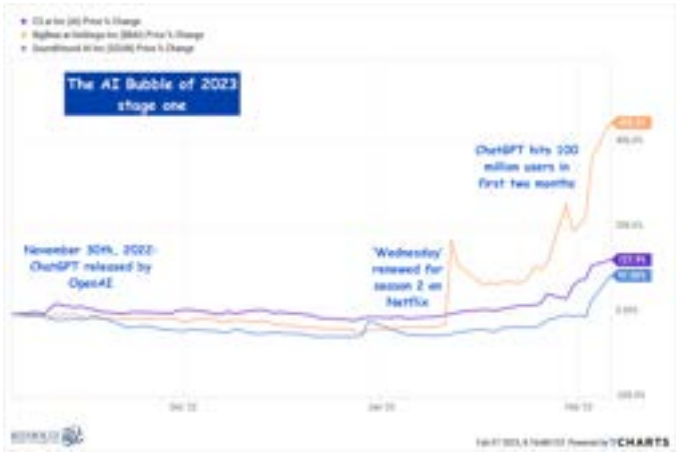


5. **Regulations:** Emphasis on consumer protection and ensuring safe human-centric use of AI has led to increased trust among consumers and the creation of a reliable environment for investors.

AI has certainly changed the world by transforming the whole ecosystem and changing the perspective of people regarding technology. It seems that AI is going to be the upcoming frontier in the next few years.

The Bubble in AI Stocks:

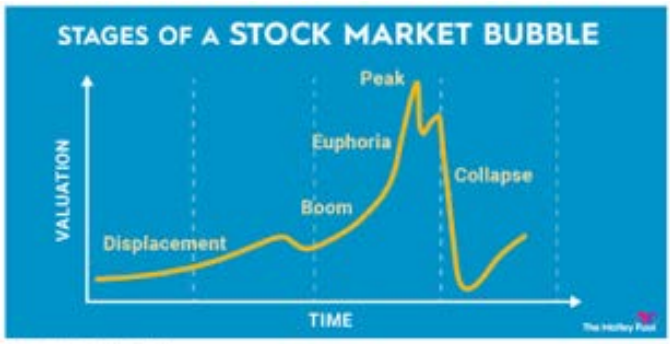
AI has become the next-gen technology and is conquering the world with remarkable transformations in several industries. However, there is another side of the coin: AI might be a bubble in the making that might burst within a few years just like the Dot-com or Internet Bubble which blew up in the early 2000s.



The Dot-com bubble was a stock market bubble wherein investments in the NASDAQ stock index soared by 800% (the peak was on 10th March 2000) and after 2.5 years, the bubble burst, with the tech index falling by 78% from its peak which led to loss of all the gains during the bubble. The bubble was driven by the adoption of the World Wide Web and the Internet in 1995 which led to a surge in venture capital (VC) investments and inflated valuations of dot-com startups. It peaked on 10th March 2000 when NASDAQ went up to 5048.62 points, more than doubof the bubble by October 2002 and companies losing $5 trillion in market capitalization.

The result was the shutdown and bankruptcy of prominent companies like Pets.com (backed by Amazon), Webvan, Boo.com, etc., and mass layoffs which generated a frenzy in the job market. As the tech market stabilized, companies like Amazon, eBay, NVIDIA, and Google gained market share and came to dominate in their respective fields. Today, the most valuable companies are in the tech space.

The AI bubble came into prominence with the rise of ChatGPT in November 2022, coupled with NVIDIA reporting disappointing Q1 earnings around May 2023 which gave rise to the generative bubble in the making. There seem to be similarities with the Dot-com bubble in terms of market volatility, overvaluation of certain companies, and the possibility of a burst in the upcoming few years.



Such a bubble can be attributed to the following factors: a blizzard of IPOs, investors borrowing too much to buy AI stocks, an unjustified surge in financial ratios (like P/E and dividend yield), and AI industry leaders disappointing investors by failing to meet expectations regarding prices, revenue, and leverage. Hence, it is important to watch out for market conditions and financial metrics to ensure that there is no inflation of numbers or a bubble in formation which can have destructive repercussions for the stock market when it bursts.

Personal Opinion:
In my view, AI has become the staple of today's tech industry and has started to dominate all industries and spaces. There has been considerable diversification of the AI product portfolio, companies are generating huge profits, financial instruments (mainly stocks) are yielding high returns and dividends, and innovation and strategic advantage are proving to be the driving forces behind the success of AI leaders. However, the overvaluation of tech stocks and the tech IPO frenzy seem to indicate that AI is just a bubble that will burst once it has peaked. I believe that AI will continue to grow in the upcoming years, however, there are chances that such growth might not be sustainable due to the constant evolution of technology and the uncertainty looming over the market. Hence, it is important to be aware of both the pros and cons of investing in AI and tech space, to be on the lookout for current conditions, and boom or bubble indicators and to keep track of numbers, management decisions, and regulations to ensure that the investment is safe and yielding high returns.

Conclusion:
To summarize, technology has witnessed drastic transformation; from the ENIAC system to the dominance of AI in today's market space. AI has transformed the world with advanced tech products and services, invention of robots, and made our planet a better place to live. However, concerns about cyber safety, misuse of AI for malicious motives, and inflated value of AI investments have continued to affect people's opinions about tech advancements and future investment decisions to a large extent. Therefore, one must do thorough research on the company he intends to invest in, focusing on its performance, its business strategies and growth plans, financial metrics like P/E ratio and cash flow, its management and leadership, the track record of the company, and whether it can keep up with the pace of regulations and laws. .

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INDIA'S STOCK MARKET IN 2030: TRENDS, RISKS, AND OPPORTUNITIES

Anik Mitra

SEBI Regd. Investment Advisor

Abstract

India's stock market is poised for transformative growth by 2030, driven by rapid digitalization, economic expansion, and evolving investor behavior. This article explores the key trends shaping the market, including the rise of retail investors, the impact of emerging technologies like AI and Blockchain, and the growing influence of sustainability-focused investing. It also examines sectoral shifts, with high-growth areas such as electric vehicles, green energy, and semiconductors gaining prominence. However, the market faces risks such as global economic uncertainties, regulatory challenges, and environmental vulnerabilities. Geopolitical developments, including India's strategic positioning in global trade and capital flows, further influence market dynamics. By analyzing these factors, the article highlights the opportunities for investors, policymakers, and businesses while underscoring the need for strategic planning to navigate risks. Ultimately, India's stock market is set to become more inclusive, efficient, and globally competitive, playing a pivotal role in the country's journey toward a $10 trillion economy

Introduction

India's stock market has transformed from a fragmented, paper-based system to a dynamic, tech-driven financial hub, with a market cap exceeding 4 trillion. By2032,it is poised for significant growth, aligning with India's goal of becoming a 10 trillion Economy, Key drivers include rapid industrialization, digitalization, and financial inclusion, supported by macroeconomic stability, policy reforms, and technological advancements like Blockchain, AI, and automation.

Economic expansion, fueled by robust GDP growth and demographic advantages, will boost corporate earnings and market cap. Regulatory reforms and sustainability-focused investing will shape trends. However, risks like global uncertainties and regulatory challenges persist. Understanding these dynamics is crucial for investors, policymakers, and businesses navigating India's evolving financial landscape.

Key Trends Shaping the Market

1. Digital Transformation & Fintech – The Role of AI, Blockchain, and Algo Trading India's financial markets are transforming through AI, Blockchain, and algorithmic trading. AI enables smarter decisions, Blockchain ensures transparency, and algo-trading becomes retail-friendly via robo-advisors. Digitalization boosts speed, cuts costs, and enhances efficiency. Decentralized Finance (DeFi) platforms and smart contracts disrupt traditional finance, while RBI's CBDCs could streamline cross-border transactions, strengthening India's global financial standing.

Emerging Technologies:

- Quantum Computing: By 2030, quantum computing could revolutionize financial modeling and risk assessment, enabling faster and more accurate predictions.

- 5G Connectivity: The rollout of 5G networks will enhance real-time trading capabilities, especially for high-frequency trading (HFT) and algorithmic strategies.

- Digital Identity Systems: Aadhaar-based digital identities could streamline KYC processes, making it easier for retail investors to participate in the market.

Chart 1: Digital Payments in India
Source:National Payments Corporation of India (NPCI)

2. Retail Investor Boom – Increasing Retail Participation and Impact
Retail investors are reshaping India's stock market through digital platforms, financial literacy, and easy access to data. Surging Demat accounts and mutual fund inflows are reducing reliance on foreign institutional investors (FIIs). By 2030, retail investors will influence market trends, sectoral allocations, and corporate governance, with social media amplifying their impact, making markets more democratized yet volatile.

Key Drivers of Retail Participation:

- Financial Literacy Campaigns: Government and private initiatives to educate the masses about investing.

- Gamification of Trading: Apps that use gamification to make trading more engaging for younger investors.

- Fractional Ownership: Allowing retail investors to buy fractional shares of expensive stocks, making high-value investments accessible.

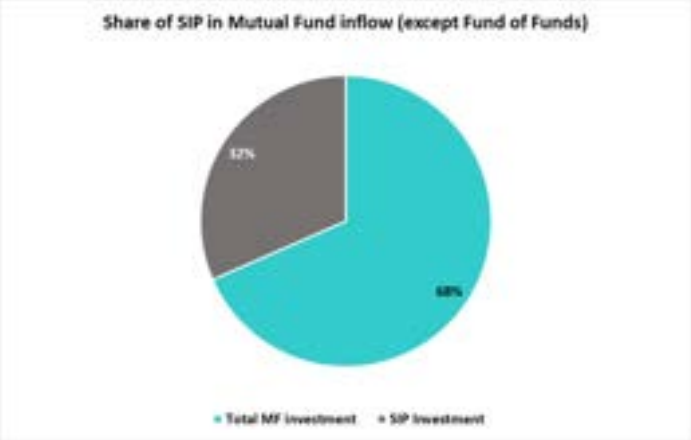

Chart 2: Share of SIP in MF investment
Source: AMFI

3. Sectoral Shifts – Emerging Sectors Like EVs, Green Energy, and Tech
India's economic growth in the coming decade will be driven by key high-growth industries:

- Electric Vehicles (EVs): India aims for 30% EV adoption in private vehicles and over 70% in commercial fleets by 2030. Government incentives and falling battery costs will accelerate this transition.

- Green Hydrogen & Renewable Energy: India's commitment to net-zero carbon emissions by 2070 has fueled investments in solar, wind, and green hydrogen.

- Semiconductors & AI: As India strives for self-reliance in chip manufacturing and AI-powered applications, new opportunities will arise for investors.

- Cloud Computing & Cybersecurity: With growing digital adoption, companies providing cloud storage and cybersecurity solutions will thrive.

Additional Emerging Sectors:

- Space Technology: India's space sector is opening up to private players, creating opportunities in satellite manufacturing, space tourism, and related technologies.

- Healthcare & Biotechnology: Advances in genomics, personalized medicine, and telemedicine will drive growth in this sector.

- Agritech: Innovations in precision farming, supply chain optimization, and sustainable agriculture will attract investments.

4. Geopolitical Influence – India's Position in Global Trade and Capital Flows
   India's stock market will be shaped by global geopolitics, including US-China trade tensions, supply chain shifts, and strategic partnerships, boosting FDI in manufacturing. Inclusion in global bond indices and improved ease of doing business will attract institutional capital. However, risks like oil price volatility, regional conflicts, and global slowdowns may create market uncertainties.

   Key Geopolitical Trends:

- Multilateral Trade Agreements: India's participation in regional trade blocs like RCEP and bilateral agreements with the EU and US.

- Global Supply Chain Shifts: Companies relocating manufacturing hubs to India to diversify supply chains.

- Currency Wars: Fluctuations in the rupee due to global currency dynamics and their impact on foreign investments.

5. Regulatory Evolution – SEBI's Role in Ensuring Transparency and Investor Protection

   By 2030, regulatory measures are expected to evolve further, focusing on:

- Stricter corporate governance norms.
- Enhanced risk management frameworks.
- Investor-friendly policies that encourage long-term wealth creation.
- Stronger ESG (Environmental, Social, and Governance) compliance, making sustainability a key investment criterion.

The increasing influence of SEBI in ensuring market integrity will contribute to a more structured and secure stock market.

Future Regulatory Initiatives:

- Real-Time Surveillance: Advanced AI tools for real-time monitoring of market activities to prevent fraud and manipulation.

- Green Financing: Incentives for companies to issue green bonds and adopt sustainable practices.

- Retail Investor Protection: Enhanced disclosure norms and grievance redressal mechanisms for retail investors.

Key Trends Shaping the Market: A Deep Dive into the Future of India's Financial Ecosystem

India's financial market is transforming through digital innovation, shifting investor demographics, and global dynamics. Key trends include:

1. Digital Transformation & Fintech – The Role of AI, Blockchain, and Algo Trading: AI, blockchain, and algorithmic trading are revolutionizing market operations, investments, and transactions, enhancing efficiency and accessibility.

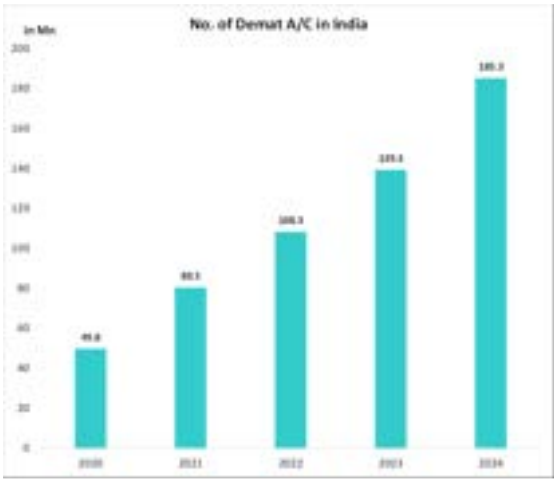

Chart 3: No. of Demat A/C in India
Source: SEBI

AI-Powered Financial Ecosystems

Artificial intelligence (AI) is transforming financial markets by enabling data-driven decisions through real-time analytics. AI predicts market trends, identifies undervalued stocks, and empowers both institutional and retail investors. Robo-advisors, using AI and machine learning, offer personalized portfolios

based on risk appetite and financial goals, making high-quality advice affordable for retail investors.

Blockchain: The Backbone of Transparency and Security

Blockchain ensures transparency, security, and efficiency in financial markets. Its decentralized, tamper-proof ledgers address fraud, settlement delays, and transparency issues. Blockchain streamlines stock market settlements, reduces transaction costs, and automates processes like dividend payments via smart contracts. Decentralized finance (DeFi) platforms eliminate intermediaries, fostering financial inclusion, especially in underbanked regions like India.

Algorithmic Trading: The Rise of the Machines

Algorithmic trading, now accessible to retail investors, executes trades with speed and precision. High-frequency trading (HFT) benefits from 5G's low latency. AI-integrated systems adapt to market changes, analyzing news sentiment, social media trends, and macroeconomic indicators for informed decisions.

Chart 4: Share of System based Trading in India
Source: Moneycontrol

Emerging Technologies: A Glimpse into the Future

- Quantum Computing: By 2030, quantum computing will revolutionize financial modeling and risk assessment, enabling faster, more accurate predictions and sophisticated investment strategies.
- 5G Connectivity: Enhanced real-time trading capabilities, especially for high-frequency and algorithmic trading, will be supported by faster, more reliable cross-border transactions.
- Digital Identity Systems: India's Aadhaar-based system is streamlining KYC processes, driving financial inclusion and expanding the retail investor base.

2. Retail Investor Boom – Increasing Retail Participation and Impact
Retail investors are reshaping India's stock market, driven by digital platforms, financial literacy, and democratized market data. This shift is making the market more resilient and less reliant on foreign institutional investors (FIIs).

- Democratization of Investing: Platforms like Zerodha, Groww, and Upstox offer user-friendly interfaces, low fees, and educational resources, leading to a surge in Demat accounts. Government and SEBI-led financial literacy campaigns are empowering investors.
- Social Media and Financial Influencers: Platforms like Twitter, YouTube, and Instagram are democratizing financial information but also introducing volatility as retail investors react to real-time trends.
- Innovative Trends:

(i) Gamification of Trading: Making investing engaging for younger investors.
(ii) Fractional Ownership: Enabling diversified portfolios through fractional shares.
(iii) SIPs in Equities: Encouraging disciplined investing.

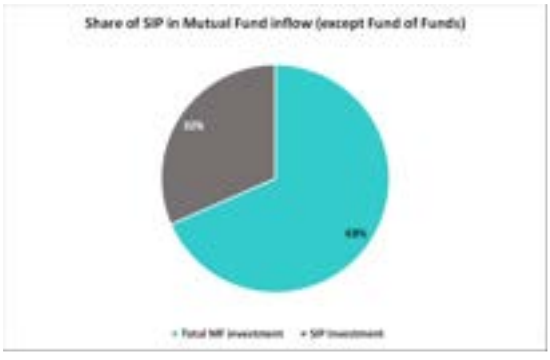

Chart 5: No. of Demat A/C in India
Source: AMFI

3. Sectoral Shifts – Emerging Sectors Like EVs, Green Energy, and Tech: India's economic growth will be driven by high-growth sectors offering unique opportunities:

- Electric Vehicles (EVs): India targets 30% EV adoption in private vehicles and 70% in commercial fleets by 2030. Falling battery costs and government incentives are accelerating growth in EV manufacturing, battery tech, and charging infrastructure.

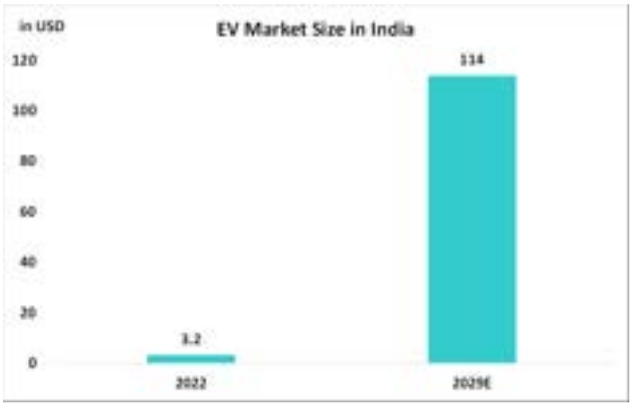

Chart 6: EV market size in India
Source: AMFI

- Green Hydrogen & Renewable Energy: India's net-zero carbon goal by 2070 is boosting investments in solar, wind, and green hydrogen, which could transform industries like transportation, steel, and chemicals.

- Semiconductors & AI: India's push for self-reliance in chip manufacturing and AI-powered applications in healthcare, agriculture, and finance are creating new investment opportunities.

- Cloud Computing & Cybersecurity: Rising digital adoption is driving demand for cloud services and cybersecurity solutions, positioning companies in these sectors for growth.

Additional Emerging Sectors:

- Space Technology: Private sector opportunities in satellite manufacturing and space tourism.
- Healthcare & Biotechnology: Growth in genomics, personalized medicine, and telemedicine.
- Agritech: Innovations in precision farming and sustainable agriculture.

Startups Driving Innovation: Startups are revolutionizing sectors like healthcare, agriculture, and financial inclusion. Government initiatives like Startup India provide tax benefits, funding, and regulatory ease, fostering entrepreneurship.

Chart 7: Indian Start-Up fund raised
Source: Entrackr

Challenges and Opportunities: Valuation concerns, regulatory scrutiny, and market volatility pose challenges, but increasing risk capital and retail investor participation offer growth opportunities.

Impact on the Market: The IPO and startup boom is making India's markets more dynamic and inclusive, fostering innovation, job creation, and economic growth.

4. Geopolitical Influence – India's Position in Global Trade and Capital Flows

India's stock market is shaped by global geopolitics. US-China trade tensions and supply chain realignments position India as an alternative manufacturing hub, boosting FDI. Inclusion in global bond indices and improved ease of doing business attract institutional capital. However, risks like oil price volatility and regional conflicts could create market uncertainties.

5. Regulatory Evolution – SEBI's Role in Ensuring Transparency and Investor Protection

By 2030, regulatory measures will focus on stricter corporate governance, enhanced risk

management, and investor-friendly policies. SEBI's use of AI for real-time surveillance and emphasis on ESG compliance will ensure a more structured and secure stock market.

Risks and Challenges in the Evolving Market Landscape

The Indian financial market, while poised for growth, faces significant risks and challenges that could hinder its progress. These include:

1. Global Economic Uncertainties: India's markets are vulnerable to external shocks, such as recessions in major economies (US, EU), which could reduce foreign investments and trigger capital outflows. Fluctuating crude oil prices, given India's heavy reliance on imports, can widen the trade deficit, weaken the rupee, and increase inflation. Geopolitical tensions and currency volatility further complicate long-term planning for businesses and investors.

2. Regulatory Changes: Sudden policy shifts, like tax reforms or capital controls, can disrupt markets and impact investor sentiment. While ESG norms promote sustainability, they impose compliance costs, particularly burdening smaller firms and creating competitive disparities.

3. Technological Disruptions: The rise of digital technologies increases cybersecurity risks, threatening trading platforms and fintech systems. Rapid innovation also raises operational costs and the risk of technological obsolescence.

4. Environmental Risks: Climate change disrupts agriculture and infrastructure, while transitioning to green practices involves high costs and potential stranded assets in carbon-intensive industries. These challenges demand strategic mitigation to ensure market stability.

Conclusion

India's journey toward a $10 trillion economy by 2032 will be accompanied by dynamic shifts in its stock market. While technological advancements and policy reforms will open up new avenues for wealth creation, investors must remain vigilant about global economic uncertainties and regulatory changes.

For long-term investors, 2030 presents a landscape filled with both opportunities and challenges. Strategic diversification, sectoral investments, and a keen understanding of macroeconomic trends will be key to navigating India's evolving financial ecosystem. With careful planning and informed decision-making, investors can capitalize on the country's growth trajectory and secure sustainable wealth creation for the future.

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INVESTING & STARTUPS

Investment and Startup

By: Khushi Yadav, Jagrati Tewari and Kritika Joshi

ABSTRACT

This paper explores the topic of investment and startups in India, focusing on the role of venture capital, angel investors and government initiatives in driving startup growth. The study highlights key challenges Indian startups face in securing investments including market competition and regulatory hurdles. The findings provide insights into the evolving startup ecosystem in India, emphasizing the importance of strategic investments in fostering innovation and economic development.

INTRODUCTION

The idea of startups originates from the concept of entrepreneurship. Entrepreneurship is basically when a person with an idea turns it into a business and creates economic value out of it. An entrepreneur works with a vision to proliferate with minimum investment and high risk while bringing disruption in the market simultaneously. Similarly, startups are small ventures with limited capital and fewer founders. Infosys is believed to be one of the earliest startups in India. Founded in 1981, by merely seven founders in Pune, Infosys is today one of the leading companies offering digital services and consulting globally. Initially, they used Narayan Murthy's house as their office where Murthy's wife worked as a cook, clerk and programmer. Startups are often launched to solve an existing problem or merely as a flash of insight into certain aspects. They exist in almost all sectors including technology, education, health, e-commerce, social causes, etc. They can also be defined as a new way of doing business or improvising the existing methods of doing business by leveraging new technology.

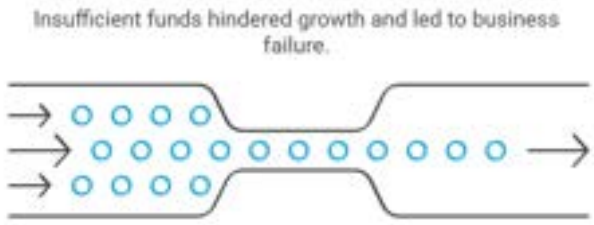
Characteristic features of Startups can be defined as follows-

- Asset-light: As startups have less number of founders ranging from 2-5 or more, they generally finance their venture themselves or may attempt to attract investment from external sources before going all exclusive in the market. They may opt for funds from friends and family, crowdfunding or loans from financial institutions.
- Mono tasker: Startups focus on only one aspect of business, often something that they are good at. Rather than multitasking, they take up one part of the value chain to devise effective methods for the same.
- Focus on core strengths: Startups focus on their core strengths and to avoid any unnecessary hassle, they outsource the rest with the help of technology.

- Problem-solving approach: Rather than a profit-making motive, they focus on solving the problem of customers. They devise tailored solutions for existing problems in the market which have the potential to create significant business opportunities and impact.
- Uncertainty: Startups are associated with a high risk of failure as their success completely depends on customer preferences and perceptions. Even if they succeed initially, they may fail after some time if a new idea overpowers their business.
- Specialized and small team: Small teams are involved in developing a startup, where every person is skilled and specialized in their job role which helps maintain their standard and provides a good know-how as well as working environment.

- Scalable and fast-growing: If the idea turns out to be good and effective, it can be operated on a large scale and generate high profits. The mindset involved in a startup is to analyze the market and customer needs before developing a product. The manufacturer first tests the potential of the product by presenting it to customers and based on the respective feedback initiates further production. Also, their success depends on 'how one sells' more than 'what the product looks like'. They work on the motive of 'sell before you build'. With startup comes innovation. Innovation meaning 'developing something new' can be done in various dimensions. Startups work on innovation in product, design and business models. While many startups attain the heights of success at an early stage, others fail to do so even after sustaining in the market for quite some time.

There can be various reasons for the failure and success of startups as identified:
The major reason why startups fail to stand in the market is inadequate funding. They often rely on investors for funding and if their solution or business idea is not found appealing, the investors start backing off, leaving the venture with no source of funding eventually. 29% of startups in India fail due to running out of adequate funds to run their business. Apart from this, lack of market need is why almost 42% of the startups fail because they innovate a product that is not necessarily needed by the customers. They either fail to identify the problem that needs to be solved or their solution does not turn out to be good enough. Other reasons may include ineffectual marketing where startups fail to address the public about the significance of their product and since customer feedback is an important element for further improvements to the product, when startups are unable to make necessary improvisations in their product in light of customer satisfaction, it leads to their eradication from the market. Even today, many startups in India irrespective of the fact of how attractive their product offerings may be, are on the verge of shutting down or operating continuously under loss. For instance, Dazo, a Bengaluru-based food startup had to close down its operations in 2016 due to lack of funding and inability to tackle fierce competition. While Dazo's initiatives to simplify



meeting customer needs for quality home-cooked meals with ease of online ordering gained attention initially, a shortage of funds led the business to fail. Not all startups fail, in fact, many of these are thriving on a large scale. Reasons for such growth in startups are identified as:
India's entrepreneurial system has seen a major development over the last few decades owing to government initiatives and policies to

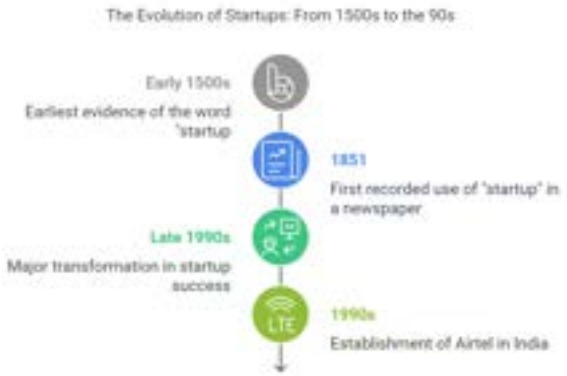
support entrepreneurship, such as the Startup India campaign (2106), which is based on three pillars:

- Funding support and incentives
- Industry-academia partnership and incubation
- Simplification and handholding

This program aims to support entrepreneurs, create a favourable environment for
and help them build a strong startup ecosystem in India. This initiative has helped India's startup landscape grow rapidly making the country the world's third-largest startup ecosystem. Other aspects include technological advancements that enable businesses to simplify their working processes and grow efficiently while expanding their customer base and most importantly the rapid rise in the number of incubators and the trend among youth to engage in entrepreneurship is what's fuelling the growth of the startup landscape in India. While talking about leveraging technology, how Zomato managed to transform the food industry with technological innovation cannot be ignored. Zomato, initially named Foodiebay, brought about a concept of ordering food online from their customer-preferred restaurants. Today, Zomato delivers across PAN India serving over 750+ cities in India.

HISTORY OF STARTUPS

To begin with the history of startups, we first need to know the origin of the word "startup". The earliest evidence of the word startup being used was in the early 1500s. The history of startups dates back to the 18th and 19th centuries when the first recorded word "startup" was in a newspaper article in 1851. The word startup, back in the day, was described as a new business or enterprise but if we talk about startup now, it is a word with a completely different meaning. The word startup is now characterised by innovation. The US saw a huge shift in the industry when several new businesses were founded in the early 19s and during the period of World War II. The US government started to invest more in such businesses to enhance innovation, research and development in the creation of new technology. The major transformation in the history of startups was seen in the late 1990s, earlier than that many startups came and had faced immense downfall. That was the period when the entrepreneurs started to realise where they were lacking behind and then they came up with better business models in the late 1990's. To make a startup successful, an innovative idea was needed that could cure the problems with a better solution. The next progression that was needed to make a startup successful was adequate investment which would help them to transform their idea into a product that could be used by the people as a solution and also the use of technology in such an innovative way to make the product available for the people at their doorstep. The very best example of this could be Amazon. The founder of Amazon, Jeff Bezos, understood the inefficiencies and limitations of traditional bookstores that required people to visit the bookstores physically to just read a book and started a company that could provide them with their desired books at their doorsteps. The Indian startup ecosystem saw a major modification in the 80s with many IT companies like TCS, Wipro, etc which also brought a global economic change then in the 90s India's biggest telecommunication company Airtel was set up which became a business worth a billion in the early stages. This was just a gist of the history of startups, the journey of startups is a testament to the relentless pursuit of innovation in a world where constant is the only change.



MSME V/S STARTUP

When discussing startups, people often get confused between the terms MSME and startup. To avoid this, it's important to understand both the terms well. Let's begin with MSMEs. MSME stands for Micro, Small and Medium enterprises which can be defined as those enterprises that are owned by individuals, households or small entity owners, with confined limits of annual turnover, total wealth and employment. The Government of India defines MSMEs as those manufacturing and service-rendering enterprises where for Micro enterprises the investment in plant and machinery or equipment should not be more than Rs. 1 crore and the annual turnover not more than Rs. 5 crore, for Small enterprises the investment in plant, machinery or equipment should not be more than Rs. 10 crore and the annual turnover should not be more than Rs. 50 crore and for medium enterprises the investment in plant, machinery and equipment should not be more than Rs 50 crore and the annual turnover should not be more than Rs 250 crore. As we have already discussed what a startup is, let's give you a brief overview of it. Startups can be defined as those young companies that bring a unique product or an innovation or use of technology in such a manner that brings disruption in the market. Some often refer to startups as "disruptors" too.

Now the main question is why are people more interested in startups than MSMEs? The start of both MSME and startup makes them different i.e. generation of the Idea. In a startup, the idea typically changes or disrupts the old conventional pattern of society whereas the basic idea behind MSMEs is to earn profit andthis leads to lower business risk in MSMEs as compared to startups, for instance, the old grocery stores near our house which are nearly about 30 or more years old are still at same places with their old profit earning strategies. The startup Zepto which was founded in 2021 during the pandemic period, as a quick commerce platform offering 10-minute grocery delivery is now India's unicorn with a valuation of USD 3.6 billion. As they came up with a different idea that helped millions of people during COVID-19, the idea of ultra-fast delivery to customers made the startup successful. The entrepreneurs of startups have the mindset or vision of "ruling the world" whereas MSME owners have a vision of stability, sustainability and wealth in the near environment. Though startups have higher risk factors and a lesser potential for growth than MSMEs, if the startup has a better roadmap that could solve the problems in the market, and knows how to grab an opportunity and reap the benefits of it then the success of the startups become unstoppable.

WHAT ARE THE GOVERNMENT INITIATIVES FOR STARTUPS

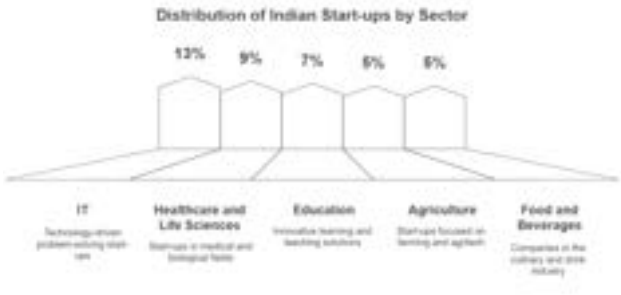
As India has now become the world's third-largest startup ecosystem, the government of India has been working tremendously to help the ecosystem flourish more. From promoting the startup culture by bringing new schemes onboard to launching their website START UP INDIA and providing funding to various startups which helps them to grow, the Government of India has been paving the path for startups through their strategic initiatives which not only encourage innovation in the country but also help in generating employment, in development of people as well as the economy.

The Government of India launched #startupindia, a flagship initiative to cultivate the startup culture more and to build a strong and inclusive ecosystem for entrepreneurs in India. As per the recent records by the online portal of Startup India, 4000+ startups have been benefited by the central government, Rupees 945 crores of funding has been enabled by various schemes launched by the government of India, schemes like the Electronics Hardware Technology Park scheme launched by the Ministry of Electronics and Information Technology, the Next Generation Incubation scheme (NGIS) is launched to fulfill the objectives of national policy on software products with a total budget outlay of Rs. 95.03 crores and aims to support around 300+ tech startups in locations like Prayagraj, Jaipur, Patna, Lucknow, Mohali and many more. The Startup India initiative also focuses on building proper infrastructure for entrepreneurs to help them focus more on innovation and providing the best solution for the problems prevailing in the market. As India is where bold ideas flourish and dreams are fulfilled, the Government of India is now focusing on promoting entrepreneurial skills in the students by building incubation centres all over India. The government has also built 31 innovation centres, 15 startup centres, 15 technology business incubators, 7 Research parks and 500 At Tinkering labs.

Many startups have been recognized under the Startup India initiative. Around 6398 applications have been received so far, 4127 startups have been recognized, 1900 startups are eligible for the tax exemption (under which 900 have been processed and 1000 are pending) and 69 startups are given tax exemptions.

One of the most supportive schemes by the government of India is the Atal Incubation Mission (AIM), which focuses on fostering innovation by financing firms with Rs. 10 crore over a period of 5 years in the sectors of agriculture, education, health, etc. and the Startup Another initiative India Seed fund Scheme, which was launched to assist early startups. Under this scheme 1000+ startups have been provided over Rs 177 crores and over Rs. 5 crores will be provided to selected entrepreneurs. Some of the most famous startups that have been funded under the Startup India scheme like Ola Cabs, Swiggy, ByJu's, Paytm, etc. This was just a small brief about what the government has been doing to enhance the startup ecosystem in India.

FUTURE OF STARTUPS IN INDIA:



As we have discussed about the history of start-ups and investments now we should go for the future of start-ups and investments. The future of start-ups and investment in India looks promising.

Let's first discuss the present scenario of start-ups and investment in India. India has recognized start-ups solving problems in 56 diverse industrial sectors with 13% from the IT sector, 9% from healthcare and life sciences, 7% from education, 5% from agriculture and 5% from food and beverages. On 3rd October 2023, India became the 3rd largest favourable ecosystem for startups. Among middle economies, India secured 2nd position in innovation quality with top positions in the quality of scientific publications and the quality of its universities.

Exponential growth has been seen in the past few years of the Indian start-up ecosystem from 2015-2022 which is around 15 times increase in total funding, 9 times and 5 times increase in number of investors and incubators respectively.

India has around 111 unicorns with a valuation of $349.67 billion and among these 111 unicorns, 45 unicorns with a total valuation of $102.30 billion were born in 2021, in the year 2022 around 22 unicorns were born with a total valuation of $29.20 billion. In the year 2023, we only saw the emergence of Zepto (India's fast grocery delivery app).

According to the YourStory report 2, H1 2022, 891 funding deals were recorded which were around 82.8% higher in comparison to H1 2021 (541 funding deals).

Leading sectors that invite funding include FinTech, EdTech, E-commerce, Social Networks, FoodTech, Logistics and Supply Chain, Media and Entertainment, D2C Brands, SaaS, and HealthTech. FinTech, EdTech and E-commerce and the leading investors are Sequoia Capital India, Tiger Global Management, Kunal Shah, Better Capital, Inflection Point Venture, Let's Venture, Accel, Blume Venture, 9unicorns, and Alpha Wave Global.

Investment and Start-ups have fuelled the growth of the Indian economy as the number of firms has risen sharply in the past few years. The future of start-ups and investment in India looks very promising as the Government of India through various initiatives supports the talented youth of the country to engage in entrepreneurial activities. Moreover, the emergence of digital technologies and internet access made it painless for entrepreneurs to reach wider audiences and disrupt traditional industries.

Through the initiative of digital India, the adoption of smartphones and the internet in India especially in rural areas is effortless and is further opening up new opportunities for startups to reach a new set of untouched customers due to lack of accessibility to the internet. This has led to the growth of some successful startups for instance PayTM, Ola, Flipkart, etc. By launching favourable initiatives for startups, the Indian government is trying its best to create an ecosystem for startups that helps them sustain for a longer period. Some initiatives taken by the Indian government are the Startup India Seed Fund scheme, Startup India initiative, Atal innovation mission, software technology parks, eBiz portal etc. Among all the initiatives of the Indian government, Startup India is one of the most popular initiatives which was launched in the year 2016 and it helps the startups in gaining various tax exemptions and funding. The government has also come up with the idea of increasing incubation centres and accelerators to support and mentor new startups.

These initiatives have helped a lot in creating a positive environment for entrepreneurs in our country. Although the government is trying its best to support startups and investments still they are facing major challenges to grow in the Indian ecosystem. Among the major challenges that an entrepreneur and an investor faces is the limited funding available to them especially during their inception period when they are in great need of funds. For instance, if startups

plan to go to traditional banks for a loan usually they would not get that because traditional bank loans are simply not designed for the fast-paced and unpredictable world of building a new startup from the ground. This is the main reason why 99% of start-ups fail to access funds.

Another challenge that startups and investors usually face in India is a complex regulatory environment. Due to several laws and regulations for Investors and startups in India, they have to invest a lot of time to comply with these laws and regulations and sometimes while complying with them they incur a hefty amount on the entrepreneurs who are still struggling to get funding in their early stages of development and this results in declining or slow growth of their startup. Although the government is working to simplify the compliance procedures for startups, still there is a long way ahead to make the regulatory environment more favourable for startups. Infrastructure plays a vital role in the development of a startup and when a country lacks in infrastructural development it plays a major setback for that country. In the case of India, although we have achieved great infrastructural development in urban areas, somehow we fail to achieve that in rural areas. Due to this, there is limited access to very basic services to the population which acts as a barrier to the growth of startups operating in those areas. Although the government is trying its best to improve infrastructure in rural areas, infrastructural development is a long-term process that will require significant investment.

FINDINGS

As time passes popularity of startups is increasing and people tend to move towards startups and take more and more risks. Points contribute towards the growth of startups and the preference for investment among youth:

- Startups are more capable of adapting to market changes and can disrupt the traditional market.
- Today's youth prefers a creative and innovative work environment and go for leading something that is their own.
- Startups often grow at a fast pace allowing employees to gain experience in a short period of time.

There are some reasons as well why investors and startups fail in India. Those reasons are:

- Sometimes startups go for the wrong product which results in their failure. Proper market research is required before manufacturing and launching the product. Entrepreneurs must know whether the market is ready for that product or not.
- Doing too much at once also leads to the failure of startups. As we know startups have limited money, resources just like any other company. Thus if startups go for diversifying their product too early then there might be chances that the successful product doesn't get enough resources which leads to their demise.
- Although the government is trying its best to provide enough funds to startups somehow, they are still lacking and this results in the failure of startups.
- The copy-paste approach leads to the failure of investors in India as sometimes investors go for some famous entrepreneur's story and try to copy that.
- The complex regulatory landscape of India is one of the reasons for their failure.

Poor capital allocation (overfunding/ underfunding) also leads to the failure of investors and startups.

At an early stage, investors lack patience and expect quick results from their investments which is not a good sign. Therefore, they exit too early by selling their stakes and miss out on the potential of that investment.

CONCLUSION

The landscape of startups and investment in India is changing at a rapid pace and is driven by a combination of innovative entrepreneurship, supportive government policies, and an increasing flow of venture capital from domestic as well as international markets. This research highlights that while India presents significant opportunities for startups across various sectors, challenges such as access to limited funding, Indian regulatory complexities, and market competition remain persistent and to sustain the growth of its startup ecosystem, India must continue to focus on fostering an environment that encourages innovation and risk-taking while also ensuring that investment mechanisms are accessible and efficient.

The role of investors is crucial in providing capital and networks that can help startups scale successfully. As India continues to mature as a global startup hub, a balanced approach is required that aligns the interests of both investors and entrepreneurs which will be the key to driving long-term success and economic development.

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Success Blueprints: Essential Entrepreneurial Advice for a Competitive Market

By: Manan Mahajan

Abstract

As anybody who has founded a business can attest, entrepreneurship is not the polar opposite of day jobs or the right careers; it (like any good destination) is an adventure. — A challenge-ridden opportunity to change lives and industries throughout your career by definition alone. To be successful in this field one needs more than a unique idea, but a clear understanding of market dynamics, strategy foresight, and financial acumen coupled with being mentally locked & loaded for the uncertainty ahead. This paper covers the founding pillar of any kind of entrepreneur paving the way for invaluable insights on how to invest dreams into logical business possibilities, sourcing relevant funds if required, and constructing a unit that epitomizes strength in unity demonstrating adaptability indispensable towards evolution through marketplaces.

Using lessons learned from real-world case studies, personal experiences and industry glimpses the idea is to arm entrepreneurs with information on how they can better position themselves to succeed in a competitive startup landscape. From ideation to product-market fit and from go-to-market strategy execution to scale up; the insights provided in this article will guide you into making wise decisions that either help mitigate risks or enhance your chances of sustainable long-term success.

Introduction

Innovation has become the key driver for economic growth in today's world hence making entrepreneurship one of the powerful forces that drive industries and create jobs (Christensen,1997).

However, from conception to mature business life there are numerous challenges that hinder this development. It is common to hear about start-ups failing because they were not well prepared, did not execute their plans properly, or failed to adapt quickly when conditions changed.

The entrepreneurial voyage is inherently hazardous but well-informed choices as well as strategizing can significantly increase chances of success. The following article provides direction for new entrepreneurs by highlighting the critical steps necessary to build a sustainable and successful business.

Literature Review

Theories on entrepreneurship underlie the understanding of what causes success in start-ups. Eric Ries, in his Lean Startup methodology, proposes making a Minimum Viable Product (MVP) and using feedback from customers to iterate it, thus reducing waste and optimizing learning (Ries, 2011). According to Clayton Christensen's idea of disruptive innovation, these firms can create innovative products that can target niche markets and hence challenge incumbents (Christensen, 1997).

However, despite such theories, most start-ups still fail. The top reasons for startup failure were identified by a CB Insights report as no market need (42%), running out of cash (29%), and not having the right team (23%). Entrepreneurs must be aware of these traps in order to avoid common mistakes and build a resilient business.

Research Methodology

The findings of the current article are based on an analysis of both the existing research literature and industry publications and case studies. Furthermore, accounts by founders of successful companies, or venture capital investors offer real-life views of the challenges of operating in the context of the system. Presentation aids including diagrams of business model canvases and graphs showing the funding process can be used to create a better understanding.

Entrepreneurial Advice

1. Begin With a Solid Business Model

The strong business model is one of the fundamentals of any young business. Moss defines it as describing how a firm generates and delivers value and obtains profit from it. The Business Model Canvas is a strategic management tool that seeks to assist the entrepreneur in visualizing aspects of the business model such as the customers, value proposition, revenue streams, and key activities (Osterwalder & Pigneur, 2010).

Case Study: Airbnb

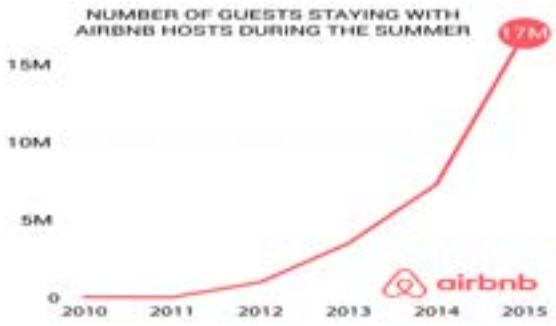

Figure 1: Graph of Airbnb's Growth

The success of Airbnb can be attributed to the strategies that have changed the ideas of the hospitality business. Exploiting the sharing economy concept, Airbnb developed an environment that brought homeowners, who were looking for temporary occupants to their houses, and travellers in search of cheap places to lay their heads at one point. This approach not only filled a niche in the market but grew extremely quickly because its costs were low and its customers happy.

There is a considerable emphasis on the entrepreneurial jumps, where an early checking of the business model is relevant. It is about doing your homework and testing the assumptions with the help of MVPs to avoid costly errors in the end.

2. Secure the Right Funding

Access to capital is a vital factor of any business uniquely small businesses, and this is because. The following are the options open to entrepreneurs and startups, bootstrapping; Angel investment; Venture capital; and Crowdfunding. Every type of funding has its strengths and weaknesses, and the selection should be based on the company's development plan and mission statement.

Case Study: Slack

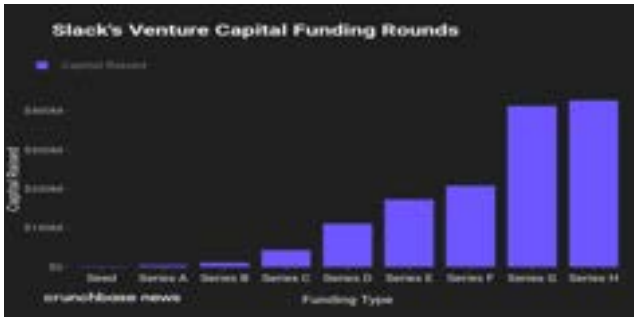

Figure 2: Graph of Slack's Funding Rounds

Slack which is a business communication tool is an example of a business that sourced its first capital through venture capital funding (Slack, 2020). The firms' founders looked for investors where apart from money, the investor would bring inside knowledge and connections. Slack has a duty to expand quickly and cover the market sufficiently in this partnership.

It also becomes important that the entrepreneurs learn how best they can present the business so as to be sold. Basically, this means that apart from a good story, the plan has to demonstrate that the market is interested; further, the plan has to demonstrate that the firm can make money; above all, the firm has to demonstrate it can become a big firm.

3. Build a Resilient Team

According to Catmull (2014), there is one primary resource that trumps all others that a company could possess as a startup. The cutting-edge selection process should allow the company to select employees who can complement each other through their proficiency and be motivated by the company's goals. The kind of team that is sustainable is the one that can work around hard knocks, prompt change, and steer the company to success.

Personal Insight

Among many things, I realized that the team that is initially set up can be the biggest asset or the major disadvantage in a start-up. Being involved in a start-up, I encountered several issues, more so at the initial stages; role conflict. Nevertheless, due to the restoration of the team hierarchy and increasing transparency, the company learned to deal with the circumstances and eventually attract rather large financing.

In its stead, the company culture should be integrated in a manner that benefits everyone with more of the following encouraged among the entrepreneurs and employees; teamwork, innovation, and persistence. Making certain that the organizational members spend considerable time together performing many beneficial tasks as well as making certain there is communication doings whereby the employees can express themselves would be advantageous to the employer in motivating the employees to work for the team cohesively.

4. Adaptability and Mindset of Growth

Startups are fast-paced and hectic. Entrepreneurs should be ready to pivot their business models or strategies based on the feedback from the marketplace and changing conditions. This adaptability can be the ultimate foundation for longevity.

Case Study: Netflix

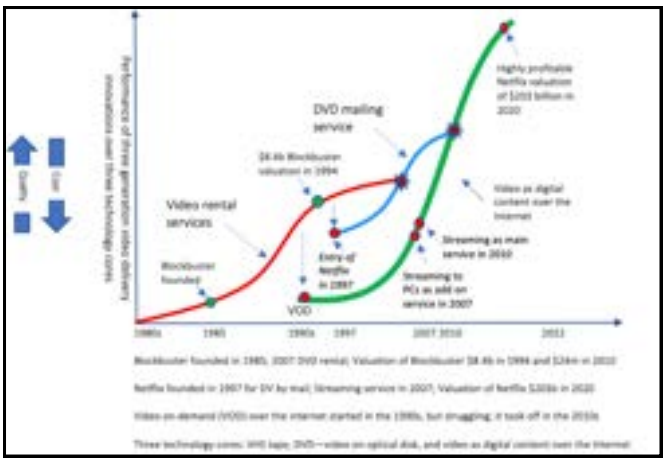

Figure 3: Netflix's adaptability led to its success

Originally a DVD rental service, Netflix switched to online streaming as customer trends changed. Netflix was able to adapt which has seen it not just survive, but excel into a global entertainment powerhouse (McCord, 2014).

Challenges are opportunities for learning — you want to employ a growth mindset here. In an ever-changing market, entrepreneurs need to be in the know about what is going on with industry trends alongside advancements in technology as well as how new generations are interacting and making decisions. Competing requires actual, continuous learning — from networking to reading up on your industry and going through mentorship programs.

5. Focus on Customer Experience

In such a competitive market, Customer experience is a key differentiator. Businesses that focus on the satisfaction of their clients are often able to build a solid client base, in turn leading to more repeat business and referrals.

Case Study: Apple

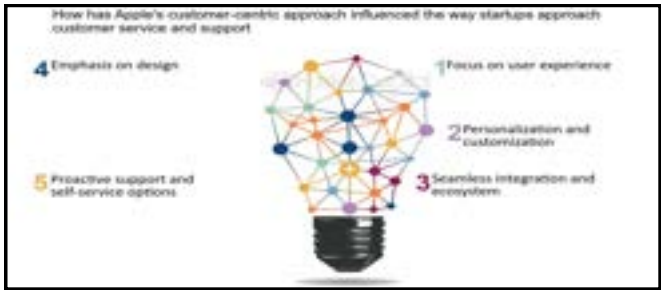

Figure4:Apple focuses on customer experience

The core of all is Apple and its dedication to making customer experiences sit at the heart of everything they do (Gallo, 2019). Apple takes every single touchpoint into account, from product design to customer service in order that the user experience is flawless at each point. That has made for a highly loyal customer base with customers who feel like fans of the brand.

Regular engagement with customers, mining feedback, and tweaking to make products better is a sword entrepreneurs should hone. Leveraging this to build a brand that has value and meaning in the lives of customers can provide some real legs for success.

6. Strategic Planning and Execution

Although strategic planning is necessary, it all comes down to execution. Developing a clear roadmap with near and far goals, including the steps required to achieve them is crucial for entrepreneurs.

Personal Insight

The OKR (Objectives and Key Results) framework is a good way to do this. It starts by articulating bold goals and measurable key results that align the team on a common purpose. Staying on point by periodically assessing the business and making proper changes as required.

Revisiting and fine-tuning the strategy on a regular basis again ensures that it is agile, and adapts to what happens in practice both at the level of business performance as well as changes arising from market forces.

Results/Discussions

This article offers advice that is based on both theoretical frameworks and real-life experiences, hitting a sweet spot right in the middle. The case studies and anecdotes demonstrate how entrepreneurial success is more about the ability to pivot strategically, adapt quickly, or remain customer-focused at all costs. The usage of visual aids to explain a statement as simple as for example – 'business model' and 'funding stage' through graphs would enrich our understanding and boost the value reciprocity that this article can unleash.

Conclusion

Being an entrepreneur is hard work, but when you know the tricks of the trade — it can be satisfying and gratifying as well. Entrepreneurs who focus on critical aspects such as business model development, funding, team building, and adaptability among others will have a greater chance of being successful. Still, it is important to never lose sight of the fact that every startup has been built quite differently, and while some general principles may apply across different startups they are not universal rules set in stone.

Entrepreneurs will have to be able to apply different strategies and learn along the way while adapting to challenging circumstances.

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REITs: Resurgence or Relapse?

By: Siddharth Taparia & Ved Khemka

ABSTRACT

Ever wondered if you could own a piece of prime real estate as easily as accessing cloud computing resources? Real Estate Investment Trusts (REITs) offer investors just that. Similar to the flexibility of cloud computing, REITs allow investors to participate in the real estate market without the complexities of direct property ownership. By pooling funds from multiple investors, REITs invest in a diversified portfolio of real estate assets, providing investors with exposure to the property market. SEBI (Securities and Exchange Board of India) mandates that at least 80 percent of an REIT's assets must be finished and must generate income. They must also distribute 90 percent of their Net Distributable Cash Flow (NDCF) to their shareholders. When compared to traditional real estate investments and other asset classes, REITs have exhibited their unique advantages. Various risk factors, including interest rate sensitivity, tenant concentration, and macroeconomic conditions, are at play as the key determinants of REIT performance in the Indian context. Additionally, REITs also face a turbulent framework, with regulatory changes impacting investor confidence and market growth. With a vast array of stakeholders including vendors, architects, governments, and promoters, Indian eyes are on REITs and their performance may have pervasive effects on the economy.

Keywords: REITs, Real Estate, Securities, Denotification, SEZs.

BUILDING BLOCKS

REITs in India have been a recent phenomenon, but they have fundamentally altered the trajectory of real estate investment in the country. (Risher, 2024) The concept of REITs began to take shape in India around the mid-2000s, inspired by their success in Singapore. However, SEBI did not create a formal regulatory framework for REITs until 2014. The foundation for REITs to function in the Indian financial markets was created by these rules and laws, which made them a feasible option for investors. The Indian REIT market is just five years old as an asset class, with Embassy Office Parks REIT (Embassy REIT) being the first issue in late March 2019. The issue was oversubscribed by 2.57x. CRISIL has been constantly assigning a rating of 'CRISIL AAA/Stable' to the non-convertible (NCDs) of Embassy REIT. (Embassy, 2024)

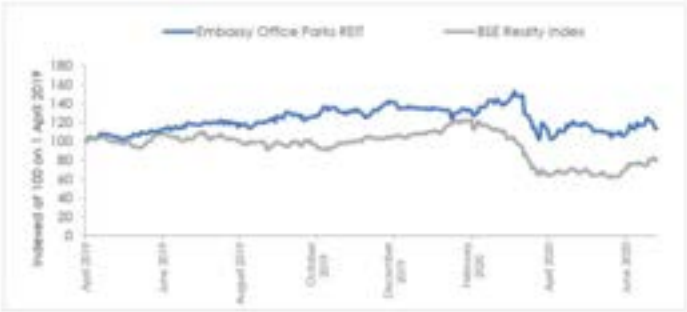


Figure 1: Embassy REIT vs BSE Realty Index
(Source: CNBCTV18)

Figure 2: Drivers of Retail REITs
(Source: Axis Capital)

More REIT launches in India were made possible by Embassy REIT's successful listing and subsequent outperformance. As of 2024, there are three more listed REITs. With a market capitalization of more than $10 billion, REITs collectively possess 115 million square feet of commercial office and retail space in India. The four REITs have generated approximately $3 billion in equity capital through primary issuances, including initial listings and follow-on offers, and have disbursed close to $2 billion in just five years. (Risher, 2024)

As per the Indian REITS Association (IRA), over ₹1.4 trillion worth of assets are being cumulatively managed by the four listed REITs on the Indian stock exchanges, serving more than 240,000 unitholders. With an approximate distribution of over ₹180 million, these REITs are on their march towards reaching the ₹1 trillion mark market capitalization soon. (Indian REITs Association (IRA), 2024).

CASE STUDY: RETAIL REDEMPTION

Nexus Select REIT, India's sole listed retail-focused REIT, stands out in the Indian real estate market. Unlike commercial REITs, which primarily focus on office spaces, Nexus specializes in retail properties. This diversification provides a hedge against fluctuations in office leasing demand, making it a more resilient investment option.

Nexus manages a portfolio of 17 malls across 14 cities, totaling 10 million square feet. Despite concerns about footfall in physical retail, Nexus has thrived due to India's growing consumer economy. The REIT's tenant mix includes major global brands, offering strong leasing stability and attracting a steady stream of visitors.

Nexus Select has achieved an average occupancy rate of 97 percent in FY24, indicating strong tenant demand and a healthy occupancy level for its retail properties. However, they face a tough competitive environment marked by the rise of e-commerce and the potential impact of economic downturns. Moreover, the commercial REITs are also working on developing a retail portfolio for themselves. (Babar, The Economic Times, 2024)

CASE STUDY: THE BROOKFIELD BLOCKBUSTER

Brookfield REIT is a key player in India's commercial REIT market, focusing primarily on office spaces. Unlike Nexus Select REIT, which specializes in retail properties, Brookfield's portfolio revolves around Grade A office spaces, catering to India's expanding corporate sector. This focus provides stability through long-term leases with multinational corporations, particularly in the IT and professional services sectors, making it a resilient investment option in the commercial real estate space.

Brookfield manages a portfolio of five office parks across major cities like Mumbai, Gurugram, Noida, and Kolkata. These properties are strategically located in key business hubs, offering high visibility and demand from top-tier corporate tenants.

Brookfield REIT achieved an average occupancy rate of almost 90 percent in FY24, reflecting strong demand despite the rise of hybrid work models. However, the REIT faces challenges, such as the increasing competition from other commercial REITs and the potential impact of remote work trends.

Nonetheless, its strategic portfolio and leasing stability make it a solid contender in India's growing commercial real estate market. (Babar, The Economic Times, 2024)

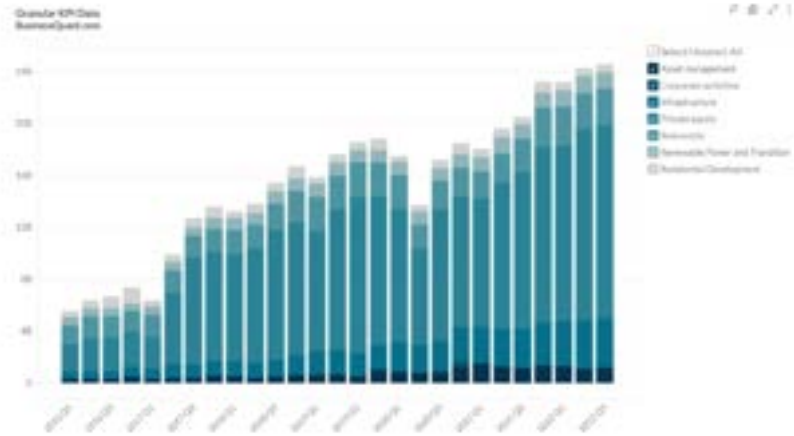


Figure 3: Brookfield REIT's Revenue over the Years in Various Categories
(Source: BusinessQuant)

THE VIRUS VACANCY

The COVID-19 pandemic threw a wrench into the world of REITs. Global lockdowns caused a sharp decline in economic activity, with metrics like office leasing, occupancy, and distribution per unit (DPU) reflecting devastating numbers making REITs a risky investment at the time (Nijboer) In the US, office occupancy rates plummeted by an average of 2.5 per cent in 2020 compared to the previous year. (The Coronavirus, Commercial Real Estate and REITs, 2020)

Figure 4: REIT Performance as Compared to Other Indices in 2020
(Source: NAREIT)

New office space construction even dropped by 30-35 percent in the same year. (Business Today, 2021) This translated to a 15 percent decline in DPU for US REITs. (Global commercial real estate markets feel the impact of COVID-19, 2020)

Figure 5: Office Occupancy Rates Overtime
(Source: NCREIF)

The story was not much different in India, a relatively new player in the REIT market. Office leasing in major cities like Mumbai and Delhi witnessed a temporary decline due to work-from-home policies. However, India's resilient economy and government stimulus measures helped soften the blow.

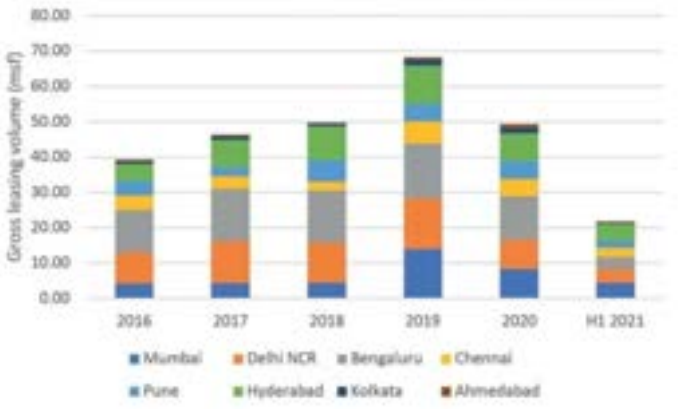


Figure 6: Office Leasing Volumes in India during the Pandemic
(Source: Cushman and Wakefield Research)

As economies began to reopen and vaccination rates rose, REITs started to see a recovery. A shift towards hybrid work models, alongside booming e-commerce driving demand for logistics space, supported this rebound. By 2021, many REITs observed a rise in occupancy rates and DPU.

Not to mention, the inherent structure of REITs ensured that it would stand resilient. (Akinsomi, 2020)

While the initial decline in office leasing was significant, leasing activity began to pick up by the year's end. Pent-up demand and economic recovery efforts fuelled this improvement. REITs like Brookfield India REIT saw positive signs, with gross leasing rising to 1.6 million square feet in 2021. However, occupancy rates were still recovering, with Brookfield reporting an effective occupancy rate of 87 percent. DPU also showed stabilization, with Brookfield distributing ₹22.10 per unit in FY2022. This recovery aligns with the rise of hybrid work models, as companies gradually return to physical offices.

Figure 7: Brookfield REIT Price since Listing (Source: Ace Equity)

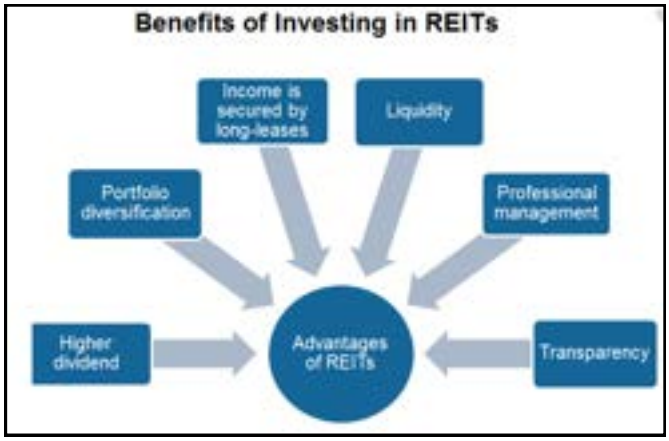
TROUBLE IN PARADISE

Real Estate Investment Trusts (REITs) in India have faced challenges due to the presence of Special Economic Zones (SEZs). SEZs, intended to boost economic growth, often create regulatory hurdles for REITs. A major issue lies in the restrictions on transferring ownership of SEZ properties, limiting REITs' ability to acquire and manage these assets, which impacts their potential to generate returns for investors. However, stringent regulations have made it difficult for REITs to capitalize on this asset class fully. Additionally, tax benefits associated with SEZs have intensified competition, making it challenging for REITs to acquire properties at attractive valuations.

However, SEBI's decision to allow floor-wise denotification of IT and ITeS SEZs has been a significant positive development for REITs. Floor-wise denotification, which involves removing only specific parts of a property from SEZ status, offers REITs greater flexibility in managing their portfolios. (Money Life, 2023) For example, a REIT can sell a specific floor of a building without affecting the SEZ status of the entire property. This flexibility enables REITs to optimize their asset base, focusing on more profitable holdings while reducing exposure to less desirable areas. Additionally, floor-wise denotification can enhance the liquidity of SEZ properties, making them more attractive to potential investors. By improving asset management flexibility and boosting liquidity, SEBI's decision may help alleviate some of the challenges REITs face in the Indian market.

The move was well-received with Brookfield India initiating the conversion of 1.5 million square feet of its SEZ properties. (Crisil, 2024) Mindspace and Embassy REIT have also been converting spaces. Since the move, most commercial REITs have reported their strongest performance after their listing. Renting has improved and offices have fewer vacant spaces along with continuously improving income, indicating better ratios.

SECURITY SUPERIORITY



In comparison to traditional direct real estate where there is a significant upfront investment, REITs offer an affordable gateway to real estate investment. Given that they are not subject to double taxation, REITs have grown in popularity as an investment vehicle for income-producing real estate. Because REITs are exchange-traded, they are not subject to redemption or liquidation risk, in contrast to mutual funds.

In addition to the liquidity of a publicly listed security, REITs offer diversification advantages because they invest in a multitude of properties. On the other hand, REIT returns and equities returns have a stronger link than direct investment returns, and this association gets stronger during severe market downturns. Real estate investments do, however, enhance a portfolio's risk-return profile as compared to portfolios that solely consist of traditional asset types.

Figure 8: Equity REITS v/s Traditional Equity (Source: NAREIT)

Through January 2023, total year-to-date returns were 10.1 percent, 6.7 percent, and 7 percent for All Equity REITs, Russell 1000, and Dow Jones US Total Stock Market respectively.

Figure 9: Direct Real Estate v/s REITs

REITS obviate the need for market-specific knowledge and property management while making it simpler to diversify your real estate portfolio.

A STEADY FUTURE: UNDER CONSTRUCTION

The meteoric rise of REITs on the global stage, coupled with the increasing regulatory relaxations in the country, the Indian REIT market signals a promising future for the country's commercial real estate sector.

In March 2024, the Securities and Exchange Board of India (SEBI) introduced new regulations for Small and Medium Real Estate Investment Trusts (SM REITs), creating a clear regulatory framework for Fractional Ownership Platforms (FOPs). As per CBRE Research, the potential market for SM REITs in India encompasses more than 300 million square feet of existing commercial office space, with an additional 50 million square feet projected to be added by 2026. This presents an estimated market opportunity exceeding USD 60 billion, highlighting the substantial growth potential for these platforms within India's real estate sector. (CBRE, 2024).

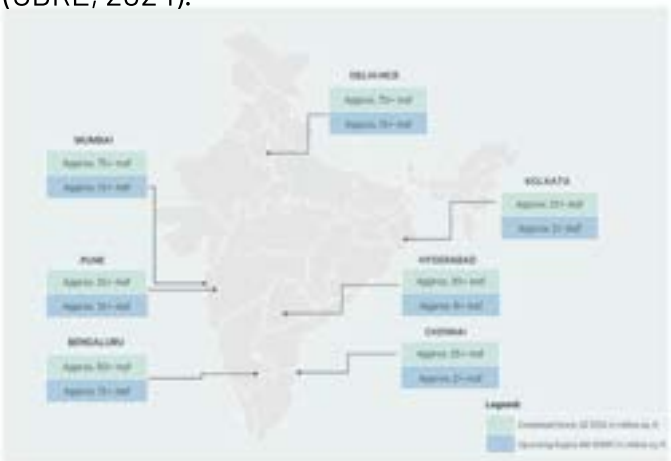


Figure 10: Market estimation for potential SM REITs in India (Source: CBRE Research)

Further, as we witnessed in the Union Budget 2024-25, the decision to reduce the holding period for determining long-term capital gains on listed business trusts – REITs and InvITs – from 36 months to 12 months, aligning these instruments with listed equity shares. This alignment of holding period and tax parity is expected to significantly increase the appeal of REITs as a preferred investment choice in India due to more lenient taxation on REITs.

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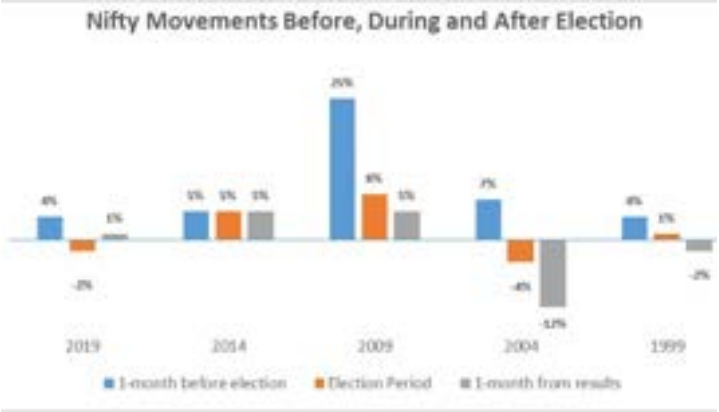
General Elections and Stock Markets

By: Parth Lahoti

INTRODUCTION

The general election in India is conducted every five years to select its Prime Minister to run the government. They are recurring in nature and affect both the political and investment environment of a particular country. Indian elections are riddled with far-reaching consequences, with their effects not only limiting themselves to the political landscape but also marginally affecting the stock market and economy. Uncertainty is ubiquitous; ranging from the common sundry labourer to the most accomplished business, a sense of unease underlines the election period.

The volatility caused to stock market performance remains the primary anxiety for the market participants, analysts, and policymakers, and there is a certain element of political risk associated within the psyche of potential stakeholders. The relation between political risk and the capital market is not so significant in the long term although it does affect the market in the short term as it dries out quickly soon after the election result is announced.



ELECTIONS & SENSEX

YEAR	INCUMBENT	NEWLY ELECTED	RESULTS DATE	SENSEX RALLY SIX MONTH TO ELECTIONS
1980	JP	INC	1/6/1980	0.5%
1984	INC	INC	12/31/1984	12.5%
1989	INC	Janata Dal	12/4/1989	0.1%
1991	Janata Dal	INC	5/27/1991	2.6%
1996	INC	United Front	5/23/1996	25.1%
1998	United Front	BJP	3/4/1998	-9.3%
1999	BJP	BJP	10/6/1999	31.6%
2004	BJP	INC	5/13/2004	9.1%
2009	INC	INC	5/16/2009	59.8%
2014	INC	BJP	5/16/2014	15.7%
2019	BJP	BJP	5/23/2019	9.8%

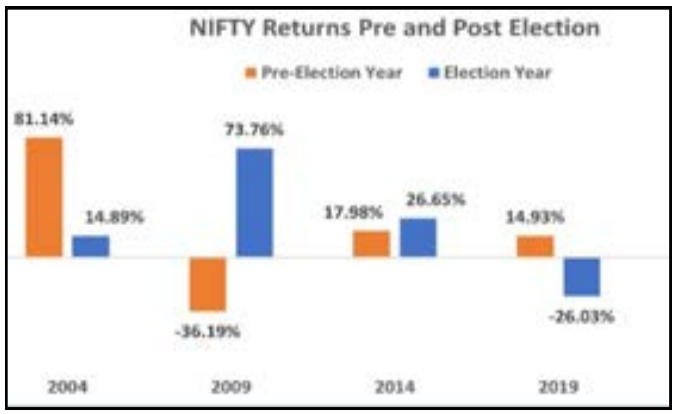
BJP= Bharatiya Janata Party, INC= Indian National Congress, JP= Janata Party
Source: SAMCO Securities

The election result primarily increases the volatility in the market for a few days. Studies have found that the highest average return occurred once the result was announced and subsequently settled down in a few days. A spike of variability was observed in the next seven days period after the election result announcement. It has been observed that the pre-election period usually gets more affected than the post-election period.

Political transitions can trigger substantial changes in government policies, economic priorities, and regulations, subsequently affecting various sectors of the economy and companies, the purpose of this paper is to highlight the actual impact of general elections on the stock market. In many instances, the market only substantially fluctuates as a result of political announcements such as law amendments, regulation promulgation, and national elections. However, while elections introduce volatility due to sporadic investor

behaviour in the short term, the long-term effects are only really affected by the market-defining economic reforms and policies implemented by the ruling party. The naturally volatile nature of the stock market is historically amplified in the direct aftermath of the elections.

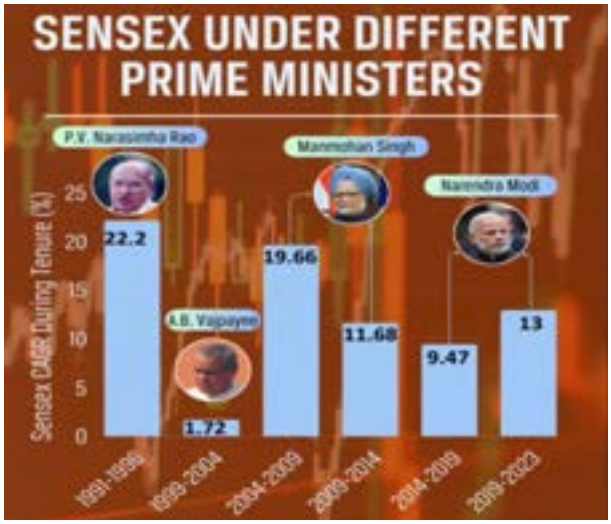
The stock market gets influenced by the Government's decisions on economy, trade practices, taxation, business laws, etc. Other factors that affect market performance are the availability of other investment assets, change in the composition of investors, and market sentiments.The stock market gets influenced by the Government's decisions on economy, trade practices, taxation, business laws, etc. Other factors that affect market performance are the availability of other investment assets, change in the composition of investors, and market sentiments. Emotions play a crucial role in today's investment arena, for example as seen in the 2014 elections; investors were excited with the expectations that BJP will form the government and the market reflected a bullish run.



Factors such as optimism, pessimism, confidence and irrational expectations, etc. are assumed to expound the dramatic upheaval of the progress of trading volumes and that of the returns. It has become a natural phenomenon to see the market behaving more volatile than usual when election results are announced. It is through the lens of behavioural finance that researchers have found the anomaly taking place at the time of the election.

HOW THE ELECTION RESULTS HAVE AFFECTED NIFTY OVER THE YEARS

This article focuses on analysing the impact of election result announcement on the performance of Indian stock indexes Sensex (BSE) and Nifty (NSE). Many studies previously done have discussed the election effect on the stock market. This paper focuses on the election result effect on the stock market indexes of both the major exchanges in India.



SCHOLAR'S OPINIONS WITH RESPECT TO IMPACT OF ELECTIONS ON THE STOCK MARKET

With Respect to Indian Markets

Campello (2007) – a Professor of Finance at the prestigious Cornell University and a renowned economist, through his study, highlighted how general elections breed unease which may affect investors' decisions and psyche, which can, on a large scale- cause abnormality and bring about irregularities in the market. The Existence of Political risk is a ubiquitous phenomenon that has affected not just one, but many National Stock markets all across the world. The core reason behind the stock markets' inefficiency and volatility during these time periods may be attributed to political and economic unease that spawn unsound reactions. Many more studies reinforce the fact that the General election carries a significant impact on the behaviour of the market and thereby its correlating index movement.

Other Countries

Pedro and Valcanov (2003)- This paper analysed the nature of relationship observed between presidential elections and the stock market of the United States of America by sampling 684

monthly observations that included 18 elections within which 10 democratic and 8 Republican presidents were elected. Their study was based on data collected from 1927 onwards. The research established that volatility is present in the stock market around election periods with high sensitivity surrounding the result dates. Further through their research, they highlighted that the stock market returns were noticeably higher under Democratic presidencies as compared to Republican Presidencies. However, they were unable to explain this variation in returns, which still remains an unanswered mystery.

Aggarwal et al. (1999) – This study delved into the various kinds of events that correlate to massive shifts in the instability of emerging stock markets. The paper found that most of these contingent events tend to stay local and not international. The 1987 stock market crash was the only global event that may have been said to cause a significant increase in the volatility of several emerging markets.

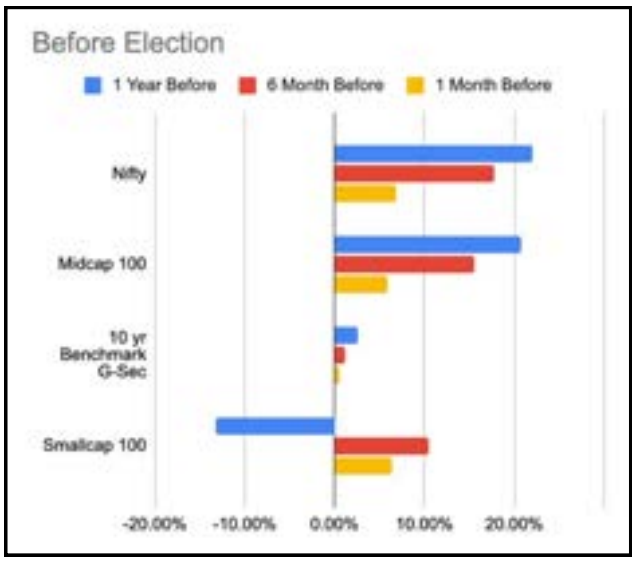
Khalid et al. (2010)- This paper utilized the Markov Switching Process in studying the impact of Political Events on Financial Market Volatility. Taking an investigative approach towards the political shocks of the past, both negative and positive, this study managed to compile and study the data from Pakistan for the period ranging from January 1999 to September 2006. The research concludes by finding that different political events have undeniably caused setbacks and impacted the local economy severely.

ANALYSING THE DATA- IN BRIEF

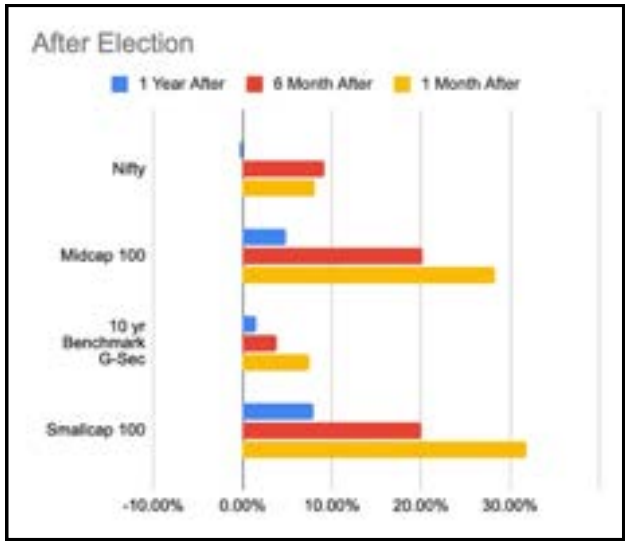
The patterns observed may indicate a relation more nuanced than what was before thought, which leads us to ponder the question; just how much influence does a ruling party command on the future of India's market?

Fluctuation in the stock market is generally based on the news which is related to economy, political events, weather conditions and foreign affairs. The objective of this study is to empirically analyse the effect of general elections on both NSE and BSE returns in pre-elections and post-elections period and compare the variance of daily returns in the stock market for short term (10 days), medium term (20 days) & long term (30 days) in the direct aftermath of the pre-election and post- election period, aiming to highlight the impact of elections in creating a volatile market, at least in the short term.

For this analysis 5 election sessions were considered that ranges from 1998 – 2019. The daily closing prices of NIFTY & SENSEX index have been collected for a period from 1998 to 2019 which includes a total of 5 Lok Sabha elections. The time period of the study has been broadly divided into pre and post elections period.



The Pre-Election period usually shows more movement than post as seen in the above pictures which are from the 2019 Lok Sabha elections.



6 months before Lok Sabha Election	Sensex Values	18 months post Lok Sabha Elections	Sensex Values	Returns Absolute (%)
30-May-89	692	27-May-91	1324	91%
17-Dec-90	1188	13-Dec-92	1860	57%
02-Dec-95	3035	28-Nov-97	3618	19%
27-Aug-97	4085	24-Aug-99	4792	17%
09-Apr-99	3423	05-Apr-01	3676	7%
12-Nov-03	4998	08-Nov-05	8353	67%
14-Nov-08	9267	11-Nov-10	20937	126%
13-Nov-13	20194	10-Nov-15	25743	27%

ANALYSING THE DATA- STATISTICALLY

Objectives of the Study

The objectives of the study also encompass the following:

• To analyse the impact of the general elections on both the NSE and BSE performance in pre-elections and post- elections period.

• To analyse, compare and contrast the variance within daily returns of the stock market for short term (10 days), medium term (20 days) & long term (30 days) in the pre-elections and post- elections period.

Hypothesis

The following hypotheses has been framed:

H1: There is no significant impact of the general elections on both NSE and BSE returns.

Tools which help us with the analysis

T-Test- The 'T-Test' refers to a statistical examination of two population means. A double-sample t-test aims to check whether two samples are different in nature used when the variances of two normal distributions are unidentified and an experiment utilizes a small sample size.

Methodology

The daily closing prices of the NIFTY and SENSEX indexes have been compiled from the abha elections Yahoo finance website ranging from 1998 to 2014 which encompasses 5 Lok Sabha elections.

The time period of the study may be broadly divided into the pre and post elections period. 60 trading days' data surrounding the Lok Sabha elections period has been analysed. The time periods analysed in this paper may be classified into short term (10 days), medium term (20 days), long term (30 days) before and after the declaration of the Lok Sabha elections.

Daily Average Return in Nifty Index

Year	Election Dates	X3 Last 30 Days	X2 Last 20 Days	X1 Last 10 Days	Y1 Next 10 Days	Y2 Next 20 Days	Y3 Next 30 days
1998	February-March	0.023	0.022	0.013	0.036	0.026	0.026
1999	September-October	0.017	0.016	0.013	0.047	0.05	0.049
2004	April-May	0.018	0.023	0.015	0.345	0.187	0.136
2009	April-May	0.048	0.035	0.024	0.341	0.82	0.157
2014	May	0.004	0.005	0.003	0.008	0.007	0.007

Daily Average Returns in Sensex Index

Year	Election Dates	X3 Last 30 Days	X2 Last 20 Days	X1 Last 10 Days	Y1 Next 10 Days	Y2 Next 20 Days	Y3 Next 30 days
1998	February-March	0.02	0.02	0.02	0.03	0.03	0.02
1999	September-October	0.02	0.01	0.02	0.01	0.03	0.04
2004	April-May	0.02	0.02	0.02	0.26	0.14	0.1
2009	April-May	0.06	0.04	0.02	0.34	0.17	0.13
2014	May	0.005	0.004	0.005	0.009	0.007	0.007

Shows Paired t-test for Nifty Index

	X3 & Z	X2 & Z	X1 & Z	Y1 & Z	Y2 & Z	Y3 & Z
Actual	-1.213596	-1.216333	-1.228762	-0.949026	-1.081857755	-1.122480837
Table Value (5%)	2.78	2.78	2.78	2.78	2.78	2.78

Shows Paired t-test for Sensex Index

	X3 & Z	X2 & Z	X1 & Z	Y1 & Z	Y2 & Z	Y3 & Z
Actual	0.31780871	0.0272538	-0.641754651	0.582771517	1.003644083	1.237447649
Table Value (5%)	2.78	2.78	2.78	2.78	2.78	2.78

Impact of Election on Nifty

	SHORT TERM PERIOD			MEDIUM TERM PERIOD			LONG TERM PERIOD		
	X3 & Y1	X2 & Y1	X1 & Y1	X3 & Y2	X2 & Y2	X1 & Y2	X3 & Y3	X2 & Y3	X1 & Y3
Actual									
Table Value (5%)	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78

Impact of Election on Sensex

	SHORT TERM PERIOD			MEDIUM TERM PERIOD			LONG TERM PERIOD		
	X3 & Y1	X2 & Y1	X1 & Y1	X3 & Y2	X2 & Y2	X1 & Y2	X3 & Y3	X2 & Y3	X1 & Y3
Actual	-0.670	-0.621	-1.261	-0.807	-0.788	-1.154	-0.854	-0.892	-1.151
Table Value (5%)	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78

INFERENCE DRAWN FROM DATA

10 Days

The observed result of the paired sample through t-test proved to be noticeable, indicating that there is, in fact, a slight increase in the returns from the pre- to post-election period of time. The research disproves the hypothesis H1 that there is a significant impact of the General Elections on the returns in the very short-term period of CNX Nifty and Sensex.

20 Days

A paired sample t-test was conducted in order to ascertain whether a statistically significant variance existed between the returns of the 20 days pre- and post-election period. The result of the sample test proved to not be significant, indicating that there is an increase in the returns from the pre-Election period to the post-Election period. The research sustains the hypothesis within this specific time period as there is no significant impact of Election on the returns of the medium-term period.

30 Days

A paired sample t-test was conducted in order to ascertain whether a statistically significant variance existed between the returns of the 30 days pre- and post-election period. The result of the sample test proved to not be significant, indicating that there is a significant increase in the returns from the pre-Election period to the post-Election period. The research sustains the hypothesis within this specific time period as there is no significant impact of Election on the returns of the medium-term period. Therefore, there is no impact of Election returns of long-term period in CNX Nifty and Sensex.

CONCLUSION

The article concludes by reiterating Hypothesis 1 that the General Election result does not result in a noteworthy effect on the stock market. Although, it does foster a very volatile nature in the market in the immediate lead up to the elections and the immediate period succeeding the announcements of the results as depicted by daily average returns.

stock market for short term (10 days), medium term (20 days) & long term (30 days) in the direct aftermath of the pre-election and post-election period, aiming to highlight the impact of elections in creating a volatile market, at least in the short term.

For this analysis 5 election sessions were considered that ranges from 1998 – 2019. The daily closing prices of NIFTY & SENSEX index have been collected for a period from 1998 to 2019 which includes a total of 5 Lok Sabha elections. The time period of the study has been broadly divided into pre and post elections period.

On the sociological aspect of things, the empirical data indicates that investors tend to ride on the policies, ideology and political will of the party in contention (and the party in power soon after the election) resulting in them betting on the bull and bringing the bears down.

The statistics also indicate that the stock market is more affected in the pre-election period as compared to the post-election timeframe. The stock market may be influenced by the Government's decisions on economy, trade practices, taxation, business laws, etc. that may be preempted by investors. Effectively, the investors in investing in certain companies also bet on the winner of the election. The emotion of the market and nature of humans also clearly affects the market.

For instance, in the 2014 elections; investors were excited with the expectations that the BJP party would form the government and the market thereby reflected a bullish run. Factors such as optimism, pessimism, confidence and irrational expectations, etc. are assumed to expound the dramatic upheaval of the progress of trading volumes and that of the returns. It has

become a natural phenomenon to see the market behaving abnormally when election results are announced.

On the practical side of things, it must be noted that one can also benefit with the application of short-term market strategy during this period of volatility, given the smart application of calculated risks. More events like the Union Budget, elections, festivals, mergers and acquisition, share splits, bonus announcement, wars, etc., always results in a slight market shift.

Specific stock market sectors and key policy issues are to be observed with a watchful eye in election years While the analysis does not point towards elections carrying a meaningful medium-to-long-term market effect, they may affect individual sectors and industries more harshly than they do others, which offers scope for further research. Different election outcomes have the propensity to affect proposed policies, regulations, or global conflicts.

The following are some policy issues that may be used to monitor throughout election process:

- Spending priorities, such as Infrastructure and Defence
- Healthcare
- Regulation
- Immigration policy
- Geopolitical conflicts

The study aims to aid investors in understanding the necessity to invest cautiously and may offer guidance on making wise investment decisions around the timeframe of the general. This study will help investors minimize their overall risk and maximize returns of their investments.

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The Investment Ecosystem of Indian Startups

By: Ankur Ranjan

Abstract

The startup ecosystem of India has grown significantly in the recent past, attracting interest in investors' investments across verticals from venture capitalists, angel investors, and institutional investors. The research article looks at some key aspects of investment in the Indian startup ecosystem with regard to the strategies for investment, venture capital trends, success stories, and the role of government initiatives in fanning the entrepreneurial growth of the nation.

It discusses sector-specific investing, stage-specific investing, and diversification as the most popular investment strategies. Other key trends identified in the article are the growth in early-stage investing, increased focus on emerging technologies, and the expansion of venture capital funds into India. The notable success stories of Flipkart, Paytm, and Byju's have been showcased to prove that growth and innovation are possible in the Indian startup ecosystem.

The second broad area that the article focuses on is the initiatives taken by the government in the form of Startup India, Atal Innovation Mission, and Fund of Funds for Startups, that encourages and subsidizes entrepreneurship and innovation in the country. Though various challenges exist within this ecosystem in the lack of exit options or regulatory hurdles, there also exist opportunities in terms of a huge and growing population, increasing internet and smartphone penetration, and an emerging middle class.

Introduction

The Indian startup ecosystem has significantly succeeded in touching untouched spaces in the jungle of raising funds through venture capitalists, angel investors, and institutional investors. With the country proving to be the new global innovation and entrepreneurial hub, it becomes relevant and important to learn how investment in Indian startups works. How to invest in the Indian startup ecosystem: Investment strategies, trends in venture capitals, success stories, and government initiatives heralding entrepreneurship growth.

Investment Strategies for Indian Startups

While considering an investment in Indian startups, it becomes very essential for the investor to devise a clear strategy that goes well with his risk and investment goals. Some of the most used strategies in this category include:

1. Sector-Specific Investing

The investors can get concentrated on sectors of their expertise and promising growth potential. For example, an individual may invest in startups dealing with digital payment, lending, or wealth management if they have a background in fintech.

2. Stage-wise Investing

Investors may decide to concentrate their efforts on companies that are at the preseed, seed, or Series A development stages. Each of these phases carries a differently balanced risk-reward profile, so an entrepreneur will have to analyze one's risk tolerance accordingly.

3. Diversification

In the landscape of startup investments, diversification is a key tenet of risk management. Investors can help their portfolios be insulated from the failures of single ventures by diversifying investments across sectors and stages.

Venture Capital Trends in India

This has marked a huge inflow of venture capital into the Indian startup ecosystem over the last few years. According to a KPMG report, venture capital investments have reportedly touched a record $38.5 bln last year from $11.1 bln in 2020. Some of the key trends in VC investing in India are:

1. Early Stage Grew Invested

The quantum of early-stage investing has gone up drastically because most investors are basically looking at startups at the preseed and seed stage. This increase in acceleration mainly has to do with a spur in the number of accelerators, incubators, and angel investors across the board in this ecosystem.

Today, investors hope to reach start-ups that exist in new technologies, such as artificial intelligence, machine learning, blockchain, and the Internet of Things. These offer immense growth potential to drive innovation across different sectors.

2. Growth of Venture Capital Funds

The amount of venture capital activity going on in India has been spiking up over the past years. There has been an increased amount in the number of global VC firms moving to set up shops in the country and an increase in the funds raised by domestic funds

Successes from the Indian Startup Ecosystem

The Indian setup in itself has come up with various success stories, with many scaling up to unicorn status. Some of the notable ones are:

1. Flipkart

Flipkart, an e-commerce company founded in 2007, was bought by retail giant Walmart Inc. in 2018 for $16 billion. Thereafter, it made headlines by scaling up over $7 billion in funding from investors like Tiger Global, Accel Partners, and SoftBank.

2. Paytm

Paytm with digital payments and financial services is one of the most valuable startups based in India. The company itself raised over $3 billion from investors, including SoftBank, Alibaba, and Ant Financial.

3. Byju

Byju's, founded in 2011, is an edtech startup that has grown to become one of the world's most valued startups, with total investments exceeding $3 billion from investors like Tiger Global, Naspers, and General Atlantic.

Government Initiatives to Support Entrepreneurship

Entrepreneurship and innovation in the nation are worked upon through various initiatives taken by the Government of India. Some of the many major initiatives toward realizing these goals include:

1. Startup India

Startup India was initiated in 2016, and this flagship government program has been devised in the course of creating a robust ecosystem that fosters innovation and startups in the country. These offer various benefits to start-ups like tax exemption, access to funding, and support through Mentorship.

2. Atal Innovation Mission

A government-sponsored program that works to promote innovation and entrepreneurship throughout the country. It helps start-ups through incubators, accelerators, and innovation labs.

Fund of Funds for Startups

It has set up a fund of funds for startups to provide capital to SEBI-registered venture capital funds. The FFS seeks to mobilize domestic capital and encourage the flow of institutional capital towards startups.

Challenges and Opportunities

While the Indian startup ecosystem is emerging and growing, the other side of the coin holds a disparate set of challenges. Key among these would be:

The absence of exit options

On this, exit options were said to be one of the biggest concerns from investors with regard to the Indian start-up ecosystem. The markets remain small and illiquid for investors to effectively exit their investments.

2. Regulatory Hurdles

Key burdens for Indian startups are regulatory issues, with taxation and compliance taking the lead; foreign investments are always encountered as one scales.

Despite such odds, the Indian startup ecosystem continues to be one of great possibilities for its investors. A large and growing population, an increase in Internet and smartphone penetration, and a rising middle class make for a vast and untapped market for start-ups. Besides, the initiatives the government has taken toward fostering entrepreneurship and innovation have just started to ease the environment for more and more investments to happen.

Conclusion

This Indian startup ecosystem now has a global hub for innovations and entrepreneurship, bringing in many investments from venture capitalists, angel investors, and institutional investors. On the other hand, although investment in Indian startups is open to enormous growth prospects, it poses various challenges and risks. For an investor to be part of his ride, there has to be a well-defined investment strategy in line with risk appetite and investment objectives. The entrepreneurship and innovation together with government initiatives shall create a very conducive operational environment for start-ups and investors in the years ahead.

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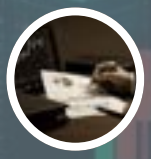
SCHOLARLY SPOTLIGHTS



The Art of Decision-Making

How Visual Aesthetics Influence Choices

By: Ishita Gupta

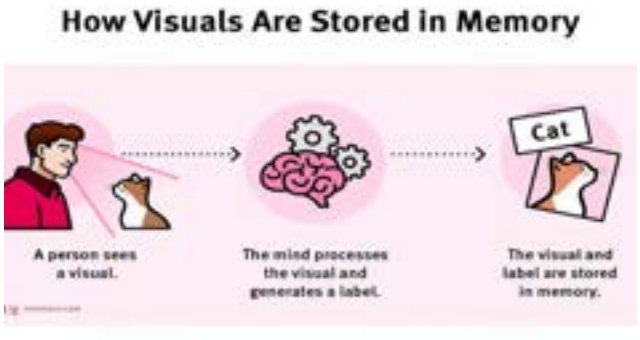
ABSTRACT

This study examines how visual aesthetics influence consumer decision-making, focusing on key design elements and the psychological concepts like the aesthetic-usability effect, demonstrating how visually appealing designs can enhance perceived quality, evoke positive emotions, and drive consumer preferences. A small survey and case study illustrate the significant impact of aesthetic design on brand success and consumer loyalty. The findings highlight the critical role of visual aesthetics in shaping consumer behaviour and enhancing business outcomes. However, it underscores that while aesthetics may initially attract consumers, the product will lose its appeal if not combined with functionality, particularly when there is a notable disparity in performance compared to other products.

INTRODUCTION

In a world saturated with choices, the decision-making process—whether selecting a product, browsing a website, or trusting an advertisement—is guided by various factors, including product quality, price, and functionality. While factors like these are crucial, there's another powerful force at play - visual aesthetics The design, colour, and overall appearance of products and digital interfaces can profoundly impact our preferences and perceptions. This article delves into the art of decision-making, exploring how visual aesthetics shape our preferences, perceptions, and ultimately, our decisions.

The purpose of making this study visually appealing was an attempt to make users aware how unconsciously they may be attracted to visual "beauty" more than they assume or admit.



Visuals or images exert the picture-superiority effect, recognized in cognitive psychology, indicating that people remember images better than words. Psychologist Allan Paivio explained this by noting that visuals are stored in memory both as images and as descriptive words or phrases, while words are stored only as text. Because generating mental images for words requires more cognitive effort, it is not common and images are more memorable due to their dual representation in memory.

THE ROLE OF VISUAL AESTHETICS IN CONSUMER DECISION-MAKING

In today's highly competitive market, businesses aim to develop products that not only fulfil functional requirements but also captivate consumers through compelling visual appeal. The

importance of "first impressions" cannot be overstated, particularly in consumer markets, where the aesthetic presentation of a product plays a crucial role in shaping a potential buyer's perception and influencing their purchasing decisions. The intricate relationship between visual aesthetics and consumer choice showcases how aesthetics can attract customers and foster brand loyalty.

Research consistently shows that positive perceptions of a product's order, beauty, novelty, and creativity enhance consumers' confidence in its quality and functionality. Recent studies emphasize that when visual design is harmonized with practical functionality, it creates a more engaging and satisfying consumer experience. In short, there is substantial evidence that beauty enhances usability.

Additionally, consumers make aesthetic judgments about products almost instantaneously, often within milliseconds. These immediate, visceral reactions significantly impact their perception of the product's credibility and value. This rapid formation of impressions means that consumers form fundamental and lasting opinions about a product's appeal and quality in an extremely brief period, even before evaluating its functional attributes. This highlights the profound importance of striking a balance between aesthetic appeal and practical functionality

LITERATURE REVIEW

The Psychology Behind Aesthetics

Human beings are wired to respond to beauty. Research in psychology and behavioural economics has shown that people tend to associate aesthetic beauty with other positive attributes, such as quality, reliability, and usability. This phenomenon, known as the "aesthetic-usability effect," suggests that products or interfaces that are visually appealing are often perceived as easier to use, even if their functionality is identical to less attractive alternatives.

For instance, a study by Tractinsky et al. (2000) revealed that users who interacted with a more visually pleasing interface rated it higher in usability, even when the actual usability was the same across different designs. This bias towards beauty can be a powerful tool in influencing consumer behaviour.

The Role Of Aesthetics In Consumer Choices

First Impressions Matter

The saying "you never get a second chance to make a first impression" holds true in design. Whether it's a product on a shelf or a website landing page, the first few seconds of visual exposure can determine whether a consumer will continue to engage or move on. Studies have shown that users can form an opinion about a website's visual appeal within 50 milliseconds. This snap judgment is critical in determining whether they will stay and explore or abandon the site altogether.

Colour Psychology

Colour is one of the most influential elements of visual aesthetics. Different colours evoke different emotions and can significantly impact consumer behaviour. For example, red is often associated with urgency and can encourage impulse purchases, while blue is linked to trust and reliability, making it a popular choice for financial institutions and tech companies.

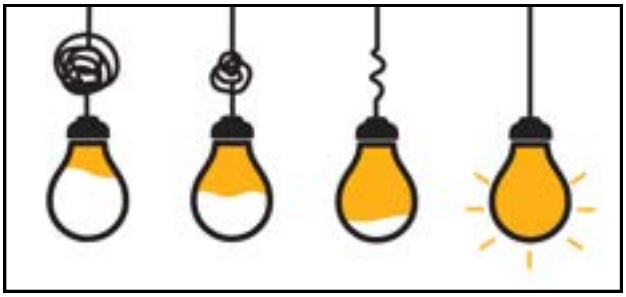
In a study by Satyendra Singh (2006), it was found that people make subconcious

judgments about a product within 90 seconds of initial viewing, and up to 90% of that assessment is based on colour alone. This highlights the importance of colour in branding and product design.

The Power of Simplicity

Minimalistic designs, characterized by clean lines, ample white space, and a focus on essential elements, have gained popularity in recent years. This trend is not just about aesthetics; it also aligns with the cognitive ease principle, which suggests that people prefer things that are easy to think about and process.

A study conducted by Google found that users consistently rated visually simple websites as more beautiful. This preference for simplicity is likely because it reduces cognitive load, making it easier for users to navigate and understand the content. This can lead to higher engagement rates, lower bounce rates, and increased conversion rates.



Symmetry and Balance

Humans are naturally drawn to symmetrical designs. Symmetry is often associated with beauty and harmony, and it plays a crucial role in how we perceive objects and spaces. In the context of product design or web design, balanced and symmetrical layouts are more likely to be perceived as professional and trustworthy.

Research by Schenkman & Jönsson (2000) found that symmetry in design not only enhances aesthetic appeal but also influences perceptions of usability and quality. This can lead to more favourable consumer decisions, as the product or interface appears more reliable and credible.

The Influence of Topography

Typography is another essential element of visual aesthetics. The choice of font, size, and spacing can convey different messages and evoke different emotions. For example, serif fonts are often seen as traditional and trustworthy, while sans-serif fonts are viewed as modern and clean.
In a study by Shaikh et al. (2006), it was found that the readability and aesthetic appeal of typography significantly impacted user engagement and comprehension. Well-chosen typography can enhance the user experience, making content more accessible and enjoyable to read, which in turn can influence decisions.

METHODOLOGY:

1. Case Studies:
Real-World Example: Tropicana's Packaging Redesign

In 2009, Tropicana, a leading brand in the juice industry, decided to redesign the packaging of its flagship orange juice product. The goal was to modernize the brand's image and appeal to a broader audience. The original packaging featured a well-known image of an orange with a straw inserted, which had become iconic over the years.

Tropicana opted for a cleaner, more minimalist design. The new packaging replaced the iconic orange image with a simple glass of orange juice and used a white background with a more modern font for the brand name. The intent was to give the product a fresh, contemporary look.

The redesign, however, led to an unexpected outcome. Consumers did not respond well to the new packaging. Many felt that the new design lacked the warmth and familiarity of the original. Within a few weeks, Tropicana experienced a 20% drop in sales, which amounted to a loss of over $30 million. The company quickly reverted to the original packaging, and sales rebounded.

2. Survey

A brief survey was conducted with a small sample of 10 participants to gain insights into consumer

perspectives and reinforce the role of aesthetics in consumerism.

The survey presented choices between three different types of three distinct products, varying their functionality and price to observe if these factors influenced the participants' preferences. Additionally, the survey included questions about preferences for colour schemes, typography, and overall interface design.

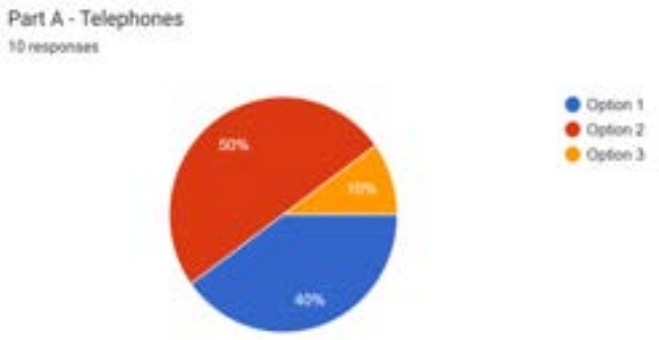
The link to the survey form is provided in the reference section.

DISCUSSIONS AND FINDINGS:

This Tropicana case highlights the power of visual aesthetics in consumer decisions. While the goal was to modernize the brand, the drastic change alienated loyal customers who had a strong visual association with the original design. The example shows that while redesigning a product's appearance can boost sales by attracting new customers or refreshing the brand, it must be done carefully to maintain the brand's core identity and connection with its existing customer base.

The survey highlighted the following points:

Design for different products: Understanding how people perceive and choose between different styles of common household items can be helpful in design and marketing.



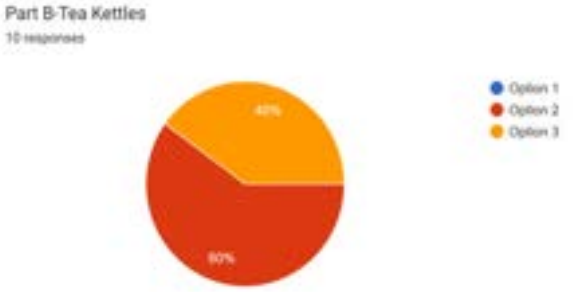
Respondents who chose

Option 1 reflects a preference for unique or modern designs.

Option 2 indicates a preference for practical, common designs.

Option 3 likely prefers traditional or vintage designs.

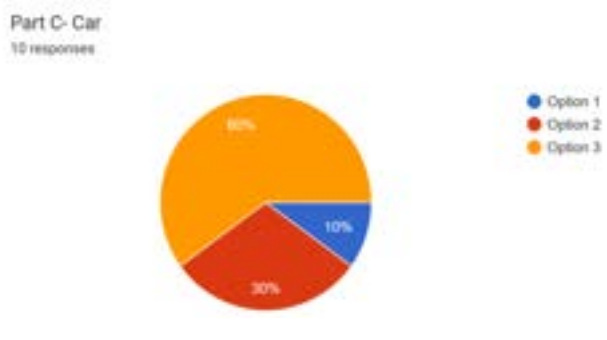
Findings: Most respondents chose "Option 2" or "Option 1," suggesting that the majority prefer more contemporary or distinctive designs over traditional ones. This could indicate a trend towards modernism and innovation in consumer choices for everyday products like telephones.



Respondents who chose

- Option 1 indicates a preference for older, possibly more classic designs.
- Option 2 appeals to those who like unique or fancy designs.
- Option 3 indicates a preference for standard designs.

Findings: A higher selection of "Option 2" could indicate a preference for design aesthetics even in everyday household items, suggesting that consumers are willing to invest in visually appealing products.



Respondents who chose

- Option 1 shows a preference for classic car designs.
- Option 2 reflects a preference for regular, common designs.
- Option 3 indicates a preference for unique or fancy cars.

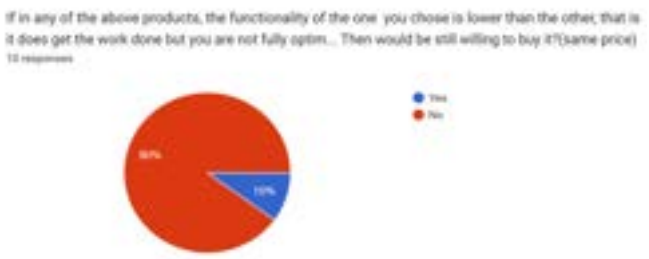
Findings: "Option 3" dominates, suggesting that respondents are interested in cars that stand out or offer something more than the usual, potentially

pointing to a trend where uniqueness is valued in the automotive market. Preferences in car design might reflect broader trends in consumer behavior regarding technology and aesthetics in the automotive industry.

2. Price Sensitivity & Compromise on Optimization:

- Respondents were asked if they would still buy a product if the price increased slightly but the product's functionality remained the same.

- Respondents were asked if they would still buy a product if it was not fully optimized (mediocre) but at the same price.



Findings:

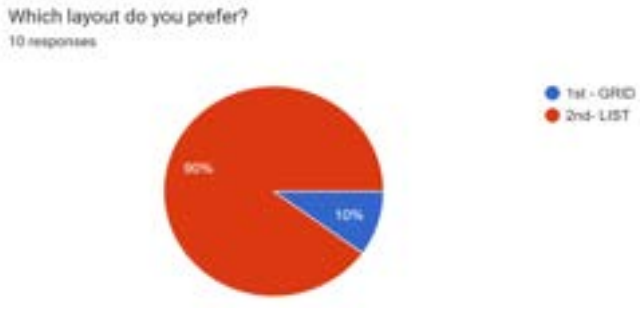
a. The majority answered "Yes," (70%). It could mean the products are an important aspect of personal life for respondents, and they are willing to invest a little more budget in selecting specific types.

b. The majority answered "No,"(90%) It shows that while aesthetics matter, functionality is a key aspect in product decision and consumers might be less willing to compromise on that aspect.

3. Layout Preference:

Respondents indicated their preferred layout for presenting product information.

- Preference for "1st - GRID" suggests a visual and structured approach to information.
- Preference for "2nd - LIST" suggests that respondents prefer a simpler, text-based layout.

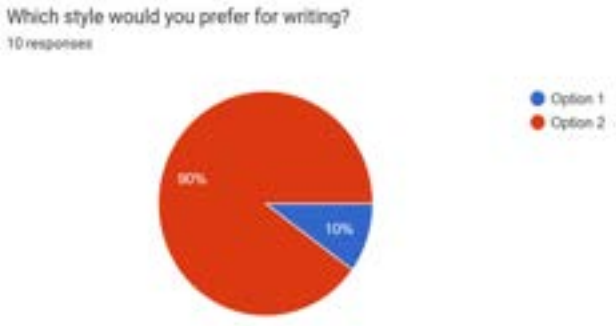


Findings: Most respondents prefer the "LIST" layout; it suggests a lean towards simplicity and readability. This insight could guide UI/UX decisions, favouring less cluttered and more straightforward designs and might be applicable in web design, product displays, or other visual formats.

4. Writing Style Preference:

This likely refers to the preferred style of writing or presentation for the product information.

- Option 1 (Serif) indicates a preference for decorative text.
- Option 2 (Sans Serif) suggests a preference for clear and simple text.

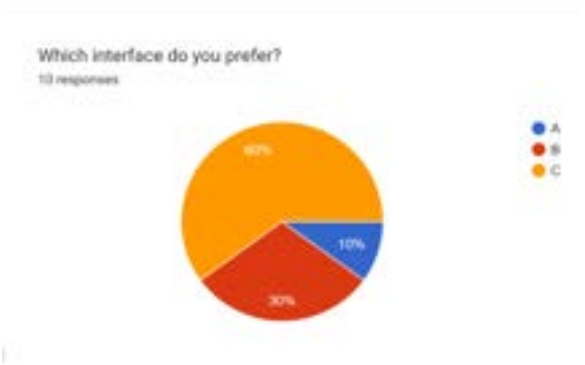


Findings: A higher preference for "Normal" style suggests that respondents prioritize clarity and simplicity in communication. . This could inform choices in font selection, branding, and user interface elements where writing style matters and that a clean, professional look may be more effective than a decorative one.

5. Interface Preference:

Respondents were asked to choose between different interfaces, labelled A, B, C, etc.

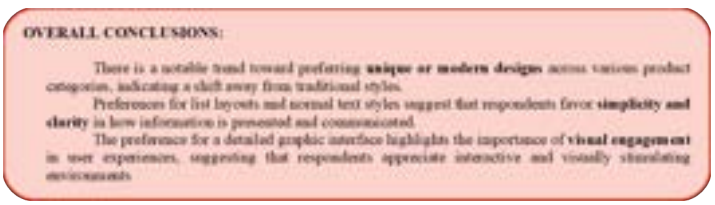
- A for "Text" suggests minimalism.
- B for "Text and Details" suggests more information without overwhelming visuals.
- C for "Detailed Graphic Interface" suggests a preference for visually rich, interactive experiences.



Findings: If "C" is preferred, it suggests that respondents value an engaging and visually rich user experience, which could be a critical factor in designing digital products. Understanding this can guide design decisions, particularly in app development, websites, or software tools.

CONCLUSION

The Art and Science of Aesthetic Decision-Making
Visual aesthetics are far more than just a matter of taste—they are a powerful tool that shapes perceptions, influences emotions, and drives consumer choices. Whether through the strategic use of colour, the balance of design elements, or the simplicity of layout, aesthetics play a critical role in decision-making processes. For businesses, understanding and leveraging the art of visual aesthetics can lead to more effective branding, better user experiences, and ultimately, greater success in the marketplace. As consumers, being aware of how aesthetics influence our choices can help us make more informed decisions and appreciate the subtle artistry that surrounds us in our daily lives.


OVERALL CONCLUSIONS:

There is a notable trend toward preferring **unique or modern designs** across various product categories, indicating a shift away from traditional styles.

Preferences for list layouts and normal text styles suggest that respondents favor **simplicity and clarity** in how information is presented and communicated.

The preference for a detailed graphic interface highlights the importance of **visual engagement** in user experiences, suggesting that respondents appreciate interactive and visually stimulating environments.

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Economic Justice or Economic Burden?

THE CASE OF WEALTH TAX IN INDIA

By: Himanshi & Naman Sehgal

INTRODCTION

Imagine this: Reliance Industries Limited, valued at a staggering $309 billion under Mukesh Ambani's leadership, now commands nearly 10% of India's entire GDP. As the wealth of a few reaches astronomical heights, the question looms larger than ever—should India bring back the wealth tax? With economic inequality deepening by the day, this debate has moved from the sidelines to the centre stage.

This article presents a comprehensive analysis of wealth taxes in India, delving into their historical context, key features, and objectives. We explore the constraints and challenges associated with implementing such taxes, weighing the arguments both for and against their reintroduction. Additionally, we examine the global perspective on wealth taxation, drawing on best practices from around the world, and consider the insights of leading economists who have contributed to this ongoing discourse.

HISTORICAL BACKGROUND

India's experience with wealth-related taxes, including wealth tax, inheritance tax, and estate duty, illustrates the nation's evolving approach to addressing economic inequality and generating revenue.

Inheritance tax, or Estate Duty, was introduced on October 6, 1953, with the intention of taxing the value of property inherited by heirs. Estate Duty faced issues, including high administrative costs, low revenue generation, and difficulties in enforcement, leading to its abolition in 1985.

Wealth tax in India was introduced on April 1, 1957, through the Wealth-Tax Act. The tax aimed to target the net wealth of individuals, Hindu Undivided segments contributed proportionately to national development.

Initially, wealth tax was levied on a broad range of assets, including residential and commercial real estate, motor cars, jewelry, yachts, boats, and cash holdings. This broad scope led to extensive administrative challenges and compliance issues. Following India's economic liberalisation in 1991, the tax system underwent significant changes to align with global practices and encourage economic growth.

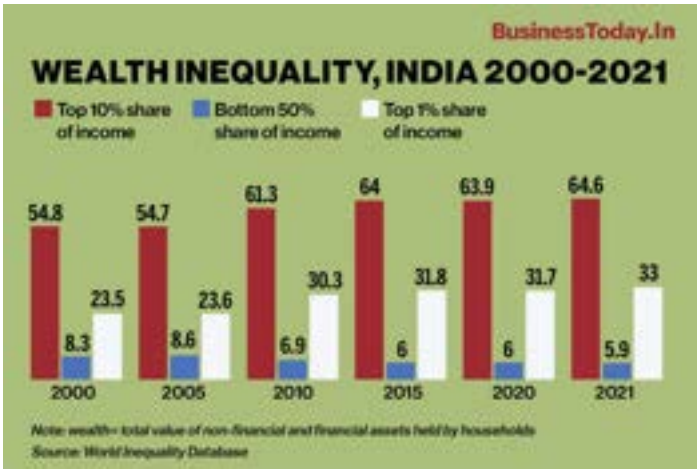
In 1993, the Wealth Tax Act was amended to focus exclusively on unproductive and idle assets. The revised scope included:

- Real Estate: Excluded residential property occupied by the owner, property used for business purposes, and agricultural land.
- Motor Cars: Excluded vehicles used for commercial purposes or as stock-in-trade.
- Jewelry and Precious Metals: Excluded items held as stock-in-trade.
- Urban Land: Excluded agricultural land and properties used for business.
- Cash Holdings: Amounts exceeding Rs 50,000.

The challenges of managing these taxes, coupled with their minimal impact on reducing economic inequality and their tendency to incentivise capital flight, prompted a shift in fiscal policy towards more effective and streamlined methods of taxation

The primary objectives of the wealth tax were:

- To reduce economic disparity by taxing the wealth accumulated by the affluent and using the revenue to fund social welfare and development initiatives.
- To serve as a significant source of revenue for the government, financing projects related to poverty alleviation, education, and healthcare.
- To discourage investment in non-productive assets like real estate and luxury items, thereby promoting more productive economic investments.



Despite its objectives, the wealth tax faced several significant challenges:

- The revenue generated from wealth tax was minimal compared to the costs of administration. For instance, in the fiscal year 2014-15, the total revenue collected as wealth tax was approximately Rs 1,008 crore, which was relatively insignificant given the administrative expenses.
- The valuation of non-liquid assets such as real estate and artwork proved complex and contentious, leading to high administrative costs and frequent disputes.
- The dual taxation system, involving both wealth tax (before death) and estate duty (after death), created overlapping tax obligations and significant dissatisfaction among taxpayers.
- High tax rates incentivised tax evasion and capital flight.

These issues led to the abolition of wealth tax in 2015, which was replaced by a surcharge on high-income individuals under income tax provisions.

Arguments for Reintroduction

1. Addressing Wealth Inequality

India exhibits severe wealth inequality, with the top 10% of the population controlling 77% of the nation's wealth, while the poorest 50% account for just 4.1% of the wealth. The top 1 per cent of Indians earns 22.6 per cent of the national income compared to 15 per cent earned by the bottom 50 per cent of the population, according to a study by the World Inequality Lab. Between 2000 and 2018, the wealth of Indian billionaires increased nearly tenfold, surpassing the entire Union Budget of 2018-19 (INR 24,422 billion). Implementing a wealth tax could help address these disparities by redistributing wealth and funding programs aimed at uplifting marginalised groups. An inheritance tax could also serve as a tool to redistribute wealth from the richest sections of society to support public welfare initiatives.

Chart 1: Income Share (%) and Average Per Capita Income (Rs., Current 2022 Prices)
Source: Income and Wealth Inequality in India, 1922-2023: The Rise of the Billionaire Raj

Chart 2: Wealth Inequality in India (2022-23) - Wealth Share (%) and Average Per Capita Wealth (Rs., Current 2022 Prices)
Source: Income and Wealth Inequality in India, 1922-2023: The Rise of the Billionaire Raj

2. Additional Revenue Source

As fiscal deficits continue to rise, the government must explore additional sources of revenue. India's fiscal deficit is budgeted at INR 1,653,670 crore (5.6% of GDP) for 2023-24. Reintroducing a wealth tax could generate significant income from the

wealthiest individuals. According to a study by Thomas Piketty and colleagues, a 2% annual tax on net wealth exceeding Rs 10 crore and a 33% inheritance tax on estates over Rs 10 crore could generate approximately 2.7% of GDP in revenues. This additional revenue could be used to fund critical sectors like education and healthcare, where India lags significantly. For example, public spending on education has stagnated at 2.9% of GDP over the past 15 years, well below the 6% target set by the NEP 2020.

Furthermore, many ordinary Indians struggle to access necessary healthcare services, with 63 million people being pushed into poverty each year due to healthcare costs—equivalent to nearly two people every second. India accounted for 12% of global maternal deaths in 2020 and 14% of deaths among children under five years old in 2021. A wealth tax would provide an additional financing option to support healthcare expenditures, thereby improving access to healthcare while reducing the fiscal deficit.

Chart 3: Gross Fiscal Deficit in ₹ Crores and as a percentage of GDP over the years
Source: RBI Handbook of Statistics on Indian States

As fiscal deficits continue to rise, the government must explore additional sources of revenue. India's fiscal deficit is budgeted at INR 1,653,670 crore (5.6% of GDP) for 2023-24. Reintroducing a wealth tax could generate significant income from the wealthiest individuals. According to a study by Thomas Piketty and colleagues, a 2% annual tax on net wealth exceeding Rs 10 crore and a 33% inheritance tax on estates over Rs 10 crore could generate approximately 2.7% of GDP in revenues. This additional revenue could be used to fund critical sectors like education and healthcare, where India lags significantly. For example, public spending on education has stagnated at 2.9% of GDP over the past 15 years, well below the 6% target set by the NEP 2020.

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TAX PROPOSALS			
	Baseline	Moderate	Ambitious
Wealth tax	2% on net wealth over 10cr	2% on net wealth over ₹10cr	3% on net wealth over ₹10cr
		4% on net wealth over 100cr	5% on net wealth over 100cr
Inheritance Tax	33% on estates over 10cr	33% on estates over 10cr	45% on estates over 10cr
		45% on estates above 100cr	55% on estates above 100cr
Adults Affected	Top 0.04%	Top 0.04%	Top 0.04%

Source: World Inequality Lab

Table 1: Wealth tax brackets as proposed in a study by Thomas Piketty
(Towards Tax Justice And Wealth Redistribution In India: Proposals Based On Latest Inequality Estimates)

3. Alignment with Constitutional Values

A wealth and inheritance tax is often viewed as a progressive measure that aligns with India's constitutional ideals of social justice and equality. Economic inequality in India intersects with caste, where nearly 90% of billionaire wealth is held by upper castes, while Scheduled Tribes and Other Backward Classes are significantly underrepresented among the ultra-wealthy. Coding the surnames in the Forbes billionaire rankings reveals that upper castes disproportionately control national wealth.

Reintroducing progressive taxes would primarily benefit lower castes and middle classes, addressing deep-seated social inequalities. Revenues from these taxes could fund targeted social programs, such as scholarships for SC and ST students, job training programs for OBCs, and healthcare initiatives in underserved areas, thereby promoting socio-economic mobility and reducing inequality.

Arguments against Reintroduction

1. Implementation Challenges

Reintroducing a wealth tax in India poses significant implementation hurdles, primarily due to the complexity of the country's existing tax system. The reintroduction of an inheritance tax

could further complicate tax administration, leading to increased compliance costs and administrative burdens.

For instance, the wealth tax was abolished in 2015 because the cost of administration and collection often exceeded the revenue it generated. In 2013-14 wealth tax revenues amounted to Rs 1,007 crore, but this was accompanied by significant challenges in accurately valuing non-liquid assets like real estate and businesses. These valuation disputes can lead to legal challenges and additional strain on already overburdened tax administration resources.

Chart 4: Collection of Wealth Tax from 2004 - 2014
Source: Indian Union Budget

2. Economic Impact
The reintroduction of a wealth tax could have negative economic consequences, particularly in terms of capital flight and reduced investment within the country. High taxes on wealth might discourage individuals from accumulating wealth or investing in long-term assets in India. Instead, they may relocate their assets or businesses to countries with more favourable tax regimes. Economist Gautam Sen has warned that such a tax could prompt India's wealthiest individuals to move their businesses to tax-friendly destinations like UAE.

According to a report by New World Wealth, approximately 8,000 high-net-worth individuals (HNIs) left India in 2022 alone, a trend that could accelerate with the reintroduction of a wealth tax. This potential relocation of high-net-worth individuals and their businesses could result in a substantial loss of wealth for India, reducing tax revenues and hindering economic growth. Even Sweden, which had one of the highest inheritance tax rates, eventually removed the tax due to the emigration of wealthy individuals.

3. Personal and Societal Consequences
The reintroduction of wealth and inheritance taxes could impose significant financial burdens on families, especially those inheriting moderate wealth. These taxes might force families to liquidate assets to meet tax obligations, disrupting long-term financial stability. Wealthy families could resist these taxes as they reduce the wealth passed on to heirs, potentially leading to political and social challenges for implementation.

Family-owned businesses could face severe consequences, with tax liabilities on non-liquid assets like real estate forcing sales or closures, resulting in job losses and economic disruptions. Additionally, these taxes are often viewed as double taxation, as they tax assets already subject to income or capital gains taxes. This perception can fuel public resentment and deter investment, reducing capital formation and negatively impacting economic growth and social stability.

Global Perspectives
Wealth and inheritance taxes exhibit considerable diversity worldwide, reflecting varying economic and social priorities. Countries have tailored their tax systems to align with their unique financial needs and social goals, resulting in a broad spectrum of approaches. From progressive taxes in Spain to high inheritance rates in Japan, these policies showcase the complex landscape of wealth taxation globally.

In Europe, countries like Norway and Switzerland maintain wealth taxes, with Norway imposing a 1% tax on wealth exceeding NOK 1.7 million and Switzerland applying cantonal taxes on worldwide assets. Conversely, France replaced its comprehensive wealth tax with a targeted real estate tax in 2018, focusing on high-value real estate holdings. Spain features a progressive wealth tax with rates ranging from 0.16% to 3.5%, though regional variations can significantly alter the tax landscape.

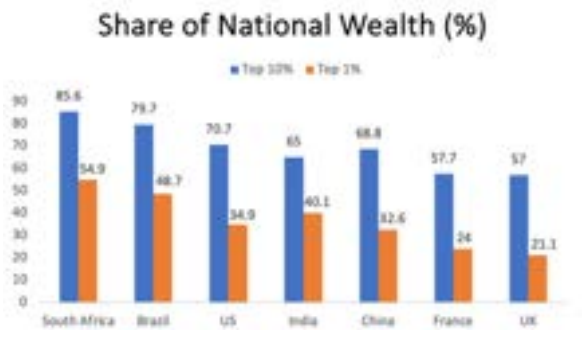

Chart 5: Distribution of National Wealth across selected countries
Source: World Inequality Database

In Asia, India has abolished its wealth tax since 2015, citing inefficiencies and high compliance costs. In North America, the United States lacks a federal wealth tax but imposes estate taxes on significant inheritances, with a high threshold of $12.92 million as of 2023. The UK applies inheritance tax at 40% on estates exceeding £325,000, with various reliefs available. Japan, with one of the highest rates globally, taxes inheritances up to 55% on large estates.

This global panorama illustrates how different regions adapt their tax systems to address wealth distribution and economic considerations. The variety in tax structures highlights the challenges and solutions each country faces in balancing revenue generation with fairness and efficiency.

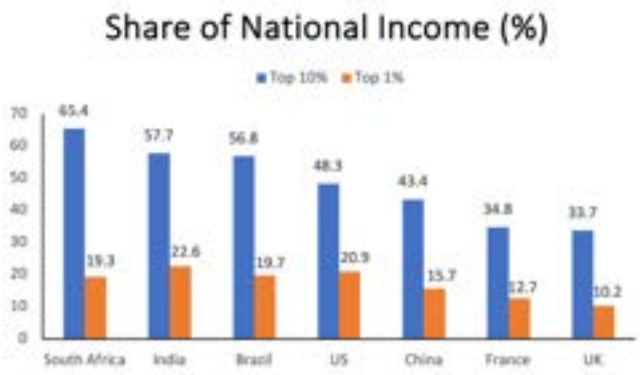

Chart 6: Distribution of National Income across selected countries
Source: World Inequality Database

LESSONS FOR INDIA

Countries like Norway have successfully implemented wealth taxes by prioritising simplicity and efficiency, avoiding the complex regional variations seen in Spain. This approach demonstrates that a straightforward and uniform tax system can be both sustainable and effective. Conversely, France and the U.S. focus their wealth or inheritance taxes primarily on the wealthiest individuals, illustrating that targeting high net-worth individuals can enhance political feasibility. Given that wealth and income in India are highly concentrated among the top 10% and especially the top 1%, targeting this affluent segment would ensure that the tax impacts only a small fraction of the population.

Incorporating these insights, India should design its wealth tax system with simplicity and efficiency at the forefront. Learning from Norway's model, India should aim for a straightforward and uniform tax structure that minimises administrative burdens and avoids complex regional variations.

Balancing revenue generation with compliance costs is also crucial. Reintroducing a wealth tax in India should involve a cost-effective administration process to avoid excessive burdens on taxpayers. Setting a fair tax rate with a clear ceiling could simplify the system, eliminating surcharges and making it more manageable. To encourage compliance and fairness, India could consider providing benefits or incentives to those within the targeted bracket. By adopting these strategies, India can create a wealth tax system that effectively targets the affluent while minimising the impact on the majority of its population.

CONCLUSION

The reintroduction of a wealth tax in India presents a complex yet potentially transformative opportunity. A well-structured wealth tax could serve as a crucial tool in addressing income inequality, generating additional revenue for vital public services, and aligning with India's constitutional values of social justice.
However, the implementation of such a tax must be approached with caution. The lessons learned from both India's past and global experiences suggest that simplicity, efficiency, and targeting the ultra-wealthy are key to ensuring that the tax is both effective and politically feasible. Striking the right balance between revenue generation and administrative costs is essential to avoid the pitfalls that led to the tax's previous abolition.

A reimagined wealth tax, tailored to India's unique socio-economic conditions, could provide a pathway towards greater economic equity and social development. However, its success will depend on careful design, efficient administration, and the political will to enforce it. If implemented thoughtfully, a wealth tax could help bridge the gap between India's rich and poor, contributing to a more equitable and sustainable future.

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Behavioral Finance: A Comprehensive Study

By: Sjonum Walia

Introduction

Behavioral finance is a niche in the area of behavioral economics that focuses on how psychological factors and cognitive biases determine and affect the financial behaviors of investors and financial practitioners. Traditional finance theories generally assume markets are efficient and that participants act rationally. Behavioral finance seeks to question this assertion by illustrating the way in which emotions and a set of cognitive errors create anomalies in financial markets, such as wild increases or decreases in stock prices.

Behavioral finance has much wider implications than what is applicable to the stock markets alone. The concept has tremendous significance for financial decision-making in every aspect of the economy and for all forms of institutions. Some of the prominent elements of behavioral finance include aversion to losses, bias of consensus, and liking for familiarity. In this regard, through the use of such concepts, behavioral finance develops a logical basis for understanding why both individuals and markets act in a manner contrary to the expectations from rational behavior.

The Development of Behavioral Finance

Some believe that the underlying roots of behavioral finance begin with the integration of psychology into economic theory. Economics and finance have, until recently, relied heavily on models resting on the premise of rational behavior: for example, the Efficient Market Hypothesis (Fama, 1970) and the Capital Asset Pricing Model. The theoretical models view the investor as a rational, utility-maximizing person who makes decisions based on all available information. The only problem is that real-world observations often violate these assumptions and come out with irrational behavior and inefficiencies in that violation of assumptions within the market.

Behavioral finance—which finally arrived in the late 20th century—was in good part driven by pioneering psychologists Daniel Kahneman and Amos Tversky. Their cognitive biases and heuristics research—especially Prospect Theory—presented empirical evidence to show that people do not always behave rationally (Kahneman & Tversky, 1979). Instead, these choices are susceptible to a myriad of psychological factors, which lead to predictable deviations from pure rationality. This seminal piece laid the foundation for the development of behavioral finance and engendered future research into how these heurism affect market phenomena.

The Fundamental Theories and Models of Behavioral Finance

There are only a few underlying theories and models that form the backbone of behavioral finance and serve to explain numerous empirical anomalies in the markets:

1. Prospect Theory

Beginning with the naming of the Prospect Theory by Kahneman and Tversky in 1979, it has been regarded as one of the backbones of behavioral finance (Kahneman & Tversky, 1979). The theory represents a variant of traditional utility theory and describes decision-making under risk. According to Prospect Theory, people value gains and losses differently. As a result of this value from gains and losses, inconsistencies in risk behavior arise. For instance, it indicates that people are loss-averse; they prefer not to lose rather than to gain an equivalent amount. This theory also introduced the concept of "framing," wherein the way a problem or decision is framed can radically affect the choices people make.

2. Heuristics and Biases

Heuristics are mental shortcuts taken by individuals when deciding on an option. These may assist them in making quicker decisions, but they often lead to biases—systematic errors in judgment. Common heuristics include:

Representativeness Heuristic: The belief in the likelihood of the happening of an occurrence based on the resemblance of such an occurrence to a prototype or stereotype rather than on the actual probability of such an occurrence happening.

Availability Heuristic: The belief concerning an event's likelihood as based on how easily examples come to mind. Events that happened recently or those that are quite memorable get to be overestimated.

Anchoring Heuristic: When people anchor onto the first piece of information that they receive about something and then base their decisions concerning it off this anchor.
These heuristics can lead to biased financial decisions, such as a belief in the value of an investment based on recent performance or choices about investments based on easy-to-recall information rather than more thorough analysis.

3.Efficient Market Hypothesis versus Behavioral Finance

The Efficient Market Hypothesis is a finance theory that states that financial markets are "informationally efficient," or prices at any moment in time reflect all available information. Under this hypothesis, it is impossible to consistently achieve returns in excess of the overall market because stock prices already incorporate and reflect all information about them.

Efficient Market Hypothesis	Behavioral Finance
Investors are rational. Rational investors dominate irrational investors.	Investors are emotional or irrational. From time to time, crowd mentality dictates in the market.
The current stock price reflect new information efficiently.	The market sometimes over or under reacts to new information.
Arbitrageurs can profit in most of time, restoring mispricing to equilibrium.	Arbitrageurs cannot often take advantage of mispricing, failing to restore the price to equilibrium.

However, behavioral finance contravenes the efficiency market hypothesis by proving that markets are not essentially efficient, given the psychological factor affecting the market. The behavioral anomalies,such as bubbles, crashes, and momentum effects indicate that onoccasions prices can be very seriously deviated from their intrinsic values—an issue of collective investor psychology, rather than a piece of rational analysis.

4. Market Anomalies and Behavioral Finance

Behavioral finance can explain a number of

market anomalies, which are events that cannot be rationalized by the traditional financial theories. For example:

The January Effect: Usually, a rise in stock prices in January compared to other months is attributed to year-end tax planning and investor psychology.

Overreaction and Underreaction: Sometimes investors overreact to news; this often results in extreme movements in prices. At other times, investors underreact, leading to a gradual price adjustment over time.

Equity Premium Puzzle: The fact that stocks have outpaced bonds more regularly than traditional financial theory could logically explain, based upon investors' preferences for risk and lack of affection for losses

The Role of Emotions in Financial Decision-Making

Emotions are the very linchpin of financial decision-making, often leading to irrational behaviors that deviate from standard economic predictions. Understanding the emotional drivers of financial decisions has become an important part of behavioral finance.

1. Fear and Greed

The most ruling emotions of financial markets include fear and greed. In the case of fear, this translates to panic selling—a situation where investors dump assets for no losses, which further deteriorates the situation in a falling market. In respect of greed, it perpetuates speculative bubbles. In such situations, people continue buying an overpriced asset with a hope of reselling at an even higher price. This can lead to volatility and irrational pricing of the market, hence challenging the efficient markets hypothesis.

2. Regret Aversion
Regret aversion refers to a situation where investors make decisions because they would not wish to feel the regret of having made a wrong investment choice. Such feelings result in ultra-conservative behavior, such as holding on to losers and avoiding the realization of a loss or bypassing profitable investments because of the fear of making an incorrect decision. The feelings of regret aversion most often lead to poor performance of a portfolio and lost opportunities.

3. Overconfidence
One of the most common cognitive biases is overconfidence, wherein an investor believes that his or her knowledge, skills, or the truthfulness of the information is much greater than it actually is. Overconfidence leads to excessive trading, or "trading with a feeling of superiority," since people think they can outperform the market. However, it often results in higher transaction costs and lower returns than might be otherwise achieved.

Behavioral Finance in Practice

1. Behavioral Portfolio Theory
Behavioral Portfolio Theory postulates that an investor would construct a portfolio in layers—each with a different degree of risk and goals—instead of going by a mean-variance optimization model. It is a consistency

in practice with the way real-world investors usually look to pursue multiple objectives, such as symmetric preservation and growth of wealth, rather than pursue just the maximization of return for a pre-defined level of risk (Shefrin & Statman, 2000).

2. Nudge Theory in Financial Planning

Another very popular application of behavioral finance is the so-called nudge theory, coined by Richard Thaler and Cass Sunstein. The approach in nudging considers subtly guiding an individual toward better financial decisions without necessarily limiting his freedom of choice.

3. Behavioral Corporate Finance

Behavioral finance also influences corporate finance; say, the way managers make their investment, capital structure, and corporate governance decisions. For instance, overconfident CEOs will over merge and acquire, feeling that they can create value that is just not there. Behavioral finance helps explain why such decisions are made and how they can be mitigated by better corporate governance and better decision processes.

Future of Behavioral Finance

In the future, the role of behavioral finance will be even more significant both in financial theory and practice. Such technologies as artificial intelligence and big data analytics provide new tools for analysis and prediction of

Future of Behavioral Finance

In the future, the role of behavioral finance will be even more significant both in financial theory and practice. Such technologies as artificial intelligence and big data analytics provide new tools for analysis and prediction of behavioral pattern in financial markets. This could help identify and correct the impact of cognitive biases on decisions, leading to more efficient markets with better financial decision-making.

Furthermore, the introduction of behavioral finance into financial education created a new generation of both investors and providers of financial services who were far more aware of the psychological motivations for financial behavior. This integration of behaviorally-diverse insights into decision-making allows them to make more informationally grounded decisions—one that balances not only rational analysis but also the quasi-rational nature of human behavior.

Conclusion

Behavioral finance provides an overall framework of the necessary psychological processes and emotional variables leading to financial decision-making. Behavioral finance runs somewhat against the assumptions taken by traditional finance, and opens up new avenues with which market behavior could be rationalized in company with individual decision-making, explaining those self-same anomalies that traditional theories cannot explain. The study of behavioral finance becomes ever more important as the date progresses because, with each decision made in finance, biases from behaviors go on occurring. Understanding and mitigating these biases through behavioral finance means making better and more rational choices of finance. Such unabated growth in estimation and utilization of behavioral finance can reshape financial markets, investment strategies, and corporate governance—to yield a deep understanding of how financial decisions are made.

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Banking Sector: A short-lived silver lining that emerged out of the pandemic

By: Shwetangi

Abstract

The banking sector is regarded as the backbone of an economy. The sector is profuse with intricacies and is undergoing constant transformation. The pandemic has infused significant transitions in this sector. The goal of the paper is not to analyze the impact of the pandemic on the banking sector. The paper has a distinct goal of delving into the unanticipated recovery of banks, analyzing growth factors and determining the longevity of growth. This paper compiles bits of data published by various institutes and the RBI to present a comprehensive study including a comparison of the pre-and post-COVID levels of Non-Performing Assets (NPA), the factors crucial for the sustenance of growth of the banking sector and the instruments the RBI has employed recently to manage the sector effectively.

Keywords

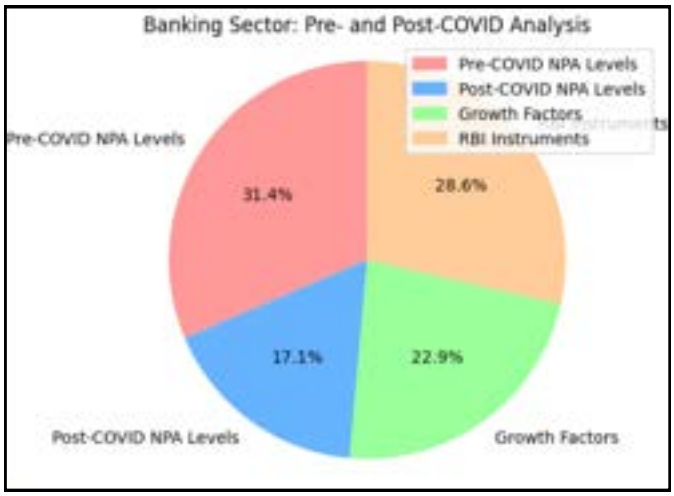
Non-performing assets, Reserve Bank of India, Consumer Credit, Digitalisation, Regulatory measures

Introduction

The Banking Industry is a one-of-a-kind sector that serves a crucial role in the working of all individuals and entities in the economy.
It fulfils a broad range of functions including but not limited to credit creation, debt monetization, capital allocation, international trade facilitation etc.

The sector has displayed fluctuating trends since the financial crisis in 2008. An unexpected uptick in the performance of banks was observed in 2008 and has yet again been witnessed during the pandemic, thus emerging as a silver lining. This paper aims to analyse the sector's resilience in the periods ahead and the institutional mechanism in position to sustain the growth.

Drawing from various sources of data including RBI and other government institutes, the paper aims to deliver a comprehensive analysis of the banking sector's performance, both pre- and post-COVID. The key metrics used, in this paper, to examine the health of the sector are Non-performing Assets (NPAs), Profitability and Credit Growth. These are measured and scrutinized to understand the trajectory of the sector. Moreover, various scholarly literature has been referred to along with articles from well-reputed news outlets to obtain the secondary data used in the research. This adds an aspect of nuanced understanding of an expert's opinion of the sector.



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Literature Review:

'E-Age Technology–New Face of Indian Banking Industry: Emerging Challenges and New Potential by R.K. Uppal (2011) went over the effect of e-banking on the productivity and effect of e-banking on the productivity and profitability of banks. He concluded that all banks are more efficient after the adoption of IT and has suggested some measures to overcome the challenges in transformation. These measures include mergers and acquisitions, training human resources, disinvestment of PSBs, FDI, etc.

'COVID-19: Boon/Disguise for Indian banks?' by Anju Goswami (2022) covered the trends and patterns of non-performing assets between 1998–1999 and 2019–2020 across banks of different ownership types and sectoral groups. The major observation was that banks have performed well in improving their asset quality during the pandemic. Finally, the study narrated the policy measures taken between 1999 and 2020 at the bank level, regulatory, and governmental levels to maintain asset quality levels of Indian banks.

In their paper **'Financial Performance of Indian Public Sector Banks Before and During COVID-19 Pandemic', Anithabose and Gnanaraj** carried out an empirical analysis determining the profitability, liquidity, solvency and EVA of public sector banks. Some banks indicated an increase in these metrics while others witnessed a decrease. The paper recommended tax incentives to the affected banks.

How digitization is shaping the future of banking published in Times of India on March 18, 2023, discusses the evolution of the banking sector over time, particularly highlighting the significant impact of digitization and technological advancements. It explores how traditional banking practices have transformed with digital banking solutions, leading to enhanced customer experiences, personalised services driven by AI, and the emergence of new business models such as fintech companies.

Digital Revolution in the Indian Banking Sector - Challenges and Opportunities by Prof. Pooja Singh, Assistant Professor & B.F.M. Course Coordinator, Narsee Monjee College of Commerce & Economics outlines the critical role of the banking sector in driving economic development, emphasizing its significance as the backbone of an economy. It discusses the transformative impact of Information Technology (IT) in the Indian banking industry.

Open Market Operations in India – An Appraisal by Abhilasha, Bhimappa Arjun Talwar, Krishna Mohan Kushwaha and Indranil Bhattacharyya examines the role of Open Market Operations on India's total liquidity and how this function of RBI

has affected the balance sheet of the Central Bank.

Research Gap:
Although there is sufficient literature on the correlation between NPAs and credit growth over the years, no study has been conducted on why the banking sector performed better after the pandemic and whether this growth is sustainable.

Research Objective:

1. To analyze how the Indian Banking Sector emerged strong out of the pandemic- we shall perform a comparative analysis of the state of the Indian banking sector pre-COVID and post-COVID.
2. To study whether the current trends in the finance sector including lending, savings and investments can sustain the robust growth of the banking sector.
3. To discuss the instruments being used by RBI to ensure effective management of banks

Comparative Analysis of Pre- and Post-COVID performance

While the pandemic left several industries of the economy severely impaired, the banking sector remained relatively resilient. Several banks reported record profit in FY23 resulting in a rally of banking stocks. These outcomes were unanticipated considering the number of businesses that were compelled to shut down. An intertemporal analysis of the level of NPAs shall be conducted to draw a comparison of the state of the Indian banking sector pre- and post-COVID. NPAs are an important metric as they measure operational efficiency, credit management, liquidity and the overall financial stability of India.

Source: in.tradingview.com

Vulnerabilities arising due to aggressive lending practices, wilful defaults and economic slowdown hinged on the Indian banking sector during the 2015-2019 period. The gross NPAs more than doubled to reach 11.18% of total advances. However, the sector bounced back in terms of its profitability and asset quality. The cumulative FY23 profits crossed 1 lakh crore indicating a 95% increase along with an improvement in Capital to Risk Assets Ratio (CRAR) to 16.1%. As per the Financial Stability Report, June 2024, the GNPA ratio of scheduled commercial banks in India is 2.8% as of March 2024, which is a 12-year low and the CRAR has increased to 16.8%.

Year	Gross NPA	Net NPA	GNPA Ratio	CRAR(%)
2017	6,84,732.28	3,83,088.76	9.32	12.14
2018	8,95,601.26	4,54,472.66	11.18	12.94
2019	7,39,541.00	2,85,122.17	9.08	12.2
2020	6,78,316.98	2,30,917.59	8.21	12.9
2021	6,16,615.70	1,96,450.80	7.33	14
2022	5,42,173.82	1,54,745.38	5.82	14.3
2023	4,28,196.99	1,02,531.56	3.87	16.81

The main factors contributing to the green shoots were the rising interest rates due to RBI's hawkish stance, post-pandemic normalization, recovery in credit demand, recapitalising PSBs, digitalisation of the banking sector and amalgamation of banks. A quantitative analysis of these factors has been undertaken to substantiate the rationale: -

1. Recapitalizing PSBs

The banking sector was in its weakest state prior to the pandemic. It was burdened with bad loans; therefore, the RBI initiated a clean-up of the sector. The RBI undertook strategic actions such as capital and liquidity infusion, moratorium, time-bound resolution procedures and prompt corrective action framework. The process under the Insolvency and Bankruptcy Code (2016), boasting a recovery rate of 42.5% up from 14.5% in former Acts, improved the speed of recovery of NPAs from 4.3 years to only 340 days.

2. Recovery in credit

The Indian banking sector had been impaired by high levels of NPAs resulting in a meagre credit growth rate of 6% before the pandemic. The share of bank loans in total credit declined and was replaced by bonds and NBFCs (Rajeswari Sengupta and Harsh Vardhan 2023). The composition of credit was dominated by unsecured consumer loans while large firms and MSMEs occupied a smaller share. This was a result of the twin balance sheet crisis. The situation worsened with the onset of the pandemic. However, the recovery of the sector was catalyzed by the increase in credit to corporates and MSMEs (driven by the Extended Credit Line Guarantee Scheme) which were 20% and 30.6% respectively. Scheduled commercial banks recorded a credit growth of 15.4% in FY23, marking the highest level in 11 years.

3. Amalgamation of banks

The last few years were marked by several significant bank mergers such as HDFC and HDFC Bank, Oriental Bank of Commerce and United Bank of India with PNB and Bank of Baroda with Dena Bank and Vijaya Bank. A working paper published in July 2022, observed that merging weak banks with relatively healthy banks resulted in a 10% reduction in NPAs due to the decrease in strategic defaults that weak banks face. For example, when Dena Bank which was burdened with stressed assets was merged with Bank of Baroda (BoB) and Vijaya Bank, the NPAs of the consolidated entity decreased and the profits of the banks improved.

The most important factor bolstering the growth of the finance sector is digitalisation. Traditionally, people had to suffer a lot just to have access to their own money or to avail of the banks' services; however, now transactions go through in a few seconds, leading to the zenith of financial inclusion. The proportion of the banked population rose from 53.95% in 2011 to 86.71% in 2021. In this industry, digitalization has been accelerated by two events in particular, Demonetization and the Pandemic. Both these events led to a significant behavioural shift towards online payments and digital banking.

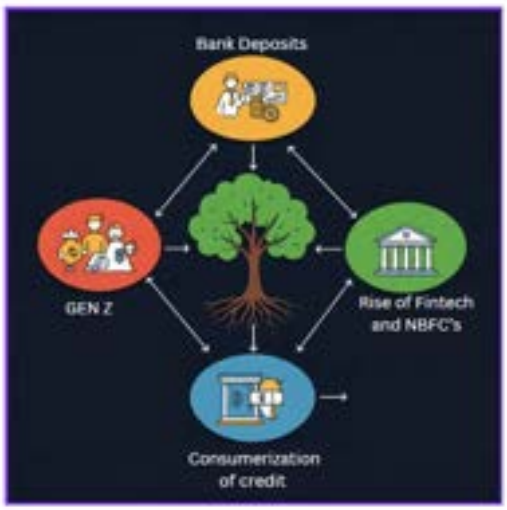
Navigating the sustainability of growth

The functioning of the banking sector majorly depends on the state of the economy, liquidity in capital markets, actions of the RBI and the spending behaviour of people.

The way the recent trends in the financial sector play out will determine the future performance of the banking sector. In this section, the paper shall analyze some factors which will determine the sustainability of growth in the banking sector.

1. Bank deposits

Banks offer various avenues for depositing money, the predominant one being fixed deposits with an average rate of return of 3.50% to 9.25%. In 2023, the equity market rewarded investors with an average return of 20%. People started substituting bank deposits with investments in capital markets and mutual funds. The rise in wealth fintechs and fin-fluencers has accelerated this trend. A study in 2019 by S&P Global observed an inverse relation between demand for retail deposits and stock market booms. The number of BSE-registered investors jumped by 27% y-o-y in 2023. As a consequence, bank deposits have risen by only 11.1% y-o-y in 2024 while bank credit has risen by 17.4% y-o-y. As the share of equities increases in the investor's savings, the liquidity available with banks will impair the lending capabilities of banks. This has also driven banks to increase deposit rates thus not only reducing the spread but also making banks sensitive to interest rate movements.



2. The Gen Z approach to financial planning

India has a very young demographic. Roughly 52% of the Indian population is composed of Gen Z and millennials which is higher than the global average of 47%. Their way of planning finances is quite different from that of the older generation. While they have lower incomes during the initial stages of their careers, they have a high inclination to take loans to spend on consumption. The overall bank credit grew by 15% in FY23, while low-ticket unsecured loans grew by 48%. FOMO, the lack of discipline in financial decisions and the growth of Buy Now Pay Later apps are the main causes of such behaviour. This is a concern for the RBI as the rise of such low-ticket unsecured loans increases the risk of default. While the rate of delinquency for property loans is 2.13% and 0.69% for auto loans, it is as high as 5.4% for small-ticket personal loans.

A high rate of default will increase NPAs and cripple the growth of banks.

3. Consumerization of credit

The share of industrial credit plunged from 56% in 2011 to 34% in 2021. The growth of credit to large industries is as low as 8.7% while that of the personal loan segment such as credit card loans is 20.2% led by home loans and vehicle finance. The rate of NPAs is higher in the case of the personal loan segment when compared with corporate credit. Also, the Insolvency and Bankruptcy Code 2016 has made the recovery process more effective. The surge in consumer credit could push banks into a credit trap and impair the quality of assets.

4. Rise of FinTech and NBFCs

The COVID-19 pandemic disrupted numerous aspects of our lives and sparked changes in a number of businesses. The crisis urged industry participants to work jointly to establish ground-breaking solutions by boosting innovation in the fintech sector. Fintech companies have adopted emerging technology to meet changing client expectations and regulatory restrictions. Examples of these include blockchain-based identity verification systems and AI-powered chatbots for customer care. Traditional banks are strengthening their digital infrastructure too.

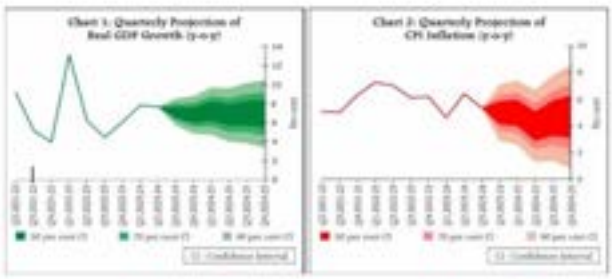
The fintech sector, with a market size of around $110 billion in 2024, has been growing exponentially and is projected to have a market size of $420 billion by 2029. The acceptance and penetration of fintech will pave the way for the growth of the banking sector.

Instruments used by RBI to regulate the Sector

This section of the paper shall conduct a temporal analysis of various actions taken by the Reserve Bank of India in relation to the state of credit and the overall economy with a focus on the last 2 to 3 years.

1. Repo Rate:

The Repo Rate is the rate at which the central bank lends to commercial banks in the short term. An increase in Repo Rate decreases money supply in the economy but is a convenient way to curb inflation. The RBI has kept the repo rate constant at 6.50% for 10 consecutive times in the apprehension that a decrease in the rate could lead to increased consumer credit and thereby give wings to inflation.



- The last change in Repo Rate was on February 8th, 2023, which comprised an increase of 25 basis points from 6.25 per cent to 6.5 per cent.
- The Repo Rate is being kept constant to reduce the Consumer Price Index Inflation from the reading of 5.69% in December 2023 to the target of 4%.
- This will result in an unchanged "External Benchmark Lending Rate" (EBLR) providing relief to borrowers due to unchanged EMIs.

Reserve Ratios:
Cash Reserve Ratio (CRR) is the minimum funds banks must maintain with RBI. A higher CRR reduces lending capacity, decreasing the money supply. The ratio has remained constant at a reasonable rate of 4.5% for over two years to maintain sufficient liquidity in the economy.

Risk Weight
On November 16th, 2023, RBI released a notification regarding the risk weight of loans issued by commercial banks.

1. The risk weight on unsecured personal loans and credit cards, either outstanding or new, was increased by 25 per cent points.

2. Similarly, loans categorised as retail loans issued to NBFCs are also subject to 125% risk weight which was increased from 100%.

3. This was done in order to reduce the demand for small-ticket consumer loans in the economy due to the higher risk of default.

Incremental Cash Reserve Ratio
On 10th August 2022, RBI announced a measure which mandated the scheduled banks to maintain an I-CRR of at least 10% on the increased NDTL (Net Deposits and Time Liabilities) to curb the increase in liquidity of the banking sector due to an inflow from the discontinued Two Thousand Notes.

From September 8th, 2023, RBI decided to discontinue I-CRR in the following manner:

1. On September 9th, 25% of the maintained I-CRR was released

2. On September 23rd, 25% of the maintained I-CRR was released

3. On October 7th, 50% of the maintained I-CRR was released

The I-CRR was discontinued to release liquidity in the economy in a phased manner.

Open Market Operation
Open Market Operation refers to the purchase and sale of government securities in the open market by the central bank (the RBI in the case of India) either from/to banks or other financial institutions.

- Resulting from the pandemic, the RBI implemented various measures to stimulate market activity, reduce funding costs, and enhance monetary transmission.

- OMOs played a significant role in this strategy, with the RBI conducting an unprecedented net purchase of ₹3.13 lakh crore during the fiscal year 2020-21.

- Specifically, three OMOs were conducted on State Development Loans (SDLs) during the year to enhance their liquidity and support efficient pricing.

- To curb the problems in monetary policy transmission and to provide a stable evolution of the yield curve, RBI introduced the Government Securities Acquisition Programme (G-SAP) from April to September 2021, which involved upfront commitments on the size of G-sec purchases, and focused on buying G-secs from the secondary market.

- Overall, OMO purchases injected liquidity of ₹2.1 lakh crore during the fiscal year 2021-22, with ₹1.9 lakh crore attributed to G-SAP.

Open Market Operations: Demonstrating rise in OMO during pandemic

(₹ crore)

	Auction			NDS-OM			Total		
	Purchase	Sale	Net Purchase	Purchase	Sale	Net Purchase	Purchase	Sale	Net Purchase
2019-20*	1,32,500	28,276	1,04,224	13,190	3,845	9,345	1,45,690	32,121	1,13,569
2020-21*	1,02,332	1,90,545	1,11,587	2,05,588	3,880	2,01,708	5,07,720	1,94,425	3,13,295
2021-22**	2,30,000	40,000	1,90,000	48,061	24,085	23,976	2,78,061	64,085	2,13,976

*: Includes OT.
**: Includes OT and purchases under G-SAP.
Source: Reserve Bank of India

Conclusion

In a nutshell, the banking sector has shown remarkable resilience and adaptability during the period of unprecedented challenges brought upon by the COVID-19 pandemic. Despite concerns about the sector's stability in such a disastrous time, it witnessed a resurgence in profitability, asset quality, and growth indicators, signalling a break in the clouds.

The comparative analysis in this study has revealed significant improvements in key metrics such as non-performing assets (NPAs), profitability, and credit growth. This turnaround can be attributed to several strategic initiatives. Moreover, the accelerated pace of digitalization has played a major role in enhancing customer experiences and operational efficiency within the sector.

However, while the sector's performance appears healthy in the short term, the sustainability of its growth hinges on several factors. Challenges such as changing consumer behaviors, particularly among the younger demographic, and the rise of fintechs and non-banking financial institutions (NBFCs), underscore the need for continued vigilance and regulatory oversight. Further, the effectiveness of instruments deployed by the Reserve Bank of India (RBI), such as repo rate adjustments and open market operations, in managing liquidity and inflation will be crucial for a suitable stability stature of the country.

By leveraging technological advancements, fostering innovation, and maintaining prudent risk management practices, the banking sector can continue to be a cornerstone for India's economic development in the years to come, as it has always been in the past.

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GenZ and The Luxury Fashion Market in India

By- Anshit Kumar Singh

Abstract

Generation Z, known as digital natives, are unique consumers with distinct tastes, preferences, and behaviors. This study explores their purchase behavior and motivations when buying luxury apparel, emphasizing their preference for high-end fashion. Marketers must be creative and interactive, both in-store and online, to appeal to this generation. The research compares the perceived luxuriousness of Western brands like Louis Vuitton and Hermes with Indian luxury brands like Sabyasachi and AND, focusing on women's fashion. Findings show that while Western brands are generally seen as more luxurious, cultural origins significantly influence perceptions. For instance, Western brands marketing traditional Indian attire, such as sarees, are perceived as less luxurious than Indian brands like Sabyasachi. Conversely, Indian brands offering Western-style evening dresses are viewed as less luxurious compared to Western brands. Brand trust and customer satisfaction are crucial for building brand awareness and loyalty. Popular brands tend to create positive customer perceptions, while lesser-known brands may face challenges. Successful brands can enhance visibility and customer loyalty, encouraging brand evangelism through trendiness, customization, and word-of-mouth.

Keywords: Generation Z, luxury apparel, purchase behaviour, cultural origins, brand perception, customer loyalty, brand evangelism

Introduction

Generation Z, or "GenZ," includes people born from the mid-1990s to early 2010s. This generation grew up with technology like smartphones, social media, and high-speed internet all around them. Because of this, they are very skilled at using digital tools from a young age (Francis, T., & Hoefel, F., 2018). This generation is more practical and careful with money than previous generations, partly because they saw the effects of the 2008 financial crisis while growing up (Seemiller & Grace, 2019). Most of Generation Z are children of Gen X or later Baby Boomers.They share tech-savviness with Millennials but may show different consumer behaviours

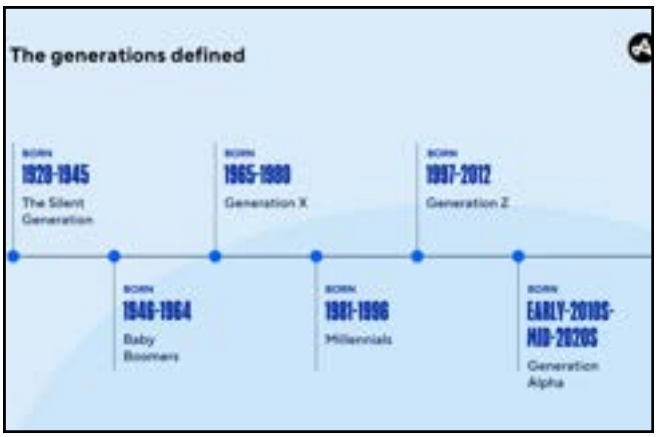
due to experiencing economic recessions at a young age (Wood, S., 2013).According to studies, the purchasing power levels of middle and upper-middle-class families have grown tremendously, resulting in an increased demand for the luxurious fashion market. Wealthy Indians, including Generation Z, travel abroad a lot, so they see the newest fashion trends and luxury brands from around the world.

As a result, consumers now prefer international styles, modern fittings, and stunning designs. The clothing industry grew steadily at an average rate of 19% from 2002 to 2009 (Jain, V., Pingle, S., & Daswani, A., 2012). According to the KPMG India report, (2020) the Indian fashion industry has become robust and well-established, generating revenues of about 2 billion Indian rupees. In 2024, the revenue in the Luxury Fashion market in India amounts to US$2.65 billion. It is projected to experience an annual growth rate of 3.32% (CAGR 2024-2029) (Statista, 2024).

Besides the international and Western clothing styles that may be described as more luxurious, they need to blend in the Indian cultural knowledge of how traditional customs mix with Western brands. Cultural influences in India affect which luxury items people want to buy. For instance, traditional Indian clothing like sarees and lehengas are popular among wealthy consumers because they blend cultural pride with modern fashion trends. So, it is important to understand what drives the will of GenZ consumers to buy luxury apparel and how they cope with the ever-changing market environment. The next section will discuss the findings on the Indian luxury market, the apparel sector, and the consumer behaviour of Generation Z.

Literature Review

Generation Z, often referred to as GenZ, includes individuals born approximately between 1997 and 2012 (Dimock, M., 2019). They make up over 27% of the world's population, with most living in developing countries like India and China (Tibergien and Dellarocca, 2016). GenZ values individual expression and avoids labels. They make decisions in a practical and analytical way. This is why we call them "True Gen." In contrast, millennials, known as the "me generation," grew up during economic prosperity and focused more on themselves. They are more idealistic, confrontational, and less open to different viewpoints (Francis, T., & Hoefel, F., 2018).



Reaching GenZ consumers through advertising campaigns is challenging. They prefer ads with interesting content over those featuring presenters or music. Additionally, they only pay attention to ads that interest them and avoid those that invade their privacy (Brown, K. M., 2017). That's why they are considered the toughest consumer group to reach because they are skilled at researching and comparing products thoroughly before deciding what to buy. When these consumers buy and use luxury goods, their expectations seem to be linked to psychological factors. They move from focusing on the physical features to valuing the intangible experiences they provide. Luxury is seen as a way to express personality, according to the people interviewed. For instance, a person being asked about it said, "The luxury product reflects my personality, an outfit may be elegant for me, but not for someone else.

In any case, I consider that product to be important because it reflects my personality" (Amatulli, C., & Guido, G., 2011). Luxury apparel brands have always tried to integrate the Indian culture and Western clothes in order to penetrate widely in India and studies have been conducted resulting in "three" different outcomes:

1. An analysis showed that Western brands were rated much higher in terms of being luxurious.
2. Western and Indian fashion products are equally seen as luxurious.
3. Indian luxury brands seem more luxurious when culturally connected to 'Indian-ness'

Western brands aiming for the Indian market must increase usage occasions, similar to how Cadbury positioned itself as a 'meetha' (sweet), appealing to Indian traditions and tastes (Devanathan, S., 2020).
Studies have shown that young Indian consumers appreciate traditional fashion for its quality, brand loyalty, and sustainability. Western brands should learn from this and improve their marketing by emphasising these aspects instead of pushing fast fashion (Bardey, A., Mehdiratta, U., & Turner, R., 2022).

Luxury consumption in India is influenced by both shared cultural factors and individual psychological motivations. Luxury brands should consider both cultural values and individual status-seeking when marketing to Indian consumers. They can use local celebrities and integrate foreign brands with Indian cultural elements to better match Indian consumer perceptions of luxury (Eng, T. Y., & Bogaert, J., 2010). Also, male GenZ focuses on elegance and brand portrayal, preferring good ambiance, lighting, and merchandising. Females emphasize aesthetics, variety, and shopping experience.

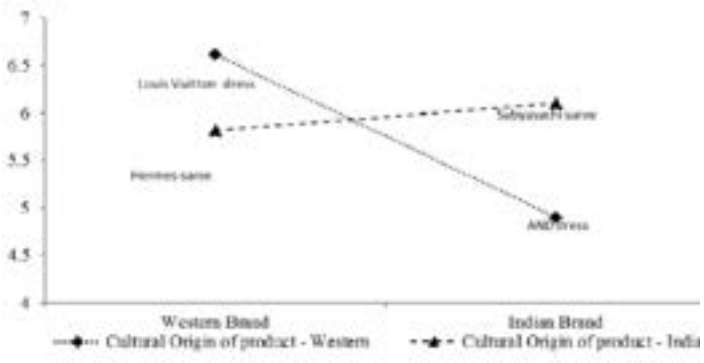
Males use emails and Twitter, while females are more tech-savvy, using apps and websites. Females buy more during discounts, and celebrities influence GenZ purchases, especially for females. Females prefer the store manager to complement and pamper them more (Jain, V., Vatsa, R., & Jagani, K., 2014).
In a post-COVID-19 world, Indian GenZ prefers a shopping experience that combines physical and digital aspects. They seek quick assistance and reliable product information, preferring 3D avatars for trying clothes. Upgrading store technologies, like AR apps, can improve user trust and accuracy of information, shaping future consumer behaviours and business strategies (Ramesh, A., Gulaty, S., & Sarwate, S.).

Luxury retail is rapidly expanding in India, driven by a growing aspirational middle class, presenting a significant opportunity for the global luxury market (Acharya, M., & Nirjar, A., 2016) since the present generation is majorly comprised of GenZ consumers, it is necessary to know what they seek in this market.
Generation Z's luxury apparel purchase behaviour involves high brand awareness from media, analyzing intrinsic and extrinsic factors, seeking opinions from friends/family, and posting photos on social media to showcase their purchases, driven by quality, fit, uniqueness, and social recognition (Jain, V., Vatsa, R., & Jagani, K., 2014) .

Research Gaps

1. Cultural Differences and Regional Trends: The Perceptions of Luxuriousness: Indian vs. Western Brands (Moderating Effect of Cultural Origin of Product) study lacks focus on how various regions in India influence GenZ's luxury brand choices.

Perceptions of Luxuriousness: Indian vs. Western Brands (Moderating Effect of Cultural Origin of Product)



Source: (Devanathan, S., 2020)

2. Long-Term Studies: More research is needed on how GenZ's buying habits change as they grow older and gain wealth.

3. Digital Influence: The study needs a deeper analysis of how tech like AI and AR impact GenZ's luxury shopping behavior.

4. Sustainability Impact: Further research is required on how GenZ's eco-friendly values influence their luxury purchasing decisions.

Future Scope of Research:

1. Detailed Consumer Groups: Research can segment GenZ by income, location, and lifestyle to better tailor luxury brand marketing.

2. Brand Loyalty Study: Future research should explore what builds brand loyalty for GenZ in Indian and Western luxury markets in a more comprehensive way.

3. Experience-Focused Marketing: Research how luxury brands can create experiences that appeal to GenZ's preference for experiences over products.

Conclusion

Generation Z, known as the "True Gen", values expressing themselves and making practical decisions. They are hard to reach with ads and prefer content-focused ones over those with presenters or music. When buying luxury items, they care more about the experiences they offer than just how they look.
For Indian GenZ, luxury is a way to show their personality. They like traditional fashion for its quality, loyalty to brands, and sustainability. Luxury brands need to think about both cultural values and how young people want to show their status when they sell to this group. When GenZ buys luxury clothes, they already know a lot about brands, look at both the inside and outside of the clothes, ask others for advice, and share what they buy on social media. They care about quality, how well things fit, how unique they are, and how much others notice what they wear.

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Industry-Specific Variations in ESG and Corporate Financial Performance in India

By - Akshat Bhaskar, Ishaan Harish, Manas Sood

Introduction

The relationship between ESG factors and CFP has been a talking point for the last couple of decades. Although considerable literature on the above aspects is documented in developed economies, studies in emerging markets, such as India, are relatively scant. Therefore, the present study focuses on exactly which ESG factors influence CFP in the Indian context and further compares these findings with existing literature. The paper focuses on the industry-specific variations of the relationship mentioned above, with a particular emphasis on the reverse causation problem.

Literature Review

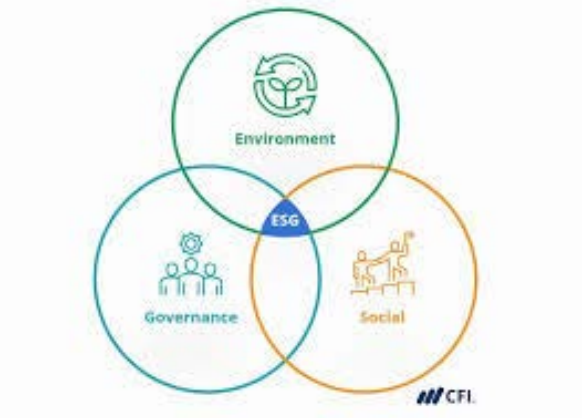
Previous studies of the ESG-CFP relationship in India have yielded mixed results. Some of these studies indicated a positive association of ESG factors with CFP-that is, the companies that are perceived to be performing better concerning ESG issues are likely to show superior corporate performance compared with others. For example, some studies found that Indian companies with higher ESG scores exhibited better financial performance measured in terms of both ROA and ROE. However, some studies have found no significant relationship between ESG and CFP in India. For example, some studies argued that certain characteristics of the Indian business context tend to diminish the positive impact of ESG factors on CFP, such as issues concerning regulation and corruption.

Methodology

Therefore, a quantitative research design will be applied, which shall analyze the financial data and ESG ratings of listed Indian companies. To this effect, relevant financial data-profits, liquidation, and solvency ratios-have been collected from Bloomberg Terminal for a sample of 300 companies listed on BSE and NSE from 2015 to 2020. The ESG rating data has been sourced from Sustainalytics. Multiple regression analysis was performed to analyze the relationship between ESG factors and CFP. In this regard, the dependent variable selected was the average ROA of a firm during the period under survey.

Results

Governance Factors: Finally, the governance-related factors had those to do with board independence and executive compensation. These factors would have a moderate impact on the CFPs. While good governance practices are very encouraging of effective corporate management, their effects on financial performance may be less direct than environmental and social ones.



Industry-Specific Variations

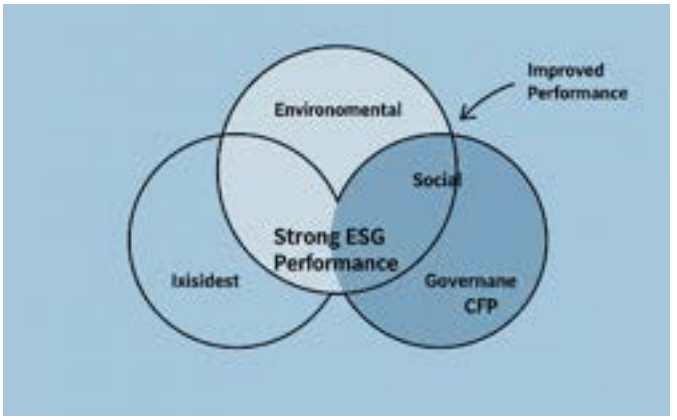
In India, the influence of ESG on CFP has been observably different for different industries. An energy company presents a unique set of environmental challenges-pollution and depletion of resources. Such companies would have to invest heavily in sustainable technologies to put down their environmental impact and maintain a social license to operate. In contrast, IT companies would face fewer environmental-related risks but would need to ensure that sourcing and data privacy are appropriate to maintain their reputations and the trust of their customers.

Energy Industry: Companies within the energy industry are under increasing pressure to be sustainable. Investment decisions around renewable energies, energy efficiency, and carbon reduction initiatives can have a very material impact on CFP. Successful transition to sources of clean energy may also include various government incentives and lower regulatory risks.

Manufacturing Sector: The firms that manufacture goods face problems of pollution, over-exploitation of resources, and labor practices. Sustainable modes of production would guarantee an improvement in the minimal waste produced with enhancement in the working conditions of the firms. In light of this, those firms that can portray good environmental and social performance tend to increase their business as more customers and even investors are attracted to their firms.

Financial Services Sector: Financial institutions can make valuable contributions to the promotion of sustainable development through methods of lending and investing. Embedding ESG factors into credit risk assessment and investment decisions, therefore, will contribute to the mitigation of risks and enhancement of financial performance.

Technology Sector: Technology companies are increasingly expected to engage in ethical issues regarding data privacy, algorithmic prejudice, and digital inequality. Ethical standards offer a greater reputation among customers. Responsible AI investing is important in that respect.



Reverse Causation: A Deeper Dive

Although the above analysis shows a positive relationship between ESG factors with CFP, one should not fail to consider the reverse causality. It is a condition in which changes in CFP result in the improvement of ESG practices rather than vice-versa. Several mechanisms may account for the appearance of reverse causation:

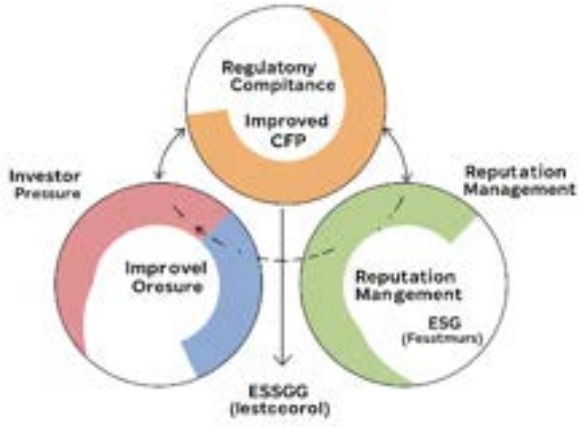
- **Financial Resources:** Firms that show superior financial performances are likely better equipped with resources to invest in ESG initiatives. For example, a profitable company can finance environmental projects or improve working conditions and improve corporate governance.

- **Investor Pressure:** Large institutional investors, along with other stakeholders, have started demanding ESG performance from the companies. The decline in the financial performance of a company may lead the stakeholders to put pressure on improvement in ESG practices, hence establishing a relationship between CFP and ESG.

- **Regulatory Compliance:** Increasingly, governments and regulatory bodies are putting strict regulations on ESG issues. Firms with good financial performance could easily bear the costs related to these regulations; therefore, there is an impression that ESG and CFP are positively related.

- **Reputation management:** Firms with weak financial performance are vulnerable to reputational risks. To improve public image and attract various types of stakeholders, it's thus possible that companies will invest in ESG initiatives.

Different methodologies applied in several studies to avoid reverse causation are instrumental variables analysis, panel data models, and difference-in-differences estimation. Such techniques may isolate the causal effect of ESG factors on CFP, net of any confounding effects and problems of reverse causality.



Addressing Data Limitations

Even though the sample size of three hundred firms is considerably sizable it may not signify all of them in India as an economy, particularly for small or unlisted businesses. Future researchers have several options to overcome this constraint:

- **Improved sample size:** An improved sample size would go a long way in including more firms, especially small firms, and those falling within the industries that are less researched.
- **Applying alternative data sources:** corporate social responsibility reports, complementing financial data, industry surveys, and stakeholder assessments that supplement ESG ratings.
- **Employ statistical techniques:** Techniques could range from balancing the sample by the method of propensity score matching to considering the differences between the included and excluded companies.

Enhancing Case Studies

The case studies of Tata Power and Infosys provide valuable insights but could be further developed to:

- Animate in detail the financial performance of: and quantify the impact of ESG initiatives on specific financial indicators, such as profitability, market value, and risk.
- Compare to industry peers: Benchmark the companies against their peers based on ESG performance and financial performance.
- Explore challenges and lessons learned: Discuss the challenges faced by the companies to implement ESG initiatives and what was learned from the experiences.

Future Research Directions

- **Long-term ESG:** The impact of ESG practices on CFP over the long term, conditional upon market reputation, investor sentiment, and regulatory changes.

- **Role of institutional investors:** Evaluate the role of institutional investors in driving ESG adoption and their influence on corporate behavior.

- **Trade-offs between ESG and financial performance:** Discuss potential trade-offs between ESG and short-run financial performance, given investment horizons and risk tolerance.

- **Industry-specific research:** More detailed research is required on more specific industries that may pose unique ESG-related challenges and opportunities.

- **Cross-country comparisons:** The relationship between ESG and CFP in India has been compared to that in other emerging markets to develop global trends and best practices.

Conclusion

Hence, the empirical evidence in the study supports the positive relationship between ESG factors and corporate financial performance in India. The findings thus suggest that companies focusing on ESG can enhance performance and, therefore, contribute to sustainable development. However, it should be considered that ESG factors take several different forms, and their relevance for CFP may vary as well.

Here, the analysis has been able to demonstrate that environmental and social factors are more influential in CFP in India than governance factors. Firms with better environmental practices and having a positive impact on society tend to outperform others in terms of their bottom line. Good governance practices are very vital in good corporate management, but their impact may be limited regarding CFP.

Industry-specific differences in the ESG-CFP relationship also exist. Indeed, industries such as energy, manufacturing, financial services, and technology possess unique ESG challenges and opportunities. Customizing ESG strategies to these particular contexts is imperative if benefits are to be optimized. One issue of reverse causality appears to arise in understanding the relationship of causality between ESG and CFP, whereas financial performance can affect ESG practices; however, empirical evidence showed that strong ESG practices are also causing improved financial performance. Other future research possibilities include the long-term impact of ESG practices on CFP, the role of institutional investors in fostering ESG practices, and whether there are trade-offs between ESG practices and financial performance within specific industries. Greater insight into the relationship between ESG and CFP in India will thus help policymakers, investors, and corporate managers make decisions that improve both sustainability and profitability.

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TCS Variable Pay Policy: Culture or Flexibility

By: Devansh Solanki

Introduction

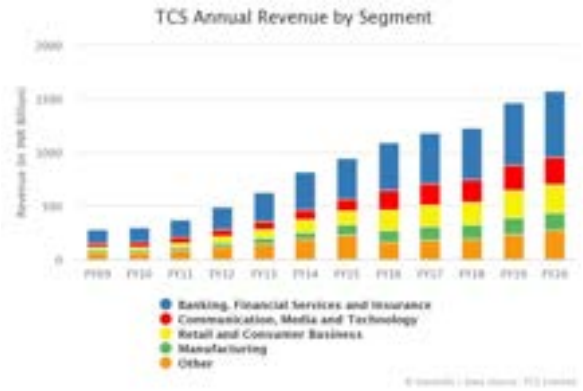
Tata Consultancy Services, better known as TCS, is one of the gems of the biggest corporate houses in India, i.e., the Tata Group. Headquartered in Mumbai, TCS is a global industry leader in IT services, consulting, and business solutions. Last year, i.e., FY 2023-24, TCS had an annual revenue of ₹2,40,893 Crores and a market capitalisation of ₹11,69,185 Crores as on 11th April 2025. It has definitely played a major role in the growth of the Indian economy. With around 6 lakh employees employed across 54 different countries, it's also one of the greatest employers in the IT field around the world.

The Tata Group has been known for its supportive and welcoming work environment. They are always known for their people-first policy. They introduced PF schemes and worker insurance for work-related activities even before it was mandatory by the government. They have a legacy of taking care of their employees, and the same has been carried forward in TCS.

The revenue of TCS can be separated into two different sources, i.e., consultancy services and sale of equipment and software licences, with around ₹2,38,135 Crores (98% of total revenue) coming from consultancy services and the remaining ₹2,758 Crores (2% of total revenue) coming from the sale of equipment and software services. The company also spends a fortune on employees, as shown in the profit and loss statement under employee benefit expenses.

It spends ₹1,25,432 Crores on salaries, incentives and allowances, ₹10,962 Crores towards contributions to provident and other funds, and ₹3,737 Crores towards staff welfare expenses. Therefore, the company spends a total of ₹1,40,131 Crores on their hardworking employees

The Tata Group has long been synonymous with progressive labor practices, pioneering employee welfare initiatives such as provident funds and work-related insurance schemes decades before governmental mandates. This legacy of prioritizing workforce well-being remains embedded in Tata Consultancy Services (TCS), which allocates ₹1,40,131 crores annually—over 58% of its ₹2,40,893 crore revenue—to employee benefits, including salaries, provident funds, and welfare programs. However, the company's recent introduction of a variable pay policy, tying bonuses to office attendance, has sparked debate about balancing operational efficiency with employee-centric values.



The Tata Group has always been known for their charitable and employee-centric policies, but the recently introduced new variable pay policy has been criticised by many, as it directly links the number of days employees are present in office to the variable pay—that is, the bonuses or extra perks they receive. So, let's try to understand the logic behind the new variable policy.

COVID -19 (START OF WFH)

The outbreak of the COVID-19 pandemic in March 2020 was a watershed moment for businesses across the globe, compelling them to navigate unprecedented adversity. Tata Consultancy Services (TCS), India's largest IT services firm, was not an exception. With offices closed worldwide owing to lockdowns, TCS made an instant switch to a "Work From Home" (WFH) mode. In contrast to industries dependent on physical operations or manufacturing, TCS's technology-based services permitted easy remote work implementation. This transition not only guaranteed business continuity but also turned out to be a strategic boon, yielding astounding advantages for the employees as well as the company.

The rapid shift to WFH was facilitated by the robust infrastructure of TCS and earlier investments in digital transformation. In March 2020, over 90% of its workforce—some 500,000 employees—were already working remotely while still having safe access to internal systems and customers. This adjustment was part of the company's larger "Secure Borderless Workspaces" (SBWS) architecture, which had been in the works for a while but accelerated when the epidemic broke out. Workers were able to work remotely with high levels of productivity and data security measures due to the SBWS paradigm.

The corporation also ensured the workers were in good health at this point in time. Virtual training workshops, mental wellness programs, and flexible work timings according to individual workers' requirements were some of them.

NEW VARIABLE PAY POLICY

Tata Consultancy Services (TCS) launched a new variable pay policy in April 2024, linking quarterly bonuses to office attendance of employees. The policy, which was introduced after the company's quarterly performance, sets four attendance slabs for calculating the percentage of variable pay for employees:

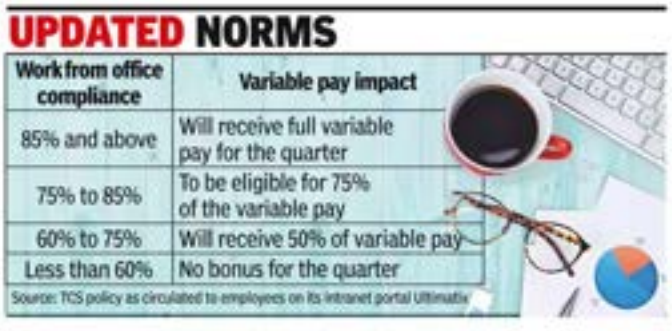
Less than 60% attendance: Employees in this category are not paid any variable pay.

60–75% attendance: Employees get 50% of their variable pay.

75–85% attendance: Workers get 75% of their variable pay.

Over 85% attendance: Workers are entitled to the entire variable pay.

The policy is consistent with TCS's overall return-to-office requirement, where employees are expected to work from the office five days a week. Failure to meet the attendance requirements can lead to disciplinary actions, including effects on annual performance reviews, career advancement, and compensation adjustments



VARIABLE PAY

Now, the question is: what is variable pay? Variable pay refers to a portion of an employee's cost to the company (CTC) that varies according to the success of the individual or the business. It is awarded in recognition of the employee's contribution to the expansion of the business. In contrast to a fixed wage, variable remuneration is directly related to particular accomplishments. The policy also cautions that continuous non-compliance with the 85% work-from-office requirement will lead to disciplinary action. This led to protests and the departure of numerous workers, as many employees who had grown used to the flexibility of WFH began leaving companies that mandated work-from-office policies

TOP MANAGEMENT RESPONSE

CEO K. Krithivasan pointed to the significance of going back to office environments as a method to foster cooperation and bonding between employees. Speaking at different platforms, including the World Economic Forum and Nasscom Technology Leadership Forum, he indicated that casual conversations—like friendly chats and learning from senior peers deal with challenging situations—help in the growth of employees. Krithivasan added, "The last quarter has witnessed most of you back to the office, building common experiences, fostering more learning, collaboration, and camaraderie." He added that almost 65% of staff had returned to the office for 3–5 days a week within a single quarter of the policy's roll-out

CHRO Milind Lakkad shared similar views regarding the advantages of working from office premises. He pointed out that 70% of staff had come back to offices after attendance-linked variable pay was introduced. Lakkad called this step temporary but one that had helped induce positive behavioral changes among the employees. "People are seeing the value of reporting to office. Some of them are reporting for the first time because they joined during the pandemic," he said

Both leaders emphasized how shared experiences contribute to team building and employee engagement. Research supports their views; shared experiences help employees learn emotional cues, working habits, and norms faster, improving team performance significantly

REASONS FOR THIS POLICY

TCS may have chosen to implement this policy at this time for a variety of reasons. First of all, teams can communicate more, exchange ideas, and learn from one another more readily when they operate in an office setting rather than over video calls. Leaders might also think that some jobs are better completed in person and that not everyone is as effective at home. The fact that many other multinational corporations have begun calling workers back to the office—at least a few days a week—in an effort to restore company culture and foster better teamwork may be another significant factor. TCS may be attempting to keep up with this return-to-office trend while getting ready for a future in which in-person collaboration and flexible work are balanced.

HOW COMPETITORS REACTED

No competitors have implemented a similar policy. Companies such as Infosys and Wipro have not tied variable payouts to the return-to-office mandate. Wipro, for instance, has distributed an average variable payout of 85% for the March quarter of FY24, consistent with the 85% variable pay given to junior employees in the December quarter.

CONCLUSION

In essence, TCS is attempting to entice employees to return to work by linking their bonuses to office attendance. Increasing teamwork and rebuilding the face-to-face connection that was lost online appears to be the aim. The issue is that people have grown to enjoy their flexibility. There is currently a rift—some believe the policy could improve company culture, while others think it's completely the wrong approach. As the line between home and office continues to blur, companies like TCS must walk a fine line—between preserving culture and respecting employee flexibility. It's a daring move, and only time will tell if it succeeds or if they lose talent as a result.

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GEOPOLITICS

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Multilateralism: A New Way of Governing the World: New Mechanisms and Modern Forms

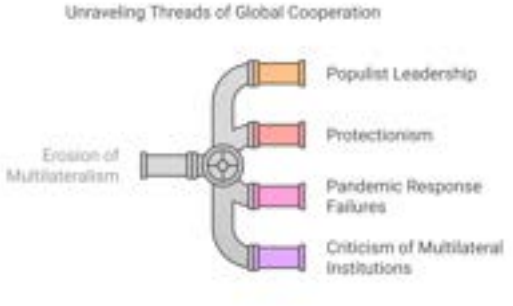
By: Udgam D. Trishulia

Introduction

International cooperation, where the idea that many nations manage a particular problem, has been the foundation of world politics since the middle of the 20th century. Organizations such as the United Nations, the World Trade Organization (WTO), and the International Monetary Fund (IMF) were created as bodies to act as referees and maintain order Nevertheless, the contemporary international environment counts for growing nationalism and geopolitical tensions, which weaken international obligations by superpowers. This essay will also look at the future of multilateralism in such a polarized world, the problems that have beset multilateralism, and its future.

The Erosion of Multilateralism

The interwar period that followed the Second World War entailed considerable agreement on the necessity of international cooperation. The situation has significantly changed in recent years, and we can observe that the consensus is waning. There is disengagement from the multilateral system because of populist leaders worldwide, such as Trump of the USA, Bolsonaro of Brazil, Orban of Hungary, and others. For example, the decision of Trump's America to pull out of the Paris Climate Agreement meant a shift from global initiatives in the fight against climate change (Davenport). Also, political developments such as the shift to protectionism have made it difficult for the WTO to support global trade. In addition, existing multilateral structures were revealed as vulnerable due to the COVID-19 pandemic. The first countermeasure to the pandemic was characterized by a rivalry that exhibited countries grabbing medical equipment and vaccines. The WHO was again blamed for bad management of the crisis, and this was again a stab at multilateral institutions (Zizek). It has been observed that the relations between the global states have become more polarized in the recent past, and the pandemic situation has further distanced countries to aggregate for a common cause, which has challenged the concept of multilateralism. Political Relations Among the Developed States and Their Consequences. One of the greatest threats to multilateralism is the escalation of the rivalry between the USA and China. It has pertinence and implications in global governance since both are the largest economies in the world. The trade war between the U.S. and China in 2018 caused the supply chain process to be unstitched and changed the status of the WTO or World Trade Organization (Chatzky and McBride). The rivalry is not only in business but in cyberspace, human rights, and the South China Sea (SCS). As was the case with the conflict between the U.S. and the U.S.S.R., an apparent struggle to conquer the global market, new opposing blocs have come into the picture, with each country trying to enlarge its sphere of influence. This has caused the deterioration of the international governance structure; it has also caused the polarization of states. For instance, some have described China's Belt and Road Initiative (BRI) as an attempt to establish a new system of economic regulation (Cai).



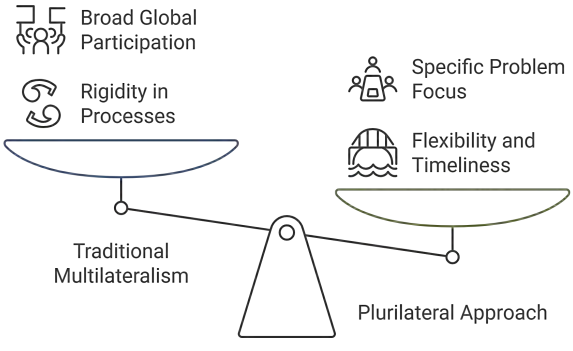
In light of the above reality, any agreement on matters arising from issues anywhere in the world becomes almost impossible and thus deals a significant setback to multilateralism.

The Role of Regional Organizations

In front of the new trends and deepening of the divide at the international level, subregional organizations can assume more critical roles in the encouragement of the multilateral system. An outstanding example of regional cooperation is the European Union (EU), which has already created a basis for political and economic cooperation between member states. The EU's negotiation of trade agreements, crisis management, and advocacy for human rights support regional organizations in realizing their capacity for multilateralism in the progressive decline of the multilateral system (Börzel and Risse). In the same way, international organizations are on the right track in performing their tasks; regional blocs such as the African Union (AU) and the Association of Southeast Asian Nations (ASEAN) have come a long way in realizing the importance of regionalism. Such organizations can act as mediators and support mechanisms to contribute to the solution of regional clashes and their economic progression (Bach). However, the effectiveness of regional organizations is a function of their capacity to forge a common front and remain immune to pressures from the more robust global actors. Caught between a rock and a hard place, it is now more than ever that the regional organizations have to balance the complicated geopolitics environment and the principle of multilateralism.

The Change Management of Multilateral Institutions

To ensure sustainability in multilateralism in today's world of increasing bipolarity, the processes should be easier to adapt to the latest context. These centers can be diversified, but another approach would be to change the structure of multilateral organizations to make them more democratic. For example, the United Nations has been accused of being biased in the sitting of its Security Council, where the permanent members wield much power (Weiss). The current permanent members of the Security Council may become more legitimate and effective if the number of members is increased to include the Group of Twenty-Four countries, which comprises the BRIC – India, Brazil, South Africa, and others. Another approach is to adopt a less rigid form of multilateralism, which has been described as multilateralism or plurilateral – the approach that occurs in a relatively limited number of states united to solve particular problems. For instance, the Paris Agreement, the global deal to fight climate change, was arrived at through the plurilateral model, where countries pledged their contributions, which were not binding on all countries (Falkner). It makes the process more flexible and timely so nations can react on time to global challenges while cooperating.

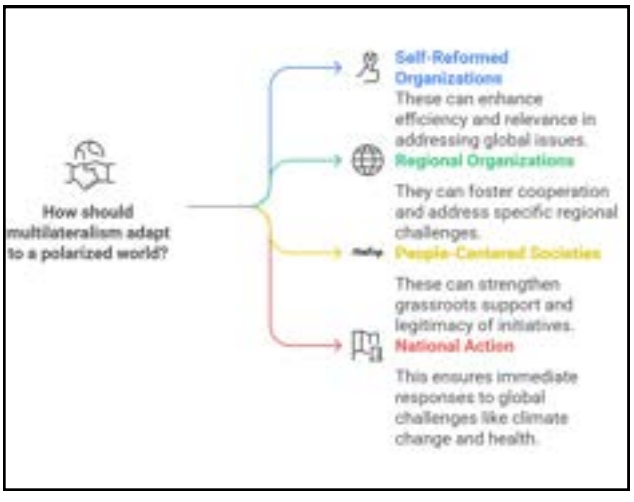


Comparing Flexibility and Scope in Multilateral Approaches

The Role of Civil Society and Non-State Actors

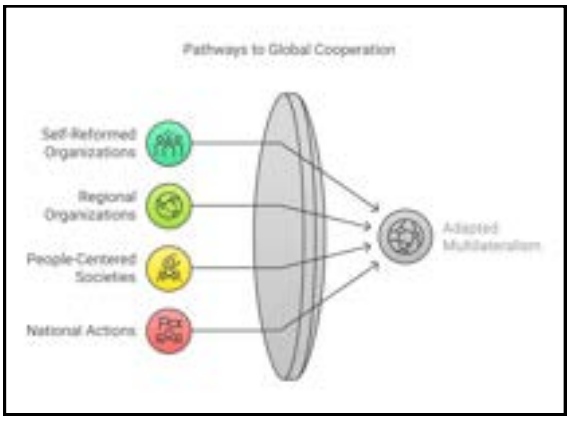
Civil society and other non-state actors enhance multilateralism in a world characterized by two robust poles. Global civil society actors are international non-governmental organizations, multinational corporations, and transnational advocacy networks that can participate in the governance of world politics and call for global cooperation in world problems, including climate change, human rights, and health.

These actors' engagement in the multilateral processes could fill the gaps created by sovereigns and provide a means for including voices that state actors may not usually consider (Gills and Gray). For example, the Global Compact on Migration agreed upon in 2018, was developed through consultations with civil society and other actors. This inclusiveness improves the multilateral agreements legitimacy and aligns multilateral agreements with the needs and sensitization of society. The role played by civil society and non-state actors in the current world environment as a vector in opposition to powerful states thus opens up the opportunity to build a less neo-realistic multilateralism.



Conclusion

Open questions of multilateralism in a future even more divided are naturally ambiguous but not hopeless. What is more, the current global environment is quite unfavorable; however, it is also possible to find some niches where it is possible to act. Self-reformed international organizations, regional organizations, and people-centered societies are all part of the way towards the renewal of multilateralism. Thus, action on international problems such as climate change, global health, or, quite obviously, security must be delivered on a national basis. Therefore, the survival of multilateralism will depend on how it adapts to the current reality of a polarized world so that it will remain relevant in supporting future governance needs.



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‘Capital Exodus from China: An opportunity for India’

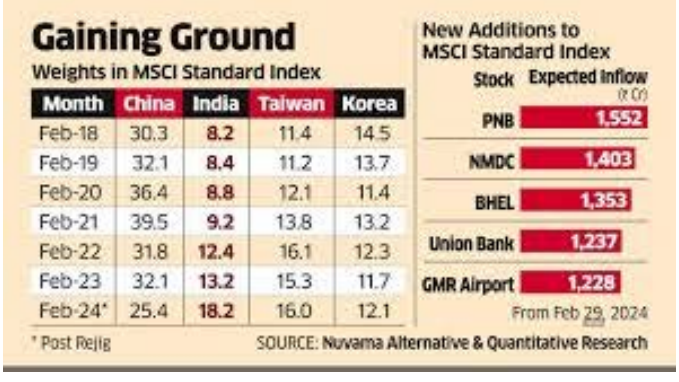
By: Parv Jain

ABSTRACT:
In this article, we will dive deep into how the world’s second largest economy, which once grew with a growth rate of double digits has become an uncertain giant with ageing population, housing crisis and low domestic consumption demand. It's the contemporary story of the People's Republic of China. It would be the first annual net outflow of capital since at least 1990 from China, which is usually termed as capital exodus. Here, we will discuss how China plus one policy and geopolitical tensions in our neighbouring country are actually creating various opportunities for India. And it’s important to consider how India will be able to snatch these opportunities from the hands its competitor countries and can boost its manufacturing sector which can in return turnabout our trade deficit and create value jobs for skilled, semi-skilled and unskilled labour.

WHAT IS WRONG WITH CHINA?:
The entire news media all over the world is abound with happenings reflecting deep pessimism about the Chinese economy. Reports say that foreign investors pulled a record amount of money from China last quarter and made it China’s first annual net outflow since 1990. Foreign Direct Investment dropped almost $15 billion in the April- June period. Chinese overseas investments instead are touching record highs, with firms sending $71 billion abroad in the second quarter, and that is 80% more than the overseas investment in the same period last year. And it is not where the story ends.

Lately, India overtook China in the famous Morgan Stanley Capital International (MSCI) Emerging Markets Investable Market Index (IMI), in terms of weightage in the index. Now, the weightage of Indian companies stands at 22.27% compared to 21.58% of China.

The significance of these data enhances with the fact that at the beginning of 2021, China’s 38.7% weightage was much greater than India’s 9.2%. With this change in the structure of the Index, Indian equities could witness inflows of about $4 -$4.5 billion, according to analysts’ estimates. Although, China still has the highest weightage in Morgan Stanley Capital International (MSCL), Emerging Markets Index (Standard Index), but given the current pace and momentum, India could potentially cross its current weightage of 22% in MSCI EM (Standard Index). This transformation will further exacerbate China’s capital exodus problem and direct foreign funds to India. Main difference between the Standard Index (MSCI EM Index) and MSCI EM IMI is that the former covers the large and midcap space, while the latter encompasses large, mid and small cap stocks. China today is not just facing the exodus of capital but the exodus of the source of capital, that are millionaires and billionaires. The recently published Hurun Rich List 2024 perspicuously act as an imperial evidence for the above stance. China saw a 25% decline in its number of billionaires, while India experienced a 29% increase. In 2023, China saw the world’s biggest outflow of high net worth individuals last year and is expected to see a record exodus of 15,200 millionaires in 2024, dealing a further blow to its economy.



Gaining Ground

Weights in MSCI Standard Index

Month	China	India	Taiwan	Korea
Feb-18	30.3	8.2	11.4	14.5
Feb-19	32.1	8.4	11.2	13.7
Feb-20	36.4	8.8	12.1	11.4
Feb-21	39.5	9.2	13.8	13.2
Feb-22	31.8	12.4	16.1	12.3
Feb-23	32.1	13.2	15.3	11.7
Feb-24*	25.4	18.2	16.0	12.1

* Post Rejig

New Additions to MSCI Standard Index

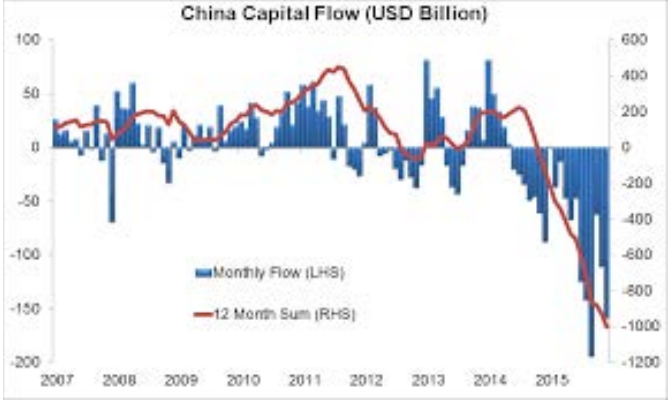
Stock	Expected inflow (₹ Cr)
PNB	1,552
NMDC	1,403
BHEL	1,353
Union Bank	1,237
GMR Airport	1,228

From Feb 29, 2024

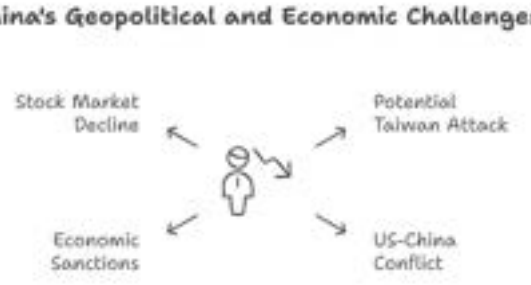
SOURCE: Nuvama Alternative & Quantitative Research

DEMYSTIFYING THE REASONS:

The sudden outflow of capital being witnessed by China is all the aftermath of various events, policies and factors. And one of the most significant factors is the China plus one strategy. China, commonly known as the manufacturing hub or factory to the world is now at the risk of losing its tag. Various MNCs shifted their manufacturing to China for it had cheap labour and favourable government policies, but the emergence of COVID-19 and the stringent implication of zero COVID policy by China have made the businesses realised that they have kept all their eggs in a single basket. Thus now, the MNCs are diversifying their manufacturing destinations or even completely shifting out of China. It is not the climax but the trailer of the movie. To understand the rationale behind the cease of being an opportunistic destination for production, we need to emphasise to what made China the manufacturing hub. The double digit growing economy, with cheap labour, low production costs, and most importantly the humongous domestic consumer base of the country, which used to be the most populous country of the world. But now, all these factors have turned unfavourable with the labour demanding more wages, autocratic political system of China and the domestic demand getting plunged. The most important aspect for an emerging economy, if it wants to remain less dependent on its exports, which are the function of geopolitical tensions and events, is its internal demand. But China, today seems to be on the path of Japan. China's total natural population dropped by more than 2 million in 2023. These dramatic demographic trends make China's long term economic prospect doubtful.



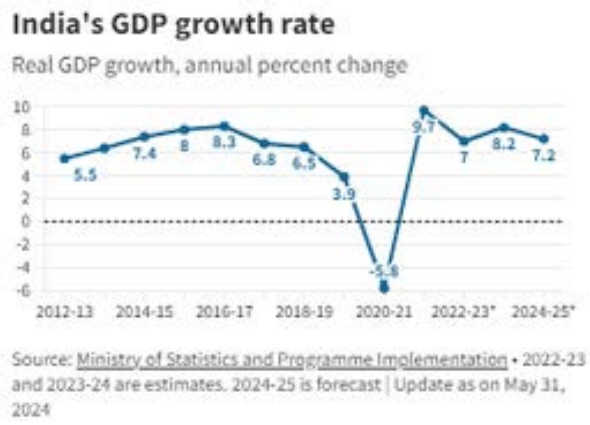
Investors, high net worth individuals and industrialists are reluctant to invest in Chinese economy and market because of the fears of sanctions and a potentially upcoming war. Today and for future, the biggest challenge for the US to stop the bipolarity is China. The plunging demand in the country is evident by the housing crisis and the deflationary pressures faced by China. And now here comes the bigger picture.



Multiple reports and geopolitical analysts predict that China may attack Taiwan in the next two to three years and this catastrophe is the thing that dreads everyone. If attacked Taiwan, China may face sanctions and even a front war with the US. All these factors ranging from economics to geopolitics have created a negative environment for businesses in China and the returns of the Chinese stock market stand out as its testimony. China's SSE Composite Index would have eaten 11% of one's investment in one year, as it gave negative returns.

WHERE DOES INDIA STAND? :

Today, India has a resilient economy in these uncertain global circumstances, where countries are facing recessionary trends; and strong macroeconomic fundamentals. The global GDP grew at 2.7% in 2023, but the Indian economy with robust domestic demand, grew at a whopping rate of 8.2% in FY 2023-24. World's most populous country with an average age of 28 years has a great potential to produce and consume. The inflation has eased down to 3.5% which is under RBI's target of 4%. India, with a strong banking sector, where non performing assets (NPAs) have almost vanished, with focus on improved infrastructure, ease of doing business, and with exports and manufacturing as its focal points,



Purchasing Managers Index (PMI) indicates ease of doing business and if above 50 points means expansion in it. The Indian services PMI has increased to 60.90 points in August 2024 and the same for manufacturing is 57.50 points

THE OPPORTUNITIES AND CHALLENGES:

The present global state of affairs and trust issues with Chinese economy have opened various opportunities for India to expand its manufacturing base, rectify its trade deficit and create employment for Indians to increase their per capita income and standard of living. The case study of Apple's production diversification lucidly signifies the potential of opportunities heading to India. As relations between the US and China have soured, Apple has worked to diversify its supply chain in countries like Vietnam and India. Recently Apple doubled its iphone production in India to $14 billion and it now makes around 14% of all the iphones in India. By 2028, Apple aims to produce 25% of all its iphones in India. But here comes the biggest challenges, Vietnam. Vietnam is a geopolitical friend but an economic competitor of India. News articles titled as 'Vietnam, not India, is in a geopolitical and geo-economic sweet spot', or 'India's true manufacturing rival is Vietnam, not China' are no rare. It's true that India is getting many overseas investments, but Foxconn's announcement of investing $100 million in Vietnam is a reminder that India is not the sole receiver of the business migration from China. And it's not only Vietnam, but also Mexico, Thailand, Indonesia and Czech Republic in line to secure funding. Thus, to take a competitive edge against these emerging markets, India has to continue its efforts on logistics infrastructure, ease of doing business and rationalise its tax structures and export tariffs.

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De-Dollarization and its potential Global Impact

By: Pratham Grover

Abstract

De-Dollarization is a process through which countries reduce their dependance on the US dollar in terms of trade, financial transactions and foreign reserves, thus shifting to other means. In the last century, the US dollar has established a prominent position throughout the World, so much so that 58% of global exchange reserves are held in the form of US dollar. This gives USA an unprecedented power over other countries and makes it a global leader. In this article, we will discuss the journey of the dollar and whether there is a possibility for a shift in power, with another currency, or something completely different, taking over global transactions.

Introduction

The US dollar has been the World's primary reserve currency for a long term. This has been due to a series of events, primarily starting with the Bretton Woods Agreement of 1944. While it still holds a very dominant position, there have been severe geopolitical tensions that have led countries to consider other alternatives. This process of De-Dollarization has the potential to completely reshape the financial system. How likely is it for such events to occur, and if not dollar, then what else. Let's find out.

The Rise of The Dollar

Before commenting on what the future will be, it is necessary to understand the past. If we truly wish to ascertain the possibilities for the future global financial system, it is essential to understand the journey of the dollar and how it came to be as powerful as it is today.

The value of a currency is strongly tied with the state of the economy and its growth. The USA economy showed prominent growth during the second World War. While other countries were busy fighting each other, the USA conveniently became a prominent supplier of ammunition, weapons, food and industrial machinery. It entered the War only after the incident in Pearl Harbour. Thus, in the period from 1939 to 1945, the average GDP Growth Rate in USA was 13.23% with it reaching as high as 18.9 % in 1942. Thus, after the War ended, the countries needed some stability in foreign trade, and Dollar, remaining highly stable, appeared to be the natural choice. Thus, in 1944, 44 allied nations agreed to peg their currencies to the Dollar, which was further tied to the value of gold. This is known as the Bretton Woods Agreement This led to a shift from the Pound to the Dollar. However, in 1971, there was a massive change, as the Nixon administration abandoned the Gold Standard. This was done because of falling gold reserves which reduced significantly from 1960 to 1970. So now, Dollar had become a fiat currency, meaning it was no longer backed by gold, but was instead dependent on the faith that people placed in it. Even after such a drastic measure, the US dollar continued to have a dominant position in the World. Why? This is where the Petro-Dollar comes in.

Petro-dollar

In the 1970s, USA entered into an agreement with Saudi Arabia, an agreement under which USA would provide Saudi Arabia with protection, and in return, the oil in the global market, would be traded in Dollars. Oil is considered to be the most valuable commodity of the century. When President Nixon abandoned the Gold Standard, the value of currencies depended on what commodities it could fetch in World market. And with the agreement between USA and Saudi Arabia, US dollar was the only currency which could fetch oil. Thus, even after the dollar was no longer backed with gold, its ability to buy oil made the countries retain US dollar in their foreign reserves.

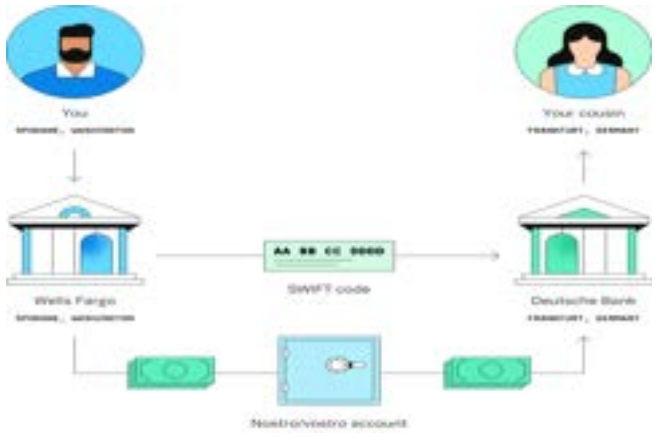
Trends towards De-dollarization

While the dollar has a very strong presence globally, recent developments have shown that there are significant trends towards De-dollarization. Nations are trying to reduce the control that the dollar and US has over World trade. For instance, the SWIFT network (Society for Worldwide Interbank Financial Telecommunication) which was established in 1973 in Belgium. What the SWIFT network does is provide an intermediary for financial transactions between nations. Under this, transactions are executed using third party banks as intermediaries. And not so surprisingly, USA dominates the system with more than 40% of these transactions being carried out in dollars followed by around 20% being carried out in Euro. This essentially means that due to its dominance in the system and its ability to put pressure over the European Union, the USA can essentially easily impose sanctions which can be crippling for other countries. This is exactly what it did with Russia in 2022 during the Russia Ukraine war. What this shows is the alarming power which USA holds over other nations due to its currency dominance, which other countries definitely don't appreciate.

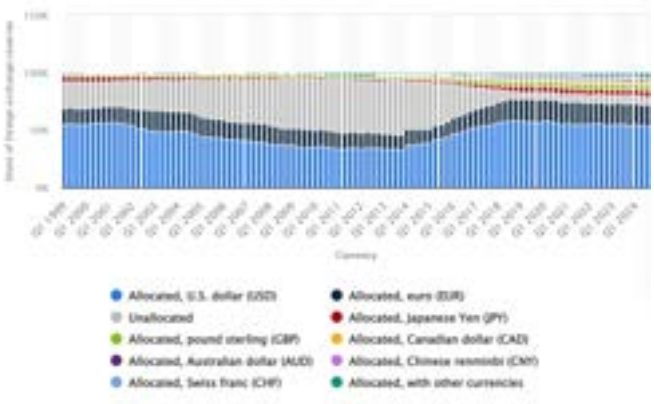
This has led to major shifts away from the dollar. For instance, a lot of Countries have switched to more bilateral trade agreements in local currencies instead of the dollar. In August 2023, the Indian Oil Corporation purchased 1 million barrels of oil from the Abu Dhabi National Oil Company using Indian rupees instead of US dollars. Russia has been selling oil in local currencies a lot after the Russia-Ukraine war as well.

There is a similar trend observes in the BRICS countries. BRICS has very big economies and are tending towards trading in their local currencies, which is again dangerous for the hegemony of the US dollar. The possibility of other currencies also joining BRICS and trading in local currencies is quite dangerous for the dollar.

In opposition to the dollar, the most prominent currencies are Euro and Renminbi. China is the second largest economy in the World and is actively trying to promote its renminbi for foreign transactions instead of the dollar. China is also in talks with oil-producing nations in order to bring a shift from Petrodollar to Petro yuan. While the foreign exchange reserves of the dollarhave been decreasing, Renminbi foreign exchange reserves are on the rise. The foreign exchange reserves of the US dollar decreased from 58.15% in Q3 2016 to 53.39% in Q3 2024. On the other hand, foreign exchange for Renminbi have increased from 0 in Q3 2016 to 2.02% in Q3 2024.



In a similar fashion, Euro can be another major threat. Over the past years, the share of Euro in global foreign reserves has also been increasing. It has risen from 11.8% in Q1 2015 to 18.62% in Q3 2024. The fact that Euro is already used in transactions among the 27 countries in the European Union also depicts a strong possibility of its presence growing stronger and rivalling the dollar.



What makes a strong currency

Now having witnessed the way that dollar came to be the most major currency worldwide, it is possible to outline the major requirements for an economy for its currency to become a global leader. The most important requirement is a flourishing and growing economy. USA is the World's largest economy with a GDP of more than US$ 30 Trillian much ahead than China which stands second with a GDP of US$ 19.53 Trillian. The sheer size of the US economy automatically gives dollar a very strong edge over other currencies.

The next important factor is trust. In 1971, when the dollar was no longer backed by gold, it became unstable. When it came back on track, while it was strongly due to the oil agreements between US and Saudi Arabia, the trust that nations placed in the dollar was another major reason. Even after the second World War, it was the trust that countries had in the stability of the dollar that eventually led to the Bretton Woods Agreement. All in all, dollar rose as a major currency because other countries had faith in its stability during times of crisis

Another important requirement is military and political power. To be a global leader financially, it is imperative that a nation is strong with respect to its military and has political influence. The same is very much prevalent in USA which has the second highest number of nuclear warheads, standing at almost 5,244 with Russia leading with almost 5,889 warheads and China at third place with just 410 warheads

Apart from these, there are many other requirements and USA has a phenomenal performance in most areas.

How likely is De-dollarization

As seen above, there are already global trends moving towards De-dollarization. However, the next big question is – Are these trends strong enough to actually replace the dollar. In the short term, the answer is clearly no. Sure the dollar has its problems. It gives US extreme competitive advantages and prompts other countries to look for different mechanisms to execute transactions. But is there any other currency or mechanism that has the capacity to replace the dollar – Not right now.

Digital currencies or cryptocurrencies lack trust and reliability. They are not very sustainable and don't currently operate at a scale that can sustain global transactions. In the previous portions of this article, we witnessed the strongest competitors to the dollar, namely the Euro and the Chinese renminbi, as well as the essential requirements a currency has to become a global currency. Thus, it becomes necessary to evaluate these two currencies based on these requirements.

For Renminbi, while China is definitely a flourishing economy, it lacks trust. Using a currency to enter foreign transactions and storing it as foreign exchange requires a lot of trust on the value of the currency and the economy itself. With China's history of Dirty Floating and devaluing its currency to boost exports, the lack of trust is quite evident. Moreover, Renminbi still stands at only around 2% of foreign exchange reserves and lacks the sheer scale required to dominate as the global currency.

Euro, while does command a lot of trust, is a currency used by a lot of nations coming together, which individually don't command huge geographical territories, which makes it difficult for Euro to become a global currency as well. Moreover, the oil trade is still dominated

majorly by the US dollar, making it difficult for other currencies to take over
Thus, the problems faced by other currencies essentially make dollar the strongest for now and its end does not appear to be in sight.

Conclusion

In a nutshell, nations worldwide are prompted to move away from the dollar, but are unable to do so because of its scale of operation and unique qualities such as its ability to buy oil, the trust dollar commands and the size of the US economy. While there are trends in the direction of De-dollarization, there aren't any strong substitutes to replace the dollar right now. In the long term, as other economies and alliances to grow stronger, particularly China, the European Union and BRICS, there is a possibility for shifts in global powers, but that seems distant for now.

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"The Impact of ESG Investing on Global Financial Markets"

By: Riddhi Sachdeva

Introduction

ESG investing means considering environmental, social, and governance factors along with traditional financial ones when making investment decisions. It's a more complete way of investing that looks at how businesses affect nature, society, and potential profits. ESG investing has grown from a small, niche strategy to a major trend that's changing the global financial system. It influences where money flows, how companies operate, and what rules governments create. As the world faces challenges like climate change, social issues, and poor corporate behavior, ESG investing provides a path for responsible and sustainable choices. This article looks at how ESG investing is reshaping financial markets and what its future might hold.

The Growth of ESG Investing

ESG investing has gained remarkable traction in recent years. According to the Global Sustainable Investment Alliance (GSIA), ESG assets under management (AUM) exceeded $35 trillion in 2020 and are projected to reach $50 trillion by 2025. Institutional investors, asset managers, and retail investors are increasingly integrating ESG factors into their investment strategies, driven by regulatory pressures, ethical considerations, and the pursuit of long-term financial performance.One of the primary drivers behind ESG investing is the growing recognition that ESG factors can significantly impact a company's financial performance. . Companies with strong ESG practices tend to exhibit lower risks, better operational efficiency, and enhanced reputation, making them attractive investment opportunities. Moreover, the increasing frequency of climate-related disasters, social activism, and corporate scandals has heightened investor awareness, leading to greater scrutiny of ESG factors in investment decisions.

A major reason behind the rise of ESG investing is the growing understanding that environmental, social, and governance factors can significantly impact a company's financial performance. Companies with strong ESG practices often face fewer risks, operate more efficiently, and maintain better reputations, making them attractive investment options. Furthermore, the increase in climate disasters, social movements, and corporate misconduct has heightened investor awareness, leading to a greater focus on ESG factors when making investment choices.

Challenges of ESG Investing

The ESG Investing has become extremely complex with an increase in global goals, changing regulations and increase in stakeholder expectations as well as awareness. Some of the challenges are-

Multi Reporting Frameworks: One of the major challenges today is the absence of a common set of Enviroment Sustainable Growth reporting standards, which compels multinational compa nies to deal with various frameworks. Deloitte sa ys that reporting is usually based on one or

more frameworks, the most popular of which are the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB). Firms tend to release sustainability reports,but increasingly, they also report ESG information on standalone webpages in additio n to reports. And, as a result this it can lead to green washing of data by firms leading people to believe their products are more environment friendly than they actually are, this not only harms the investor but also harms the overall goal of sustainability.

Understanding the impact of ESG Investing: ESG performance data isn't just for reporting; it can also be used to improve the impact and outcomes of ESG strategies. However, for many organizations, ESG data remains isolated, making it difficult to connect ESG activities to financial results. Without integrating ESG information with budgeting, planning, and financial data within a unified system, leaders can't accurately model different scenarios to see how ESG actions might affect the balance sheet, profit and loss statement, or cash flow. As a result, without this integration, decision-making becomes more of a guessing game.

Data Quality and Reliability issues:
When ESG data is inaccurate, inconsistent, or incomplete, it results in unreliable ratings, making it harder for investors to assess a company's true sustainability performance. Poor data quality can lead to misdirected investments, unexpected financial risks, and reduced investor confidence. Additionally, varying reporting standards make it difficult to compare companies, further weakening the trust and credibility of ESG investing.

Integrating into Business Strategy:
Integrating ESG into core business strategies is challenging as it requires a cultural shift

long-term commitment, and alignment across all levels of an organization. Many companies struggle with balancing short-term financial goals with sustainable practices, while others face resistance to change or lack clear guidance on implementation. Failure to integrate ESG effectively can limit its impact on both sustainability and business performance, reducing long-term value creation.

ESG's Influence on Global Market

ESG factors are transforming global markets in several dimensions:

1. **Corporate Performance**: Firms with good ESG track records are more profitable and less risk-prone. A meta-study by the University of Oxford and Arabesque Partners established that 88% of studies connect good ESG practices to improved operational performance.
2. **Investment Flows**: Investors increasingly look for ESG considerations, shaping capital flows and impacting firms' cost of capital.
3. **Regulatory Setting**: Governments are implementing stronger sustainability regulations, including the EU's SFDR and the SEC's climate disclosure regulations.
4. **Product Innovation**: The financial sector is growing ESG-oriented products such as green bonds, sustainability-linked loans, and ESG ETFs, allowing investors to bring portfolios in line with sustainability objectives.

Key ESG Trends in 2025

1. **Improved Regulatory Oversight and Compliance**: The European Union's Corporate Sustainability Reporting Directive (CSRD) will compel firms to disclose not just their environmental footprint but also how

environmental considerations influence their business.This focus on double materiality reporting will establish new standards for ESG reporting and result in heightened regulatory oversight.

2. **Technology Integration in ESG Reporting**: The use of technologies like AI, blockchain, and XBRL will be instrumental in automating and streamlining the collection and reporting of ESG data. The use of these technologies will lead to better quality data, lower error rates, and greater accuracy and accessibility of ESG information.

3. **Greater Emphasis on Social Sustainability**: Firms are putting more focus on social sustainability through enhancing diversity, equity, and inclusion (DEI) programs, supply chain equity, and local community engagement. This will increase corporate social responsibility and improve stakeholder relationships.

4. **Consumer Awareness and Anti-Greenwashing Efforts**: With customers more and more seeking accountable business conduct, firms are enhancing their ESG messaging and integrity. Such steps will counter greenwashing and drive transparency, helping firms keep up with consumer needs for sustainable and ethical conduct.

5. **Climate Adaptation and Net-Zero Targets**: Spurred by tougher emission reduction objectives, governments and companies are also speeding up climate adaptation strategies and moving towards net-zero emissions. This drive will compel companies to become more environmentally friendly and have a much lesser footprint.

6. **Regional Regulatory Divergence**: Differences in ESG policies across regions, such as between the U.S. and Europe, create challenges for global companies. This regulatory diversity complicates compliance and reporting processes, as businesses must navigate varying requirements in different jurisdictions.

7. **Rise of Corporate Activism**: Investor activism on ESG matters is anticipated to increase, and especially in politically divided societies. Firms need to be equipped to deal with challenges from activist investors in order to ensure their ESG policies are consistent with stakeholder expectations and regulatory compliances.

Regulatory Trends Shaping ESG Investing

Regulatory developments are strongly influenci ng the ESG investing environment:

1.**Growing focus on disclosure and transparency**: Regulators worldwide are requiring or encouraging companies and fund managers to disclose how they integrate ESG considerations into their business and investment decisions.

2.**Avoiding greenwashing**: Regulatory bodies are introducing stricter rules and penalties to ensure ESG claims are credible and well-founded.

3.**Regional specificity**: Local economic, environmental, and political contexts shape ESG regulations. While the US navigates its polarized policy environment, the EU leads with stringent disclosure mandates.

4.**Sustainable finance tools**: The rise of green bonds and other sustainable finance tools highlights the financial sector's critical role in driving ESG investments.

Looking Ahead

As ESG investing becomes increasingly prominent around the world, the regulatory environment will certainly change as well. The trends in various regions indicate that governments and regulators will increase their efforts to harmonize ESG practices, reduce the reduce the risk of greenwashing, and make ESG investments both effective and credible.In the years ahead, we can anticipate greater harmonization of ESG standards, especially as such as Asia-Pacific and the Middle East

bring their structures closer to those in the EU and UK. This may create more consistency in ESG reporting, facilitating easier comparison and evaluation of the sustainability profile of various companies and funds across the globe. Additionally, the development of technology-based solutions will be instrumental in bridging data challenges, allowing for more precise and extensive ESG reporting.

However, challenges remain, particularly in regions where ESG frameworks are still developing. Bridging these gaps will be crucial to unlocking the full potential of ESG investing and ensuring all markets contribute to the global sustainability agenda. As financial sector stakeholders navigate these changes, staying informed and adaptable will be key to seizing emerging opportunities.

ESG regulation is not just a challenge; it is a transformative opportunity to reshape the future of finance in alignment with broader goals of environmental stewardship, social equity, and long-term economic resilience.

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DIVERSE DYNAMO

Unlocking India's Export Potential: Revealing Stagnant Opportunities & Existing Challenges in the Banana Trade

By: Aniya Koul

ABSTRACT

India ranks second in production of fruits and vegetables all over the world, after China. Nearly 13.6% and 14% of the world's fruits and vegetables were produced by India in 2023. As far as bananas are concerned,the country ranks first in the production of Bananas in the world (26.5% i.e. 35.36 million metric). It is usually expected when the productions is high invariably the commodity holds good number of export supply and demand but in case of India, this has not been a steady case despite India's share in production is very high but India's share in the global market is low which is 0.36 million metric tons of bananas worth $176 million (only 1% in global market).

The purpose of this research paper is to assess the absolute comparative advantage of particularly banana exports from India and the potential to bring significant economic, social and environmental advantages to India and assess the present challenges.The revealed comparative advantage shows that the export performance of India in fresh bananas had been positive during the period of study But the analysis further shows that even though the facilities to support production and export of perishable commodities such as fruits has been steadily improving over the years but it is still nowhere close to where it should be. If India is to reap full benefits of its potential as a big exporter of banana for which the Govt of India had set a target of $1 billion worth export in next 5 years, a concerted effort is to be made on production and quality exports in the next 5 years, a concerted effort is to be made on production and quality.

INTRODUCTION

With the advent of the WTO-sponsored global trading regime, the world saw an unprecedented expansion of global GDP and consequently of the purchasing power of the consumers. Consumers, powered by their increased disposable income, were now looking for superior varieties of food products like fresh fruits and vegetables. Producers of such crops, mainly from Asia and Latin America, on the other hand, were looking for ways to attract customers and achieve higher margins. India, Africa, and Latin America have a comparative advantage in fresh fruits and vegetables because of being in a tropical region which is a suitable climate for the growth of certain fruits which leads to the supply from Africa, Asia, and Latin America and demand from North America and Europe. It was because of this reason that these regions emerged as strong players in the global trade of fresh fruits & vegetables.

The shift in global trade has led to the start of the food processing industry in India from the mid-90s onwards. The Indian food processing industry is primarily export-oriented.Even though it has been clocking impressive figures of around 7.79% in export growth rate, its share in the international market continues to be

but this sector continues to remain grossly underutilized (Invest India,2023). Nearly 15% and 11% of the world's fruits and vegetables are produced by India. During In 2020-21, India exported fresh fruits and vegetables worth Rs. 9,940.95 crores, comprising fruits valued at Rs. 4,971.22 crores and vegetables valued at Rs. 4,969.73 crores (APEDA). This huge production base leads to India's wonderful export opportunities.

BANANA EXPORTS

Food & Agriculture Organization (FAO) publication shows that from around 67 million tonnes of global banana production in the year 2000, having a CAGR in production of around 3.2 %, since 2000 has reached around 114 million tonnes in 2023.Around 70 % of the total global banana production is contributed by ten major banana-producing countries and India, Ecuador, Brazil, and China alone produce half of the total banana output. India's alone share in total global production of bananas is around 25 %.

Developing countries from the tropical regions of Asia and Latin America are the principal producers of bananas. On the other hand, developed countries, primarily located in the northern hemisphere where banana cultivation is a tough proposition, are the biggest consumers of bananas.As a result, global trade for this commodity is structured in such a way that developing countries are the main exporters and developed countries are the main destinations for global exports. Around one-fifth of the global production of bananas is exported from the developing countries to the developed countries. The Philippines is the only Asian country listed among the top exporters of bananas in the world.

In the year 2019, the global banana industry generated revenue of around USD 13.9 billion from international trade. However, it must be noted that only 15 % of total global banana production goes into the international trade of the commodity. The rest is dedicated to local consumption, primarily in large producing countries such as India, China, and Brazil. In the year 2022-23 India, with a total production of around 34.9 million tonnes was the biggest producer of the banana in the world. Though India is the largest producer of bananas in the world with a whopping 26.4% share, the country's international banana exports are negligible (1%). The main banana-producing states in India include Andhra Pradesh, Maharashtra, Karnataka, Tamil Nadu, Gujarat and Uttar Pradesh.

According to the Union Ministry of Agriculture, Andhra Pradesh produced the highest amount of bananas in India in 2022-2023, with 56.84 lakh tonnes, followed by Maharashtra with 49.6 lakh tonnes. However, regarding the cost of production, the COP in India is significantly higher than that of other leading global exporters. This explains why, despite being such a big producer, India is only a relatively small exporter but still banana cultivation is considered quite profitable in India if compared to other products, fetching net returns of around Rs 40,000 to Rs 60,000 per acre.

LITERATURE REVIEW

There many research done by the National Horticulture Board (NHB), Ministry of Agriculture, Government of India, Food and Agriculture Organization of United Nations, APEDA, Ministry of Food Processing Industry, Government of India (MOFPI), CFTRI, IIFT, Ministry of Commerce & Industry, Government of India, Indian Institute of Horticulture Research (IIHR) Bangalore, etc on horticulture but there haven't been any significant research on the export of banana despite being the top producers and Government having a target of $ 5 billion banana export in 2025. There have been recommendations for promoting horticulture but a study on the export-related problems of bananas is the need of the hour, as them being less costly in production & giving the best net returns is one of the most suitable according to Indian farmers. The challenges need to be analyzed so that the government or APEDA can come up with export policy solutions.

RESEARCH METHODOLOGY

In this research paper, for analyzing the data, various statistical tools & techniques have been used. For calculating the productivity of India for this product i.e. fresh bananas, the total production of particular fruits and vegetables in the respective years was divided by the total production area of the fruits and vegetables. Other statistical tools & techniques, such as revealed comparative advantage (RCA), Compounded Annual Growth Rate (CAGR), and Time Series have also been used wherever required.

Table 1. Compounded Annual Growth Rate – Production & Export of Bananas – India & the world (figures are expressed in terms of %)

Period	India (Production)	India (Exports)	World (Production)	World (Exports)
1991 - 1997	7.86	14.71	6.53	10.59
1998 - 2004	1.49	1.62	1.81	3.87
2005 - 2011	6.66	7.79	2.74	7.12
2011 - 2017	1.05	1.05	4.5	1.21

Source: Online Database from Food Agriculture Organization, UN

The CAGR for the I period 1991-2011 was 10.99%. The trends in India and the world have been largely similar but global production witnessed a higher rate of growth than what was witnessed in India during 2011-2017.

Similarly when it comes to exports, the trend in India and the world have been quite similar. In the case of production and exports too, the period of 1998-2004 was a declining stage. Overall, for the period from 1991-2017, whereas India witnessed a CAGR of above 29%, the CAGR for the world as a whole was around 26.26%. This means, unlike production where India's numbers were smaller than the global numbers, when it comes to exports, India's performance was better than the overall global production.

Table 2: Productivity in Banana Cultivation (figures are expressed in terms of tonnes per hectare)

Period	India	World
1991 - 1997	23.5	9.32
1998 - 2004	30.26	11.27
2005 - 2011	35.37	14.37
2011 - 2017	35.15	20.56
2017 - 2023	38.25	22.04

Source: Online Database from Food Agriculture Organization, UN

Table 2 and the figure below represents the productivity trend in banana cultivation for India & the world bananas during 1991-2023. India's productivity had been significant and it was 23.5% to 38.25 during the period under study. India registered the highest productivity during 2005-2023. Where India posted high double-digit growths in productivity consistently between 1991-2023, the global productivity has been quite different. From 1991 to 1997, the world saw single-digit rates of productivity growth. At 9.66%. From 1999, it picked up pace and continued to post healthy double-digit rates of growth for every single year. However, even at its peak, global productivity growth is nowhere close to India.

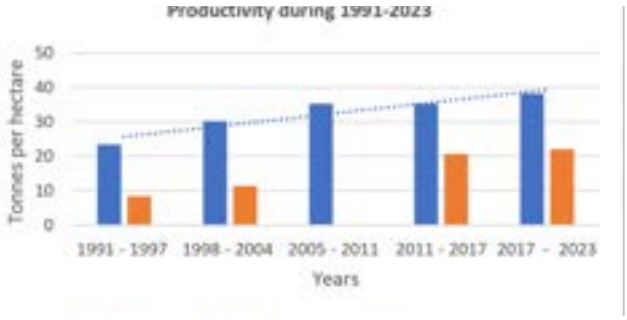


Table 3 depicts the RCA and RSCA ratio of India for bananas during the period 1991-2023. The RCA ratio for bananas was less than one (RCA<1) during 1991-1997. On the other hand, the same RCA ratio for bananas was more than one

(RCA>1) after 1998. As far as the RSCA ratio is concerned, it exhibited both negative and positive values during the period. A positive RSCA ratio implies that India has a comparative advantage in bananas, and a negative RSCA ratio implies that India's bananas did not enjoy any significant comparative advantage during the period. Overall India has a comparative advantage in the export of bananas.

Table 3 : India's RCA & RSCA Ratio in Bananas

Period	RCA	RSCA
1991 - 1997	0.18	(4.68)
1998 - 2004	1.06	(0.04)
2005 - 2011	6.04	0.37
2011 - 2017	1.1	0.039
2017 - 2023	1.7	0.255

FINDINGS

As the data analysis reveals, the productivity of cultivation of bananas increased gradually between 1991-2023. When it comes to exports, data clearly shows that despite being the largest producer of fruit in the world, India's share in world trade is relatively small. The growth rate of exports achieved by India during the period under study was quite healthy despite the gross exports being small. Data shows that at the end of 2012, India was exporting around 6100% more than what it did in 1991. Yet less than 0.1% of current Indian banana production is exported in terms of global production, which represents less than 0.3% of the international banana trade. The Revealed comparative advantage ratio shows that India has great potential to become a banana-exporting powerhouse.

This potential was also duly reflected in the export numbers. But, given the phenomenal advantages enjoyed by India, one has to conclude that the export performance of India still has quite a long way to go before India can claim to be performing as per its potential.Given the fact that there is, despite the impressive past performance, a huge disparity between the actual and potential performance of India in banana exports,India has to look into the root causes to figure out what exactly is preventing it from realizing its actual potential which is as follows -

1. The most important constraint identified by the fruits and vegetable growers was the inability to meet the quality standards requirements for export to various developed countries

This is one of the common problems in exports is the importing countries propose particular quality specifications for each commodity, making it difficult for farmers to access distant markets and obtain higher net prices The dominance of smallholder-based agriculture in India presents a major hurdle in meeting the food safety and quality standards demanded by affluent country markets.

These production systems limit the number of farmers capable of adopting sophisticated farm practices and making necessary investments to comply with stringent standards such as Euro-Retailer Produce Working Group Good Agricultural Practices (EurepGAP). Obtaining certification and staying updated on evolving standards pose significant cost and information barriers, particularly for small farmers who lack economies of scale. Indian horticultural producers' perceived inability to meet standards hampers their ability to negotiate and initiate marketing contracts in developed country markets, contributing to an average reputation effect.

2. Another major constraint is poor storage and transport facilities as most of the fruits and vegetables are perishable

Dependency on pesticide usage, lack of institutional support, and lack of information on organic cultivation were the other important problems encountered by the farmers. In India, timely infrastructural facilities such as quality packing materials, cold chains, and controlled atmosphere containers are not adequately available for export. Lack of standardization on postharvest handling was the second most important problem expressed. This shows the need for standardization of protocol and training on postharvest handling and controlled (CA) and modified (MA) atmosphere storage facilities.

3. The other significant problem was the documentation procedure for export

the other problems included collision among commission agents and auctioneers and unavailability of market information and strategies. There is no provision for government insurance for banana farmers in case of crop failure. However, Indian farmers are tax exempted but still many have debt problems. Farmers pay 36–40% interest on black market loans relative to a bank rate of 12%. Rural depopulation is causing an overall shortage of rural workers, further increasing pressure on farmers. The rising value of land leads some farmers to sell off their farms

4. Pest Infestation and Use of Chemicals and Pesticides in the Field

Every year, Indian farmers lose a substantial amount of their crops to pest infestation, which leads to a loss in income. The pest issue persists as poor farmers may not have the knowledge or access to technology to prevent it. Indian farmers are heavily dependent on the use of pesticides to protect the crop as well as to increase yield. Sometimes, the chemicals that are used are either banned in other countries or there are strict MRLs on pesticide residues imposed by importing countries.

5. Competition between Developing nations

India's share in the EU's imports of fresh and processed food products was 2.9 percent, which was lower than that of other developing countries including Brazil (7.8 percent), China (4.9 percent), Turkey (4.5 percent) and Vietnam (3.4 percent). Thus, not only are Indian exports facing more rejections compared to the volume of trade, but the country is definitely in a disadvantageous position vis-à-àvis its competitors from other developing countries in the EU market.

6. Lack of Harmonisation of Standards across Countries

India's export inspection and control processes are not recognized by importing countries, leading to duplication of inspection and testing procedures. Mutual recognition agreements (MRAs) based on international standards could streamline export processes and address health and safety concerns more efficiently along with that varied maximum residue limits (MRLs) across different countries pose a significant challenge for exporters,requiring compliance with individual country standards.

This lack of harmonization complicates the export process and adds to the cost and complexity of ensuring product conformity.

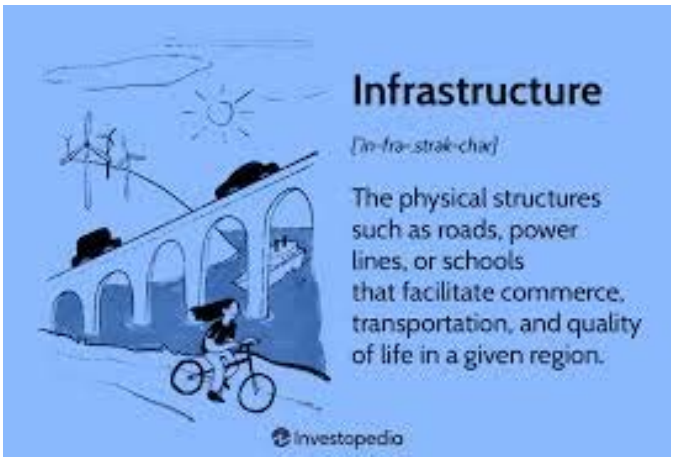
7. Lack of Coordination among authorities concerned

Delays in action or inaction on the part of the government can be directly traced to the fact that India, unlike most developed and many developing countries, follows dual food and safety standards which are regulated by different authorities. If a standard is imposed in markets such as the US and EU, it is equally applicable to exports, imports, and domestic markets. In India, export standards are laid out by APEDA, and the control of exports is handled by bodies such as EIC. In most countries where the Ministry for Agriculture is also the nodal ministry for agricultural trade whereas in India, the nodal Ministry and Ministry of Agriculture and Farmers Welfare have seemingly no role in agricultural trade. This undermines the very role of the ministry since, as pointed out by certain state government officials, the clear lack of coordination between the ministries and export organizations such as APEDA and the EIC has deprived farmers of the opportunity to export and hence deprived them of an opportunity to earn a premium on their produce.

8. Issues with Traceability

In a survey conducted by a third party, many exporters said that they do not source agricultural products directly from farmers, rather they source from mandis and other agricultural markets. The main reason behind this is if farmers know that the produce purchased from them is meant for export, they tend to charge a higher price from exporters, thereby raising exporters' costs.The exporter exports only high-quality produce that can be exported. The farmer, on the other hand, sells all his produce to the exporter, both high quality as well as low quality. In this case, the low-quality produce will be wasted since it cannot be exported. It is more convenient for an exporter to purchase only high-quality products from mandis, since the farmers are not able to maintain a uniform quality of supply.

9. Infrastructure Bottlenecks



Conducting different treatments for different export destinations may not be feasible financially for the exporter and the infrastructure needed to set up is also expensive and may not be available in the state from which the product is being exported. Moreover, all post-harvest activities are to be done in APEDA-approved facilities. Getting the approval from authority for a facility involves time and cost. It takes about 3-5 months on average to obtain a license for sorting, grading, and testing facilities while the hot water treatment plant takes about two and a half months. Further, while the cost of obtaining the license is around INR 50,000, often the facilities have to be re-constructed to suit EU requirements.

The cost of setting up the required infrastructure sometimes comes to INR 50-100 million. The cold storages are not equally spread across all states and there is a severe shortage of pack houses, which can lead to product spoilage and fungus. Poor storage and transportation conditions, lack of general

cleanliness, and the limited number of pack houses cause shipments to be contaminated with fungi and other substances.

ECONOMIC OPPORTUNITIES FOR THE PRIVATE SECTOR

India's developing banana market possesses several economic opportunities for both the private sector and individuals which need to be explored which will turn into the betterment of the farmers and increase the competitiveness of the export market of bananas. Here are the following key areas which can be explored :

1. Processing and Value Addition

There is a significant potential for private companies and entrepreneurs to invest in the production of banana-based products, such as banana chips, puree, flour, and beverages. Value addition can enhance profitability and cater to both domestic and international markets. Apart from this, banana leaves, stems, and peels can be processed into eco-friendly packaging, textiles, or organic fertilizers. Entrepreneurs can capitalize on sustainable products, contributing to the circular economy.

2. Cold Storage and Supply Chain Solutions

Investments in cold storage facilities, refrigerated transport, and efficient logistics can reduce post-harvest losses and maintain banana quality for export markets.This is a crucial area where private firms can earn returns while addressing a critical gap in the banana supply chain. Startups can invest in those who are focused on supply chain optimization using IoT, blockchain, and AI can streamline operations and improve traceability, which is crucial for meeting international standards.

3. Export-Oriented Farming

Private companies can engage in contract farming with local banana growers, providing them with technology, resources, and market access. This ensures consistent quality and supply for export markets while offering farmers stable income. There's a growing global demand for organic bananas. Entrepreneurs can invest in certified organic banana farms, tapping into premium markets that offer higher margins

4. Research and Development

Opportunities exist in developing new banana varieties that are more disease-resistant, have a longer shelf life, or are better suited for export. Private sector investment in R&D can create high-value products tailored for specific markets. Private companies can invest in sustainable farming practices, such as water-efficient irrigation systems or zero-pesticide farming. These practices not only improve yield but also attract international buyers interested in ethically produced goods.

5. Agri-Tech Startups

Startups focusing on precision agriculture can provide banana farmers with data-driven insights on soil health, irrigation, and pest management, leading to increased productivity and better crop management. Digital platforms connecting farmers directly with buyers can eliminate middlemen, ensuring better prices for producers and cost savings for consumers.

6. Export and Trade Services

Entrepreneurs can establish businesses that assist farmers with export documentation, compliance, and logistics, helping smaller producers access global markets more easily. Private sector opportunities also exist in offering customized financial services, such as export financing, crop insurance, and hedging tools, to reduce risks for banana farmers and exporters.

7. Tourism and Agri-Tourism

The private sector can invest in developing banana plantations as agri-tourism destinations, which can provide an additional revenue stream for farmers and local communities. This promotes sustainable tourism while boosting local economies and raising awareness about banana cultivation.

CONCLUSION

India's advancements in the export of bananas are closely linked to its ability to bring in new investments, technologies, and awareness to its huge agriculture sector. India also offers an alternative to the region's current supply from more remote sources. Unlike the rest of the world's major banana growing areas, which are dominated by large-scale commercial farms, the Indian banana industry is based on large numbers of small, independent affinity to Middle Eastern markets, where there is a growing demand for bananas, which offers significant potential for boosting its exports. Our study has looked closely at the emerging Indian banana export model and the wider social and economic implications of future growth for an export model to thrive under these conditions, it must offer clear benefits, not just to new customers abroad, but also to the local economy and the growing local communities. The Indian banana trade is, therefore, a good example of the potential opportunities, and the challenges, involved in boosting export production in emerging economies

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Source: Online Database from Food Agriculture Organization, UNO

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Small Steps, Big Returns: A Young Investor's Guide

By: Mitali Sharma

"Investing should be more like watching paint dry or watching grass grow. If you want excitement, take $800 and go to Las Vegas." — Paul Samuelson

The allure of rapid wealth accumulation is undeniable. Many aspire to emulate the success of renowned investors like Warren Buffett, often overlooking the fundamental principle that substantial, sustainable returns require time and patience. The desire for quick riches frequently leads to hasty decisions, resulting in significant losses and jeopardizing long-term financial goals, including early retirement.

This discussion aims to provide a more grounded approach to achieving financial independence by the age of 40. While the concept of retiring at 40 is ambitious, it is not unattainable with careful planning and disciplined execution. The following outlines a pathway to achieving this objective:

F.I.R.E:

The FIRE (Financial Independence, Retire Early) movement represents a strategic approach to financial planning that prioritizes accelerated wealth accumulation to facilitate retirement significantly earlier than the conventional age of 65. This philosophy, originating in the 1990s, emphasizes aggressive saving and strategic investing to amass a substantial retirement corpus. For individuals in their early twenties, for example, the FIRE approach offers a potential pathway to retire by 30 and pursue personal interests and lifestyle choices without the constraints of traditional employment.

TYPES OF F.I.R.E:

1. Lean F.I.R.E: Believers of a minimalist lifestyle who live off very little resources achieve lean F.I.R.E by saving more than half of their income.

Calculating your lean F.I.R.E number: Annual expenses*20

Let's explain Lean F.I.R.E with an example:

Suppose you at age 20 have a monthly expense of Rs. 50,000 which sums up to Rs. 6,00,000 for a year. By the time you're 30 (inflation adjusted), You will achieve a corpus of = 6,00,000*20= Rs. 1.2Cr.

2. Fat F.I.R.E: Fat FIRE is a financial strategy where people aim to save and invest significantly more than the average person while maintaining their current lifestyle. To achieve this, they typically need a high income and aggressive investment plans.

Calculating your FAT F.I.R.E number: Annual expenses * 50

3. Barista F.I.R.E: For the ones confused between lean and fat financially independent retirement plan, can go for Barista F.I.R.E a combination of both which provides financial independence but also allows one to take up work of their choice, focusing on passion rather than money.

RULES FOR F.I.R.E:

- Rule of 25:

This rule states that you need to save 25 times your annual income to retire.

- The 4% Rule:

This rule states that retirees can withdraw 4% of their savings in the first year of retirement and then adjust for inflation in the future years.

These are just a few methodologies to expedite your early retirement keeping in mind that their application is subjective.

With F.I.R.E, you need patience, consistency and of course a little faith. One needs to harness the power of the time and compounding to truly reap its benefits. But first off, beginning early and saving regularly is the most crucial step.
Fair warning, if you don't earn enough for subsistence then maybe F.I.R.E is not the right approach for you. One needs to be aware of the corpus they'll require in the future as well as their current income and run some numbers.

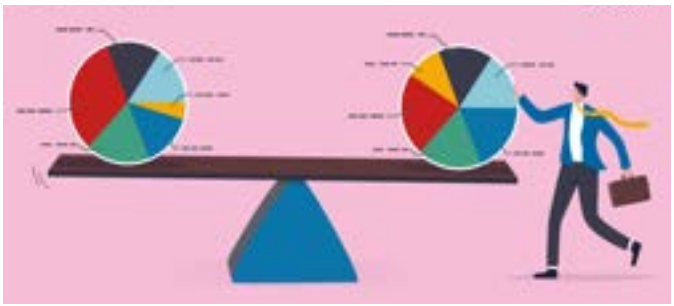
In the earning years, you may not need income from his investments so choosing growth assets such as equity will help obtain a bigger corpus, whereas after retirement it will be challenging to invest majorly in such assets due to associated risks.

To achieve the corpus you need, the following steps can be adopted:

Asset allocation: Your funds can be allocated amongst Equity, Debt, Gold, Others. Choosing smartly amongst these asset classes keeping in mind your risk appetite and diversification to beat inflation is essential.

Sub allocation: In equity itself, there are large cap, mid cap and small cap funds, so allocating your resources amongst these funds should be based on your risk appetite and priorities. Most people allocate 40% of their funds in equity to large cap and mid cap each and 20% to small cap.

Rebalancing your portfolio: Since the market is not consistent it is advisable to make moderations to your portfolio to keep up with the market.



PROMISING TOOLS FOR IMPLEMENTING F.I.R.E:

While this may appear to be a digression, its relevance will become apparent shortly. Consider an individual with a profound appreciation for stamps, to the point of infinitely increasing marginal utility. If someone were to propose, "Give me 10 of your 100 stamps each month, and I will transform them into 1,000 within five years," the initial reaction might be skepticism. However, this proposition becomes less absurd when considering the perspective of a philatelist. By relinquishing a small portion of their collection monthly, they retain the majority of their stamps while simultaneously increasing their overall holdings.

This analogy serves as an introduction to Systematic Investment Plans (SIPs), a highly efficient and effective investment strategy, particularly for young investors. The concept mirrors the stamp scenario: a consistent, relatively small contribution over time can yield substantial returns.

A growing number of young individuals recognize the importance of long-term investing across diverse asset classes, the compounding effect of money, and the necessity of outpacing inflation. This increased financial awareness is reflected in the remarkable growth of the mutual fund industry, which has expanded fivefold in the last decade, from ₹8.68 trillion in May 2013 to ₹61.16 trillion as of June 2024.

Systematic Investment Plan:

Definition:

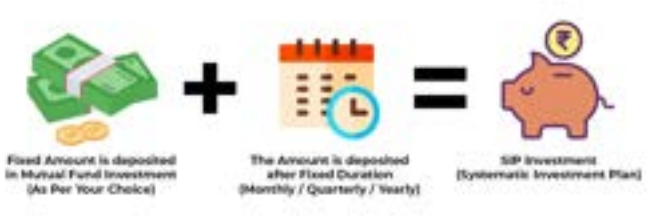
A Systematic Investment Plan (SIP) provided by Mutual Funds allows investors to regularly invest a fixed amount in a chosen scheme, such asmonthly or quarterly, rather than in a lump sum. With installments as low as INR 100 a month, it functions similarly to a recurring deposit and offers the convenience of automated payments through standing instructions with one's bank.

Working:

1. Select a Mutual fund scheme: There are numerous MF schemes to choose from based on your goals, risk appetite and investment strategy.

2. Select investment frequency: Most common choice being monthly, people still go for weekly,quarterly, annually and semi-annually.

3. Set up SIP with a Mutual Fund scheme: Setting up your SIP is easy once you've selected a mutual fund scheme. You can go to chosen Mutual fund, click on invest and enter your bank details alongwith SIP contributions and frequency.



4. Automatic debits and unit allocation based on NAV: After the money is debited, you will receive a notification about your funds being invested which includes the number of units you've been allotted based on NAV (Net asset value)which is basically a unit of Mutual fund.

With or without F.I.R.E:

Systematic Investment plans can be a very useful tool to achieve financial independence and retire early because they inculcate the habit of saving regularly and encourage consistent investing, core philosophy of F.I.R.E

Secondly, SIPs want its adopters to experience the power of compounding which aligns with F.I.R.E's objectives.

Essentially, SIPs provide a structured approach to saving and investing, which aligns perfectly with the FIRE movement's focus on long-term financial growth and early retirement.

It is not necessary that you save a hefty 50-70% of your income in accordance to F.I.R.E movement. Irrespective of whether you opt for F.I.R.E or not, you can still avail the benefits of SIP by saving and investing according to your comfort.

The amount to start a systematic investment plan can be as low as Rs. 100. Once your SIP matures, you can mobilize your interest income through SWP (systematic withdrawal plan) and convert it into your mainstream income post-retirement.

CONCLUSION:

In an era marked by rising expenses and dwindling traditional retirement safety nets, building a secure financial future is more crucial than ever. The allure of immediate gratification often eclipses the importance of long-term savings.

In order to achieve financial independence early, we need discipline and strategic investing. While extreme savings are often associated with F.I.R.E and SIP can be a great catalyst, we can opt for Systematic Investment Plans even with modest contributions. Diversification, asset allocation, and consistent investing are key to building a substantial corpus. Remember, FIRE is a journey, not a destination and starting early gives you a significant advantage.

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Beyond Borders

By: Ishika Arun

Abstract

Businesses looking to expand internationally in today's globalized world must navigate the mosaic of various cultural norms. The importance of cultural sensitivity and adaptation in creating effective business plans for international markets is examined in this abstract. Companies risk miscommunication, misunderstandings, and market failure when they ignore cultural quirks. On the other hand, businesses can create trust, solidify local partnerships, and customize their products to meet the demands of niche markets by accepting cultural differences.

The abstract explores the diverse effects of cultural awareness. First, it looks at how building rapport and trust with local stakeholders is facilitated by an understanding of communication styles, decision-making procedures ,and values.To prevent inadvertent offense, this entails navigating variations in directness, punctuality, and non-verbal cues. It also emphasizes how crucial it is to modify business procedures to adhere to regional laws and customer preferences.

This includes pricing structures, marketing plans, and product offers that appeal to the intended market.

The abstract also highlights how important cultural sensitivity is to forge solid local alliances. This entails humility, honouring regional customs and traditions, and refraining from ethnocentrism. Businesses can navigate cultural complexities and obtain valuable market insights by collaborating with local partners.

The abstract concludes by outlining important tactics for fostering cultural awareness and flexibility. These consist of carrying out in-depth studies, assembling a multicultural team, looking for regional alliances, modifying communication techniques, and exhibiting cultural sensitivity. Businesses can unlock the potential of diverse markets and achieve long-term global success by giving these strategies top priority.

Keywords: international business, Global expansion, Cultural Awareness, Cultural adaptation, Consumer preferences, Diverse teams, Cross-cultural communication, Business Strategies

Introduction

Businesses are no longer limited to their home markets in today's world, which is becoming more connected. Borders can be crossed to find growth and expansion opportunities in the world's many different cultures. But going into international markets comes with its problems. One of the biggest is figuring out how to work in a world where different cultures are important.

Cultural awareness and the ability to adapt are not only desirable traits for international businesses, but they are also necessary for creating successful business strategies that connect with local customers and ultimately lead to long-term success around the world.

You can't say enough about how important it is to understand other cultures when doing business internationally. Culture affects and shapes every part of human behavior, from how we talk to each other and make choices to our beliefs and values. Ignoring these cultural differences can cause a lot of problems, such as misunderstandings, broken communication, and even offense. For instance, a company that doesn't change its marketing materials to use the local language and cultural references might find it hard to connect with the people it wants to do business with. Also, a company that doesn't follow local business etiquette, like being on time or giving gifts, might hurt its relationship with potential partners or customers without meaning to.

On the other hand, businesses that are open to cultural differences can build trust, form strong local partnerships, and make their products fit the needs of specific markets. Knowing about the culture of a foreign market helps businesses come up with ways to communicate that will work with people there. They can also change their goods and services to fit the needs and tastes of people in that area. This cultural awareness not only builds trust and goodwill but also makes businesses look like respectful and culturally competent partners, which ultimately makes them better able to compete in the global market.

Also, understanding other cultures is a key part of making strong partnerships in the area. In many international markets, having local partners can help businesses learn a lot about the culture, figure out how to follow the rules, and connect with important people. But for partnerships to work, both people need to respect and understand each other. Businesses can build trust and rapport with local partners by being sensitive to different cultures and changing the way they talk to each other. This will help them work together and set them up for long-term success.

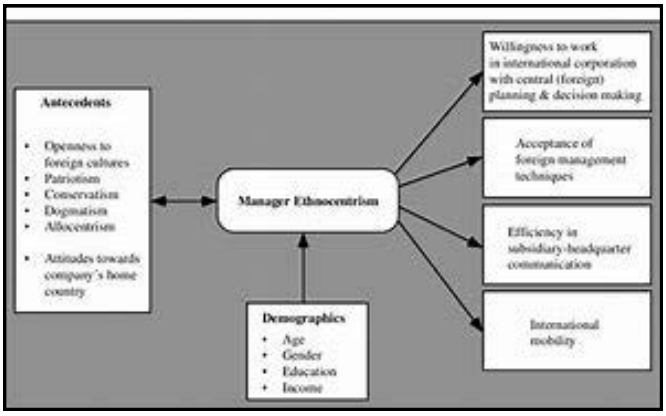
Developing cultural awareness and the ability to adapt is not just a strategic advantage; it is a basic need for success in the global market. Businesses can unlock the potential of diverse markets, build meaningful relationships, and achieve long-term global expansion by putting these important factors first.

Literature Review

The world is becoming more and more connected, which has put international business at the forefront of economic growth and development. As businesses expand beyond their home countries and into the rich web of different cultures, they face a wide range of challenges and opportunities. One of the most important things that affects their success in foreign markets is how well they can deal with cultural differences. Cultural understanding and adaptability are not just nice-to-haves; they are necessary for making business plans that work with local customers and allow for long-term growth around the world.

There is a lot of different academic talk about how important it is to be aware of other cultures when doing business internationally. Hofstede's early works (1980) laid the groundwork by creating his influential framework of national cultural dimensions. These works showed how things like power distance, individualism vs. collectivism, and avoiding uncertainty affect how businesses work and how people behave as consumers in different societies.

Scholars like Lewis (1999) built on this foundation by studying communication styles in more depth. They stressed how important it is to understand directness, formality, and nonverbal cues in order to have good cross-cultural interactions. These basic studies showed the dangers of not understanding other cultures. They showed how ethnocentric ideas and insensitive advertising can hurt the market and hurt a company's reputation.



Newer research has added to this understanding by pointing out that culture is dynamic and has many sides. Yau and Tung (2013) say that we need to get rid of fixed national stereotypes and look at cultural differences in and between societies in a more complex way. In the same way, Caligiuri and Tung (2014) support a contextual approach and urge businesses to think about how individual, organizational, and societal factors interact when making cross-cultural strategies. This move toward a more dynamic and all-encompassing view of culture is a result of the world market becoming more complicated, with different subcultures and changing consumer tastes calling for a more flexible approach.

There is a lot of research that looks at how cultural awareness affects different parts of doing business internationally. Gesteland's (2006) and Javidan's (2004) studies show how important it is to be sensitive to other cultures when working with local partners and customers to build trust and strong relationships. These works stress how important it is to respect local traditions and customs, listen actively, and stay away from ethnocentric biases. Businesses can build stronger partnerships, learn more about the market, and get around bureaucratic hurdles more easily if they work to build trust and understanding across cultures.

Furthermore, marketing experts such as Roth (1997) and Shimp (2000) have stressed how important it is to adapt marketing strategies to fit the needs of local audiences. This means making changes to product lines, pricing, and advertising to fit different cultural settings. For example, a fast-food chain in India might need to offer vegetarian options and avoid using beef in its ads to show that it respects the religious and cultural values of the country. Such changes not only keep marketers from making mistakes but also show that you understand the local market and are committed to it, which improves your brand's image and keeps customers coming back.

Research Methodology

This study goes into great detail about how important it is for international business strategies to understand and adapt to different cultures. A methodological approach that combines qualitative and quantitative elements will be used to shed light on this complex subject.

Questions for research:

How do companies use understanding and adapting to different cultures when making plans for doing business internationally?

What are the most important problems and chances for businesses that need to adapt to different cultures?

What are the best ways to build trust and form strong partnerships in markets with a lot of different cultures?

What effects do being aware of other cultures have on marketing plans and how people act when they are traveling abroad?

Getting the data:

In terms of quality:
In-depth interviews with international business leaders, marketing experts, and local partners from a wide range of industries will be conducted through semi-structured interviews. This will give us more detailed information about their experiences and ideas about how to be culturally aware and adapt in the workplace.

Case studies: In-depth case studies of both successful and unsuccessful international business ventures will be looked at to find the best ways to do things and the worst things that could happen when cultural factors are taken into account.

Things of cultural value: Businesses change how they do things to fit different cultural settings by looking at marketing materials, advertising campaigns, and products from a variety of markets.

Types of numbers:
Online surveys: Standardized surveys will be sent to people who work in international business to find out how they learn about other cultures, how they adapt, and how they think these things affect their business success.
Survey data will be analyzed statistically to find patterns, links, and possible measurable effects of cultural awareness and adaptation on important business

metrics such as sales, market share, and customer satisfaction.
Analysis of Data:
Thematic analysis: To find recurring themes, patterns, and key areas of influence in qualitative data from interviews and case studies, thematic analysis will be used.
Content analysis: This method will be used to look at cultural artifacts and figure out how cultural elements are used in marketing messages and products.
Statistics that describe and infer: We will use descriptive and inferential statistics to look at survey data and draw conclusions about how common and important certain cultural awareness and adaptation practices are.

Using three sources:
Through triangulation, you can combine qualitative and quantitative data to get a fuller picture of the research topic. The study aims to get a fuller and more nuanced picture of the connection between cultural awareness and adaptation in international business success by looking at things from different points of view and using both subjective and objective data.

Ethics in Research:
Ethical research principles will be used for all data collection. Participants will give their informed consent, they will remain anonymous, and the data will be kept secret.

Results We Expect:
The goal of this study is to give useful information about how to use cultural awareness and adaptability in real-life international business strategies. The study aims to give businesses useful advice on how to deal with the challenges of working with people from different cultures by using facts and examples from real life. The study also wants to add to the academic conversation about how people behave in business when they are from different cultures and show new trends and future directions in this important area.

Results/Discussions

When I looked into cultural awareness and adaptability in international business strategies, I found a web with many different threads. Businesses that go global face both problems and chances as they try to find their way through different cultures

Qualitative Threads: Cultural intelligence as money: Cultural intelligence, or being able to understand and fit in with people from different cultures, was emphasized through interviews and case studies. Companies that did well- stressed training in cultural intelligence, language skills in key markets, and the ability to read body language. "We learned the hard way that what sells well in the US might not be appropriate in the Middle East due to cultural norms around modesty," said the marketing director of a global clothing brand about how important it is to know local fashion trends and change designs so as not to offend people.

Customizing Strategies for Market Fit: Companies that did well changed their strategies to fit different cultural settings. This meant changing things about the products, the way they were marketed, and how they were priced so that they fit with local tastes and beliefs. In a case study, a fast-food chain that went into India made sure that its menu had vegetarian options and didn't have any beef-based items because of religious concerns. This awareness of different cultures not only made sure the product fit the market but also built trust and brand loyalty.

Strong local partnerships came up a lot as a theme in "The Power of Partnerships." Businesses that were sensitive to local culture and worked with local partners learned a lot about the market, got around bureaucratic problems more easily, and earned customers' trust. A case study showed how a tech company did well in China by working with a local company that knew how the complicated rules worked and made it easier to talk to important people.

The Tangled Threads of Ethnocentrism: Ignoring cultural differences caused some businesses a lot of trouble. Insensitive marketing campaigns and assumptions based on ethnicity led to offense, slowed down market penetration, and hurt the brand's image. There was a case study about a brand that didn't change its funny ads for the Chinese market, which led to cultural clashes and falling sales. This story is a warning against ethnocentrism and shows how important it is to understand other cultures.

Quantitative Stitches: The quantitative analysis supported the qualitative results. A poll of people who work in international business found that understanding other cultures is linked to business success. Companies that did better on tests of cultural awareness said they had happier customers, a bigger share of the international market, and more sales. Also, a large majority of respondents said they changed their marketing, products, and communication styles to fit different cultural settings.

This shows how common these behaviors are. However, ethnocentrism was also named as a major problem by the survey, showing that many businesses still find it hard to get past this way of thinking.

Discussion:

The results make it clear that understanding and adapting to different cultures are not nice-to-haves, but necessary for doing well in international business. To build trust, deal with problems, and find the right market fit, it's important to learn about different cultures and adapt strategies to fit the local situation. Partnerships with local players who understand different cultures also improve prospects. On the other hand, ethnocentrism and lack of cultural knowledge can cause mistakes that cost a lot of money and market failure.

The existing body of knowledge is enhanced by this study's:

- Giving data-driven insights into how cultural awareness and adaptation can be used in the real world through examples and quantitative analysis is what this research adds to what is already known.
- Finding the main problems and chances that businesses in various markets face and giving suggestions for how to solve them based on what was found.
- Organizations need to develop cultural intelligence and work with local partners who are also culturally competent.

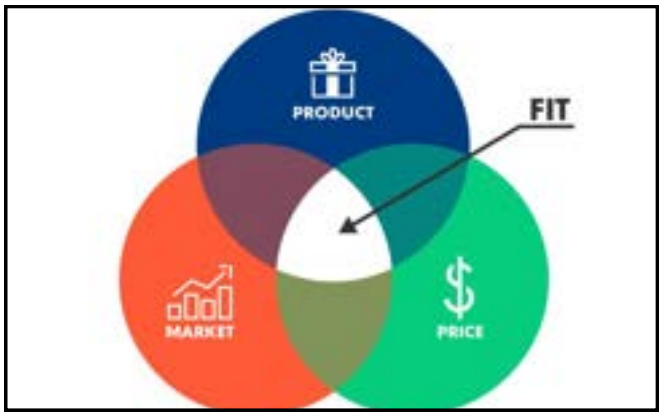
Limitations and Plans for the Future:

The main focus of this study was on big, well-known companies. Looking into the struggles and successes of small and medium-sized businesses (SMEs) that work in various markets could teach us a lot about their own. Also, more research could be done in the future to find out how different cultural aspects affect business practices and consumer behavior in different areas. It might also be helpful for future research and business to look at how cultural awareness and adaptation change as a result of globalization, digitalization, and multicultural societies.

Conclusion

We've been on a wonderful trip through the colorful web of cultural influences on international business thanks to the threads of this study. Our research has given us useful information that shows how important it is to understand and adapt to different cultures when dealing with complicated markets.

Without a doubt, the web we've shown shows that understanding other cultures is essential for doing well in international business. Businesses can better understand and adapt their strategies to different cultural settings by developing cultural intelligence. As part of this, you should improve your language skills, pay attention to body language, and show respect for local traditions and customs. As shown by ethnocentric assumptions and insensitive marketing campaigns, not doing so can lead to mistakes that cost a lot of money and make it harder to break into new markets.



In addition, the web shows how adaptation and market fit are closely linked. For long-term success, it's important to make sure that product features, marketing messages, and pricing models fit with local tastes and beliefs. Businesses that can adapt to different cultures not only gain customer loyalty and goodwill but can also tap into the huge potential of a wide range of markets. This was shown by the global clothing brand that changed its styles to fit local fashions or by the fast-food chain that added vegetarian options in India, showing that it understood the local market and was sensitive to cultural differences.

The web also shows how powerful partnerships can be. Businesses can easily deal with complicated rules, communicate clearly with important people, and learn a lot about the market by building trust and strong relationships with local partners who understand other cultures. The fact that a tech company teamed up with a Chinese company shows how working together can be beneficial and how getting past cultural differences and bureaucratic problems can lead to success.

In the end, a web of cultural influence shows an important but complicated picture for businesses doing business around the world. Businesses can overcome problems, build bridges between cultures, and achieve long-term global success by putting cultural awareness first, adapting their strategies to different situations, and forming partnerships based on trust. Companies can use this research as a starting point for more research and real-world use.

This way, companies can keep figuring out how different cultures affect each other and make their own success stories in the global market.

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Nexus between Foreign Institutional Investors and NSE during Covid

By: Eshller Eshway

ABSTRACT

This paper aims to analyse the relation between FII and Nifty50. An empirical investigation has been conducted to determine the cointegration and causality between FII and Nifty50 using Johansen's cointegration and Granger causality techniques. Monthly data points spanning the year 2021 have been used for empirical investigation. Empirical results of the cointegration technique reveal no cointegrating equations between the FII and Nifty50. The results of Granger causality reveals that there is no significant relationship between FII and Nifty50. The results of this paper can be useful for retail investors, portfolio managers, and policymakers.

Keywords: Johansen Cointegration; Granger Causality; Adf Test; Indian Stock Market; Sensex Co-Integration; FII; Granger Causality; Stationarity; Nifty50.

Foreign Institutional Investors are key participants in the Indian stock market and significantly influence its growth and development. Since India opened its economy in 1992, FII has been one of the primary contributors of capital to the capital market, especially through equity investments. The COVID-19 pandemic has caused tremendous volatility in markets; however, on the positive side, it has also thrown up some great opportunities for investors.

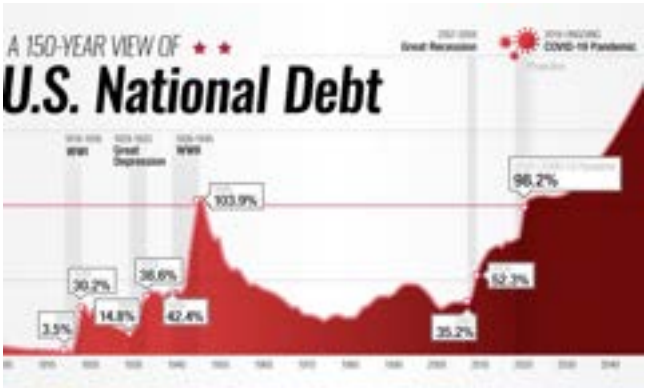
This paper, therefore, tries to study the relationship between the FII flows and the Indian capital market. We take the monthly data of 2021 to investigate the influence of Foreign Institutional Investors on NSE Nifty during COVID. Precisely, the aims of thestudy are to identify the impact of FII on the Indian stock market during COVID (NSE Nifty) and to analyse the cointegration and causality relationship between these factors using Johansen cointegration and Granger causality techniques. This paper specifically goes on to focus on the impact of Foreign Institutional Investors on NSE Nifty during COVID. During our research, we never came across a paper that particularly focused on COVID-19. Obviously, COVID-19 had an impact on the stock market, and further investigation revealed there was major selling by the FIIs. Thus, this paper aims at finding out the relationship between these factors and if one impacted the other. This research has been divided into six sections.

1.0 Introduction

The United States has a statutory debt limit in place to regulate the amount of debt the federal government can issue and thereby the opportunities for the Treasury to finance deficit spending. The latest of these limits was reached on May 16, 2021 and the Treasury has announced a so-called 'extraordinary measures' program to extend the government's funding until August/ September 2021. The proposed measures are accounting devices that will allow the Treasury to auction additional debt. They will permit the Treasury to meet current obligations, albeit at the expense of future cash flow. The measures will not change the total amount of US debt in

in circulation. Once exhausted, the debt limit will need to be raised or suspended. Congressional failure to do this has the prospect of a government shutdown, an event which has the potential to raise substantial risk in the Treasury securities market, with potentially catastrophic systemic economic consequences.

The debt to GDP ratio for the United States has risen substantially over the past 20 years, particularly as a direct cause of the Great Accumulation in the wake of the financial crisis. The ratio has increased further under the demand management budgetary response to the COVID pandemic. Although this ratio is not an immediate cause of concern given the status of the US dollar as a reserve currency, and the Treasury market as the global benchmark for safe, dollar-dated assets with reliable returns, the debt to GDP ratio does have implications for economic growth, living standards, and the strategic position of the United States. Rising debt has the potential to affect the cost of borrowing for the private sector, for decision-making over risk-free debt, and for equity performance for various financial asset classes. Unsustainable debt levels could also engender a loss of confidence in the financial markets and the value of the dollar, with potentially catastrophic systemic economic consequences. The debt limit, in place to regulate the issuance of this debt, acts as both a redline of government spending and a reminder to the House and Senate of the need to monitor the government's final fiscal outcome.



Background and Significance

The United States of America has a statutory limit to the amount of national public debt that can be outstanding. The debt limit had been suspended until September 29, 2017.

To manage the federal government's short-term funding needs without breaching the debt limit, the Treasury implemented extraordinary cash management measures. These actions allow it to fund government programs and to meet other obligations while holding total debt at a level below the statutory debt limit. Despite numerous political battles over raising the debt limit, default on U.S. sovereign debt does not appear to affect the Treasury market in any way that is discernible from looking at the spread between interest rates on sovereign debt issued by countries with higher or lower risk of default. There is no indication that prices of other financial assets, such as U.S. stocks, have been affected by public debt limits.

The debt limit may potentially increase the risk of government default by constraining the Treasury's ability to maintain liquidity at sufficient levels of Congressional authority to maintain spending without the necessary revenue being received when the borrowing is needed. In the past, cumulative delays in increasing the debt limit could have led to government default. It is plausible that threats of political action that can lead to default on the government's obligations could be more credible when the debt limit is binding than when the Treasury is able to take countermeasures. If the U.S. government were to default on its debt, the Treasury market and global financial markets could be seriously disrupted. There is not another sovereign debt market that is large enough to provide a substitute. Any disruption of this nature could have very serious implications for the U.S. ability to maintain an appropriate level of government borrowing at the lowest possible cost.

On the other hand, there might be reasons to prefer not having a debt limit that is too accommodative. Periodic showdowns on the size of the debt limit have the potential to slow the growth of the national debt, which may be far in excess of an appropriate level.

2.0 Review of Literature

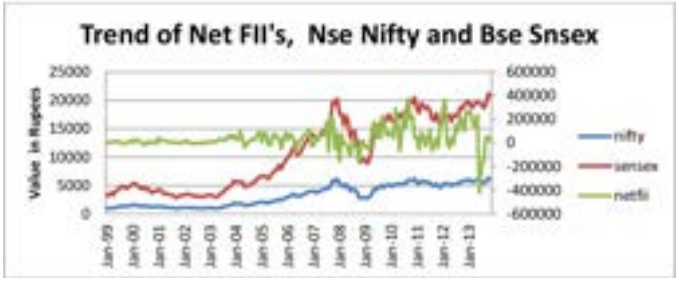
International Institutional investors play a major role in the economic growth of India. Their impact is significant although their industry capitalization is just not much and is also improving every week. While looking at different literatures available it was found that most of the developing countries opened up their economies intending to attract foreign capital and supplement it with domestic capital in the early 1990s.

Aggarwal & Solomon (2017) conducted a study on "Trends and Patterns of FDI and FII in India". The research analysed the triple relation and impact of FDI, FII, and BSE Sensex. They concluded that there was a positive but strong correlation between FDI and Sensex and a weak but negative correlation between FII and Sensex. The study decided by the Multiple Regressions test that there was no impact of FII and FDI on BSE Sensex.

Prasad and Vaishali (2017) attempted to study the nature and pattern of the FII in various segments of the stock market in India and found that FII stands at the second position in the investment after Financial Institutions and a majority of their investments flow inthe direction of the Finance and Banking sector. By the usage of generalised impulse function, variance decomposition, and Granger causality test, Vardhan & Sinha (2016) found that the change in the exchange rate does not affect the inflows of FIIs however, outflows are influenced by the change in the exchange rate. Nagpal et al. (2016) concluded that the impact of the flow of FDI & FII on the Indian stock market is significant.In the practical life stock market movements do not depend on the FDI or FII alone, many other factors drive the stock market to be either bullish or bearish.

From the study conducted by Dr. Sandeep Kapoor and Mr. Rcoky Sachan, discovered that there is a weak positive correlation between FDI & Sensex and FDI & nifty and a strong positive correlation between FII & Sensex and FII & Nifty. Arora and Kumar (2015) conveyed that there is no volatility in the market on account of FIIs however it is important to say that the returns from foreign institutional investors and the net investments made by them are significantly related to a smaller extent that is there are number of other factors which affect the returns of FII which can be the risk associated, type of market etc. Anubha (2013) [JPI10] [AJ11] in his research studies observed that FIIs investment has a significant positive impact on the stock market and major stock indices. The findings also showed that the degree of impact of FIIs varies among various sectors of the economy.

Figure 1: Graph



Furthermore, "Foreign Capital Flow and Indian Capital Market: An Appraisal" by Singh, (2013), investigated the role of foreign capital patterns and trends in the Indian capital market. It was found that FDI and FIIs help in increasing the growth and provide a gigantic opportunity to the Indian economy. The results concluded that there was a strong and positive effect of FDI and FII on Sensex and Nifty. Mamta et al., (2012) examined the impact of foreign institutional investment on the stock market using the statistical tool Karl Pearson's coefficient of correlation. The study attempted to examine the pattern of FII s and their effect on the volatility of BSE Sensex. It was observed that there is a highly positive correlation between FIIs

investment and Sensex. On the other hand, Gupta (2011) examined the rise or fall of the Indian stock market due to FIIs investment and her study covered the period from April 2006 to February 2011.The results of her study showed that FIIs investment flows are unpredictable and their movement depends on market sentiment, hence it was observed that increased volatility associated with FIIs investments results in severe price fluctuations in the Indian stock market.

Inoue, 2009 examined the casualties in mean and variance between stock returns and foreign institutional investment (FII) in India. He found that there were unidirectional casualties in mean and variance from stock returns to FII flows irrelevant to the sample periods, while the reverse casualties in mean and variance were only found in the period beginning with 2003, thus indicating that FII flows had exerted an impact on the movement of Indian stock prices during the more recent period. Christy & Murale, 2009 found the linkages between the FIIs inflows and the performance of Sensex to be robust and significant. The performance of Sensex in terms of market capitalization, returns on Sensex and Trading Turnover were significantly related to the surge in FIIs inflows. They revealed that there was bi-directional causality between net FII inflows and the BSE Sensex– which mutually reinforced each other. It was observed that net FII inflows had a positive impact on the Indian stock market and foreign exchange reserves.

Moreover, Babu & Prabheesh, 2008 examined the dynamic interaction between FII flows and stock market returns in the Indian stock market. They found the existence of bidirectional causality between FII flows and stock returns.

Further analysis through the impulse response function indicated that FII flows were more stock return driven. Furthermore, Ahmad et al., 2005 examined the relationship of FII flows with firm-level stock returns in the Indian equity market. They found a strong unidirectional causality at the aggregate level between FII investments and NSE Nifty. The results showed the existence of bi-directional causality between stock returns and FII flows and vice-versa in 13 firms, and unidirectional causality running from stock returns to FII flows in 21 firms. Ahmad & Ashraf, 2005 examined the relationship between foreign institutional investors and stock returns in India between 2002-04. Granger-causality showed a unidirectional relationship, indicating that equity returns because of FII flow.

Chakrabarti, 2001 analysed the FII flows to India and their relationship with other economic variables and concluded that the flows were highly correlated with equity returns in India but were more likely to be the effects than the cause of those returns.

The following Table 1 summarises the above literature review:

Table 1: Literature Review Summary

Authors	Relationship
Chakrabarti, 2001, Morgan Stanley, Mamta *et al.* (2012), Singh, (2013), Anubha (2013), Kapoor & Sachan (2015),	Positive
Aggarwal & Solomon (2017),	Negative
Gupta (2011), Arora & Kumar (2015), Nagpal *et al.*, (2016), Vardhan & Sinha (2016)	No relationship
Ahmad & Ashraf, 2005, Ahmad *et al.* 2005, Inoue, 2009	Unidirectional
(Ahmad *et al.*, 2005), Babu & Prabheesh 2008; Christy & Murale, 2009),	Bidirectional

Source: Compiled by authors

3.0 Data and Research Methodology

"To achieve the desired objectives research methodology is divided into two parts. First, preliminary analysis of the data set is conducted for the study that includes checking for outliers, calculating descriptive statistics, and testing unit root properties of each data series. For this purpose, the study has employed the Augmented Dickey Fuller (ADF) technique. Second, the Granger causality and Johansen cointegration techniques are employed for determining the causality and cointegration relationship between Sensex and key macroeconomic variables. Equation (1) is being used for calculating the logarithmic returns of the given series."

$r=\ln(P1P0)100$ ...(1)

3.1 Data research

Secondary data has been collected from various sources. Monthly data for the year 2021 has been considered for this study. Data on Nifty 50 closing has been downloaded from the NSE official website; data on Net FII Inflow has been retrieved from NSE website and economics times newspaper.

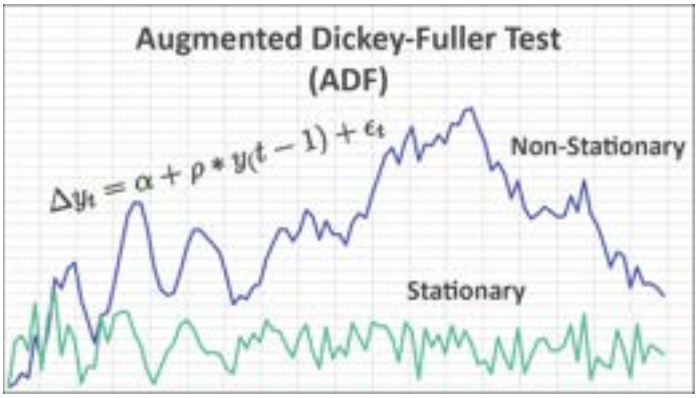
3.2 Augmented dicker fuller (ADF) test

"The ADF technique is the most widely used technique to determine the stationarity of time series data. The null hypothesis of the ADF test states that the series has unit root or non-stationary while the alternate hypothesis states that the series does not have the unit root. If the null hypothesis is rejected the series is said to be stationary i.e., integrated series of zero order (0). However, if we cannot reject the null hypothesis then the series is said to be non-stationary at the level. Usually, it is found that financial series are the first different stationary i.e. integrated series of the first order I (1). Here, the test has been conducted in two forms: "Intercept" and "Trend and Intercept" forms." (Goel, H., & Singh, N. P. 2021).

"The equation (2) with trend and intercept for has been used –

$$\Delta Xt=\mu+\alpha T+\rho Xt-1+i=1mi\Delta Xt-1+et \quad ...(2)$$

Where, *Xt* is the given variable at time t, Δ is the difference operator, T is the time trend, μ denotes constant term, *α* denotes the coefficient on the time trend, *et* is the error term and m correspond to the number of lags."



3.3 Johansen cointegration

"The Johansen test, named after Soren Johansen, is a technique to determine the long run cointegration between the data variables. Johansen's cointegration is the most widely employed technique to test the cointegration among the variables. If two or more non stationary series combine to form a stationary series then the given series is said to be cointegrated. Also, cointegrated series move together in the long run while they may drift apart in the short run due to the presence of some external forces. Here, the Johansen cointegration test assumes a set of null hypotheses for all possible numbers of cointegrating relationships among the select variables. For instance, the first null hypothesis of the Johansen cointegration test states that there is no (r = 0) cointegrating vector among select variables. However, the number of cointegrating vectors among the given variables cannot be greater than the total number of variables. Thus, the last null hypothesis of the Johansen cointegration test states that there are at most five (r ≤ 5) cointegrating vectors among the given variables."

"The kth order VAR model of Johansen's test used to conduct is given below in equation (3).

$$\Delta Yt=+MYt-1+i=1k-1i\Delta Yt-1+t \quad ...(3)$$

Where $\Delta Yt = Yt - Yt-1$ is the difference operator, *M* is the coefficient matrix for the first lag, *Γi* are the matrices for differenced lag and *εt* is the noise term".

"There are two likelihood ratios to test for cointegration under Johansen's approach. These statistics are trace, λ*trace* and max

3.4 Granger causality

"Here, the lead lag relationship between the data series has been studied by employing the Granger causality test. This test depicts the direction of causality between the variables. There are two ways in which we can employ Granger causality techniques. In case there is no cointegration, we apply VAR Granger causality (Granger, 1969) whereas, in case of cointegration, we apply VEC Granger causality to analyse the short run causality. The bivariate kth order VAR equations of Granger causality have been shown in equation (4) and (5). However, we have six variables in our study. Therefore, there will be 30 VAR equations but for the sake of convenience, we have shown only two equations."

$Xt=0+i=1piXt-1+ k=1mkYt-k+ Vt$ ...(4)
$Yt=0+i=1piYt-1+ k=1mkXt-k+ Ut$ ...(4)
"Where *Xt* and *Yt* are the dependent variables at time t, $\beta 0$ and $\theta 0$ are constant drift terms, p and m are the number of lags and *Vt* and *Ut* are the error term. For equation (4) the null hypothesis states that *Yt* does not Granger cause *Xt*. Similarly, the null hypothesis for equation (5) is *Xt* does not Granger cause *Yt*. If we reject the null hypothesis, it means that there is a lead lag relationship between the variables under study. "The null hypothesis of no short run causality is rejected if the p-value or $\chi 2$ value is less than the level of significance."

Excel has been used for sorting and organising the data set while EViews 10.0 has been used for employing ADF, Johansen cointegration and Granger causality techniques.

4.0 Empirical Findings

4.1 ADF test

ADF test is employed to check the stationarity of the variables. All the variables are being tested at level and first difference

Table 2: ADF Test Results at Level

		ADF Results	
Variable	**Test Form**	**Test Stat. (Critical Value)**	**P-Value**
LFIIS	Intercept	-3.359735	0.0374*
	Trend and Intercept	-0.175621	0.9768
	None	0.471432	0.7951
Lnifty50	Intercept	-1.627375	0.4371
	Trend And Intercept	-2.178760	0.4499
	None	2.020894	0.9823

Source: Analysed by authors

Tables 2 and 3 show the ADF results at the level and first difference respectively of both the variables. Both variables were found non-stationary at the level that indicates FII's and Nifty50 (NSE) have the presence of unit root. So, the null hypothesis of unit root cannot be rejected at a 5% level of significance. Both the sample variables were made stationary after taking their first difference. Table 3 shows that both the variables were stationary at 5% level of significance. Thus, we can say that the variables were integrated of first order, i.e., I(1).

Table 3: ADF Test Results at First Difference Level

		ADF Results	
Variable	**Test Form**	**Test Stat. (Critical Value)**	**P-Value**
Lfiis	Intercept	-4.814772	0.0060*
	Trend and Intercept	-6.517654	0.0038*
	None	-5.073807	0.0002*
Lnifty50	Intercept	-3.391834	0.0382*
	Trend and Intercept	-3.248698	0.1319
	None	-2.897442	0.0085*

Source: Analysed by authors

4.2 Johansen cointegration technique results

Table 4: Johansen Cointegration Results

Null Hypothesis	EigenValue	Trace Test		Max EigenValue Test	
		Statistics	P-Value**	Statistics	P-Value**
r = 0 (none)	0.669541	13.51422	0.0973	11.07273	0.1506
R<= 1 (at most 1)	0.216629	2.441493	0.1182	2.441493	0.1182

Source: Analysed by authors

Johansen cointegration technique (Table 4) was used to determine the association between the FIIs and NIFTY50. The results of the ADF test allowed the authors to use the Johansen cointegration technique to find the relationship between the FII and NIFTY 50. Here, the optimal lag length was determined using the SIC criterion. According to SIC, the optimal lag is 2. The results indicated that there was no cointegrating relation between FII and NIFTY50. Therefore, the null hypothesis of cointegration cannot be accepted at a 5% significance level.

4.3 Granger causality test results

Null Hypothesis:	F-Statistics	Prob.	Result
Rnifty50 does not Granger Cause RFIIS	2.41676	0.2050	No significant relationship
RFIIS does not Granger Cause Rnifty50	0.92894	0.4663	

Source: Analysed by authors

*Notes: *Indicate significant results at 5% level of significance*

After conducting the Johansen cointegration test, the Granger causality test was applied to find the lead lag relationship and the direction of causality between FII and NIFTY 50. Since the Granger causality test is sensitive to lag operator, optimal lag length was chosen using Akaike information criteria (AIC) and Schwarz information criteria (SC). Both the statistics suggested the optimal lag length is 2. Table 5 shows that there is no significant relationship between FII and NIFTY 50 since FII does not Granger cause NIFTY 50 and vice versa. So, it cannot be rejected at the significance level.

5.0 Research Implications

The major implications of this study can be for the government of India, retail investors, policymakers, investment houses, portfolio managers, domestic institutional investors (DIIs), and academicians. Retail traders who invest in the stock market switch their positions from one stock to another stock can be benefitted from the results of this study. Since the results of the Granger causality test shows that FII and Nifty50 do not granger, thus this result can help RBI in formulating appropriate strategies for controlling. Therefore, the results of this model can be useful for foreign institutional investors (FIIs) and policymakers.

6.0 Conclusions

In this era of globalisation, it is important to study the factors which affect the stock market returns. One such factor is the FII's. So, the research has made an effort to find the relationship between FII and NIFTY50 returns. The data used for the study was 2021 and was taken from nseindia.com and moneycontrol.com.

Results of the ADF test showed that both variables were integrated of first order. Results of Johansen cointegration showed that there was no cointegration between FII's and NIFTY50. The studies did show that neither of the two

The studies did show that neither of the two (NIFTY and FII flows) had granger causality with each other i.e., the two were independent of each other and did not affect one another. The above study did imply that FII investment and NIFTY50 were influenced by various other macroeconomic fundamentals based on which growth was studied and, in any way, did not have any casual relationship with each other.

Therefore, the results of this study can be useful for government agencies and retail investors across the country. Also, it can be helpful to the policymakers in designing appropriate strategies to attract or distract the flow of foreign capital. However, there are some limitations to this study as well. The study focuses on FII activity in equity only and excludes the debt securities which could also bear some influence on the growth of the capital market. In this sense, there is a further scope of the study to be extended to the debt market in the future to get an insight into the development & growth of the financial markets.

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