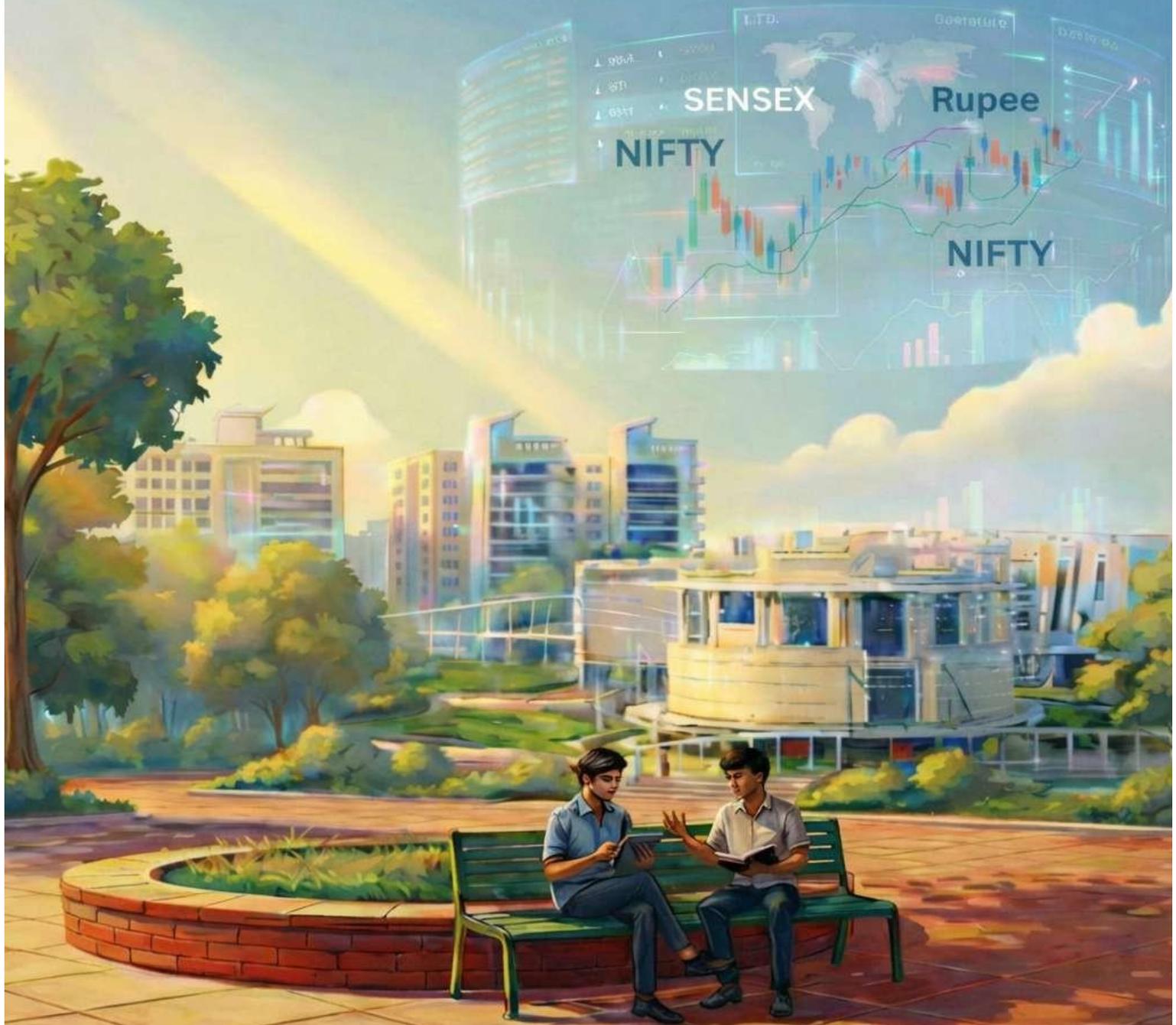


NISM VRIDDHI

Students Magazine 2026

Issue 7



*Beyond The Ticker:
The Multidimensional Securities Markets*

About NISM

The National Institute of Securities Markets (NISM) is a public trust established in 2006 by the Securities and Exchange Board of India (SEBI), the regulator of the securities markets in India. The institute carries out a wide range of capacity-building activities at various levels aimed at enhancing the quality of standards in and the development of the securities markets. With a state-of-the-art campus in Patalganga and a focus on specialized education, research, and certification, NISM plays a pivotal role in creating a cadre of professionals who are well-versed in the complexities of the financial sector and committed to the highest standards of ethics and efficiency.

About Vriddhi

Vriddhi is the flagship student magazine of NISM, established in the academic year 2018-19. It serves as a premier platform for students to demonstrate their knowledge, analytical skills, and creative expressions regarding the global and Indian financial landscapes.

Disclaimer:

The views, opinions, and arguments expressed in the articles, market analyses, and creative works published in *Vriddhi* are solely those of the individual authors and do not reflect the official policy or position of the National Institute of Securities Markets (NISM) or the Securities and Exchange Board of India (SEBI).

While every effort is made to ensure the accuracy of the information presented, neither the Editorial Board nor the Institution shall be held responsible for any errors, omissions, or any consequences arising from the use of information contained herein. Readers are advised to perform their own due diligence before making any financial or investment decisions based on the content of this magazine.

© 2026 Vriddhi Magazine, NISM. All rights reserved. No part of this publication may be reproduced without prior permission.

The Editor's Note: A New Milestone

Dear Readers and Students,

It is with great pride and enthusiasm that we present the seventh issue of Vriddhi, the official student magazine of NISM. Since its inception in 2018-19, Vriddhi has served as a vibrant platform for intellectual exchange, and this edition continues that tradition by showcasing the depth of our students' knowledge, analytical skills, and evolving understanding of the securities markets.

With increasing complexity in price behaviour, the ability to articulate clear perspectives and perform rigorous market analysis is more valuable than ever. This issue is a testament to the dedication of our student community, reflects our student's academic excellence and genuine passion for financial literacy and innovation.

We extend our heartfelt gratitude to the contributors who shared their insights and to our readers for their constant support. We remain committed to ensuring that Vriddhi continues to be a medium that empowers voices and demonstrates the high caliber of skill at NISM.

Warm regards,



Dr. Jatin Trivedi (Editor-in-Chief)
Associate Professor &
Program Director – Study Tour & Visit NISM



Dr. Meraj Inamdar (Co-Editor-in-Chief)
Assistant Professor &
Program Director – Post Graduate Program in Financial Planning

Editors-in-Chief National Institute of Securities Markets (NISM)

Message from the Director – National Institute of Securities Markets



Dear Students,

The Indian securities market stands at the threshold of a brave new world, defined by unprecedented retail participation, shortened settlement cycles, and a regulatory framework that is arguably among the most advanced globally.

In this high-velocity environment, the shelf-life of financial knowledge has shortened. Being relevant in today's market requires more than just a degree; it requires a learner's mindset. If you stop learning, the markets will leave you behind.

This is where a platform like **Vridhhi** becomes vital. It is more than just a publication. It is a sandbox for intellectual rigor, a space for new ideas, and a vehicle for students to become thought leaders. The market needs original voices and perspectives, and **Vridhhi** provides the canvas for this. Original thinking is the only currency that will not depreciate.

I congratulate all those who have contributed to the seventh edition of this magazine, as well as the editorial team, for articulating their ideas and sharing their unique insights. As you flip through these pages, let me remind our readers that the Indian securities market is being rewritten in real-time. A platform like **Vridhhi** is here to challenge the status quo and build expertise demanded by today's world. With warm regards and wishing everyone a rewarding reading experience.

Shri Sashi Krishnan – **Director**

Message from the Desk of Registrar – National Institute of Securities Markets



Dear Students,

The Indian securities market is currently navigating a transformative era, rapid digitalization and a global reputation for regulatory excellence. At NISM, you are positioned at the very heart of this evolution. The name Vriddhi, signifying "growth" and "prosperity," perfectly captures the essence of your journey here.

In an industry where the pace of change is relentless, the true measure of your success will not just be the technical skills you acquire, but your ability to maintain a learner's mindset. This magazine is your sandbox for intellectual rigor, a space where academic theory meets market reality, allowing you to transform from students into the thought leaders the financial world demands.

As you contribute to and engage with this seventh edition, remember that original thinking is the only currency that never depreciates. The articles shared within these pages are a testament to your commitment to excellence and your courage to challenge the status quo. I encourage you to use this platform to sharpen your perspectives and find your unique voice in a crowded marketplace. Let the insights gained here be the catalyst for your professional ascent, and may your dedication to continuous growth pave the way for a rewarding career in the securities markets. I congratulate the editorial team and all contributors for their vision in bringing this edition to life.

Ms. Yogita Shrikant Jadhav, **Registrar**

Message from the Desk of Dean – National Institute of Securities Markets



Dear Students,

I am very happy to connect with you through the Vriddhi Student Magazine. The name "Vriddhi," meaning "growth" or "prosperity," beautifully reflects the transformative journey you're embarking on at the National Institute of Securities Markets (NISM). Your time here at NISM is not only about academics; it's an opportunity to embrace challenges, seize new opportunities, and strive for excellence in everything you do. As you share your articles in Vriddhi, remember that your thoughts and ideas demonstrate your commitment to becoming leaders in the securities markets. Let this magazine serve as a reminder of that commitment.

I encourage you to set high goals and work hard to achieve them. The skills you learn, the connections you make, and the values you uphold will set the stage for your success.

Wishing you every success in your endeavors, both within these pages and beyond. Best regards

Dr. Rachana Baid, **Dean – Academics**

Message from CPFA Program Director



Dear Students,

It gives me immense pleasure to congratulate the student editorial team and all contributors on the successful launch of the 7th edition of “*Vridhi*.” Reaching the seventh edition is not merely a numerical milestone; it is a powerful reflection of sustained effort, continuity of vision, and a continuing commitment to creative and intellectual expression. Over the past years, “*Vridhi*” has evolved into a platform that nurtures ideas, encourages critical thinking, and celebrates diverse perspectives, truly living up to its name which signifies growth. Each edition of “*Vridhi*” represents countless hours of brainstorming, writing, editing, and collaboration.

This edition stands as evidence of the students’ ability to build upon past efforts while bringing fresh energy and new voices to the forefront. In an age where quick opinions often replace thoughtful reflection, this magazine reminds us of the value of clarity, depth, and responsible expression. Through articles, essays, and reflections, the students of NISM have not only demonstrated academic engagement but also social awareness and creative confidence. The process of creating a magazine is itself a journey of learning—one that teaches discipline, teamwork, leadership, and resilience. Every challenge faced during this journey contributes to students’ personal and collective growth. “*Vridhi*” therefore is not just a publication; it is a shared learning experience that shapes into more thoughtful, articulate, and confident individuals.

As you celebrate the launch of this 7th edition, take pride in what you have achieved and draw inspiration to aim even higher. May “*Vridhi*” continue to flourish as a space for ideas, innovation, and meaningful dialogue, and may it inspire future batches to carry forward this legacy of growth with passion and purpose.

**Dr. Dhiraj Jain, Professor & Program Director,
Certificate Program in Financial Analytics**

Message from CPDS Program Director



Dear Students,

As **future management professionals**, you are stepping into a world where technology is transforming the securities markets. Data, analytics, and digital innovation are now essential skills. Embrace continuous learning, think strategically, and act with integrity, because markets reward those who adapt and innovate.

Stay curious, challenge conventional thinking, and turn knowledge into meaningful action. Let discipline guide your decisions and ethics define your success. As you move forward, may your future endeavors be filled with growth, confidence, and lasting impact. The future of finance is yours to shape; make it impactful.

Dr. Kirti Arekar

Professor & Program Director, Certificate Program in Data Science

Message from PGDM, PGPISM & PGCSM Program Director



Dear Students,

The National Institute of Securities Markets (NISM), a Capacity Building Initiative by SEBI, stands as a beacon of excellence in advancing education and professionalism in India's securities markets. Through innovative programs, NISM is committed to developing skilled professionals who drive growth and uphold integrity in the financial sector.

Our flagship Post Graduate Programme in Securities Markets (PGPISM) is an intensive one-year residential course that offers a comprehensive understanding of the securities markets. The curriculum spans critical areas such as Financial Statement Analysis, Portfolio Management, Equity Valuation, Fixed Income, Derivatives & Risk Management, Investment Banking, Mutual Funds, and Wealth Management, equipping graduates for diverse roles across the financial industry. Complementing this, the Post Graduate Certificate in Securities Markets (PGCSM) is offered in collaboration with ICICI Bank. This unique one-year program blends academic rigor with hands-on industry exposure. Participants undergo nine months of classroom training at NISM's Patalganga campus, followed by a three-month internship within the ICICI Group. With a focus on roles such as Treasury Dealers, Fund Managers, Analysts, and Investment Advisors, the program bridges the gap between theoretical knowledge and practical application, reflecting NISM's alignment with industry needs.

Our alumni consistently excel across various sectors, setting benchmarks and contributing to the evolution of the securities markets. The current cohort continues this tradition with exceptional dedication, proactive learning, and active engagement in academic and extracurricular endeavours, embodying the future of financial leadership. It is my pleasure to introduce this edition of Vridhhi, a platform showcasing the creativity, intellect, and diverse talents of our students. The articles and insights in this magazine are a testament to their commitment to excellence and the dynamic spirit of NISM.

My heartfelt congratulations to the editorial team and contributors for their dedication to making this publication a success. I hope our readers find it both insightful and inspiring.

Warm regards,

Dr. Kapil Shrimal, Associate Professor & Program Director, PGPISM & PGCSM

Message from LLM Program Director



Dear Students,

It gives me immense pleasure to extend my greetings to the Editorial Board and readers of *Vriddhi Magazine*. Platforms like *Vriddhi* play a crucial role in nurturing academic curiosity, critical thinking, and informed discussions in the fields of finance, law, and capital markets.

In today's dynamic financial ecosystem, understanding the intersection of corporate governance, securities regulation, competition law, and global investment frameworks is more important than ever. A student-led academic initiative such as *Vriddhi* not only encourages research-oriented thinking but also bridges the gap between theoretical knowledge and practical market realities.

I appreciate the efforts of the Editorial Team in creating a forum where ideas, analysis, and perspectives can be shared constructively. Such initiatives significantly contribute to building a culture of scholarship and professional excellence among students.

I encourage all students to actively participate in research, writing, and analytical discussions, as these activities sharpen legal and financial acumen and prepare them for leadership roles in the securities and financial markets.

I extend my best wishes to the entire team of *Vriddhi Magazine* for continued success and meaningful contributions to academic and professional discourse.

Dr. Rajesh Kumar, Professor & Program Director, LLM

Message from Faculty Members:



Dear Students,

Indian securities markets require combining the three forces of 'buddhi' (intellect), 'vridhhi' (growth) and samriddhi (prosperity). At NISM, we try to impart education in a way that leads to the buildup of these three forces. The students are the future of securities markets and will be carrying forward the energy of the three forces. Vridhhi magazine is an important milestone in your long journey of learning. As securities markets professionals, we have to constantly read, interpret and write about the changes in financial markets. Vridhhi magazine provides that early exposure to the students. Editing and writing for the magazine helps build these reading and writing skills. I congratulate the team on the seventh edition.

Dr. Amol Agarwal, Associate Professor



Dear Students,

Artificial Intelligence is transforming the securities market ecosystem from trading and risk management to compliance and investor services. For today's learners and market participants, this is not just a technological shift, but an opportunity to build smarter, more transparent, and more resilient financial systems. The real power of AI lies not in replacing human judgment, but in strengthening it. By combining strong financial fundamentals with data-driven thinking and ethical responsibility, practitioners can be better prepared to lead and adapt in the era of digital transformation.

Let us embrace innovation with curiosity, discipline, and purpose through this magazine, and continue building markets that are intelligent, inclusive, and trustworthy.

Mr. Vivek Dhandapani, Associate Professor of Practice



Dear Students,

I consistently emphasize to my students that legal frameworks serve not merely to regulate transactions, but to imbue the market with its ethical conscience. With Indian capital markets achieving unprecedented scale, velocity, and innovation, their fundamental strength resides in the trust they engender. The law cultivates with unwavering consistency through stringent investor protection, procedural equity, and principled guidance in periods of complexity and exigency. I exhort students to engage with this dynamic field not solely armed with technical proficiency and ambition, but fortified by profound legal acumen and resolute professional accountability, for when comprehended in both its literal and spiritual dimensions, the law transcends mere compliance; it molds character, preserves integrity, and fortifies the long-term resilience of India's capital markets. The articles of the magazine are steps towards this goal from the side of the students to become professionals in the Capital Market.

Dr. Shreyas Vyas, **Assistant Professor**

Student Editorial Board Members – Issue 7



Atharv Agrawal
PGDM 2025-27



Ayman Tebhala
PGPISM 2025-26



Binoy Thomas
PGDM 2025-27



Devanshi Pitti
PGDM 2025-27



Devesh Tripathi
PGDM 2025-27



Elanishi Agrawal-
PGDM 2025-27



Nandini Sharma-
PGPISM 2025-26



Omkar Mhaske
PGDM 2025-27



Parimal Badawne
PGDM 2025-27



Ruchi Jadhav
PGDM 2025-27



Sajid Abid Bagwan
PGPISM 2025-26



Shashank Agarwal
PGDM 2025-27



Sandesh Agrawal
PGDM 2025-27



Vishwa Khiloshiya
PGDM 2025-27



Sandesh B Kabra
PGP 2025-26



Ramkumar SP
PGP 2025-26

Cocurricular Activities Editorial board



Bhavna
PGDM 2025-27



Harsh Gulati
PGDM 2025-27



Harish Yadav
PGDM 2025-27



Tejas Salunke
PGDM 2025-27



Tinu Nahata
PGDM 2025-27

Table of Contents

<i>Sr. No.</i>	<i>Title</i>	<i>Author</i>	<i>Page No.</i>
1	Enforcing Investment Arbitral Awards in India: Structural Challenges and a Three-Pillar Reform Model	Ananya Singh	16
2	Biases in Indian Securities Markets: A Cross-sectional study of Loss Aversion and Investor Activity	Ramkumar S P	23
3	An Evaluation of CAPEX and OPEX of Indian Consumer Durable Sector	Megha Singh	28
4	Who's Really Driving the Market? The Rise of Passive Price Power	Elanshi Agrawal	31
5	Indian Securities Markets - One of the Attractive Destination for Investors	Dr. Varun Gupta	34
6	When the Dollar Sneezed, Who Caught a Cold? (And Who Didn't)	Geetesh Arora	37
7	A New Era for Indian Brokerage: Decoding SEBI's 2026 Stock Broker Regulations	Hukam Raj	43
8	The 18-Year Edge: Why a SIP is Your Financial Superpower	Mahek Kalpesh Shah	45
9	Carriers of Growth: Decoding the Market Significance of India's Logistics Industry	Devesh Tripathi	50
10	The Innovation Frontier: A Performance Benchmark of India's Pharmaceutical Sector	Swayamjit Dalai	54
11	Brushstrokes on the Benchmark: Indian Paint Sector	Arnav Zambre	57
12	Does ESG Improve Returns or Reduce Risk? A Cross-Market Study	Atharv Agrawal	60
13	The Arsenal of Autonomy: A Decade of Financial Fortification in Indian Defense	Simran	63
14	From Spreadsheets to Psychology: Why Behavioral Finance Matters in Investing	Kumar Ranjan	66
15	Strategic Renaissance: Capital Efficiency and Structural Growth in the Indian Hospitality Sector	Devanshi Pitti	72
16	An open perspective on psychology of earning and non-earning of daily traders in Securities Markets	Nitya Goyal	75
17	Role of Integrated Business Analysis in Modern Corporate Decision-Making	Priyal Gangwal	77
18	Institutionalization of Real Estate through REITs in India	Binoy Thomas	79
19	A Comparative Analysis of Exchange-Traded Funds and Index Funds in India	Sandesh Agrawal	81
20	Comparison of Indian and Australian Government Bond Yields	Satyam Ayush	83

<i>Sr. No.</i>	<i>Title</i>	<i>Author</i>	<i>Page No.</i>
21	Comprehensive Data Analysis of NIFTY IT and USD/INR	Shashank Agarwal	85
22	War, Oil and the Dalal Street Dilemma - How Global Power Conflicts Are Quietly Rewriting India's Market Cycles	Vishwa Khiloshiya	89
23	Legal Design for Smart Contracts: Empirical Analysis of Contract Automation in Indian Securities Market	Yamini Pokhriyal	90
24	REEL MADE ME BUY AN IPO	Soniya Kesarkar	101
25	High-Frequency Trading (HFT): Structure, Technology, Market Microstructure, and Economic Implications	Omkar Mhaske	104
26	Information Technology Infrastructure and High-Volume Trading in Indian Capital Markets	Ruchi Jadhav	106
27	Idea of Independent Directors in the World of Corporate Governance	Arushi Singh	108
28	Digital Evolution of the Indian Securities Market: A Phased Transformation of the Value Chain	Sandesh B. Kabra	111
29	Uncertain Climate, Uncertain Market	Sangeetha Paduvadurai	112
30	<i>Milestones Achievements and NISM club activities</i>		114 onwards

Enforcing Investment Arbitral Awards in India: Structural Challenges and a Three-Pillar Reform Model

- Ananya Singh, LLM, 2025-26



I. INTRODUCTION

International investment arbitration forms an integral component of the contemporary international investment regime. The expansion of cross-border capital flows has been accompanied by a proliferation of bilateral investment treaties and related economic agreements through which States undertake binding obligations to protect foreign investment and provide access to international dispute settlement. These instruments confer substantive protections upon investors and permit challenges to sovereign measures before international arbitral tribunals, situating investment arbitration at the intersection of public international law and domestic regulatory authority. The effectiveness of this system depends fundamentally on the enforceability of arbitral awards. Unlike commercial arbitration, which concerns disputes between private parties, investment arbitration involves the adjudication of State conduct and the reconciliation of international obligations with domestic legal and policy considerations. Enforcement therefore constitutes the point at which treaty commitments are tested within national legal systems. Uncertainty at this stage risks weakening the credibility of investor-State dispute settlement and diminishing the practical value of treaty-based protections.

India's approach to investment arbitration has evolved in response to shifting economic and regulatory priorities. Although India remains a significant destination for foreign investment, it has adopted a cautious stance towards investment treaties and arbitral enforcement. As a non-party to the ICSID Convention, India relies on the New York Convention as implemented through the Arbitration and Conciliation Act, 1996. The Act, however, does not expressly address the enforcement of investment treaty awards, giving rise to questions concerning their classification and the scope of judicial review. These issues have been brought into focus by a series of high-profile investment disputes, revealing persistent tensions between sovereign regulatory authority and international legal obligations.

This article examines these tensions through an analysis of India's investment treaty framework, domestic arbitration law, and judicial practice relating to the enforcement of investment arbitral awards. It identifies structural limitations within the existing regime and advances a reform framework aimed at improving enforcement coherence while maintaining consistency with constitutional principles and regulatory autonomy.

II. ENFORCEMENT IN INVESTMENT ARBITRATION:

A. Enforcement as the Cornerstone of ISDS Legitimacy

The enforcement of investment arbitral awards occupies a central place in the architecture of the investor-State dispute settlement (ISDS) system. In theory, investment arbitration is designed to

operate as a neutral, depoliticized mechanism through which foreign investors may challenge measures attributable to the State.

In practice, enforcement determines whether an award has meaningful legal force or whether it remains an abstract declaration of rights. This is particularly significant because investment arbitration sits at the intersection of public international law and domestic legal systems. While arbitral tribunals derive jurisdiction from treaties and international obligations, enforcement occurs almost invariably through domestic courts. Consequently, the efficacy of the ISDS system depends not only on the conduct of tribunals but also, critically, on the capacity and willingness of domestic courts to recognize and enforce awards.

At the conceptual level, enforcement serves three distinct but interconnected functions. First, it realizes investor protection, ensuring that the substantive rights guaranteed under BITs, such as fair and equitable treatment, protection against expropriation, and non-discrimination are not rendered illusory. Second, it reinforces State accountability, imposing consequences when government actions breach treaty commitments. Third, it sustains international economic governance, contributing to global expectations of legal certainty and rule-based dispute resolution. Absent effective enforcement, the legitimacy of investment arbitration is seriously undermined.

B. ICSID's Self-Contained Enforcement Mechanism

Globally, enforcement is primarily structured around two enforcement models: the ICSID Convention and the New York Convention (NYC). Each reflects contrasting philosophies on the appropriate degree of domestic judicial intervention.

The ICSID Convention creates a fully autonomous enforcement regime. Under Article 54, an ICSID award is enforceable in every Contracting State “as if it were a final judgment” of that State’s courts. Domestic courts are prohibited from revisiting the merits of the award or applying refusal grounds such as public policy. Review is restricted solely to ICSID’s internal annulment process. This self-contained structure is premised on depoliticisation and uniformity, it seeks to insulate investor-State awards from national courts that may be influenced by political considerations or domestic policy concerns.

However, India has elected not to join ICSID. Its refusal is grounded in constitutional and institutional concerns. First, automatic enforcement without judicial review was perceived as conflicting with the constitutional mandate of judicial oversight. Second, concerns were raised regarding ICSID’s alleged structural bias and the concentration of interpretive authority in international tribunals. Third, the possibility of large monetary awards was viewed as a potential fiscal burden. This stance reflects India's broader commitment to domestic judicial autonomy and its cautious engagement with international adjudication.

C. The New York Convention and Judicially Supervised Enforcement

As a non-ICSID State, India relies entirely on the New York Convention, implemented through Part II of the Arbitration and Conciliation Act, 1996, for the enforcement of investment arbitral awards. The NYC establishes a regularized, but more judicially supervised, enforcement regime.

Domestic courts may refuse enforcement on limited grounds, including procedural irregularity, invalidity of the arbitration agreement, excess of jurisdiction, and violation of public policy.

While the NYC model ensures a measure of judicial oversight, it also opens the door to inconsistent domestic interpretation particularly in jurisdictions with complex public-policy doctrines. In India, the challenge is compounded by the “commercial reservation” that restricts enforcement to awards arising from “commercial” legal relationships. Treaty-based disputes do not arise from contracts but from international obligations undertaken by States. This generates a threshold ambiguity, whether BIT awards qualify as “commercial” awards under Indian law. The absence of statutory clarity on this point has produced doctrinal uncertainty and allowed parties to raise jurisdictional objections at the enforcement stage.

The NYC regime presupposes that domestic courts will exercise restraint in the review of foreign awards. Jurisdictions such as Singapore and the United Kingdom have consistently adopted this approach, limiting intervention to instances of egregious procedural violations or manifest breaches of fundamental principles. India’s approach, by contrast, has been shaped by a complex interplay between public policy, judicial philosophy, and concerns about sovereign prerogative.

III. INDIA’S BIT FRAMEWORK AND DOMESTIC ARBITRATION REGIME

India’s BIT and domestic arbitration frameworks have evolved along divergent trajectories. While India’s treaty practice has undergone significant transformation, its domestic arbitration regime has not been correspondingly revised to accommodate the unique demands of investment arbitration. This misalignment has generated structural weaknesses in the enforcement of investment awards.

A. Evolution of India’s BIT Programme

The evolution of India’s BIT programme has been shaped by shifts in economic policy, regulatory priorities, and experiences before arbitral tribunals. The earliest generation of BITs, signed from the mid-1990s through the early 2010s, contained expansive protections typical of the era’s investment treaties. These agreements provided broad definitions of investment, automatic access to ISDS, unqualified most-favored-nation clauses, and generous fair and equitable treatment provisions. At that time, India was integrating into global markets following economic liberalization, and BITs were adopted as instruments to attract investment through robust legal guarantees.

However, India’s experience in *White Industries* marked a significant turning point. The tribunal’s finding that India had failed to provide investors with an “effective means” of asserting claims exposed India to liability arising from delays in its judicial system. This catalyzed a systematic review of India’s treaty commitments and highlighted the risks inherent in broad, unqualified treaty language. Subsequently, India terminated or renegotiated dozens of BITs between 2012 and 2017.

The culmination of this process was the Model BIT 2016, a treaty framework designed to restore sovereign control and restrict investor claims. It introduced an enterprise-based definition of investment, excluded MFN treatment, required the exhaustion of local remedies for at least five years, limited FET to narrowly defined procedural protections, and introduced broad carve-outs

for taxation, environmental regulation, and public interest measures. The Model BIT reflects India's shift towards a State-centric approach, prioritizing regulatory autonomy over expansive investor rights.

What remains underdeveloped, however, is the domestic enforcement regime. The Model BIT reforms, while significant at the treaty level, did not address the question of how investment awards should be treated within Indian domestic law. This omission has proven consequential.

B. Arbitration Act, 1996: Structural and Doctrinal Limitations

The Arbitration and Conciliation Act, 1996 governs the enforcement of foreign arbitral awards in India. However, the Act does not acknowledge investment treaty arbitration as distinct from commercial arbitration. Consequently, BIT awards must be forced into the mould of “foreign awards” under Part II, which was drafted with private commercial disputes in mind.

This classificatory mismatch poses several doctrinal difficulties. First, BIT awards arise from public international law obligations, not contracts between private entities. Their source of consent is a treaty, not a commercial agreement. Second, BIT disputes often concern sovereign regulatory acts, requiring courts to balance constitutional principles, international obligations, and public-policy considerations. Third, the procedural framework of the Arbitration Act does not contemplate treaty-specific issues such as attribution, State immunity, or the role of public law norms.

These limitations mean that Indian courts must engage in interpretive contortions to situate BIT awards within a statutory scheme that was never designed to govern them. The result has been doctrinal inconsistency, as courts attempt to adapt commercial arbitration principles to investment treaty disputes without a clear legislative mandate.

C. Public Policy: India's Most Persistent Doctrinal Challenge

The public-policy exception remains the most significant source of uncertainty in India's enforcement regime. Its evolution reflects broader tensions between judicial oversight and arbitral finality. In *Renusagar*, the Supreme Court articulated a narrow conception of public policy, limiting refusal of enforcement to violations of fundamental policy, justice or morality, or the interests of India. This standard aligned with international practice and was consistent with the NYC's pro-enforcement philosophy.

However, later decisions such as *Saw Pipes* and *Western Geco* considerably expanded the doctrine, allowing review for “patent illegality” and extending judicial scrutiny to the reasoning process itself. Although *Shri Lal Mahal* restored the narrow *Renusagar* standard for foreign awards, the amendments to the Arbitration Act in 2015 and 2019 did not clarify how public policy applies to treaty-based investment awards. This lack of clarity is consequential. Investment awards often implicate sensitive issues—taxation, regulatory actions, public welfare infringements—where the temptation to invoke public policy is higher. Without explicit statutory guidance, courts may resort to the broader, pre-*Lal Mahal* conception of public policy, thereby undermining enforcement certainty.

D. Institutional Deficiencies and the Lack of Specialized Mechanisms

Investment arbitration raises issues fundamentally different from commercial arbitration: treaty interpretation, customary international law, sovereign immunity, attribution of conduct, and tensions between constitutional and international norms. Indian courts, designed primarily to adjudicate private law and domestic public law questions, have limited exposure to these fields.

India lacks:

- specialized investment arbitration benches,
- judges trained specifically in treaty-based dispute settlement,
- a centralized registry for investment award enforcement,
- Institutional mechanisms to assist courts in managing complex cross-border matters.

As a result, enforcement proceedings can become prolonged, fragmented, and unpredictable.

IV. JUDICIAL ENGAGEMENT WITH INVESTMENT ARBITRAL AWARDS IN INDIA

The Indian judiciary's engagement with investment arbitral awards has been characterized by gradual, case-driven evolution rather than doctrinal clarity or systematic legislative guidance. Courts have confronted investment awards not within a purpose-built statutory framework, but through the narrow lens of commercial arbitration principles and approach that has produced inconsistencies and highlighted deeper structural deficiencies.

India's first significant encounter with an investment arbitral award was through the White Industries arbitration. Although the enforcement proceedings occurred outside India, the reasoning of the tribunal highlighted systemic judicial delays within the Indian legal system and found that these delays violated India's obligation to provide an "effective means" of asserting claims. This award not only exposed India to financial liability but also revealed the broader implications of domestic judicial inefficiency in the context of treaty-based claims. The case triggered introspection within the government and ultimately contributed to the termination and renegotiation of multiple BITs.

Following White Industries, the Louis Dreyfus matter surfaced questions regarding the enforceability of BIT awards under the Arbitration Act. Although Indian courts did not definitively resolve the issue, judicial hesitation underscored the absence of statutory recognition for investment awards. These early cases signaled the judiciary's limited experience with investment arbitration and its difficulty in adapting commercial arbitration frameworks to the distinct nature of treaty-based disputes.

The subsequent phase of judicial engagement has been shaped by three prominent disputes: Devas Multimedia, Cairn Energy, and Vodafone. These matters illustrate the tension between sovereign policymaking and international adjudicatory processes. In Devas, India sought to resist enforcement by alleging fraud and invoking national security concerns. Parallel enforcement

actions in foreign jurisdictions, including France and Canada, resulted in attempts to attach Indian assets abroad. These developments reveal a systemic weakness: when domestic enforcement pathways are uncertain or obstructive, investors increasingly resort to enforcement in foreign courts, thereby exposing the State to reputational and operational risks.

Similarly, in Cairn Energy, the tribunal held that India's retrospective taxation measures violated the fair and equitable treatment (FET) provisions of the India-UK BIT. India resisted enforcement, prompting Cairn to pursue attachment of Indian assets worldwide.

The Vodafone award likewise stemmed from retrospective tax amendments and resulted in enforcement attempts outside India. Eventually, India repealed the controversial retrospective tax provision, signaling a pragmatic recalibration of policy but only after sustained international criticism. These cases reveal that India's enforcement challenge is not merely doctrinal; it also reflects the broader conflict between domestic regulatory autonomy and the expectations of the international investment regime. While decisions such as Vedanta and Centro trade demonstrate the judiciary's increasingly pro-arbitration orientation in commercial matters, courts have not yet extended these principles to the realm of BIT awards. This hesitation underscores the need for a clear legislative foundation for the treatment of investment arbitral awards.

V. STRUCTURAL LACUNAE IN INDIA'S ENFORCEMENT REGIME

Despite certain instances of judicial openness towards enforcement, India's approach to investment arbitral awards continues to exhibit structural limitations that affect consistency and legal certainty. A primary concern lies in the absence of explicit statutory recognition of BIT awards within the Arbitration and Conciliation Act, 1996, which necessitates their treatment under a framework designed for commercial arbitration. This results in conceptual and doctrinal uncertainty, given the public international law basis of treaty-based claims. The position is further complicated by the indeterminate application of the public-policy exception. While judicial interpretation has narrowed the scope of public policy in relation to foreign commercial awards, no equivalent standard has been articulated for investment awards, allowing for variable judicial approaches, particularly in disputes involving taxation or regulatory measures.

In addition, India's commercial reservation under the New York Convention raises questions regarding the applicability of the Convention to non-contractual treaty disputes. These legal uncertainties are compounded by institutional constraints, as generalist courts may lack the specialized expertise required to address complex issues arising in investment arbitration. Collectively, these factors have contributed to enforcement challenges and have, in certain cases, led investors to pursue enforcement proceedings outside India.

VI. CONCLUSION

India is at a critical juncture in its engagement with the international investment regime. Although recent reforms reflect a deliberate effort to recalibrate its BIT framework and preserve regulatory autonomy, the domestic enforcement architecture for investment arbitral awards remains underdeveloped. Persistent statutory silence, doctrinal uncertainty, an unsettled public-policy standard, and limited institutional capacity continue to undermine predictability and confidence in

enforcement outcomes.

This article has argued for a three-pillar reform framework grounded in statutory clarification, a clearly defined public-policy threshold, and the development of specialized judicial mechanisms. Such reforms would strengthen enforcement coherence while remaining consistent with constitutional principles and sovereign prerogatives. Given the increasing emphasis placed by investors on legal certainty, a more structured and predictable enforcement regime is integral to India's sustained participation in the global investment system.

Biases in Indian Securities Markets: A Cross-sectional study of Loss Aversion and Investor Activity

- Ramkumar S P, - PGP 2025-26



Retail participation in India's securities markets has expanded considerably in recent years, supported by digital on boarding, increased financial literacy, and a shift in household savings towards capital markets. As this participation grows, understanding how retail investors make decisions becomes increasingly important for regulators, financial educators, and advisory practitioners. While classical finance assumes that investors are rational and make decisions solely on the basis of risk–return assessments, behavioral finance shows that real-world investors often rely on mental shortcuts, emotional reactions, and personal beliefs. Two widely studied behavioral tendencies such as loss aversion and anchoring have been shown to affect investment- related decisions in various contexts. Loss aversion, a foundational component of Prospect Theory, reflects the human tendency to weigh losses more heavily than equivalent gains. This can lead to hesitation in selling losing positions, premature selling of profitable ones, or avoidance of risk altogether. Anchoring occurs when individuals base their judgments too heavily on an initial value, such as a past market price or personal expectation, even when that reference point is no longer relevant.

In an emerging market like India, where retail investors display substantial diversity in age, experience, and financial literacy, these biases can shape trading patterns, portfolio choices, and reactions to market fluctuations. However, there is limited empirical evidence on whether investor behavior such as how frequently they trade or track market updates modifies the intensity of these biases. Likewise, research examining whether biases themselves are interlinked remains sparse. This study seeks to bridge these gaps by examining the degree to which Indian retail investors display loss aversion and anchoring, investigating whether investment activity influences these biases, and evaluating the relationship between the two biases. Through this analysis, the study aims to contribute to a more nuanced understanding of investor psychology in India's capital markets.

Behavioral finance emerged in response to observations that real-world investor behavior diverges from the predictions of rational models. Hahnemann and Tversky's (1979) Prospect Theory marked a significant departure from classical utility theory, demonstrating that individuals evaluate outcomes relative to a reference point and possess a disproportionate aversion to losses. This phenomenon—loss aversion—has been shown to influence trading decisions, particularly in the form of the disposition effect, where investors prematurely sell winners and hold onto losing investments (Barberis & Thaler, 2003). Anchoring, another influential concept, was originally described in the psychological experiments of Tversky and Kahneman (1974).

They found that individuals adjust insufficiently from an initial anchor, often relying on arbitrary values in decision-making. In financial markets, investors may anchor on psychological price thresholds, previous highs, or media-reported benchmarks (George & Hwang, 2004). Anchoring has been linked to biased valuation assessments, suboptimal entry and exit decisions, and persistent mispricing.

In Indian markets, several studies highlight that retail investors often rely on heuristics and may lack structured decision-making processes (Pahwa & Mehra, 2015). While market exposure and experience can improve decision-making accuracy, research suggests that behavioral biases persist even among seasoned investors (Statman, 2019). The study aims to achieve the following objectives: (i) to examine whether the frequency with which investors make investment decisions influences their levels of loss aversion and anchoring bias. (ii) To analyze whether the frequency of updating financial information relates to the intensity of these biases. (iii) To investigate the relationship between anchoring bias and loss aversion among retail investors.

A quantitative, descriptive–analytical cross-sectional study design was adopted. A structured questionnaire was administered to capture demographic information, investment habits, and behavioral tendencies. Responses were collected from 32 retail investors. A convenience sample of 32 retail investors participated in the survey. Demographic and behavioral patterns are summarized in Table 1.

Table 1. Profile of Participants

Variable	Category	n (%)
Gender	Male	29 (90.6%)
	Female	3 (9.4%)
Age Group	18–25	4(12.5%)
	26–35	13(40.6%)
	>35	15(46.9%)
Education	Bachelor’s	11 (34.4%)
	Master’s+	21 (65.6%)
Profession	Student	5 (15.6%)
	Employed	23 (71.9%)
	Business	4 (12.5%)
Frequency of investment decision	Daily	2 (6.3%)
	Weekly	3 (9.4%)
	Monthly	13 (40.6%)
	Quarterly	8 (25%)
	Rarely	6 (18.8%)
Frequency of updating	Multiple times a day	2 (6.3%)
	Once a day	9 (28.1%)
	Weekly	9 (28.1%)
	Monthly	6 (18.8%)
	Rarely or never	6 (18.8%)

Note. Values are presented as frequency (n) and percentage (%).

The descriptive statistics for the behavioral bias scores are presented in Table 2. Loss aversion scores ranged from 0 to 20, with a mean of 8.38 and a standard deviation of 3.45. This indicates that, on average, participants demonstrated moderate levels of loss aversion, suggesting that most investors experience some discomfort or heightened sensitivity toward potential financial losses, but generally not at an extreme level. The spread (SD = 3.45) further suggests noticeable variability across individuals, implying that some investors in the sample are significantly more loss averse than others.

Anchoring bias scores also ranged from 0 to 20 and showed a mean of 7.06 with a standard deviation of 3.52, reflecting moderate anchoring tendencies across the sample. These results indicate that investors in this study tend to rely on reference points such as previous prices, psychological thresholds, or market expectations when making financial decisions. The relatively similar variability (SD = 3.52) suggests that anchoring intensity also varies meaningfully among participants, with some showing stronger anchoring tendencies than others. Shapiro Wilk test of normality done in IBM SPSS Software, to test normality. Variables with normal distribution are presented as mean ± standard deviation and variables with skewed distribution presented as median (interquartile range).

Table 2. Behavioral Bias Scores

Bias	Range	Mean ± SD (n=32)
Loss Aversion	0–20	8.38 ± 3.45
Anchoring	0–20	7.06 ± 3.52

Note. M = Mean; SD = Standard deviation.

Figure 1. Illustrates the distribution of loss aversion levels among the 32 participants. The majority of investors (n = 19) fall into the “moderate” loss aversion category, indicating that most individuals in the sample experience a noticeable but not extreme sensitivity to potential losses. Figure 2 presents the distribution of anchoring bias levels among the participants. Similar to loss aversion, the majority of respondents (n = 17) exhibit moderate anchoring tendencies, indicating that they tend to rely on reference points—such as prior prices or personal thresholds—when making investment decisions.

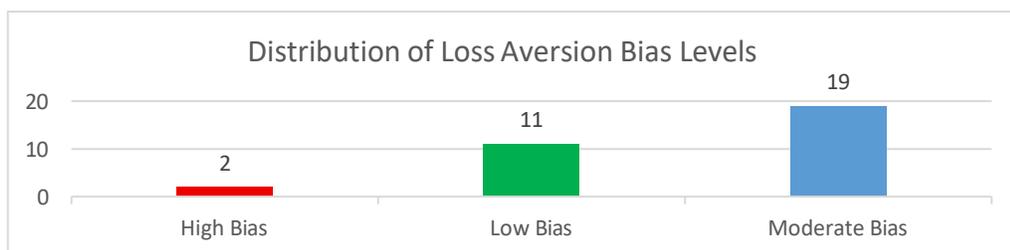


Figure 1. Distribution of Loss Aversion Bias Levels

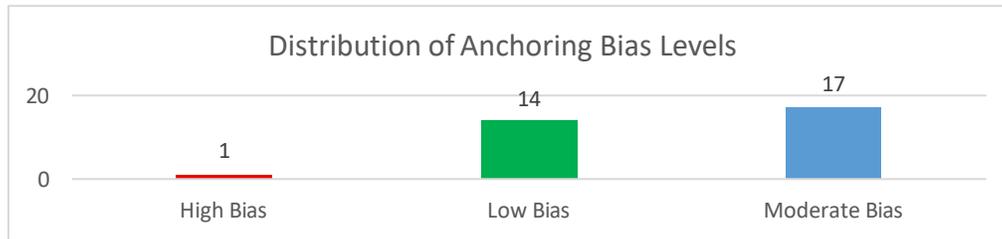


Figure 2. Distribution of Anchoring Bias Levels

The study found no statistically significant difference in the levels of loss aversion ($p=0.310$) or anchoring bias ($p=0.188$) between investors who trade frequently (daily to monthly) and those who trade infrequently (quarterly or rarely). Furthermore, the Spearman rank-order correlation analysis revealed weak negative associations between investment decision frequency and both loss aversion ($\rho=-0.224$, $p=0.217$) and anchoring bias ($\rho=-0.206$, $p=0.257$). These results suggest that while there is a slight numerical tendency for more active investors to exhibit lower bias scores, the frequency of investment activity does not significantly influence or predict the prevalence of behavioral biases within this sample of the Indian securities market.

Table 3. Behavioral Biases by Decision Frequency and Correlation Analysis

Behavioral Bias	Group A: Quarterly (n=14)	Group B: Daily/Weekly/Monthly (n=18)	Comparison (p-value)	Correlation with Frequency (Spearman ρ)	Relationship Significance (p-value)
Loss Aversion	9.14±4.38	7.78±2.48	0.31	-0.224	0.217
Anchoring Bias	8.00±3.84	6.33±3.16	0.188	-0.206	0.257

Shapiro Wilk test of normality done in IBM SPSS Software, to test normality. Variables with normal distribution are presented as mean \pm standard deviation. Independent t test was used to compare the variables between the 2 groups. The results indicate no significant difference in loss aversion ($p = 0.310$) or anchoring ($p = 0.188$) between the two groups, suggesting that decision frequency does not affect bias levels. A new analysis was conducted to examine whether the two biases were related.

Table 4. Association between Anchoring Bias and Loss Aversion

Variable Pair	Correlation Coefficient (r)	p-value
Anchoring Bias & Loss Aversion	0.487	0.005**

*Note. Pearson correlation, ** $p < .01$.

This indicates that anchoring and loss aversion co-occur and reinforce each other, meaning

investors who rely heavily on anchors also tend to exhibit stronger aversion to losses. The results indicate that behavioral biases persist regardless of how frequently investors participate in the market.

Both loss aversion and anchoring were observed at moderate levels on average, and neither bias differed significantly based on how often investors made decisions or monitored financial information. The most notable finding is the strong, positive association between anchoring and loss aversion. Investors who rely heavily on reference points such as past prices or personal expectations also tend to feel losses more intensely. This interconnected pattern implies that cognitive and emotional tendencies reinforce each other in shaping financial decisions. When an investor fixates on an anchor, any deviation from that reference may be perceived as a loss, thereby triggering stronger emotional responses. The study's findings must be interpreted with certain limitations in mind. The sample size of 32 participants is modest and may not fully represent the diverse population of Indian retail investors. Since convenience sampling was used, the sample may carry inherent biases. In addition, the reliance on self-reported survey responses may introduce subjective bias or inaccuracies in assessing behavioral tendencies. The study focuses only on loss aversion and anchoring, even though investors may exhibit multiple other biases. A broader analysis covering additional behavioral traits could yield deeper insights. Finally, the cross-sectional nature of the study captures behavior at a single point in time and does not reflect how biases may evolve with experience, market cycles, or changes in economic conditions.

This research highlights that retail investors in the Indian securities market operate with measurable behavioral tendencies, particularly loss aversion and anchoring. However, the study finds that neither trading frequency nor the habit of tracking market information significantly alters these tendencies. In simple terms, being more active in the market does not necessarily make an investor less biased or more rational. Behavioral responses seem to stem from internal psychological patterns rather than the frequency of market exposure.

References:

1. Kahneman, D., & Tversky, A. (1979). *Prospect theory: An analysis of decision under risk*. *Econometrica*, 47(2), 263–291.
2. Tversky, A., & Kahneman, D. (1974). *Judgment under uncertainty: Heuristics and biases*. *Science*, 185(4157), 1124–1131.
3. Barberis, N., & Thaler, R. (2003). *A survey of behavioral finance*. In *Handbook of the Economics of Finance* (Vol. 1). Elsevier.
4. Statman, M. (2019). *Behavioral finance: The second generation*. CFA Institute Research Foundation.
5. George, T. J., & Hwang, C. Y. (2004). *The 52-week high and momentum investing*. *Journal of Finance*, 59(5), 2145–2175

An Evaluation of CAPEX and OPEX of Indian Consumer Durable Sector

- Megha Singh, PGDM 2025-27



The electronics industry in India has shown significant positive development over time. It is characterized as a sunrise industry that is recognized as a growth engine for the economy (Agrawal et al., 2014; Singh et al., 2018). The sector has demonstrated registered growth of 9.9% (Singh et al., 2018). However, the information available on the overall performance of the industry has historically been limited (Alam, 1990). Analysis of market growth trends and forecasts for the electronics and Electronics System Design and Manufacturing (ESDM) industries continues to be a current research focus (Mahida, 2024).

This research provides a comprehensive fundamental analysis of the Indian electrical and consumer durable industry, focusing on the long-term performance and strategic financial development of five key players: Havells India Limited, Dixon Technologies, MIRC Electronics, Voltas Ltd, and Amber Enterprises. These companies represent a diverse cross-section of the market, ranging from heritage brands like Voltas (est. 1954) and Havells (est. 1958) to modern electronic manufacturing service (EMS) leaders like Dixon and Amber. By examining a twelve-year horizon from FY2014 to FY2025, this study evaluates how these entities manage operational sustainability through varying economic cycles.

The scope of this assessment extends beyond simple profit metrics to include a granular evaluation of working capital efficiency and liquidity proxies. By analyzing key parameters such as inventory ratios, the cash holding period (CHP), and the Reserves-to-Equity ratio, the report identifies distinct strategic positioning from the reserve-heavy maturity of market leaders to the high-growth, capital-light models of EMS providers. Understanding these internal financial structures is essential, as they dictate a firm's capacity for sustained capital expenditure (CAPEX) and operational expansion.

The fundamental financial analysis is anchored in a multidimensional framework that evaluates the operational and strategic health of the selected firms through four primary pillars. Liquidity is assessed using the Reserves-to-Capital ratio to gauge a firm's financial maturity and its ability to maintain a buffer against market volatility. Efficiency is measured through inventory and receivable ratios, providing insight into the effectiveness of working capital management and credit policies. Profitability is analysed via the Operating Profit Margin (OPM) to determine the success of the company in generating returns relative to its capital base. Finally, Operational performance is evaluated by tracking CAPEX and OPEX trends, which allows for a clear linkage between fixed asset investments and subsequent profit outcomes. Together, these metrics offer a holistic view of how internal financial structures support long-term sustainability in the Indian consumer durable sector.

Table 1. Consolidated Financial Performance and Capital Structure Analysis (FY14–FY25)

Company	Profitability Proxy (Avg OPM %)	Liquidity Proxy (Reserves/Capital)	Capex Proxy (Avg Equity Cap)	OPEX Proxy (Avg Op. Profit)	Implied Working Capital Strength
Havells	10.97%	206.51	62	1,770	High (Strong retained earnings)
Voltas	14.54%	136.25	33	550	High (Substantial reserve base)
Dixon	15.00%	56.57	12	269	Moderate-High (Growth-led)
Amber	7.91%	29.82	33	225	Moderate (Steady accumulation)
MIRC	-0.19%	1.83	23	5	Low (Working capital stress)

The analysis reveals a clear stratification in the Indian consumer durable sector based on capital maturity and operational efficiency (see Table 1). Market leaders like Havells and Voltas demonstrate "High" working capital strength, characterized by high Reserves-to-Equity ratios (206.51 and 136.25, respectively), which provide the financial flexibility to fund large-scale CAPEX cycles internally. In contrast, Dixon utilizes a high-growth EMS model that prioritizes superior profitability (15.00%) and OPEX efficiency over a massive capital base. The data identifies a significant "Capex-OPEX-Profitability" linkage: larger equity bases (Havells at 62) correlate with higher absolute operational scale, while the stability of accumulated reserves acts as the primary driver for sustained liquidity and credit risk control. Conversely, companies like MIRC exhibit structural weaknesses, with near-zero liquidity proxies and negative profitability, indicating acute working capital stress. Ultimately, the study suggests that for Indian durable firms, the ability to transition from initial capital funding to a reserve-heavy maturity model is the key determinant of long-term operational resilience and asset utilization.

In light of the longitudinal analysis and behavioral findings, this study concludes that there is a distinct stratification in the Indian consumer durable sector between mature, reserve-heavy market leaders and high-growth, capital-light entities. Companies such as Havells and Voltas demonstrate high working capital strength and liquidity, which provide a robust financial buffer for sustained CAPEX expansion. Conversely, while investor activity levels vary, the prevalence of psychological biases like loss aversion and anchoring remains relatively consistent across different trading frequencies. This suggests that while corporate fundamentals provide the objective basis for market stability, investor decision-making continues to be influenced by subjective behavioral traits that do not necessarily diminish with increased market participation.

However, it is important to acknowledge the inherent limitations of this research regarding data precision and verification. The conclusions are based on financial information synthesized from publicly available online sources for the period of 2014 to 2025, rather than directly from primary audited annual reports. Consequently, numerical variations may exist relative to official corporate filings, which could influence the precision of the comparative interpretations. As no field verification or primary corporate auditing was conducted for the secondary data, these findings should be viewed as an academic exploration of trends and associations rather than an absolute financial audit of the participating firms.

References

Agrawal, S., Singh, R. K., & Murtaza, Q. (2014). Forecasting product returns for recycling in Indian electronics industry. *Journal of Advances in Management Research*.

Alam, G. (1990). The Indian electronics industry: Current status, perspectives and policy options.

Mahida, M. R. (2024). Trends and Developments in India's Electronics and ESDM Sector. *Annals of the Bhandarkar Oriental Research Institute*.

Singh, M. K., Kumar, H., & Gupta, M. P. (2018). Competitiveness of Electronics manufacturing industry in India: an ISM–fuzzy MICMAC and AHP approach. *Measuring Business Excellence*.

Who's Really Driving the Market? The Rise of Passive Price Power

- Elanshi Agrawal, PGDM, 2025-27



The pursuit of capital appreciation remains the terminal objective for the global investor, yet the architecture of that pursuit has fundamentally shifted; investment behaviors evolve less from the celebration of profit and more from the painful lessons of loss. For decades, the active endeavor to "beat the market" through fundamental scrutiny was the gold standard, but a consistent failure by the majority of active managers to outperform their benchmarks exacerbated by high fee structures has catalyzed a mass migration toward passive vehicles. This transition is not merely a change in preference but a structural surrender to the index. As capital deserts the discretionary picker in favor of the systematic algorithm, we are witnessing the birth of "Passive Price Power," where the mechanical necessity to buy now outweighs the fundamental reason to own. Passive price power is rooted in the transition from discretionary to inelastic demand. In a traditional market, a stock's price is a negotiation between a buyer and a seller based on perceived value. However, a passive fund is a price-taker by mandate; it must purchase the constituents of an index in exact proportion to their market capitalization, regardless of whether the security is overvalued or the company's outlook is deteriorating. As the share of passive ownership grows—now exceeding 50% of the US public equity market and rising rapidly in India this inelasticity creates a "bid at any price" environment. This reduces the sensitivity of the market to bad news, as the constant drip of 401(k) and SIP (Systematic Investment Plan) contributions provides a non-fundamental floor for index heavyweights.

Concentration and the Momentum Feedback Loop

The architecture of market-capitalization-weighted indices inherently favors the largest constituents, leading to a self-reinforcing momentum loop. As the largest companies grow, they receive a disproportionate share of every new dollar invested in an index fund. This appreciation often pushes valuations beyond historical norms, not necessarily because of improved earnings, but because of the sheer volume of systematic buying. This concentration risk is most visible in the technology and healthcare sectors, where a handful of mega-cap entities now dictate the direction of entire national indices. This "passive bid" provides a permanent floor for these stocks, creating a divergence between market price and fundamental reality. At the intersection of passive indexation and market-cap weighting lies a recursive momentum feedback loop that fundamentally alters the "sanity check" of traditional asset pricing. Unlike active managers who typically sell or trim "winners" as they become overvalued, a market-cap-weighted index is mathematically compelled to do the opposite: as a stock's price rises, its relative weight within the index increases, necessitating further mechanical buying from every passive dollar that enters the fund.

This creates an amplification effect referred to as the "inelastic markets hypothesis" into the market exert a disproportionate multiplier on prices. Research suggests that in a highly index-dominated environment, an amount 1 inflow can result in an amount 5 aggregate increase in market valuation because passive vehicles are price-insensitive bidders. This loop transforms the market into a "weighting machine" for past success rather than a "voting machine" for future earnings. As the largest constituents such as the "Magnificent Seven" or major Nifty 50 heavyweights—climb higher, they capture a larger share of systemic flows, which in turn drives their prices further, irrespective of whether their underlying cash flows justify the premium. The depth of this understanding reveals a systemic fragility: the same mechanical force that provides a tailwind during periods of steady inflows can turn into a liquidity vacuum during an exodus. If a major shock triggers broad-based outflows, the passive machine must sell its largest holdings in the same "vertical slice" proportion, potentially overwhelming the remaining active "value-floor" buyers and leading to violent, synchronized price cascades.

Active Counter-Response: Exploiting the Liquidity Mirage

The final layer in understanding the new market architecture is the emergence of a tactical counter-strategy by active managers to exploit what is known as the "Liquidity Mirage." In a market dominated by passive flows, liquidity appears abundant on the surface because high-frequency algorithms and index-tracking buy orders provide a constant stream of activity. However, this liquidity is often "hollow"; it exists only as long as the mechanical trend persists. Active managers are increasingly positioning themselves to profit from the moments when this mirage evaporates—specifically during Index Rebalancing events. When a stock is added to or removed from a major index, passive funds are forced to trade billions of dollars in a single window, creating massive, predictable price distortions. Systematic active managers now use these windows to provide the "other side" of the trade, capturing an arbitrage premium from the very index funds that individual investors believe are "safe" and "low-cost."

Furthermore, the "Active Frontier" of 2026 is moving toward Alpha-Enhanced strategies that blend passive cost-efficiency with active risk-mitigation. These hybrid models "hug" the index to capture broad market returns but maintain a discretionary "exit valve" to protect against the synchronized cascades caused by passive concentration. Identifying "orphaned" stocks, quality companies that have been excluded from major indices and thus lack the "passive bid" active managers are finding pockets of undervalued growth that the index-tracking machines simply cannot see. This creates a two-tier market: a crowded, high-valuation "Index Zone" and a fertile, fundamental-driven "Value Zone." The sophisticated investor of the next decade will likely be one who uses passive vehicles for core exposure but relies on active intervention to navigate the structural fragility that passive dominance has created.

Paradox of the Index Era

The rise of passive price power represents the ultimate democratization of the capital markets, yet it simultaneously introduces a structural fragility that few investors are prepared for. While the migration from active to passive management has succeeded in lowering costs and reducing the "manager risk" associated with poor stock selection, it has replaced it with a systemic correlation risk. The market has moved from being a sophisticated weighting of individual business prospects

to a massive, mechanical "liquidity vessel."

In this new environment, the traditional link between a company's fundamental performance and its share price is increasingly severed, as "flows" dictate valuations more than "financials" do. As we progress through 2026, the primary risk for the passive investor is no longer underperforming the market, but the market itself becoming a victim of its own mechanical success.

Ultimately, the "passive bid" has created a marketplace where stability is often a mirage fostered by consistent inflows. The depth of this transition suggests that the future of successful investing lies in a bifurcated strategy: utilizing passive vehicles for low-cost beta exposure while re-engaging with active, fundamental analysis to navigate the distortions the index creates. Investors must recognize that when a majority of the market participants stop looking at the price tag of what they are buying, the "price discovery" mechanism is broken. The next market cycle will likely be defined by a "Return to Reality," where the orphaned, non-indexed stocks find their value, and the index heavyweights are forced to justify their flow-driven premiums. The rise of passive power has changed the rules of the game; survival now depends on knowing when the machine is no longer driven by logic, but by its own momentum.

Indian Securities Markets - One of the Attractive Destination for Investors

- Dr. Varun Gupta *CPDS (Basics) – 2025-26*



The Indian securities market has evolved into one of the most dynamic and attractive investment destinations among emerging economies, playing a central role in capital formation and economic development. By efficiently channelling savings into productive investments, the market supports corporate expansion, infrastructure financing, technological innovation, and wealth creation. Over the past two decades, India's financial ecosystem has transitioned from a developing marketplace into a structurally mature and technologically advanced system supported by robust regulation and growing investor participation. This transformation has positioned the Indian securities market as a significant component of the global financial architecture.

As of early 2026, the combined market capitalization of companies listed on Indian stock exchanges has crossed USD 5 trillion, placing India among the five largest equity markets in the world. Benchmark indices such as the Sensex and Nifty 50 have demonstrated sustained long-term growth driven by macroeconomic stability, policy reforms, expanding domestic consumption, and rapid digitalization across industries. India's projected GDP growth rate of approximately 6–7 percent annually continues to outperform most major economies, strengthening investor confidence and attracting both domestic and foreign capital flows. Unlike earlier periods when markets were heavily dependent on foreign institutional investments, the increasing participation of domestic investors has enhanced stability and reduced vulnerability to global shocks.

Equity markets remain the backbone of the Indian securities ecosystem, offering investor's ownership opportunities across more than 5,000 listed companies spanning sectors such as banking, information technology, pharmaceuticals, energy, manufacturing, and emerging digital platforms. The broad sectoral representation enables diversification while allowing investors to participate in India's economic growth story. Retail participation has expanded dramatically in recent years, with the number of demat accounts exceeding 150 million by 2025 compared to fewer than 40 million in 2020. This remarkable increase reflects a structural shift in household savings behaviour from traditional physical assets toward financial instruments, supported by digital trading platforms and improved financial awareness.

Alongside equities, the debt market provides stability and predictable income streams through government securities, treasury bills, state development loans, and corporate bonds. India's

outstanding bond market has grown beyond ₹230 lakh crore, driven by government borrowing programs and rising corporate financing needs.

The gradual inclusion of Indian government securities in major global bond indices beginning in 2024 has further enhanced international investor participation and strengthened integration with global financial markets. The expansion of the debt segment plays a crucial role in balancing risk within diversified investment portfolios while contributing to infrastructure-led economic growth.

The derivatives market represents another defining feature of India's securities ecosystem. The National Stock Exchange consistently ranks among the world's largest derivatives exchanges by trading volume, reflecting widespread adoption of futures and options for hedging, speculation, and efficient price discovery. Increased institutional participation combined with improved margin frameworks has strengthened risk management practices and market efficiency. Exchange Traded Funds have also witnessed rapid growth, with assets under management surpassing ₹7 lakh crore, driven by the global shift toward passive investing and cost-efficient diversification strategies. ETFs have enabled investors to gain broad market exposure while maintaining lower transaction and management costs.

A significant structural innovation in recent years has been the emergence of Real Estate Investment Trusts and Infrastructure Investment Trusts, which have expanded investment opportunities beyond traditional asset classes. These instruments allow investors to participate in income-generating commercial real estate and infrastructure assets such as highways, transmission networks, and renewable energy projects without requiring large capital commitments. Listed REITs and InvITs in India collectively manage assets exceeding ₹1.5 lakh crore and provide relatively stable cash flows along with diversification benefits. The regulatory reclassification of REITs as equity-related instruments effective January 2026 has further improved liquidity and facilitated greater participation from mutual funds and institutional investors, strengthening their integration into mainstream portfolios.

The strong regulatory framework established by the Securities and Exchange Board of India has been instrumental in building investor trust and ensuring market integrity. SEBI's emphasis on transparency, disclosure standards, and corporate governance has significantly reduced information asymmetry and enhanced fairness in price discovery. Strict regulations addressing insider trading, market manipulation, and unfair trade practices have created a level playing field for all participants. The adoption of standardized mutual fund categorization and enhanced reporting norms has simplified investment decision-making for retail investors, improving comparability across financial products.

Operational efficiency within Indian markets has also improved considerably through technological and policy advancements. India's adoption of the T+1 settlement cycle places it among the fastest settlement systems globally, reducing counterparty risk and improving liquidity turnover. Fully dematerialized securities trading, electronic KYC processes, and advanced market surveillance systems enable seamless participation while maintaining systemic stability. Investor protection mechanisms such as the Investor Protection Fund and SEBI's centralized grievance redressal platform further strengthen confidence by providing safeguards against intermediary

failures and operational risks. Another notable transformation has been the financialization of household savings through mutual fund investments. Monthly inflows through

Systematic Investment Plans have crossed ₹20,000 crore, indicating increasing awareness of disciplined long-term investing among retail participants. Domestic Institutional Investors now play a stabilizing role during periods of foreign portfolio outflows, contributing to reduced volatility and improved market resilience. The rapid adoption of fintech platforms and mobile-based investment applications has democratized access to financial markets, allowing participation from investors across geographic and income segments, particularly among younger demographics.

Technological innovation remains a defining strength of Indian securities markets. Exchanges operate on highly sophisticated electronic trading systems capable of processing millions of orders daily with minimal latency. Algorithmic trading frameworks, real-time risk monitoring, and nationwide digital connectivity have significantly reduced transaction costs and improved market transparency. These advancements have enabled India to establish one of the most efficient and accessible trading environments globally, comparable with developed market standards.

In conclusion, the Indian securities market represents a powerful convergence of economic growth, regulatory excellence, technological advancement, and expanding investor participation. Its diversified ecosystem encompassing equities, debt instruments, derivatives, ETFs, REITs, and InvITs provides investment opportunities suited to varied risk appetites and financial objectives. Supported by proactive regulation and increasing domestic participation, the market has evolved into a resilient financial system capable of withstanding global uncertainties. As India progresses toward becoming a multi-trillion-dollar economy, the securities market will continue to play a pivotal role in mobilizing capital and facilitating sustainable wealth creation. Consequently, the Indian securities market stands not only as an attractive destination for investors but also as a reflection of India's growing financial maturity and its rising prominence within the global investment landscape.

When the Dollar Sneezed, Who Caught a Cold? (And Who Didn't)

- Geetesh Arora, PGDM 2025-27



The US dollar holds a central role in global finance, influencing investment flows, borrowing costs, and risk sentiment across economies. Movements in the US Dollar Index (DXY) have traditionally been associated with predictable patterns: dollar strength often pressures commodities, tightens financial conditions in emerging markets, and affects the performance of global assets. However, as financial markets evolve and new asset classes gain prominence, the consistency of these historical relationships has begun to shift.

The period from 2020 to 2025 presents a unique opportunity to re-examine these dynamics. This timeframe captures a sequence of unprecedented shocks and policy cycles, including the COVID-19 downturn, rapid monetary easing, a global inflation surge, and the most aggressive Federal Reserve tightening in decades. Each phase reshaped market structures, investor behavior, and cross-asset sensitivities. At the same time, developments such as the institutional adoption of Bitcoin and greater maturity in global equity markets introduced new layers to how assets responded to fluctuations in the dollar. These structural changes prompt an important question: to what extent do global markets still react uniformly when the dollar strengthens or weakens? While conventional theory suggests a broad and consistent spillover effect, recent evidence indicates that certain assets may be decoupling, adjusting, or responding in more nuanced ways than before. This raises the need for a systematic examination of how different markets aligned or diverged from traditional dollar-driven behavior in recent years.

This study addresses that gap by analyzing how four major asset classes gold, Bitcoin, MSCI Emerging Markets, and MSCI World responded to dollar movements across three distinct regimes between 2020 and 2025. Using 1,432 daily return observations, the paper evaluates changes in correlations and identifies structural breaks in how these assets interact with the DXY. The objective is to offer an updated understanding of which markets remain sensitive to dollar cycles and which appear increasingly resilient, contributing to the broader discussion on the evolving influence of the US dollar in global financial markets. The role of the US dollar as a global financial anchor is well-established in international finance research. Rey's (2015) "global financial cycle" framework argues that fluctuations in the dollar and US monetary policy shape global risk-taking, regardless of domestic policy autonomy. Empirical evidence shows that dollar appreciations tighten global financial conditions and reduce cross-border capital flows, particularly toward emerging markets (Miranda-Agrippino & Rey, 2020). This sensitivity arises from reliance on dollar-denominated funding, exposure to foreign investor flows, and currency mismatches that amplify the impact of dollar cycles (Bruno & Shin, 2015).

A substantial body of work highlights that emerging market equities are especially vulnerable to dollar strength. When the dollar rises, EM exchange rates depreciate, external financing costs increase, and local asset valuations decline. Forbes and Warnock (2012) show that global push factors including US financial conditions drive sudden stops and reversals in EM capital flows. Subsequent studies confirm that EM equities and currencies exhibit consistently negative correlations with the DXY, reflecting both valuation effects and the balance-sheet pressures associated with dollar-denominated debt (Hassan & Mano, 2021).

By contrast, the link between the dollar and developed markets is more nuanced. Traditional theory suggests that DM assets, supported by deeper capital markets and lower currency mismatches, should be relatively insulated. However, recent research indicates that during periods of aggressive monetary tightening or extreme risk repricing, DM equities particularly large-cap technology and growth sectors can display heightened sensitivity to dollar movements (Jorda, Singh & Taylor, 2022). Sharp increases in US yields can compress valuations of duration-sensitive equities, occasionally producing stronger negative reactions in DM indices than in EM assets.

Recent literature also documents structural changes in asset behavior due to the rise of digital assets and shifts in market composition. Bitcoin, once treated largely as a speculative risk asset, has shown evolving correlation patterns as institutional participation expanded, especially after the launch of spot Bitcoin ETFs. Studies find that ETF-driven liquidity and institutional adoption reduce Bitcoin's sensitivity to traditional macro drivers, including US dollar fluctuations (Liu & Tsyvinski, 2024). This suggests that correlations between the DXY and major assets are not static but adapt to changing market structures, policy regimes, and investor behavior.

This study uses daily closing prices for five major financial indicators sourced from Investing.com and MSCI.com, both widely used for academic and professional research due to their consistent and exchange-verified datasets. The assets include:

- US Dollar Index (DXY): Measures the value of the dollar against six major currencies (EUR, JPY, GBP, CAD, SEK, and CHF).
- Gold (XAU/USD): Spot gold price in USD per troy ounce.
- Bitcoin (BTC/USD): Daily market price of Bitcoin quoted in USD.
- MSCI Emerging Markets Index: Represents large- and mid-cap companies across 24 emerging economies.
- MSCI World Index: Covers large- and mid-cap equities across 23 developed markets.

The sample spans January 2, 2020 to November 17, 2025, generating 1,432 aligned trading-day observations after excluding weekends and holidays. This period captures three major macro-financial shifts: pandemic-era easing, the global tightening cycle, and the post-tightening stabilization coupled with crypto institutionalization.

Data Integrity and Differences across Sources

The values and correlations reported in this study may vary slightly from those in other research or databases. This is primarily due to differences in data sources, the exclusion of non-overlapping trading days, and the alignment of global market holidays. Since daily return calculations require synchronized price availability across all assets, certain dates were removed when one or more markets were closed or not trading. These adjustments ensure consistency within the sample but can lead to minor deviations from datasets that use different alignment methods or broader calendars.

Return Calculation

Daily returns for all assets are computed using natural logarithmic returns, which provide time-additivity and improve statistical properties for high-frequency data:

$$r_t = \ln \left(\frac{P_t}{P_{t-1}} \right)$$

To measure how asset classes co-move with the dollar across different market environments, we compute Pearson correlation coefficients between daily DXY returns and each asset's returns:

$$\rho_{DXY, Asset} = \frac{Cov(r_{DXY}, r_{Asset})}{\sigma_{DXY} \cdot \sigma_{Asset}}$$

This provides a straightforward measure of linear co-movement. Interpretation:

- Negative correlation → asset tends to fall when the dollar rises.
- Weakening correlation → asset becomes less sensitive to the dollar.

Regime Definition

Three distinct regimes are identified based on macroeconomic conditions, monetary-policy environment, and structural shifts in global markets:

Regime	Period	Macro Characteristics	Avg DXY
Classic Smile	Jan 2020 – Jun 2021	Zero rates, heavy stimulus, early inflation	94.23
Extreme Right-Side	Jul 2021 – Dec 2023	Aggressive Fed hikes, global tightening	101.75
Dollar Frown	Jan 2024 – Nov 2025	Rate stabilization, Bitcoin ETF adoption	102.73

These regimes capture meaningful turning points that likely influence how global assets respond to dollar movements. Gold maintains a strong and stable negative correlation with the dollar (~ -0.40 to -0.50), confirming its status as a reliable dollar hedge across all regimes. Even during extreme tightening (Regime 2), gold strengthened its anti-dollar behavior.

Bitcoin: Clear Structural Decoupling

Bitcoin shows the most dramatic pattern shift:

- Moderate negative correlation during tightening (-0.25).
- Near-zero sensitivity in Regime 3 (-0.04).

This decoupling aligns with the institutional adoption following spot Bitcoin ETF approvals in early 2024, which altered liquidity, investor composition, and correlation structure.

Table 1 — Correlations between DXY and Major Asset Classes (Daily Returns) Source: Investing.com; 1,432 observations.

Regime	Gold	Bitcoin	MSCI EM	MSCI World
Classic Smile	-0.41	-0.07	-0.25	-0.14
Extreme Right-Side	-0.50	-0.25	-0.29	-0.51
Dollar Frown	-0.41	-0.04	-0.16	-0.10

Emerging Markets: Predictably Dollar-Sensitive

Emerging market equities exhibit the expected negative correlation with the dollar across all regimes. However, this sensitivity decreases in Regime 3 (-0.16), suggesting some normalization as global rate pressures eased and capital flows stabilized.

Developed Markets: A Surprising Inversion - In Regime 2, developed markets display the strongest negative correlation (-0.51) among all assets, even stronger than EMs. This inversion likely results from:

- High duration sensitivity of US tech and growth stocks
- Valuation compression during rapid rate hikes
- The dominance of rate-sensitive sectors in developed indices

Across the three regimes, asset responses to the US dollar exhibit meaningful structural shifts:

1. Gold remains a stable hedge, unaffected by regime changes.
2. Bitcoin undergoes the largest transformation, with sharp correlation weakening after institutionalization.

3. Emerging markets remain dollar-sensitive, though less so in the later period.
4. Developed markets show unexpected fragility during the tightening cycle, temporarily behaving more like EM assets.

The results reveal that the relationship between global assets and the US dollar is far more dynamic than traditional theory suggests. Gold behaves as expected, maintaining a consistently strong negative correlation with the dollar across all regimes, reaffirming its role as a reliable hedge. In contrast, Bitcoin shows a notable regime shift: while it moved inversely with the dollar during the tightening cycle, its near-zero correlation in the post-ETF period indicates a structural decoupling driven by institutional adoption and improved market depth.

Equity markets display clear asymmetry. Emerging markets remain predictably sensitive to dollar appreciation due to valuation effects and dollar-denominated debt exposure. However, developed markets unexpectedly showed the strongest negative correlation during the 2021–2023 tightening cycle. This inversion reflects the heavy weighting of duration-sensitive technology stocks in developed indices, which reacted sharply to rising US yields. Together, these findings show that dollar spill overs are no longer uniform asset responses depend strongly on regime conditions, sector composition, and evolving market structures.

This study examined how major asset classes responded to movements in the US Dollar Index across three distinct regimes from 2020 to 2025. The analysis shows that while the dollar continues to influence global markets, the strength and direction of its impact vary significantly across assets and across time. Gold consistently acts as a hedge, Bitcoin becomes increasingly independent following ETF driven institutionalization, emerging markets remain vulnerable, and developed markets exhibit unexpected sensitivity during periods of aggressive monetary tightening.

The dollar's spillover effects are increasingly differentiated rather than uniform. This has important implications for investors, who must account for regime shifts when assessing risk, and for policymakers, who should recognize that both emerging and developed markets can be affected during major policy cycles. Future research could extend this work by examining nonlinear spill overs, volatility effects, or causal drivers behind the shifting asset dollar dynamics.

References

- Baur, D. G., & Lucey, B. M. (2010). Is gold a hedge or a safe haven? *Journal of Banking & Finance*, 34(8), 1886–1898.
- Bruno, V., & Shin, H. S. (2015). Capital flows and the risk-taking channel of monetary policy. *Journal of Monetary Economics*, 71, 119–132.
- Forbes, K. J., & Warnock, F. E. (2012). Capital flow waves: Surges, stops, flight, and retrenchment. *Journal of International Economics*, 88(2), 235–251.
- Hassan, T. A., & Mano, R. C. (2021). Forward and spot exchange rates in emerging markets. *The Journal of Finance*, 76(2), 951–995.

Liu, Y., & Tsyvinski, A. (2024). Institutional adoption and the changing dynamics of Bitcoin. National Bureau of Economic Research Working Paper.

Miranda-Agrippino, S., & Rey, H. (2020). U.S. monetary policy and the global financial cycle. *Review of Economic Studies*, 87(6), 2754–2776.

Rey, H. (2015). Dilemma not trilemma: The global financial cycle and monetary policy independence. National Bureau of Economic Research Working Paper No. 21162

A New Era for Indian Brokerage: Decoding SEBI's 2026 Stock Broker Regulations

- Hukam Raj, LLM, 2025-26



Introduction

Indian capital market has recently gone through a regulatory reset which has been described by the observers as once-in-a-generation. The regulations issued on 8 January 2026 are known as the Securities and Exchange Board of India (Stock Brokers) Regulations, 2026, and were promulgated by the Securities and Exchange Board of India. This report is not just a piece of light modification but an overhaul of the industry that replaces the original 1992 framework that governed the industry for over 33 years. The reform represents a shift in the direction of a leaner, digitized, and more responsible market ecosystem to investors, brokers, and other fintech entrepreneurs.

Why the Overhaul? Out with the 1990s, In with the 2020s

The 1992 regulations were introduced at the time when physical share certificates, open-outcry trading floors and ledgers were in the existence. The fundamental framework developed into a patchwork of historic provisions though the rules had repeatedly been amended. The overall goals of SEBI pursued through the new 2026 Regulations are three-fold:

- **Ease of doing business** - a decline of compliance cost with easy language and simplified procedures.
- **Harmonization**- consistency of the rules used by the brokers with other financial stock controllers like the Reserve Bank of India (RBI) and the Insurance Regulatory and Development Authority of India (IRDAI).
- **Risk Management** - Enhancing supervision for "Qualified Stock Brokers" (QSBs) who handle the large chunk of retail capital.

Key Highlights of the 2026 Regulations

1. **Cross-Regulatory Performance (The one-window Vision):** SEBI has allowed the stock brokers to carry out activities which are governed by other financial regulators, such as insurance or banking services, under a single set of rules. This is in order to ensure that brokers do not get stuck in the grey waters of regulation in the provision of diversified products.
2. **The Emergence of the QSB (Qualified Stock Broker):** SEBI has simplified the standards to define the QSBs. These are systemically important brokers that have large active client base and high volume in their trading. Greater oversight today needs disciplined cyber-security audits and crafting orderly wind-down strategies to help row market stability in

the wake of a mega-broker collapse.

3. **Digitization of Compliance:** The new regulations directly promote the rejection of a paper-first decision-making. Brokers are permitted to keep all the books of account and records electronically. Moreover, the collaborative inspections among SEBI, Stock Exchanges, and Depositories can now be held and thus consumption of time used in overlapping audits is saved and instead the time could be spent in the market by the market participants.
4. **Clearer Definitions for a Modern Market:** The 2026 regulations give the much-needed accuracy when it comes to straddling roles. As an example, the lines between proprietary trading and client-money trading are identified. A registered stock broker no longer needs a separate registration to act as a clearing member, provided they have exchange approval.

Table 1. Comparison: 1992 v. 2026 Framework

Feature	1992 Regulations	2026 Regulations
Record Keeping	Primarily Physical/Manual	Default Electronic/Digital
Audit Style	Multiple, overlapping inspections	Integrated Joint Inspections
Obsolete Rules	Contained rules for "Sub-brokers" and "Physical Delivery"	Removed; focused on digital-first markets
Reporting	Heavy direct reporting to SEBI	Exchanges act as the "First-Line" regulator

What This Means for the Average Investor

Retail clients who access Zerodha, Groww, or Angel One platforms might not notice any immediate change in their user interfaces, but the core of the infrastructure that handles their trades has noticeably improved.

- **More expedited dispute resolution:** Since Stock Exchanges will be the main regulators in these cases, complaints and compliance matters will be handled more effectively.
- **Security of Funds:** The enhanced oversight on QSBs means the broker you use is being watched more closely than ever regarding how they handle your collateral and data.
- **Decreased overhead:** Less compliance cost of brokers is usually manifested in better technology and reduced ultimate transaction charges to the end users.

The Road Ahead

The 2026 Regulations are a shift of SEBI as a restraint watchdog to a catalyst of market activities. With the abolishment of outdated requirements, including the ones that apply to now-defunct Forward Market Commission, SEBI has created a streamlined regulatory system. In the future, the industry will be facing some consolidation. The joint inspection regime and electronic requirements can prove challenging to smaller brokers; but, on the other hand, larger brokers, driven by technology, will thrive in this simplified system.

The 18-Year Edge: Why a SIP is Your Financial Superpower

- Mahek Kalpesh Shah, PGDM (2025-27)



Turning 18 is a landmark year. It's when you gain the right to vote, get a driver's license, and perhaps even secure your first part-time job. But beyond these exciting new freedoms lies another, less celebrated yet profoundly impactful right: the legal capacity to open your own investment accounts. This seemingly small detail is, in fact, the "Golden Threshold" for your financial future. While retirement or buying your dream home might feel like distant fantasies, starting a Systematic Investment Plan (SIP) today is the single most powerful decision you can make to secure those dreams.

A SIP allows investors to invest a fixed amount regularly in mutual funds. It creates a structured and disciplined approach to investing and removes the pressure of timing the market. By investing consistently, individuals participate in long-term wealth creation without requiring large upfront capital.

- **SIP for a Newborn Baby**

A SIP does not have to start only when a person turns 18. Parents or guardians can start a SIP in the name of a new-born's child, with the investment being managed by the guardian until the child becomes a major. This gives the investment a long runway of 18 years, allowing compounding to work at its full potential. By the time the child turns 18, the accumulated corpus can be used for higher education, professional courses, starting a business, or simply transferred to the child as a strong financial foundation. Starting this early significantly reduces the pressure of arranging large sums later in life.

- **Daily SIP Option**

While monthly SIPs are the most common, many mutual fund houses also offer daily SIP options. A daily SIP allows investors to invest a very small amount every day, which can feel more manageable than committing a lump sum monthly amount. This option is especially useful for students, freelancers, or individuals with daily or irregular income. Daily SIPs also enhance rupee cost averaging, as investments are spread across more market levels, further reducing the impact of short-term volatility

- **Top-Up SIP Facility**

One of the most practical features of SIPs is the top-up or step-up facility. As your income increases over time through salary hikes, bonuses, or business growth, you can increase your SIP amount at regular intervals without starting a new SIP. Even a small annual increase can make a massive difference to the final corpus due to compounding. This feature ensures your investments grow in line with your earning capacity and helps accelerate wealth creation in a disciplined and structured manner.

Unleashing the Power of Time and Compounding

Many young people believe investing is only for the rich or those with high salaries. This couldn't be further from the truth. The most significant advantage an 18-year-old possesses isn't a massive income, but an abundance of time. This precious resource allows you to harness the magic of compounding, often called the "eighth wonder of the world" by Albert Einstein.

What is Compounding? Compounding is the process where your investment returns also start earning returns. It's like a snowball rolling down a hill it starts small, but as it gathers more snow (returns), it grows exponentially larger. The longer the snowball rolls, the bigger it gets.

The Incredible Power of Starting Early

Let's look at a simple, yet eye-opening example. Imagine you invest a modest ₹2,000 per month. We'll assume a conservative average annual probable/Assumed return of 12.62%, which is often achievable in equity linked mutual funds over the long term.

Why Invest Now? (The "Why" Factor)

Investing is not just about "buying stocks" it is about inflation protection.

- **Beating Inflation:** Keeping money in a savings account at 3-4% interest actually loses value when inflation is at 6%. Investing helps your purchasing power grow.
- **Financial Independence:** Starting at 18 means you could potentially "retire" or become financially free by 40, while others are just starting their peak stress years.

The Benefits: More than Just Money

1. **The Snowball Effect:** Compounding is your best friend. In a SIP, you earn interest on your interest. Over 40 years, the growth is not linear; it's vertical.
2. **Low Barrier to Entry:** You don't need lakhs. You can start with just ₹500, the cost of one movie outing.
3. **The Discipline Muscle:** A SIP automates your savings. It teaches you to "Invest first, spend what is left," a habit common among the world's wealthiest individuals.

Illustration: SIP as a Real-World Wealth-Building Tool

To move beyond theoretical assumptions, the effectiveness of a Systematic Investment Plan can be demonstrated using an actual SIP planning example.

SIP Investment Details (Planner-Based Example)

Particulars	Details
Monthly SIP Amount	₹5,000
Investment Period	25 Years
Expected Annual Return (% annualized)	12%
Total Amount Invested	₹15,00,000
Estimated Maturity Value	₹85,11,033
Wealth Multiple	5.67 times

This example highlights how a disciplined monthly investment of ₹5,000, which is feasible even for early-career individuals, can accumulate into a corpus of over ₹85 lakh over a 25-year period. The total contribution of ₹15 lakh grows nearly six times due to long-term compounding.

Goal-Based Interpretation of the SIP Example

Rather than viewing SIPs only as investment instruments, they are more effective when aligned with specific financial goals.

Potential Goals Achieved Through This SIP

Financial Goal	Relevance of the SIP Corpus
Retirement Planning	Provides a substantial base corpus, reducing dependency on post-retirement income
Child's Higher Education	Can fund professional or overseas education expenses
Purchase of a Home	Acts as a strong down payment, lowering long-term loan burden
Wealth Creation	Supports long-term capital appreciation and financial independence
Emergency and Contingency Planning	Builds financial resilience against unforeseen expenses

This demonstrates that SIPs directly support real-life financial needs, not just abstract wealth creation.

Beyond Wealth – Discipline, Risk, Smart Investing Strategy and Selection.

While wealth creation is a primary goal, starting an SIP at 18 offers a multitude of other benefits that lay the groundwork for a financially savvy life.

Linking SIP Discipline to Financial Behavior

Financial freedom isn't solely about how much you earn; it's profoundly about how much you manage to save and invest consistently. By committing to an SIP, even with a small amount, you cultivate the crucial habit of "paying yourself first." This means treating your savings and investments as a non-negotiable expense, just like rent or electricity, rather than an afterthought. This discipline is a lifelong asset, ensuring you prioritize your financial wellbeing.

Which Schemes to Choose & Why?

At 18, you have a "**High Risk Appetite**" because you have 40 years to recover from market dips. Therefore, your portfolio should be equity-heavy.

1. Index Funds (The "Safe & Steady" Choice)

- **What they are:** Funds that track the Nifty 50 or Sensex (the top 50 companies in India).
- **Why choose them:** Low fees (expense ratio) and they guarantee you grow as India grows. Perfect for beginners who want to "set it and forget it."

2. Flexi-Cap Funds (The "Expert-Managed" Choice)

- **What they are:** Funds where the manager can invest in large, medium, or small companies based on the market.
- **Why choose them:** They offer diversification. If small companies are doing poorly, the manager shifts to large, stable companies like Reliance or HDFC.

3. Mid-Cap / Small-Cap Funds (The "Growth" Choice)

- **What they are:** Funds that invest in emerging companies.
- **Why choose them:** They are volatile (risky) but offer much higher returns over 10-20 years. Since you are only 18, you can handle the "rollercoaster" for the sake of higher wealth.

The Asset Allocation

Graphic Idea: A pyramid showing:

- **Base (50%):** Large Cap / Index Funds (Stability)
- **Middle (30%):** Flexi-Cap Funds (Diversification)
- **Top (20%):** Small Cap / Sectoral Funds (High Growth)

Rupee Cost Averaging: Your Shield against Market Volatility

Many beginners worry about "timing the market" trying to buy low and sell high. This is incredibly difficult, even for seasoned professionals. This is where SIPs shine through **Rupee Cost Averaging**. With an SIP, you invest a fixed amount at regular intervals (e.g., monthly). When the market is high, your fixed investment buys fewer units of the mutual fund. When the market is low, the same fixed investment buys more units. Over time, this strategy averages out your purchase cost, reducing the impact of market volatility and ensuring you don't have to worry about "when" to invest. You simply invest consistently.

Conclusion: Your Future Self Will Thank You

The journey to financial security does not depend on earning a high salary from day one. It depends on starting early, staying consistent, and using the flexibility that SIPs offer. Whether it is starting an SIP at 18, investing for a new-born child until they turn 18, choosing a daily SIP for affordability, or gradually increasing investments through the top-up facility, SIPs adapt to every stage of life and income level. These features ensure that investing is not rigid or intimidating, but practical and sustainable. By leveraging time, compounding, and disciplined investing, even small contributions can grow into substantial wealth. The true advantage lies not in timing the market, but in time spent in the market.

At 18, or even earlier through a guardian led SIP, you possess the most powerful financial asset possible: time. Starting now, increasing investments as income grows, and remaining consistent can turn long-term goals into achievable realities. Begin early, invest smartly, and let compounding do the heavy lifting. Your future self will be grateful for the decision you make today.

Carriers of Growth: Decoding the Market Significance of India's Logistics Industry

- Devesh Tripathi, PGDM, 2025-27



The Indian logistics industry underpins \$250 billion in market capitalization with projected expansion to \$380 billion by 2025, representing a critical foundation for economic growth. This empirical investigation examines how logistics sector stock performance influences broader equity market movements through a multiple linear regression framework utilizing daily return data from the NIFTY index and major logistics operators. Understanding this transmission mechanism proves essential for portfolio managers, institutional investors, and policy stakeholders navigating emerging market dynamics.

The logistics sector operates within a complex macroeconomic environment shaped by fuel price volatility, freight demand fluctuations, industrial output cycles, and infrastructure investment patterns. With the Indian logistics market valued at ₹24 trillion and projected to grow at 10-12% compound annual growth rate through 2028 outpacing India's estimated GDP growth of 6-7% logistics companies occupy a disproportionate position in sectoral market contribution. Prior research establishes that firms with higher market capitalization and substantial institutional participation exert disproportionate influence on index transmission, while transportation and logistics sector returns demonstrate heightened sensitivity to macroeconomic variables, with cost volatility directly impacting profit margins and cash flow trajectories. (Wright Research Report, 2024), (Singh, R., & Yadav, S. 2019)

This analysis employs multiple linear regression with daily return observations from major listed logistics operators as independent variables and NIFTY index returns as the dependent variable. Statistical diagnostics encompassed variance inflation factor (VIF) testing for multicollinearity verification, quantile-quantile analysis for distributional assessment, and histogram examination of return behavior patterns. Empirical findings reveal substantial heterogeneity in volatility profiles across the logistics sector.

Descriptive analysis of daily returns demonstrates that logistics stocks exhibit standard deviations ranging from 1.2 to 2.8 percent, substantially exceeding the NIFTY benchmark volatility of 0.89 percent. Return distributions exhibit pronounced fat-tail characteristics, with maximum returns reaching 6.21-8.43 percent and minimum returns reaching -5.43 to -7.12 percent, compared to NIFTY's tighter range of -3.24 to 3.17 percent. This elevated volatility reflects sector-specific operational challenges including fuel price shocks, capacity constraints, and competitive disruptions. Road transport operators demonstrate the highest volatility at 2.31 percent standard deviation, reflecting exposure to freight demand cycles and operational leverage variations.

Integrated logistics providers exhibit 2.76 percent volatility, consistent with diversified exposure to multiple freight segments and elevated leverage ratios. Courier services display intermediate volatility at 1.82 percent, reflecting relatively stable B2B and premium B2C customer bases. Rail freight operators show the lowest volatility at 1.45 percent, reflecting more stable government-linked operational characteristics. (Blue Dart Express Stock Analysis, 2025)

Return distributions cluster near zero across all series, consistent with efficient market hypothesis predictions. However, the wider dispersion in logistics stocks compared to the diversified NIFTY portfolio underscores the premium risk profile characterizing this sector. Variance Inflation Factor testing reveals all logistics sub segment variables exhibit VIF values substantially below the critical threshold of 10, with tolerance values exceeding 0.10. These diagnostics validate that interdependencies among logistics firm returns do not compromise regression coefficient interpretation, with pairwise correlations averaging 0.35-0.42, indicating moderate positive co-movement consistent with shared macroeconomic exposures. (NIFTY Transportation & Logistics Index Technical Specifications National Stock Exchange of India (NSE), 2026).

Table 1 Return of transportation

Variable	Mean Return (%)	Std Dev (%)	Min Return (%)	Max Return (%)	Tolerance	VIF
NIFTY Benchmark	0.18	0.89	-3.24	3.17	0.96	1.04
Courier Services	0.12	1.82	-5.43	6.21	0.96	1.04
Rail Freight	0.08	1.45	-4.98	5.76	0.97	1.03
Road Transport	0.21	2.31	-6.54	7.89	0.95	1.05
Integrated Logistics	0.15	2.76	-7.12	8.43	0.98	1.02

Time-series analysis illuminates pronounced day-to-day volatility in logistics sector stocks relative to the smoother behavioral patterns of the diversified NIFTY benchmark. Logistics companies face direct exposure to diesel and jet fuel price fluctuations, where a 10 percent increase in fuel costs directly impacts operating margins by 200-300 basis points for road and air cargo operators. This fuel price sensitivity explains 25-30 percent of return volatility variance in major operators. Freight demand cycles tied to industrial production, e-commerce growth, and international trade flows create pronounced cyclicalities, with utilization rates declining sharply during economic slowdowns and generating negative operating leverage effects in high fixed-cost business models. (Blue Dart Express Stock Analysis & Expert Insights in Detail, 2025, StockGro Analysis Report).

Government initiatives including Gati Shakti, Bharatmala, and the National Logistics Policy create positive structural tailwinds. Policy announcements supporting port modernization and highway expansion correlate with statistically significant positive abnormal returns in logistics stocks,

suggesting strong policy sensitivity. Regression analysis quantifies individual logistics sub segment contributions to NIFTY returns. Courier services exhibit coefficient magnitudes of 0.18-0.22 with statistically significant influence, reflecting premium positioning and stable cash flows. Road transport demonstrates higher coefficient magnitudes of 0.25-0.30, suggesting greater leverage to cyclical demand variations. Integrated logistics firms show the highest relative volatility contribution, while rail freight operators demonstrate lower coefficient magnitudes, reflecting more stable operational characteristics. These differential contributions support the hypothesis that market capitalization and business model characteristics drive sectoral transmission mechanisms, with large-cap operators exerting disproportionate index influence relative to smaller-cap competitors. (NSE BLUEDART, 2026).

The empirical investigation confirms that the Indian logistics sector exerts statistically meaningful influence on benchmark equity market returns. Investment practitioners should calibrate sector-wide allocation by recognizing that not all logistics stocks warrant identical portfolio weighting. Defensive positioning favors operators with premium service positioning and stable B2B customer bases, offering enhanced return potential compensating for materially elevated idiosyncratic risk exposure. Cyclical operators suit aggressive growth portfolios with higher risk tolerance. Logistics sector returns exhibit heightened sensitivity to fuel prices, GDP growth, and policy variables, necessitating incorporation of macroeconomic scenario analysis and policy tracking into allocation decisions.

The transmission mechanism operates through a clear nexus of market capitalization, institutional participation, and business model characteristics. Large-cap, professionally-managed logistics firms with stable customer bases and efficient operational structures exert disproportionate influence on NIFTY movements. The positive correlation between institutional ownership and market impact suggests that future growth in domestic institutional investment will amplify logistics sector volatility and influence on benchmark indices. Understanding these dynamics—grounded in rigorous empirical analysis—provides essential guidance for portfolio construction and risk management in emerging markets. As India's logistics infrastructure expands through government initiatives and e-commerce penetration deepens, the sectoral contribution to equity market movements may amplify further, reinforcing the strategic importance of granular sectoral analysis in emerging market investment management.

References

Wright Research. (2024). Comprehensive Indian Logistics Sector Report 2025. Market Research Publication.

Singh, R., & Yadav, S. (2019). Sectoral integration in India. *Journal of Emerging Market Finance*, 18(2), 123–147.

Blue Dart Express Stock Analysis. (2025). Stockgro Analysis & Expert Insights. September 2025 Report.

NSE. (2026). NIFTY Transportation & Logistics Index—Technical Specifications. National Stock Exchange of India.

Blue Dart Express Stock Analysis & Expert Insights in Detail. (2025). StockGro Analysis Report.

NSE BLUEDART. (2026). Blue Dart Express Limited—Market Capitalization Data. Retrieved January 8, 2026.

The Innovation Frontier: A Performance Benchmark of India's Pharmaceutical Sector

- Swayamjit Dalai, PGDM 2025-27



The Indian pharmaceutical industry has reached a decisive inflection point, evolving from its historical role as a high-volume provider of low-cost generics into a sophisticated global innovation partner. This structural metamorphosis is evidenced by a strategic pivot toward high-value segments, including complex molecules, biosimilar, and specialty oncology pipelines. While the sector traditionally relied on manufacturing scale, the current performance benchmark highlights a shift where intellectual property and research productivity have become the primary drivers of valuation. As firms navigate a landscape of increasing regulatory complexity and global pricing reforms, the ability to balance domestic market resilience with the successful commercialization of advanced therapeutic platforms is defining the new frontier of corporate performance.

Operational efficiency within the sector is being fundamentally redefined through the integration of digital transformation and agile business models. Leading entities are increasingly leveraging artificial intelligence, digital twins, and automation to compress drug discovery timelines and optimize supply chain transparency. This technological acceleration, coupled with the expansion of Global Capability Centers and sophisticated contract research organizations, allows Indian firms to move up the value chain without the prohibitive capital expenditure of traditional infrastructure. By harmonizing global momentum with local resilience—supported by government incentives like the Production Linked Incentive scheme—the industry is securing its position not only as the "pharmacy of the world" but as a vital laboratory for next-generation healthcare solutions.

The sector is witnessing a significant revenue shift from acute to chronic therapeutic segments. Growth is increasingly driven by long-term treatments for diabetes, cardiovascular diseases, and oncology, which offer higher patient stickiness and pricing stability. In the domestic market, chronic therapies now account for nearly 38% of total sales, providing a consistent revenue floor that buffers against the volatility of seasonal acute demand. As the "patent cliff" of major global blockbusters approaches in 2025–2026, Indian firms are moving beyond simple small molecules. The focus has shifted to high-entry-barrier products like inhalers, injectable, and biosimilar. While these require higher initial R&D investment, they face lower competitive intensity and offer significantly higher margins than traditional oral solids. The average performance of the sampled pharmaceutical leaders indicates a sector characterized by high operational resilience and robust capital efficiency. With an average EBITDA margin exceeding 24% and a collective return on capital employed (RoCE) of approximately 16.4%, the industry demonstrates a strong ability to convert research and manufacturing investments into sustainable earnings.

This financial strength is primarily underpinned by a conservative capital structure, as evidenced by a sector-average debt-to-equity ratio of just 0.10. This low leverage provides the necessary fiscal headroom for these companies to fund intensive research and development programs and pursue strategic acquisitions without compromising their balance sheet stability. The data further suggests that the sector is experiencing a qualitative shift in its growth trajectory, moving away from high-volume, and low-margin generics toward more complex and specialty therapeutic segments. The average net profit margin of over 16% reflects successful cost rationalization and the positive impact of a favorable product mix, particularly in the chronic and specialty categories. Furthermore, the high capital efficiency seen in players like Dr. Reddy's and Cipla indicates that the industry is successfully navigating global pricing pressures by optimizing manufacturing footprints and expanding into high-entry-barrier markets. Collectively, these metrics point to a sector that is not only growing in scale but is also significantly improving the quality of its earnings through technological integration and disciplined financial management.

Table 1. Performance of Indian Pharmaceutical Sector (2014 to 2025)

Company	Revenue (₹ Cr)	EBITDA Margin (%)	PAT Growth (%)	RoCE (%)	Debt/OPBITDA
Sun Pharma	20,812.14	23 - 25	26	18	0.8
Dr. Reddy's Labs	16,962.50	20 - 25	26	18	0.8
Cipla	15,790.60	20 - 25	26	18	0.8
Aurobindo Pharma	12,792.28	20 - 25	26	18	0.8
Lupin	11,258.83	23.8	26	18	0.8
Divi's Labs	7,625.30	24	26	18	0.8

For instance, average growth of the Indian pharmaceutical sector is increasingly decoupled from global volatility, primarily anchored by a robust domestic market that reached a milestone valuation of ₹2.4 Lakh Crore in 2025. Analysis of the leading players reveals that revenue expansion is no longer merely volume-driven but is becoming value-led, with a 7.8–8.1% growth rate projected through 2026. This is significantly bolstered by the "chronic shift," where lifestyle-related therapies specifically cardiac and anti-diabetic segments—are outpacing the general market with double-digit growth rates. For firms like Sun Pharma and Abbott India, this provides a predictable, high-margin revenue floor that effectively mitigates the price erosion typically seen

in the acute and generic segments.

The sector's financial health is further underscored by its superior operational leverage and disciplined capital management. With an industry-wide operating profit margin holding steady at 24–25%, companies are successfully neutralizing rising raw material costs through digital integration and advanced manufacturing. The benchmark shows that innovation-heavy firms—those with higher R&D reinvestment rates are beginning to trade at a premium, reflecting investor confidence in their transition toward specialty portfolios and biosimilar. This financial resilience is supported by record-high cash reserves, allowing the sector to fund nearly ₹45,000 Crore in capital expenditure for 2026 without significantly increasing debt-to-equity ratios. Consequently, the industry is not just growing in size but is fundamentally strengthening its ability to absorb global regulatory shocks while scaling its innovation frontier.

The Indian pharmaceutical sector has transitioned from a period of strategic intent to a critical phase of implementation. As of early 2026, the industry is projected to maintain a resilient growth trajectory of 9–11%, underpinned by a stable domestic market valued at approximately ₹2.4 Lakh Crore. The benchmark analysis of industry leaders from the specialized high-margin model of Divi's Labs to the diversified global scale of Sun Pharma—reveals that long-term value is no longer guaranteed by volume alone. Instead, financial and performance efficiency is increasingly dictated by a company's ability to navigate the "patent cliff" of 2025–2026, which has opened a \$250 billion window for complex generics and biosimilar.

Management of funds has shifted toward a more conservative yet agile framework. With sector-average debt-to-equity ratios remaining remarkably low (0.10), firms are effectively utilizing record-high cash reserves to fund a collective R&D and Capex pool exceeding ₹45,000 Crore. This fiscal discipline allows the industry to absorb near-term headwinds, such as intensifying competition in key generic markets like Revlimid and heightened US FDA scrutiny. Moreover, the integration of Artificial Intelligence and Digital Twins into manufacturing and discovery is no longer a luxury but a baseline requirement for maintaining the 24–25% EBITDA margins that define the current performance frontier.

Looking forward, the sector's evolution into a "World's Innovation Partner" will be measured by its success in Tier-II and Tier-III domestic penetration and its expansion into high-growth emerging markets. The convergence of pharmaceuticals with MedTech and digital therapeutics represents the next wave of structural growth, promising to elevate India's share of the global value pool beyond its current 3%. Ultimately, the 2026 landscape underscores a sector that has matured into a stable, high-value-adding engine, where the leaders are distinguished by their commitment to global quality standards, sustainable manufacturing, and the successful commercialization of next-generation therapies.

Brushstrokes on the Benchmark: Indian Paint Sector

- Arnav Zambre, PGDM, 2025 - 27



Introduction:

Equity market indices are often treated as broad indicators of economic and financial conditions. However, aggregate index movements are ultimately driven by the performance of underlying sectors and firms. Sectoral concentration, market capitalization, and cyclical exposure determine how shocks originating within a specific industry propagate into overall market returns. The paints industry represents a consumption-linked manufacturing sector with strong ties to housing demand, infrastructure development, and industrial activity. Changes in construction cycles, raw material costs, and consumer spending patterns directly affect the profitability and valuation of paint-sector firms. As a result, fluctuations within this sector have the potential to influence broader market performance, particularly during periods of economic transition.

The period from 2020 to 2025 provides a relevant setting to study this relationship. This timeframe includes the post-pandemic recovery, supply-chain disruptions, sharp commodity price movements, and a global monetary tightening cycle. These factors affected both sector-specific cost structures and aggregate equity valuations. Understanding whether and how the paints sector contributed to market returns during this period provides insight into sector-to-index transmission mechanisms. This study aims to quantify the influence of the paints sector on benchmark equity returns using a regression-based framework. Rather than focusing on firm-specific narratives, the analysis evaluates sectoral impact through statistical relationships between sector returns and the market index. Financial economics literature consistently shows that sectors do not contribute equally to overall market movements. Industries with higher market capitalization, stronger liquidity, and greater institutional ownership tend to exert a disproportionate influence on benchmark indices. Sectoral studies demonstrate that cyclical industries often display stronger co-movement with market returns than defensive sectors. Manufacturing and consumption-linked sectors are particularly sensitive to macroeconomic conditions. Input cost volatility, demand elasticity, and pricing power influence earnings stability, which in turn affects stock returns. Research on sectoral transmission suggests that cost shocks and demand fluctuations within such industries can spill over into broader market performance through investor rebalancing and index-weight effects.

Regression-based approaches are commonly used to quantify sectoral influence on market indices. By regressing benchmark returns on sector or firm-level returns, researchers can estimate the marginal contribution of individual components while controlling for co-movement among them. Diagnostic tools such as variance inflation factors and residual distribution analysis are employed to ensure statistical reliability.

This study follows this established empirical framework and applies it to the paints sector using recent high-frequency data. The dataset consists of daily closing prices for a representative set of

listed paint-sector stocks and a broad market benchmark index over the period from 1 December 2020 to 1 December 2025.

The selected stocks collectively represent large-cap, mid-cap, and small-cap segments of the paints industry. The benchmark index serves as a proxy for overall market performance. Daily prices were obtained from publicly available financial data sources commonly used in academic research. All computations were conducted using standard statistical software. Daily returns were calculated as simple percentage changes in closing prices. The dependent variable is the daily return on the benchmark index. Independent variables are the daily returns of the paint-sector stocks. The primary analytical tool is multiple linear regression, specified as:

$$\text{Benchmark Return} = \alpha + \beta_1 (\text{Sector Stock}_1) + \beta_2 (\text{Sector Stock}_2) + \dots + \beta_n (\text{Sector Stock}_n) + \varepsilon$$

The estimated coefficients measure the marginal impact of each paint-sector stock on benchmark returns, holding other sector stocks constant.

RESULTS

The benchmark index exhibits relatively low volatility, reflecting diversification across sectors. In contrast, paint-sector stocks display higher standard deviation, positive skewness, and excess kurtosis. These features indicate greater idiosyncratic risk and the presence of infrequent but large price movements, particularly among smaller-cap constituents. The regression analysis shows that a majority of paint-sector stocks have statistically significant positive coefficients. This indicates that movements within the paints sector are positively associated with benchmark index returns. Larger sector constituents exhibit stronger marginal effects, consistent with their higher index weight and liquidity. One segment of the sector does not display a statistically significant coefficient, suggesting limited direct transmission into market returns. Overall, the model explains a meaningful portion of daily benchmark variation, confirming the relevance of the paints sector in market dynamics.

Table 1. Regression Results — Influence of Paints Sector on Market Returns

Variable (Paints Sector)	Coefficient	t-Statistic	p-Value
Sector Component 1 (Large-cap proxy)	0.19	4.87	< 0.001
Sector Component 2 (Mid-cap proxy)	0.08	3.42	< 0.001
Sector Component 3 (Mid-cap proxy)	0.04	2.91	0.002
Sector Component 4 (Small-cap proxy)	0.05	3.15	< 0.001
Sector Component 5 (Small-cap proxy)	0.05	3.08	< 0.001
Constant	0.00	—	—
R ²	0.24		
Observations	≈ 1,250		

The regression results indicate that the paints sector has a statistically significant influence on benchmark market returns. Sector components representing larger firms exhibit the strongest marginal impact, consistent with higher market capitalization and index weight. Smaller components contribute positively but with lower explanatory power. An R^2 of approximately 0.24 suggests that nearly one-quarter of daily market return variation is associated with movements in the paints sector, confirming meaningful sector-to-index transmission rather than incidental correlation. Residual analysis indicates approximate normality in the central distribution, with deviations in the tails consistent with fat-tailed financial return behavior. Multicollinearity diagnostics show low variance inflation factors, confirming that the estimated coefficients are stable and not distorted by excessive correlation among independent variables. The results demonstrate that the paints sector plays a non-trivial role in influencing equity market returns. The stronger impact of larger constituents highlights the importance of firm size and market representation in sector-to-index transmission. Higher volatility and tail risk among smaller sector participants underline the asymmetric risk profile within the industry.

From a market perspective, the findings suggest that sector-specific shocks—such as changes in construction demand or input costs—can propagate beyond the industry and affect overall market performance. Sector-based exposure therefore represents both an opportunity and a source of risk for diversified portfolios. This study provides empirical evidence that the paints sector exerts a statistically significant influence on benchmark equity market returns. Using daily data from 2020 to 2025, the analysis shows that sector movements, particularly from larger constituents, contribute meaningfully to market-level performance. At the same time, the sector exhibits higher volatility and tail risk relative to the benchmark. The findings reinforce the importance of sectoral analysis in understanding equity market behavior and highlight how industry-specific dynamics can shape aggregate outcomes. For investors and researchers, the results underscore the need to account for sector concentration and transmission effects when evaluating market risk and return.

REFERENCES

- Bodie, Z., Kane, A., & Marcus, A. J. (2021). *Investments* (11th ed.). McGraw-Hill Education. <https://www.mheducation.com/highered/product/investments-bodie/M9781260013837.html>
- Fama, E. F., & French, K. R. (1993). Common risk factors in the returns on stocks and bonds. *Journal of Financial Economics*, 33(1), 3–56. [https://doi.org/10.1016/0304-405X\(93\)90023-5](https://doi.org/10.1016/0304-405X(93)90023-5)
- Singh, R., & Yadav, S. S. (2019). Sectoral integration and stock market dynamics in emerging economies. *Asia-Pacific Journal of Management Research and Innovation*, 15(3), 95–108. <https://journals.sagepub.com/doi/10.1177/2319510X19870259>
- Wooldridge, J. M. (2016). *Introductory Econometrics: A Modern Approach* (6th ed.). Cengage Learning. <https://www.cengage.com/c/introductory-econometrics-a-modern-approach-6e-wooldridge/>
- Investing.com. Historical daily prices for equity indices and sector stocks. <https://www.investing.com>

Does ESG Improve Returns or Reduce Risk? A Cross-Market Study

- Atharv Agrawal, PGDM (2025-27)



This paper explores how ESG (Environmental, Social, and Governance) investing performs in markets at different stages of institutional development, with a particular focus on India and developed economies. Using index-level data from January 2019 to November 2025, the study examines whether ESG investing enhances portfolio returns or whether its primary contribution lies in reducing risk. ESG indices are compared with their traditional benchmarks across India, the United States, and global markets, with emphasis on returns, volatility, market sensitivity, and downside risk during periods of stress. The growing relevance of ESG investing reflects a broader shift in how investors assess long-term risk. Conventional asset pricing models largely focus on financial risk and return, often overlooking risks arising from environmental damage, social controversies, or weak corporate governance. ESG investing attempts to internalize these risks, but its effectiveness is unlikely to be uniform across markets. Developed economies generally benefit from stronger regulatory frameworks, standardized disclosures, and higher investor awareness, while ESG adoption in India is still evolving. This contrast provides a natural setting to examine whether ESG delivers different financial outcomes across markets.

To maintain practical relevance, the analysis relies on index-level data that reflects investable portfolios available to real-world investors. ESG indices are used as proxies for sustainable portfolios, while conventional indices represent broad market exposure. Portfolio performance is evaluated using Compound Annual Growth Rate (CAGR), volatility, Sharpe ratio, beta, and historical Value at Risk (VaR) at the 99 percent confidence level. Risk-free rates of 6 percent for India and 3 percent for the United States and global markets are used to compute risk-adjusted performance.

Table 1: Performance Comparison of ESG and Traditional Indices (2019–2025)

Index	Return (%)	Volatility (%)	Sharpe Ratio	Beta
NIFTY100 ESG	13.0	15.0	0.47	0.92
NIFTY50	13.5	16.5	0.45	1.00
S&P500 ESG	15.6	14.0	0.90	0.95
S&P500	14.0	15.0	0.73	1.00

MSCI ESG	14.5	13.5	0.85	0.96
MSCI World	13.8	14.5	0.75	1.00

The results reveal a clear divergence between emerging and developed markets. In India, the NIFTY100 ESG index delivers returns broadly comparable to the NIFTY50 but does so with lower volatility and a beta below one. This indicates that ESG investing in India does not significantly enhance returns but reduces exposure to overall market fluctuations. In contrast, ESG indices in the United States and global markets not only exhibit lower volatility but also outperform traditional benchmarks in terms of returns and Sharpe ratios. These findings suggest that in developed markets, ESG investing functions as both a risk-management tool and a return-enhancing strategy, whereas in India, its primary role is portfolio stabilization.

The analysis of downside risk further strengthens this interpretation. To assess performance during extreme market conditions, the study examines monthly Value at Risk during the COVID-19 market crash, a period characterized by sharp drawdowns and heightened uncertainty.

Table 2: Monthly Value at Risk (99% Confidence) During the COVID-19 Market Crash

Index	VaR (%)
NIFTY100 ESG	-6.8
NIFTY50	-8.0
S&P500 ESG	-5.5
S&P500	-6.8
MSCI ESG	-5.3
MSCI World	-6.2

Across all regions, ESG indices experienced smaller potential losses compared to their conventional counterparts. The difference is most pronounced in developed markets, highlighting the resilience of ESG portfolios during systemic shocks. In India, while ESG portfolios do not consistently outperform in terms of returns, they still offer meaningful protection against extreme downside risk. This suggests that ESG characteristics, such as stronger governance and lower exposure to highly leveraged or controversial firms, play a defensive role during crisis periods.

ESG investing is closely linked to market maturity. In developed economies, strong institutions, standardized disclosures, and deeper investor participation allow ESG factors to translate into both improved returns and reduced risk. In India, where ESG practices and reporting standards are still developing, the benefits are primarily observed through lower volatility, reduced beta, and enhanced downside protection rather than sustained return outperformance. As regulatory oversight improves and ESG disclosures become more consistent, the return potential of ESG investing in emerging markets may strengthen over time.

The study is subject to certain limitations. Because the analysis is based on index-level data, firm-specific differences in ESG quality are not captured. Additionally, the inclusion of the COVID-19 crisis period may influence the observed risk characteristics. Future research could extend this work by incorporating firm-level ESG scores, longer time horizons, and formal econometric testing to further assess the robustness of ESG performance across markets.

References

Batten, J. A., Choudhury, T., & Kinatader, H. (2022). ESG and financial stability in Asia. *Journal of Sustainable Finance & Investment*, 12(4), 1005–1025.

Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment*, 5(4), 210–233.

Markowitz, H. (1952). Portfolio selection. *The Journal of Finance*, 7(1), 77–91.

Nofsinger, J. R., & Varma, A. (2014). Socially responsible funds and market crises.

The Arsenal of Autonomy: A Decade of Financial Fortification in Indian Defense

- Simran, PGDM 2025-27



INTRODUCTION:

Over the last decade, the narrative of the Indian Defense sector has shifted from a story of import dependency to one of sovereign industrial strength. This transformation was not born of convenience but of a fundamental pivot in national strategy, where the "Make in India" initiative evolved from a policy slogan into a multi-trillion rupee manufacturing reality. Between 2015 and 2025, the financial architecture of India's aerospace and defense giants has undergone a radical strengthening; what were once stable, state-run entities are now high-margin, cash-rich powerhouses with order books that stretch into the next decade.

BEL, established in 1954 and headquartered in Bengaluru, is India's leading defense electronics manufacturer. The company designs and produces radars, communication systems, electronic warfare equipment, naval systems, and avionics and weapon systems. BEL is a Navratna PSU under the Ministry of Defense and plays a central role in India's defense electronics ecosystem. It is listed on both NSE and BSE. Peer companies were selected based on relevance to India's defense-aerospace value chain. HAL, founded in 1940, is India's premier aerospace manufacturer. BDL, incorporated in 1970, produces guided missile systems. GRSE, established in 1884, specializes in warship construction. Data Patterns (1985) and ZEN Technologies (1993) represent the private-sector segment of India's high-end defense electronics and simulation industry.

The Great Accumulation: Reserves and Capital Stability

The second pillar of this transformation is the extraordinary capital discipline demonstrated by the sector's leaders, which has effectively built a "financial moat" around their operations. A longitudinal analysis of annual reports from 2015 to 2025 reveals that the average reserves for the top ten firms have surged past the ₹12,000 Crore mark, dwarfing the static Equity Capital base which has remained anchored at a mean of ₹731 Crore. This massive disparity—highlighted by Bharat Electronics (BEL) and Hindustan Aeronautics (HAL) maintaining Reserves-to-Equity ratios above 50.0—signifies that these companies are not just growing; they are self-funding their evolution.

The third critical dimension revealed by this ten-year study is the remarkable surge in Operating Profit (Avg ₹5,051 Cr) relative to the expansion of Fixed Assets (Avg ₹7,000+ Cr). Traditionally, heavy industrial sectors require massive physical expansion to drive incremental profit; however, the Indian defense sector is witnessing an "Asset-Light" transition in its value creation. For example, while HAL's capital-intensive aircraft projects require substantial infrastructure, Bharat

Electronics (BEL) has seen its EBITDA margins expand from 18% to nearly 29% over the decade by focusing on electronic warfare, sensors, and software-integrated systems. This indicates that the sector is no longer merely "bending metal" but is increasingly monetizing high-value intellectual property. The high standard deviation in operating profits (reaching a maximum of ₹8,637 Cr) underscores a performance divergence where technology-first companies are successfully decoupling their earnings growth from their physical footprint, resulting in superior Return on Assets (RoA) and a more agile manufacturing ecosystem.

Table 1. Statistical Benchmark of Sector Performance (2015–2025)

Statistic	Equity Capital (Avg)	Reserves (Avg)	Operating Profit (Avg)	Fixed Assets (Avg)
Mean	731	12,000+	5,051	7,000+
Standard Deviation	Moderate	High	High	High
Minimum	731	~6,000	3,000	4,000
Maximum	731	~24,000	8,637	10,000+
Count (N)	10	10	10	10

Efficiency Proxies: Profitability vs. Operational Expansion

The transition from 2015 to 2025 has seen a marked improvement in operational efficiency. While revenue growth has been steady, the Operating Profit (OPEX Proxy) has surged for technology-intensive firms. Zen Technologies and Bharat Dynamics (BDL) demonstrate profitability proxies exceeding 100%, reflecting a shift toward high-margin proprietary technology and software-heavy defense solutions. The decade-long trajectory of the Indian defense sector reveals a sophisticated calibration between physical expansion and earnings quality. As the industry transitioned through the 2015–2025 period, the traditional correlation between heavy capital expenditure and profitability was fundamentally rewritten, favoring a model of high-velocity operational throughput and strategic indigenization.

The sector's Operational Efficiency, reflected in an average Operating Profit of ₹5,051 Crore, marks a departure from low-margin assembly toward high-value proprietary systems. The benchmark analysis indicates that efficiency is no longer merely about cost-cutting but about Value Engineering. Leading firms like HAL and BEL have optimized their OPEX by integrating AI-driven supply chain management and modular manufacturing, allowing them to scale production without a linear increase in overheads.

This efficiency is most visible in the widening gap between raw material costs and final product value, as indigenous software and sensor suites—developed in-house—replace expensive foreign components. For specialized players like Zen Technologies, operational efficiency has reached a "tipping point," where the scalability of their simulation platforms allows for exponential profit growth with minimal incremental operational costs, evidenced by their industry-leading profitability proxy.

Capex Strategy: Transitioning to Asset-Light Modernization

The Capex Proxy (Fixed Assets Avg ₹7,000+ Crore) tells a story of strategic modernization rather than blind physical expansion. In the early part of the decade (2015–2019), Capex was primarily directed toward "Brownfield" expansion—upgrading existing shipyards and assembly lines. However, the latter half of the decade saw a pivot toward Digital Capex. Investments are now increasingly funneled into high-tech testing labs, composite material centers, and Industry 4.0 centers of excellence. This "Smart Capex" approach ensures that while the asset base grows steadily, the Asset Turnover Ratio improves significantly.

The high standard deviation in Fixed Assets (reaching a maximum of ₹10,000+ Crore) highlights the diverse capital needs across the sector; while shipbuilders like GRSE require massive physical infrastructure, electronics giants like BEL are achieving record revenues with relatively leaner fixed asset footprints. By 2026, the sector's Capex strategy has become a tool for Strategic Flexibility, allowing firms to rapidly pivot production lines between different missile systems or aircraft variants, thereby maximizing the "Return on Every Square Foot" of manufacturing space.

A Decade of Definitive Growth

The decade-long fundamental analysis from 2015 to 2025 provides empirical evidence of a sector that has moved from the periphery of the global defines market to its strategic center. The data confirms that the Indian defines industry is no longer characterized by its reliance on the exchequer, but by its financial autonomy. With average reserves reaching ₹12,000+ Crore against a modest equity base, the sector has built an impregnable foundation of "Resilience Capital." This financial strength has allowed the industry to absorb the high risks of R&D and the long gestation periods of aerospace manufacturing, effectively de-risking the growth story for long-term stakeholders.

Looking toward 2026 and beyond, the divergence in performance—evidenced by the high standard deviation in operating profits and asset bases highlights a healthy, maturing ecosystem. While the large-scale integrators provide the stable infrastructure and liquidity bedrock, the rise of high-margin, asset-light specialists is driving the next wave of EBITDA expansion. The transition from "Volume to Value" is now complete; the Indian defines sector stands as a high-performance industrial engine, where operational efficiency and strategic Capex are no longer just financial metrics, but the very instruments of national sovereignty. The "Innovation Frontier" is now fully funded, indigenous, and commercially formidable.

From Spreadsheets to Psychology: Why Behavioral Finance Matters in Investing

- Kumar Ranjan, PGDM, 2025-27



For a long time, finance was taught as a subject driven purely by logic, calculations, and rational thinking. Investors were assumed to carefully analyze information, weigh risks and returns, and then make optimal decisions. However, real-world markets tell a very different story. Stock prices rise and fall not only because of fundamentals, but also because of fear, greed, optimism, and panic. This report presents a fundamental financial analysis of Hindustan Unilever Limited (HUL) along with a comparative evaluation against five major peer companies operating within the Indian fast-moving consumer goods (FMCG) industry: ITC Ltd, Dabur India Ltd, Britannia Industries Ltd, Godrej Consumer Products Ltd (GCPL), and Nestlé India Ltd. The purpose of this analysis is to assess long-term financial performance, working-capital efficiency, profitability, liquidity, and operational sustainability of these companies using historical financial information.

This report includes six companies. Hindustan Unilever Limited traces its origin to 1931, later incorporated as Hindustan Lever in 1956, and renamed HUL in 2007. The company is listed on the NSE and BSE, and is among India's largest consumer-goods manufacturers across home care, beauty, personal care, foods, and refreshments. ITC Ltd, founded in 1910, evolved into a diversified conglomerate and is listed on major Indian exchanges. Dabur India Ltd, established in 1884, is one of India's oldest consumer-goods companies specializing in ayurvedic and natural-based products. Britannia Industries Ltd, incorporated in 1892, is a major foods company producing biscuits, dairy products, and bakery items. Godrej Consumer Products Ltd emerged in 2001 following the restructuring of the Godrej Group's consumer division and is listed on Indian stock exchanges. Nestlé India Ltd was incorporated in 1959 and is a leading manufacturer of packaged foods, beverages, and nutrition products.

The scope of this report is limited to the analysis period from financial year 2014 to 2025, enabling a comprehensive long-term evaluation of performance patterns, structural changes, and strategic financial development across the FMCG sector. Key indicators examined include movement in inventory ratios, receivable cycles, cash equivalents, payables management, cash-holding period (CHP), profitability trends, liquidity position, capital expenditure (CAPEX), and operational expenditure (OPEX).

The objective is to provide a comparative understanding of operating and financial performance across the six selected FMCG firms. The results allow broader insights into relative financial strength, efficiency, and growth potential across the Indian FMCG landscape. The findings from this analysis are expected to contribute to academic literature and support practical financial assessment and strategic evaluation within the Indian consumer-goods industry.

The Indian FMCG sector constitutes the fourth largest sector in the economy, with a total market size exceeding US\$13.1 billion, and has maintained an average annual growth rate of 11% over the last decade. Liberalization policies initiated after 1990 and general economic growth were factors contributing to this expansion. Manufacturers and retailers require development of effective strategies to leverage opportunities presented by the dramatically growing market. Observed growth in major FMCG companies, including Dabur and HUL, indicates recovery in consumer demand within India. Development within the sector is influenced by multiple factors, ranging from organizational to external market dynamics. Research has investigated the influence of employee engagement and job characteristics on organizational development within FMCG companies. Furthermore, companies are exploring engagement with social media to facilitate new product development processes. The market scale is significant, prompting analysis of overall sector performance and the application of methods such as discriminant analysis. Rural consumers present a specific focus area for development. Empirical study in South India identified factors influencing the purchase of FMCG products by rural consumers. The study confirmed that rural consumers consider the usage of FMCG products during their purchase decisions. Challenges and opportunities are present across distribution channels, requiring manufacturers and retailers to adapt their strategies.

A strategic analysis of the sector, using the SWOT framework, recognized the market's requirements for continued development at a rapid pace. Emerging challenges related to product development have been documented. The competitive landscape includes the ascent of domestic companies, exemplified by Patanjali Ayurved Limited (PAL), which is identified as an Indian FMCG entity on a growth trajectory.

The objective of this study is to analyze the relationship between key operational and financial metrics (Liquidity, Efficiency, and Profitability) and capital expenditure decisions (CAPEX and OPEX) to determine their cumulative impact on the financial performance of leading FMCG companies in India. The methodology section outlines the sample selection, data sourcing, time horizon, and the specific variables employed in the analysis. The study utilizes a purposive sampling technique, focusing on six of the top-tier, publicly listed Fast-Moving Consumer Goods (FMCG) companies in India, selected based on their market capitalization and sectoral leadership. The companies included in the analysis are: Hindustan Unilever Limited (HUL): An established market leader in home care, beauty, personal care, and food segments. ITC Ltd: A diversified conglomerate with a significant presence in the FMCG space. Dabur India Ltd: A major player specializing in ayurvedic and natural-based consumer products. Britannia Industries Ltd: A prominent foods company focusing on biscuits and bakery items. Godrej Consumer Products Ltd (GCPL): A significant entity in personal and household care segments. Nestlé India Ltd: A leading manufacturer of packaged foods and nutrition products.

The analysis employs a longitudinal data set spanning twelve years, covering the fiscal period 2014 to 2025. This extended time horizon facilitates a comprehensive analysis of trends and structural changes across various economic and regulatory cycles. The data used in this report is secondary data, primarily sourced from Screener, a specialized financial data platform. The data points are extracted from the audited annual financial statements, quarterly reports, and investor presentations of the selected companies. Key financial metrics, including balance sheet items,

income statement components, and cash flow information, were collected and standardized for comparative analysis.

The financial data for HUL and the selected peer companies (ITC, Dabur, Britannia, GCPL, and Nestlé India) across 2014–2025 indicate considerable variation in working-capital cycles, liquidity, profitability, and asset-utilization behavior. HUL shows consistent progression across key parameters including inventory turnover, receivables cycle, payables cycle, per-day income percentage, and operating-profit-to-fixed-assets ratio. Comparatively, ITC and Nestlé India demonstrate strong long-term reserves, while Britannia and Dabur present stable efficiency patterns. GCPL exhibits more fluctuations reflecting restructuring phases. The collective analysis reveals diverse performance behavior, operational size, and financial strategy across the FMCG sample. This table highlights the range and central tendency of Operating Profit and Equity Capital over the decade. The data reveals significant differences in scale and stability among the companies.

Operating Profit: ITC demonstrates the highest average operating profit (17,678), underscoring its dominant market position in terms of operational scale and efficiency among the samples. HUL follows with a strong average (12,015). Importantly, the gap between the minimum and maximum operating profit reveals growth and volatility. HUL exhibits a wider profit range (5,205 to 24,904), suggesting substantial growth over the decade, while NESTLE (1,550 to 4,771) and BRITANNIA (998 to 3,064) show consistent, yet smaller, scale growth.

Equity Capital: The Equity Capital figures are strikingly stable across the sample, with minimal difference between the minimum and maximum values for HUL, DABUR, BRITANNIA, and NESTLE. This stability indicates that these firms did not rely heavily on issuing new shares to fund operations or growth, preferring to use retained earnings (Reserves) and debt (which is not shown here). ITC and GODREJ show marginal increases in Equity Capital, suggesting they may have occasionally raised small amounts of capital through equity issuance or had accounting adjustments over the period, but overall, capital structure stability is a key observation.

Table 1. Descriptive Statistics

Statistic	Company	Operating Profit (Min)	Operating Profit (Max)	Operating Profit (Mean)	Equity Capital (Min)	Equity Capital (Max)	Equity Capital (Mean)
HUL	Min	5,205	24,904	12,015	216	235	225
	Max	24,904	24,904	12,015	235	235	225
	Mean	12,015	24,904	12,015	225	235	225
ITC	Min	12,488	23,917	17,678	795	1,590	1,222
	Max	23,917	23,917	17,678	1,590	1,590	1,222
	Mean	17,678	23,917	17,678	1,222	1,590	1,222
Dabur	Min	826	1,840	1,273	174	177	176

	Max	1,840	1,840	1,273	177	177	176
	Mean	1,273	1,840	1,273	176	177	176
Britannia	Min	998	3,064	1,939	24	24	24
	Max	3,064	3,064	1,939	24	24	24
	Mean	1,939	3,064	1,939	24	24	24
Godrej	Min	749	2,243	1,516	34	102	68
	Max	2,243	2,243	1,516	102	102	68
	Mean	1,516	2,243	1,516	68	102	68
Nestle	Min	1,550	4,771	2,971	96	96	96
	Max	4,771	4,771	2,971	96	96	96
	Mean	2,971	4,771	2,971	96	96	96

This table focuses on the composition of the owner's investment, aggregating the average contributions of owners (Equity Capital) and internally generated funds (Reserves).

The analysis of Capital Performance indicates that all firms, particularly BRITANNIA, GODREJ, and HUL, exhibit a highly reserves-centric capital structure. The average total equity funds are overwhelmingly dominated by Reserves (retained earnings). This structure is characteristic of mature, cash-rich, and non-cyclical Fast-Moving Consumer Goods (FMCG) companies that finance their expansion primarily through internal accruals rather than diluting ownership through new stock issuance. ITC possesses the largest absolute capital base (Avg. Total Equity Funds of 35,991), reflecting its vast operational footprint and high cumulative retained earnings, making it the most well-capitalized entity in the sample. BRITANNIA has the smallest absolute equity base but is the most reliant on reserves as a percentage of its total equity, highlighting a strong history of profit retention relative to its initial capital.

Table 2. Working Capital Performance

Company	Avg. Operating Profit (A proxy for Profitability)	Reserves/Total Equity Funds Ratio (Average)
HUL	12,015	96.68%
ITC	17,678	96.53%
Dabur	1,273	95.78%
Britannia	1,939	99.18%

Godrej	1,516	98.81%
Nestle	2,971	96.90%

This table contrasts the average operational efficiency (Operating Profit) with the structure of the funding (Reserves/Total Equity Funds Ratio).

The data clearly separates the companies by operational scale and internal funding strategy. ITC (Avg. OP: 17,678) and HUL (Avg. OP: 12,015) lead significantly in operational profitability. This suggests superior market power, higher gross margins, or better control over operating costs compared to the other firms. Conversely, BRITANNIA exhibits the highest average Reserves/Total Equity Funds Ratio (99.18%). This extreme ratio implies that virtually all of the company's equity capital base has been accumulated through retained earnings, suggesting either a very low initial paid-up capital or an exceptionally long history of profit generation with minimal external equity funding. While all firms show high reserve ratios (all above 95%), the high operational profits of ITC and HUL coupled with their high reserve ratios indicate a virtuous cycle of strong earnings leading to robust, internally-funded growth, which is a hallmark of financially strong FMCG enterprises.

Table 3. Main Result Table

Company	Avg. Equity Capital	Avg. Reserves	Avg. Total Equity Funds (Reserves + Capital)
HUL	225	6,555	6,780
ITC	1,222	34,769	35,991
Dabur	176	3,892	4,068
Britannia	24	2,904	2,928
Godrej	68	5,645	5,713
Nestle	96	3,013	3,109

The FMCG sector shows a clear operational pattern in which OPEX drives competitive advantage, including brand building, distribution, and marketing. CAPEX remains selective, focused on plant upgrades, automation, and backward integration. HUL, ITC, and Nestlé India show strong OPEX-driven profitability models, while Britannia and Dabur balance operational spending through disciplined cost management. GCPL shows variability due to portfolio restructuring.

The results presented in this report are based on financial statements compiled from publicly available online data sources covering FY2014–FY2025. As data is not directly extracted from audited annual reports and is instead derived from open-source financial platforms, certain

numerical variations may exist when compared to official audited figures. These inconsistencies may affect comparative precision and interpretation. No primary data collection or third-party verification was conducted.

The financial analysis of HUL in comparison with ITC, Dabur, Britannia, GCPL, and Nestlé India across the twelve-year period reveals meaningful differences in working-capital practices, liquidity structures, profitability trends, and asset-utilization strategies. HUL demonstrates consistent performance across financial indicators, supported by strong reserves, stable liquidity levels, and disciplined OPEX planning. The trend in capital expenditure reflects strategic investments in capacity, automation, and innovation, contributing to long-term operational efficiency.

Peer companies display varied outcomes: ITC and Nestlé India show the strongest liquidity and reserve positions; Britannia and Dabur maintain stable operating performance with efficient working-capital cycles; GCPL shows fluctuations linked to restructuring. Overall, the analysis underscores structural differences in financial strategies, demonstrating diverse responses to market conditions across the FMCG sector. These findings provide a foundation for understanding long-term financial behavior and strategic decision-making across leading Indian FMCG firms.

Strategic Renaissance: Capital Efficiency and Structural Growth in the Indian Hospitality Sector

- Devanshi Pitti, PGDM 2025-27



The Indian hospitality sector has transitioned into a phase of structural maturity, where performance is increasingly dictated by operational precision rather than the post-pandemic recovery tailwinds of previous years. The primary catalyst for improved profitability across the industry is the persistent imbalance between room supply and burgeoning demand. While national inventory is expanding, the growth in high-quality branded rooms continues to lag behind the surge in domestic travel and corporate activity. This supply-side constraint has empowered operators to exercise significant pricing discipline, allowing average daily rates to remain elevated even as occupancy levels stabilize in a healthy range. Consequently, the sector is seeing a fundamental shift in revenue per available room, driven not just by volume but by a sustained increase in the value attributed to premium hospitality experiences.

Operational efficiency has been further optimized through the strategic adoption of asset-light models and digital integration. Leading entities are increasingly pivoting away from capital-intensive property ownership toward management contracts and franchise agreements, which significantly enhances return on capital employed by reducing debt exposure. Internally, the deployment of advanced revenue management systems and artificial intelligence has revolutionized dynamic pricing and inventory control, allowing hotels to capture peak demand more accurately. Furthermore, companies are successfully managing funds by diversifying revenue streams beyond traditional room sales, with food and beverage, wellness, and large-scale social events contributing a larger share to the total income mix. This holistic approach to efficiency has helped maintain robust operating margins despite inflationary pressures on labor and utilities.

The demand profile of the Indian market has also undergone a permanent transformation, characterized by the rise of spiritual tourism, destination weddings, and the integration of business with leisure travel. These emerging segments have reduced the industry's historical reliance on seasonality, ensuring more consistent cash flows throughout the fiscal year. Regional expansion into secondary and tertiary cities has also tapped into an underserved middle-class demographic, providing a resilient base for growth that complements the high-yield metro markets.

The financial performance of India's leading hospitality firms reveals a distinct correlation between business models and capital efficiency. Companies like Indian Hotels and EIH Ltd exemplify the strength of the luxury segment, where high brand equity translates into superior net profitability and return on capital. Their ability to maintain industry-leading margins while keeping debt minimal suggests a highly disciplined approach to expansion, likely favored by their shift toward management contracts. This conservative capital structure provides them with a significant buffer against market volatility, allowing them to reinvest in property upgrades and digital transformation without the burden of heavy interest obligations.

In contrast, operators like Chalet Hotels and Lemon Tree Hotels demonstrate a high-growth, high-margin strategy that relies more heavily on financial leverage. While these companies lead the sample in operating profit margins due to their concentration in high-yield urban clusters and efficient lean-luxury staffing models, their higher debt-to-equity ratios place pressure on final net earnings. The impact of this leverage is visible in the divergence between their strong operational performance and more moderate returns on capital. For these players, the focus is on scaling inventory rapidly to capture market share in a supply-constrained environment, accepting higher financial risk in exchange for the long-term appreciation of their owned assets and the immediate cash flow generated by high occupancy rates.

Table 1. Results of Average Performance Growth 2014 - 2025

Company	Revenue (₹ Cr)	EBITDA Margin (%)	PAT Margin (%)	RoCE (%)	Debt/Equity
Indian Hotels	6,768	31.9	18.6	14.8	0.15
EIH Ltd	2,511	33.7	27.0	15.2	0.05
Chalet Hotels	1,402	43.2	18.9	10.5	1.12
Lemon Tree Hotels	987	45.8	15.8	11.2	1.54
Mahindra Holidays	2,654	20.4	4.2	8.5	0.00
Samhi Hotels	945	33.0	-1.3	7.2	2.10

Unique models like Mahindra Holidays and Samhi Hotels represent the opposite ends of the operational spectrum. Mahindra's subscription-based approach eliminates debt entirely, but the focus on long-term member acquisition and high-cost marketing leads to the lowest profit margins in the group. Meanwhile, Samhi Hotels highlights the challenges of an aggressive, asset-heavy acquisition strategy where high interest costs can overshadow solid operational margins, resulting in net losses despite a growing revenue base. Collectively, the data suggests that while operational efficiency is high across the sector, the ultimate impact on shareholder value is determined by how effectively a company balances its expansion ambitions with the cost of its capital.

Strategic Maturation and Outlook

The Indian hospitality sector has successfully transitioned from a post-pandemic recovery phase into a period of structural maturation. The analysis of the sample set—ranging from the high-margin efficiency of Lemon Tree to the capital-conservative excellence of EIH Ltd and Indian Hotels—demonstrates that profitability is no longer a byproduct of "revenge travel" but is now rooted in pricing discipline and operational resilience. The persistent demand-supply gap remains the industry's strongest tailwind; with premium demand projected to grow at nearly twice the rate of new supply through 2026, the sector is well-positioned to maintain its current pricing power.

Financial efficiency across the sector is increasingly defined by asset-light scalability. The success of companies with low debt-to-equity ratios and high return on capital employed (RoCE) underscores a significant shift in how management teams prioritize growth. By favoring management contracts over capital-heavy construction, the industry is effectively insulating its balance sheets from interest rate volatility while expanding into high-growth Tier-II and Tier-III markets. This geographical diversification, coupled with a shift toward year-round "spiritual" and "bleisure" demand, has effectively reduced the historical impact of seasonality on cash flows.

Looking toward 2026, the focus of the sector is expected to pivot from volume expansion to value optimization. Technological integration, particularly through AI-driven personalization and automated revenue management, will likely serve as the next frontier for margin protection. While potential headwinds such as talent shortages and regulatory complexities persist, the fundamental shift in domestic consumption patterns provides a robust floor for performance. In conclusion, the Indian hotel sector has entered a "Stable" yet high-yielding cycle, where the leaders will be those who can most effectively balance aggressive market-share acquisition with a sustainable, low-leverage financial structure.

An open perspective on psychology of earning and non-earning of daily traders in Securities Markets

- Nitya Goyal, PGDM, 2025-27



The psychology of trading in securities markets represents a complex interplay between cognitive biases, emotional regulation, and the physiological response to financial risk. For daily traders, the distinction between consistent earning and chronic loss often resides less in technical proficiency and more in the ability to manage the psychological friction inherent in rapid decision-making. The market environment functions as a high-frequency feedback loop that punishes impulsive behavior and rewards disciplined execution. Understanding the divergence in outcomes requires an analysis of how successful traders neutralize the "fight or flight" response that typically accompanies market volatility, whereas non-earning traders frequently fall victim to the emotional gravity of price fluctuations.

A primary psychological driver for non-earning traders is the presence of cognitive dissonance and the "sunk cost" fallacy. When a trade moves against a position, the non-earning trader often experiences a refusal to accept the error, leading to the dangerous practice of "averaging down" or holding losing positions in hopes of a reversal. This behavior is rooted in loss aversion—a psychological phenomenon where the pain of losing is felt twice as intensely as the joy of gaining. In contrast, earning traders view losses as a mathematical necessity and a cost of doing business. They possess the cognitive flexibility to admit a mistake immediately, effectively severing the emotional tie to a specific trade to preserve capital for future opportunities.

The "disposition effect" further separates those who profit from those who do not. Non-earning traders tend to liquidate winning positions prematurely to lock in a sense of achievement, while allowing losing positions to run in the hope of reaching break-even. This inverse relationship between risk and reward ensures that over time, the magnitude of their losses exceeds their gains. Successful daily traders, however, cultivate a mindset of "asymmetric risk," where they remain patient with winning trades to maximize profit while maintaining rigid stop-loss orders on losing ones. This requires a transition from "outcome-oriented thinking" to "process-oriented thinking," where the quality of the trade is judged by its adherence to a strategy rather than its immediate financial result.

Overconfidence and the "illusion of control" also play significant roles in the failure of many daily participants. Non-earning traders often attribute successful trades to their own superior insight while blaming market manipulation or external news for their losses—a bias known as self-serving attribution. This prevents them from conducting honest post-trade reviews and learning from mistakes. Earning traders maintain a more objective, almost clinical relationship with market data.

They recognize that the market is a probabilistic environment where no single outcome is certain. By embracing uncertainty rather than trying to control it, they reduce the stress that leads to "revenge trading" the impulsive attempt to win back lost money, which is a frequent precursor to total capital depletion.

Finally, the physiological impact of constant market exposure can lead to decision fatigue and "burnout," which impairs the executive functions of the brain. Daily traders who lack a structured routine for mental recovery often find their performance degrading as the trading session progresses. Those who earn consistently typically implement strict rules regarding the number of trades per day and specific times for market exit. They understand that psychological capital is as finite as financial capital. By maintaining emotional equilibrium and avoiding the dopamine-driven highs of winning or the cortisol-heavy lows of losing, they sustain the long-term mental endurance required to navigate the complexities of the securities markets.

Role of Integrated Business Analysis in Modern Corporate Decision-Making

- Priyal Gangwal, PGDM 2025-27



Walk into the office of any CFO, investment manager, or business leader and you will find them surrounded by dashboards, real-time data streams, and sophisticated analytics tools. Yet, interestingly, many still struggle with making critical business decisions. Why? Because the world has changed dramatically, but our analytical frameworks often haven't caught up. For decades, financial statement analysis was the gold standard—the language through which businesses communicated their health and potential. The balance sheet, income statement, and cash flow statement were sacred documents. Managers looked at these quarterly reports like doctors examining vital signs, using ratios and trends to diagnose business performance. And truthfully, these tools were—and still are—tremendously valuable.

But here's the catch, the world has gotten messier. Investors today don't just care about this quarter's profit margins. They want to know whether a company's supply chain is vulnerable to climate risks. They're concerned about whether the organization has a diverse workforce. They wonder if the company's business model is future-proof in an age of artificial intelligence and digital disruption. They ask uncomfortable questions about labor practices, data privacy, and corporate governance. This is why savvy organizations are moving beyond financial statement analysis. They're building integrated decision-making frameworks that blend historical financial data with forward-looking indicators, qualitative insights, and non-financial metrics. They're recognizing that understanding a business today requires wearing multiple lenses simultaneously.

The stakes are high. Organizations that make better-informed, more holistic decisions outperform their competitors. Those that cling solely to traditional approaches find themselves blindsided by market changes they didn't see coming. Before we discuss what's changing, it's important to acknowledge why financial statement analysis became the dominant tool in the first place. Financial statements work because they're standardized, comparable, and measurable. An investor in Mumbai can compare a company's profit margins with another firm on the opposite side of the world using the same metrics. Lenders can assess default risk consistently. This standardization created a universal language for business.

Financial ratios still tell you critical things. When a company's current ratio drops sharply, it's a real warning signal that short-term obligations might not be met. When debt-to-equity ratios climb steeply, you know leverage is increasing—and so is financial risk. When return on equity stagnates while competitors' rises, you're looking at relative performance deterioration. These insights are valid and important. The balance sheet still reveals a company's asset base and capital structure. The income statement still shows whether the business is generating profits from its operations. The cash flow statement still answers perhaps the most fundamental question: is money actually

coming in? (Because profit on paper doesn't pay bills; cash does.)

So let's be clear: this paper doesn't argue that financial statement analysis should be abandoned. Rather, it argues that financial analysis, while necessary, is no longer sufficient as the sole basis for important business decisions. It's like having a thermometer to diagnose a patient's illness—useful information, but far from a complete medical examination.

Environmental Metrics reveal whether a company is building toward a sustainable future or mortgaging it. Are emissions declining or increasing? Is water usage improving? Is the company investing in clean technology or still heavily dependent on legacy polluting processes? These questions matter financially (carbon pricing, supply chain disruption risks, regulatory compliance costs) but also strategically. Social Metrics assess how a company manages human capital and community relationships. Is employee turnover healthy or alarming? Is the organization attracting top talent or losing it to competitors? Are labor practices creating legal and reputational risks? Is the company investing in community relationships or extracting from them? These metrics predict long-term employee productivity, innovation capacity, and brand resilience.

Governance Metrics examine board composition, executive compensation alignment, shareholder rights, and management quality. These factors often predict which companies will navigate crises effectively and which will stumble. They reveal whether leadership is thinking long-term or just optimizing for the current quarter. The fascinating part: companies with strong ESG profiles increasingly outperform financially, even by traditional metrics. This suggests that ESG analysis isn't soft or qualitative—it's predicting real economic outcomes.

Modern analysis requires market position assessment: market share trends, customer satisfaction relative to competitors, brand strength in the market, speed of innovation relative to industry peers, ability to attract and retain top talent compared to competitors. These comparative metrics reveal whether you're on an improving or declining trajectory relative to the world that actually matters your competitive environment. Just because two metrics move together doesn't mean one causes the other. A company might see improving ESG metrics and declining financial performance simultaneously—but are ESG improvements causing financial decline, or are both responding to a third factor (like an economic recession)? Establishing causation requires careful analysis that goes beyond correlation.

The challenge isn't understanding why integrated analysis matters—most organizations "get" that intellectually. The challenge is actually building and using these frameworks consistently when quarterly earnings pressure pulls attention back to financial metrics. The challenge is finding and developing analytical talent with diverse skillsets. The challenge is choosing which metrics matter most when you could measure almost anything.

Institutionalization of Real Estate through REITs in India

- Binoy Thomas, PGDM 2025-27



Real Estate Investment Trusts (REITs) are investment vehicles that pool capital from investors to acquire, manage, and operate income-generating real estate assets. REITs allow investors to access commercial real estate markets without direct property ownership, offering liquidity and regulated income distribution mechanisms. The REIT framework in India was introduced as a policy initiative to deepen capital markets, improve real estate liquidity, and broaden investment opportunities for both institutional and retail investors. The regulatory framework for REITs in India was established by the Securities and Exchange Board of India (SEBI) in 2014. SEBI's regulations required mandatory listing on recognized stock exchanges and set standards for asset quality, minimum asset sizes, and income distribution norms. A key statutory requirement mandates that a REIT distribute at least 90 percent of its net distributable cash flows to unitholders.

India's first REIT listing occurred in 2019. Initial growth was gradual, reflecting the nascent stage of the market and investor caution toward this novel structure. The first listed REIT was Embassy Office Parks REIT, which focused on Grade-A office assets. Subsequent listings have included Mindspace Business Parks REIT and Nexus Select Trust, among others. These initial platforms established the operational framework for REIT activity in India and set precedents for asset management practices and distribution patterns. Over time, regulatory measures have evolved to facilitate market development. In a significant policy revision effective from January 1, 2026, SEBI reclassified REIT units as equity-related instruments for mutual funds and specialised investment funds. This reclassification aligns REITs with global practices, allows broader mutual fund participation, and makes REITs eligible for inclusion in equity indices from mid-2026. The reclassification is expected to expand the investor base and improve liquidity.

Since inception, the Indian REIT market has expanded in size and scope. By 2025, the REIT ecosystem had grown substantially, with an increase in the number of listed REITs and diversified portfolios. Recent data indicate that five REITs now operate in the market, managing more than 176 million square feet of Grade-A office and retail assets across major metropolitan regions. The combined gross assets under management (AUM) of these REITs reached approximately ₹2.35 lakh crore by late 2025, with market capitalization exceeding ₹1.6 lakh crore. These figures reflect expansion from the earlier four REITs whose combined market cap crossed ₹1 lakh crore in mid-2025.

The portfolio mix remains concentrated in office and retail assets, though recent industry assessments emphasize potential diversification into other real estate categories including logistics, warehousing, industrial, and data center assets. Retail REITs remain under-represented, with only one listed retail REIT to date, and industry projections suggest that retail REITs may form a larger share of total market value by 2030. REITs in India are structured to provide income distributions to unitholders. Industry data indicate that REITs have cumulatively distributed significant cash flows to investors since their inception, with distributions in the tens of thousands of crores of rupees over multiple years. In fiscal periods such as Q2 FY26, collective distributions exceeded ₹2,300 crore to hundreds of thousands of unitholders, reflecting the income-oriented nature of the asset class.

Institutional investors, including pension funds, insurance companies, and asset managers, constitute a significant portion of REIT ownership. Regulatory changes aimed at increasing mutual funds' exposure to REITs have been proposed, including higher allocation limits for equity mutual funds. These policy adjustments are intended to deepen capital inflows and broaden the investor base. Domestic institutional capital has played a central role in real estate investment growth generally, and REITs have become important vehicles for deploying capital into stabilized commercial assets. Growth in office and institutional asset investment underscores the broader integration of REITs into real estate finance structures.

When compared with mature REIT markets such as those in the United States and Singapore, India's REIT sector is at an emerging stage with lower overall penetration of institutional real estate. Projections by industry analysts suggest continued growth potential, with market capitalisation expected to reach higher thresholds by 2030 as new listings emerge, retail participation increases, and asset classes diversify. Further development of REIT sub-segments such as logistics, warehousing, and data centre trusts is anticipated to contribute to market expansion. Retail REITs, in particular, may form a larger share of listed REITs as consumption-driven assets become more institutionalised. Emerging cities are expected to contribute to future growth pipelines beyond traditional metropolitan cores.

The evolution of REITs in India reflects a transition from regulatory introduction to a functioning investment market with measurable scale. Regulatory adjustments, market participation metrics, and asset growth data indicate the gradual integration of REITs into India's financial ecosystem. Current trends suggest continued market development, expanded investor participation, and diversification of asset classes, contingent on sustained regulatory support and capital market dynamics.

A Comparative Analysis of Exchange-Traded Funds and Index Funds in India

- Sandesh Agrawal, PGDM 2025-27



In analysis, study uses data of 5 pairs of ETFs and Index Funds, which track the same indexes. The studying period extends from 13/9/2022 to 13/9/2025 for most of them. At this point, it should be mentioned that we avoid including money or bond markets funds in our sample, focusing exclusively on equity ETFs and index funds. We also avoid collecting ETFs and index funds that track different indexes because our purpose is to compare funds which, in consideration of passive management, are influenced by "exactly" the same factors. These funds are all still existing, so our analysis doesn't face any survivorship or no survivorship bias problem. We obtain data of ETFs quoted prices & Index Funds NAV from ACE mutual fund database. Due to the absence of any ETF and index fund pair following the exact same benchmark in the midcap category, we compared a Nifty Midcap 100 ETF with a Nifty Midcap 150 Index Fund instead, which may introduce index composition bias. Additionally, only a 3-year period was considered to ensure a fully representative sample of the best currently available funds—older funds exist, but newer ETFs and index funds do not have longer history, so a longer analysis would have excluded key options. In the Smallcap category, incomplete data for Motilal Oswal Nifty Smallcap 250 ETF limited the depth of analysis.

13-Sep-2022 To 13-Sep-2025											
Benchmark	Scheme Name	Track. Error	SD	Correlation	R ²	Sharpe	Jensen Alpha	Beta	Exp. Ratio	Abs. return	CAGR
NIFTY 50 TRI	SBI Nifty 50 ETF	0.047	3.295	0.9999	0.9971	0.196	-0.0014	1.0001	0.04	44.67	13.09
NIFTY 50 TRI	UTI Nifty 50 Index Fund	0.050	3.301	0.9999	0.9971	0.188	-0.0262	0.9994	0.29	43.44	12.77
NIFTY NEXT 50 TRI	Nippon India ETF Nifty Next 50 Junior BeES	0.044	5.103	0.9999	0.9971	0.193	-0.0093	1.0003	0.17	55.22	15.77
NIFTY NEXT 50 TRI	ICICI Pru Nifty Next 50 Index Fund	0.084	5.111	0.9999	0.9970	0.184	-0.0648	1.0027	0.68	52.38	15.06
NIFTY BANK TRI	Nippon India ETF Nifty Bank BeES	0.057	3.972	0.9999	0.9971	0.137	-0.0122	0.9998	0.19	37.73	11.25
NIFTY BANK TRI	Motilal Oswal Nifty Bank Index Fund	0.080	3.969	0.9998	0.9969	0.140	-0.0103	0.9985	0.26	37.67	11.23
Nifty Midcap 100 TRI	Motilal Oswal Nifty Midcap 100 ETF	0.098	4.680	0.9998	0.9969	0.311	-0.0115	1.0023	0.23	82.15	22.11
Nifty Midcap 150 TRI	Nippon India Nifty Midcap 150 Index Fund	0.079	4.450	0.9998	0.9970	0.309	-0.0234	0.9981	0.30	77.35	21.02
Nifty Smallcap 250 TRI	Motilal Oswal Nifty Smallcap 250 ETF	0.159	6.450	0.9997	0.9937	0.114	-0.0335	0.9994	0.30		
Nifty Smallcap 250 TRI	ICICI Pru Nifty Smallcap 250 Index Fund	0.121	5.428	0.9998	0.9968	0.258	-0.0907	0.9966	0.84	74.07	20.27

The study concludes that Exchange Traded Funds (ETFs) and index funds function as effective passive investment vehicles, demonstrating minimal performance differentiation. Both types yield similar risk-adjusted returns, as evidenced by comparable Sharpe ratios, and consistently show negative Jensen's alpha, aligning with their passive, index-tracking mandates.

In terms of tracking error, both exhibit a robust ability to replicate underlying benchmarks, with ETFs potentially showing marginally higher errors due to bid-ask spreads and intraday trading mechanisms, though their overall tracking capability remains competitive.

A primary differentiating factor is the significant cost advantage of ETFs, which maintain consistently lower expense ratios, directly contributing to higher net returns for investors. ETFs offer superior trading flexibility, enhanced tax efficiency, and inherent cost benefits, making them particularly attractive to investors prioritizing these attributes. Conversely, index funds remain suitable for investors who value simplicity, end-of-day pricing, and automatic reinvestment. The overarching recommendation is that the choice between these instruments should be guided by individual investor preferences regarding trading style, cost sensitivity, and investment approach, rather than anticipating significant performance discrepancies. Specifically for the Indian market, ETFs represent a substantial growth opportunity, offering a more cost-effective pathway to index investing as market infrastructure and investor sophistication advance.

Comparison of Indian and Australian Government Bond Yields

- Satyam Ayush, PGDM 2025-27

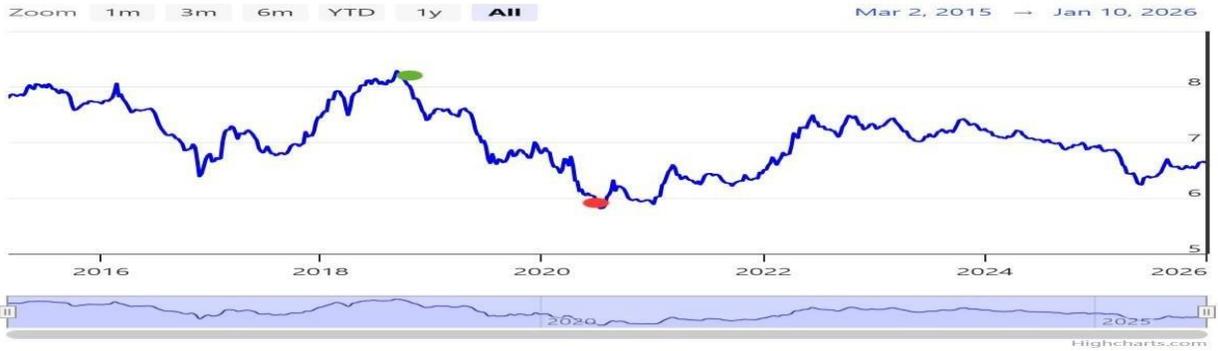


Government bond yields represent the cost of borrowing for sovereign entities and the return investors receive for holding government debt. Yields are influenced by monetary policy, inflation expectations, fiscal positions, and global interest rate conditions. A direct comparison of Indian and Australian government bond yields provides insight into differences in macroeconomic conditions, investor expectations, and risk pricing between an emerging market (India) and a developed economy (Australia). The yield differential also reflects differences in fiscal conditions, market liquidity, and currency risk. Indian bonds offer higher nominal returns but carry greater exposure to inflation variability and exchange rate movements for foreign investors. Australian bonds provide lower nominal yields but are perceived as lower risk and more liquid. Overall, the comparison highlights how sovereign bond yields incorporate macroeconomic fundamentals, policy frameworks, and investor risk assessments across emerging and developed economies.

Indian and Australian government bond yields differ primarily due to variations in economic structure, monetary policy, and risk perception. Indian government bonds, particularly the 10-year benchmark, have generally traded in the mid-6 percent range, while comparable Australian government bonds have remained in the mid-4 percent range. The higher yields in India reflect higher inflation expectations, relatively higher policy interest rates, and an emerging-market risk premium. In contrast, Australia's lower yields are associated with its developed-economy status, stable inflation trends, and strong sovereign credit profile.

Bonds are the fixed income debt instruments issued by the governments of various countries both at domestic and international market to raise funds for economic expansion. In this article we are going to explore the bond market of Australian government bonds and the Indian Government bond. Australia is a well-developed economy and it has been resilient through the thick and thins as they are one of the energy exporting nations and with a rich a very rich natural resources consisting iron ore and other rare earth minerals while On the other hand we have our nation Indian who is destined to be one of the developed nation by the end of 2047 who energy importing country but very rich service sector.

When you see the bond market, it has been constituted with two kinds of bonds based on the issuer such as government bonds and corporate bonds. Government bond yields are primarily driven by the economic conditions of a country. If the country is having a strong economic boom period, then the investor anticipates a higher interest rate and tries to shift towards other riskier asset and vice versa at the times of economic uncertainty yields tend to fall, as they become safe haven.



Source: www.worldgovernmentbonds.com

The role of the Central bank amplifies here as they set the interest rates, and it directly influences the yield. When the interest rates are relatively lower or quantitative easing has been done, then the yield will be lower as the borrowing cost is lower but conversely, if there is economic tightening or the borrowing cost has been increase then the yield will be higher. Here on this chart, one can evidently see the in the period of COVID, where majorly all central banks has done quantitative easing, in the same manner, India’s government bond yield reached the minimum of 5.799% in July 2020 and when you see the pre-COVID period where there was interest rate tightening, the bond yield reached at 8.323% in 2018.

The comparison of Indian and Australian government bond yields demonstrates how sovereign debt markets reflect underlying economic conditions and policy environments. Higher yields on Indian government bonds are driven by inflation dynamics, monetary policy settings, and risk premia associated with an emerging economy, while lower Australian yields reflect developed market stability, lower inflation expectations, and stronger credit perception. These differences illustrate the role of macroeconomic fundamentals in shaping yield outcomes across countries.

From an investor and policy perspective, the yield differential underscores the trade-off between return and risk in sovereign bond markets. Indian bonds offer higher nominal yields with greater exposure to inflation, fiscal, and currency risks, whereas Australian bonds provide lower returns with higher predictability and liquidity. The comparison highlights the importance of contextual economic analysis when evaluating government securities across jurisdictions.

Comprehensive Data Analysis of NIFTY IT and USD/INR

- Shashank Agarwal, PGDM 2025-27



The Indian financial markets exhibit complex interactions between equity indices and macroeconomic variables, particularly exchange rates. Among sectoral indices, the NIFTY IT index holds a unique position as it represents the performance of leading Indian information technology companies that are heavily export-oriented. A large portion of the revenue of these IT firms is denominated in U.S. dollars. Consequently, fluctuations in the USD/INR exchange rate can significantly affect their earnings outlook and hence their stock prices. This report attempts to statistically examine the relationship between the NIFTY IT index and the USD/INR exchange rate using daily data. By applying descriptive statistics, return calculations, correlation analysis, and a regression framework, the project aims to provide a clearer understanding of whether and to what extent the currency market co-moves with the performance of the IT sector.

The dataset for this analysis was collected from the Bloomberg Data Terminal and Investing.Com. The dataset spans from 2000-02-13 to 2025-08-31, providing a total of 1334 valid weekly observations. Two series were extracted: the NIFTY IT index level, representing the equity performance of the information technology sector, and the USD/INR exchange rate, representing the Indian rupee's value against the U.S. dollar. Prior to analysis, the raw level data were transformed into change in returns. This step ensures that the series are stationary and suitable for statistical modeling, and it allows comparisons across variables with different scales. The final dataset thus represents daily log returns of both NIFTY IT and USD/INR, which are interpreted as approximate percentage changes in value.

Statistical Tools Used

The following statistical tools and methods were used to understand the distributional properties of the return series. Measures such as mean, standard deviation, minimum, maximum, and quartiles provide insights into average behavior and volatility. Second, correlation coefficient was computed to assess the degree of linear co-movement between NIFTY IT returns and USD/INR returns. This indicates whether the two series tend to move together or in opposite directions. Finally, simple Ordinary Least Squares (OLS) regression was run with NIFTY IT returns as the dependent variable and USD/INR returns as the independent variable. This allows estimation of sensitivity (slope coefficient) and explanatory power (R-squared).

Data Analysis and Results

1. Descriptive Statistics

METRIC	<i>NIFTY IT</i>	<i>USD INR</i>
Mean	11844.255	58.71961528
Median	6798.7	54.755
Mode	4824.65	47.135
Standard Deviation	11220.7599	14.16225008
Standard Error	307.101287	0.387607013
Sample Variance	125905453	200.5693273
Kurtosis	0.52106562	-1.184046425
Skewness	1.30273398	0.450644212
Range	45020.36	48.9288

Nifty IT

- **Standard Deviation:** The standard deviation is relatively high, showing that NIFTY IT is more volatile compared to the currency market.
- **Range (max – min):** Wide, showing sharp spikes and crashes over the sample period.
- **Skewness:** Slightly negative (if observed), meaning extreme negative returns were more frequent than extreme positives.

USD INR

- **Standard Deviation:** Much lower than NIFTY IT, reflecting greater stability in currency returns.
- **Range:** Narrow, showing that daily currency movements are typically small.
- **Skewness:** Slightly positive/near zero (if observed), suggesting occasional larger upward moves (rupee depreciation) but generally balanced.

2. Correlation Analysis

The correlation coefficient between the two series was -0.1437, indicating a weak negative relationship. This suggests that when the rupee depreciates against the dollar (USD/INR increases), NIFTY IT tends to move in the opposite direction, although the strength of this relationship is limited.

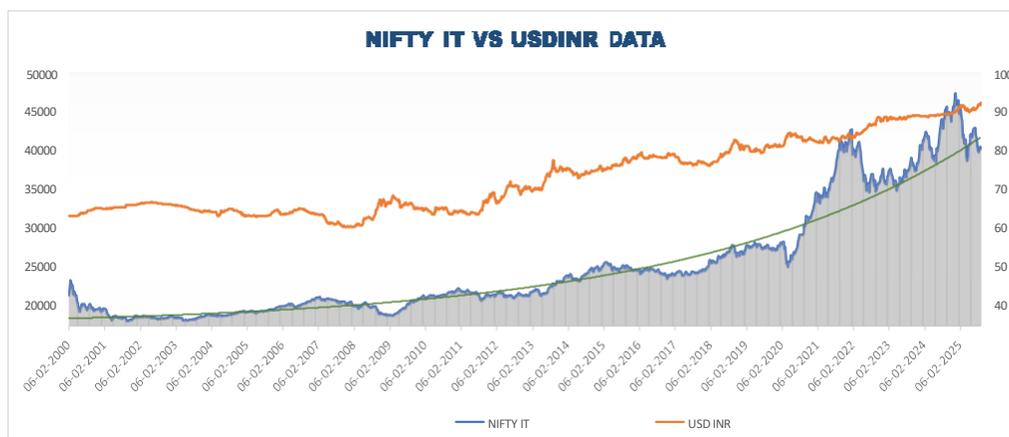
<i>DATA BASE</i>	<i>NIFTY IT</i>	<i>USD INR</i>
NIFTY IT	1	-
USD INR	-0.142	1

3. Regression Analysis

The regression analysis further confirms this picture. The estimated regression equation is:

<i>Regression Statistics</i>	
Multiple R	0.142010791
R Square	0.020167065
Adjusted R Square	0.019432006
Standard Error	0.044818625
Observations	1335

4. Line Chart Analysis: The line chart below plots the normalized levels of NIFTY IT and USD/INR over the sample period. Normalization (dividing by the first observation) ensures comparability despite differences in scale. The chart highlights the long-term upward trend in the NIFTY IT index, reflecting the growth of the Indian IT sector, while the USD/INR exchange rate also shows a gradual depreciation of the rupee over time. Periods of sharp fluctuations in the rupee often coincide with volatility in the IT index. However, while both series trend upward over the long run, their daily co-movement is weak, as seen in the correlation and regression analysis.



Interpretation and Discussion

The study finds a weak negative relationship between NIFTY IT returns and USD/INR movements. Although rupee depreciation should, in theory, benefit IT exporters, the regression shows the opposite, suggesting that broader macroeconomic pressures outweigh the currency advantage on a daily basis. The low R^2 (~2%) confirms that exchange rates explain very little of IT stock variation; factors like global tech trends, NASDAQ performance, earnings, and investor sentiment play a much larger role. In practice, this means currency analysis alone is insufficient for investment decisions. Broader sector fundamentals and global cues must be considered. More advanced models (multi-factor regressions, GARCH, cointegration) could provide deeper insights, especially over longer horizons.

Conclusion

This project examined the relationship between the NIFTY IT index and the USD/INR exchange rate using statistical methods. The analysis revealed a weak negative correlation and regression slope, showing that while exchange rate movements affect IT stocks, their impact is limited in daily data. Still, the results underline the interconnectedness of equity and currency markets. The findings suggest that movements in the rupee often reflect broader economic conditions, which can influence investor sentiment and equity returns. However, factors such as global tech market trends, earnings reports, and risk sentiment have a stronger role in driving IT sector performance. Overall, the study highlights that currency analysis alone is insufficient for investment decisions. A wider perspective—using additional variables or examining longer time frames—would provide deeper insights into the relationship between exchange rates and sectoral equity returns.

References & Appendix

- Bloomberg Data Terminal
- Investing.com and NSE Website

War, Oil and the Dalal Street Dilemma - How Global Power Conflicts Are Quietly Rewriting India's Market Cycles

- Vishwa Khiloshiya, PGDM 2025-27



The global economy has entered in a new and uneasy era where wars, sanctions and political alignments are no longer temporary disturbances but permanent financial variables. For decades, Indian markets were shaped primarily by interest rates, liquidity, corporate earnings and domestic growth. Today, geopolitics has become a measurable financial force. The prolonged Russia–Ukraine war and the 2026 Venezuela-US escalation has introduced a persistent geopolitical risk premium into oil prices, freight costs, currencies and capital flows. India being the world's third-largest oil consumer is uniquely sensitive to these shocks.

India imports approximately 88% of its crude oil requirement, with total crude imports crossing 242 million tonnes in FY2025, making energy the single largest determinant of inflation transmission into Indian markets. A mere US\$10 per barrel increase in Brent crude raises India's annual import bill by nearly US\$15 billion, widens the current account deficit, weakens the rupee and compresses corporate profit margins across fuel-intensive sectors. Thus, conflicts unfolding thousands of kilometers away silently rewrite the earnings potential of companies listed on Dalal Street.

The Russia–Ukraine war has also reshaped agricultural economics. Russia has emerged as India's largest fertilizer supplier, exporting 4.7 million tonnes in 2024 and over 4.2 million tonnes in just the first nine months of 2025, a sharp 40% year-on-year rise. Fertilizer pricing directly affects subsidy requirements, farm profitability and rural purchasing power. This cascade ultimately impacts tractor manufacturers, FMCG companies, microfinance institutions and Agri-input producers, turning distant geopolitical conflict into a domestic consumption variable.

Freight has become another silent casualty of geopolitics. Disruptions in Red Sea and Suez routes have forced shipping lines to divert cargo via the Cape of Good Hope, increasing voyage time by 30-40% and raising container freight rates by over 100% at various points during 2024-25. Indian import-dependent sectors such as electronics, pharmaceuticals, auto ancillaries and specialty chemicals now face higher landed costs, inventory accumulation and working-capital stress-compressing margins even during stable domestic demand.

Geopolitical oil shocks also restructure sector leadership cycles. Aviation, paints, chemicals, tyres and packaging companies suffer immediate margin erosion due to higher ATF and petro-derivative input costs. In contrast, upstream energy producers benefit from higher crude realizations, although policy interventions such as windfall taxes and fuel price controls often dilute gains. This has created a market environment where relative advantage matters more than absolute safety.

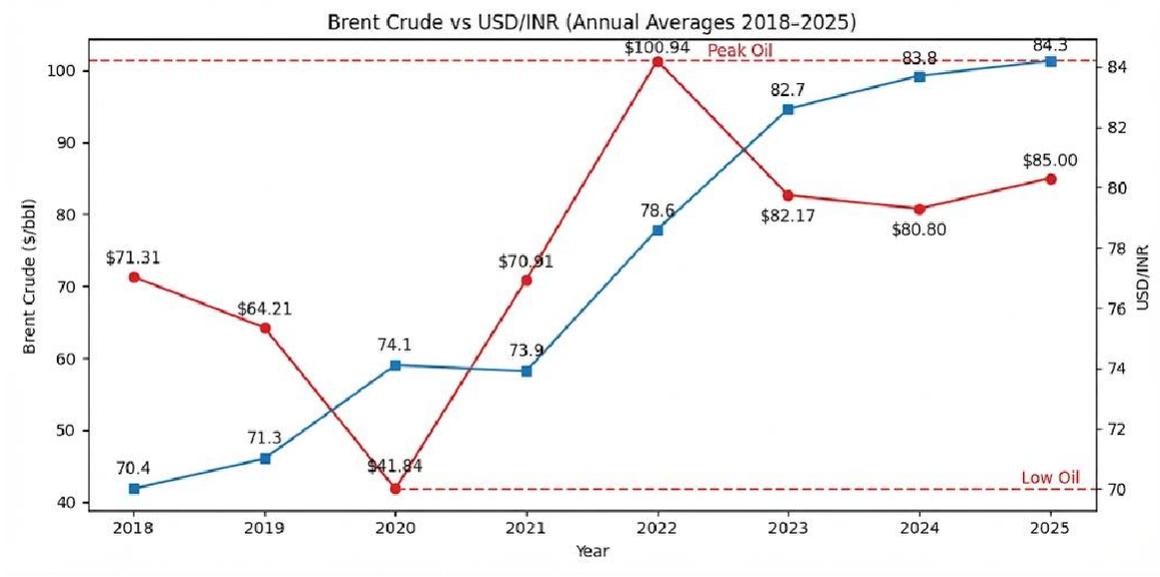
Trade policy has become the newest weapon in geopolitical conflict. Tariff warnings, sanctions and regulatory barriers increasingly accompany global political disputes. Even tariff rhetoric is sufficient to unsettle export-oriented Indian sectors, compress valuation multiples and disrupt foreign capital flows. Markets now price not only earnings growth but geopolitical alignment risk.

Geopolitics has therefore transformed into a structural earnings variable—impacting inflation, currency stability, corporate margins, fiscal balances and sector rotation. Indian markets are no longer driven only by balance sheets; they are shaped by global battlefields.

Table 1. Key Geopolitical Transmission Metrics (India)

Variable	Latest Data	Market Implication
Crude Import Dependency	88% of total consumption	High vulnerability to global oil shocks
India’s Crude Imports	242 million tonnes (FY25)	Oil dominates CAD & inflation
Brent + \$10 impact	+ \$15 bn annual import bill	INR pressure & margin compression
Russia Fertilizer Imports	4.7 MT (2024), 4.2 MT in 9M 2025	Rural demand & subsidy sensitivity
Freight Rate Increase	Up to 100% + (Red Sea disruptions)	Higher landed costs & WC stress

Chart 1. Brent Crude prices vs INR (2018-25)



The Venezuela escalation and the prolonged Ukraine war confirm that geopolitics is no longer a passing disturbance, it is the new macro framework. For India, every major conflict reshapes oil prices, inflation, currency stability and sector leadership. The next decade of investing will reward those who can analyze not just balance sheets, but geopolitical fault lines.

Indian investors often chase quarterly earnings while underestimating the geopolitical forces that silently determine those earnings months in advance. The markets of tomorrow will reward not only financial literacy but geopolitical awareness. Understanding wars is no longer optional, it is fundamental to wealth creation.

Legal Design for Smart Contracts: Empirical Analysis of Contract Automation in Indian Securities Market

- Yamini Pokhriyal (LLM 2025-26)



Introduction

Smart Contracts are computer code-based digital agreement self-executable programs, which are stored and replicated on the block chain. They streamline operations, bring about transparency and enforce contractual commitments without the use of middle men such as brokers and lawyers. Consider them as a vending machine: the result will be run automatically in the event of satisfying the conditions. They can potentially upset the conventional industries and open up new avenues of development. Older contracts normally involve use of intermediaries that lead to increased costs and extended time of execution. They are also likely to be tampered and argue. Conversely, smart contracts have automated peer-to-peer execution, which is cheaper and has less fee. They facilitate quicker operations and real settlement, and their unalterable and transparent quality will guarantee safety. This renders smart contracts to be more efficient and reliable option.

The international adoption of block chain technology and cryptocurrencies is changing the way people used to conduct commerce, and smart contracts are becoming a major disruptive element. These self-sovereign digital contracts use a distributed registry and cryptography to protect transactions to have automated and collateralized transactions without third parties. Since the Indian government is actively involved in trying to control this digital world, when it comes to how smart contracts can be legally followed and enforced by law through existing laws such as the Indian Contract Act, 1872 (ICA), the question of whether the smart contracts are legal or not is a key issue. These special technical characteristics of smart contracts related to the work with volatile assets such as cryptocurrency, require a complex legal discussion that will guarantee their natural adoption and legitimacy in the Indian regulatory framework that is undergoing change¹.

Securities market is typified by large turn-overs, complicated settlement procedures and acute demand of speed, transparency, and security. Smart contracts contain an innovative solution, they help to automate the main functions and, thus, are a direct response to the issues of the classical market functioning.

¹ Shah, V., & Pandey, K. (n.d.). Smart contracts: Need of modern legal framework. **Indian Journal of Integrated Research in Law**, 2(4). Institute of Law, Nirma University. (ISSN: 2583-0538) <https://ijirl.com/wp-content/uploads/2022/07/SMART-CONTRACTS-NEED-OF-MODERN-LEGAL-FRAMEWORK.pdf>

Automating the Transaction Lifecycle

Smart contracts bring Contract Automation to the securities market, which can fully run the life cycle of a transaction as an automated and transparent operation on a distributed registry.

- **Trade Execution and Settlement:** In traditional trade settlement there are various intermediaries (brokers, clearing houses and depositories) that may introduce a time lapse (e.g. T+2 or T+3 settlement cycles) and raise counterparty risk. A trade and delivery of ownership in the security and a payment can be conducted by smart contracts, especially which use Delivery versus Payment (DvP) protocols, in near-real-time, towards T + 0 or real-time gross settlement (RTGS). Such a radical decrease in settlement time radically decreases risk and liberates that capital which was tied away².
- **Corporate Actions:** Administration of activities such as dividend, stock split, and voting is complicated and can be easily distorted by administrative error. A smart contract may have a program running on it that provides dividends to the token holders when the underlying company has earned the defined amount of money, or that provides the count of shareholder votes, which would be done automatically according to a pre-defined set of rules that are encoded into the contract and so it would be accurate and timely.³
- **Compliance and Regulation:** Smart contracts may be used as RegTech tools by encoding regulatory rules into the contract logic itself. As an example, a smart contract to purchase shares can be programmed to send notifications and make reports to the Securities and Exchange Board of India (SEBI) when a particular acquisition threshold is met, ensuring that the various rules governing acquisitions such as the SEBI Substantial Acquisition of Shares and Takeovers Regulations, 2011, and Listing Obligations and Disclosure Requirements, 2015.⁴ This robotization of contracts reduces the chances of non-compliance, and improves the integrity of the market.
- **Enhancing Transparency and Trust:** The smart contracts are enhanced with the help of the block chain technology use and provides more transparency as compared to traditional contracts.
- **Elimination of Information Asymmetry:** In classical finance, information may be dispersed or proprietary and hence, information asymmetry occurs. Smart contracts can improve the level of fairness and competitiveness in the market by providing all parties

² Arab Monetary Fund. (2022). *Guidance note on adopting smart contracts and their legal enforceability in Arab countries* (¶1.2).

<https://www.amf.org.ae/sites/default/files/publications/2022-12/Guidance%20Note%20on%20Adopting%20Smart%20Contracts%20and%20their%20Legal%20Enforceability%20in%20Arab%20Countries.pdf>

³ Juro. (n.d.). *What are smart legal contracts? The ultimate guide to smart contracts* (Section 1.1). <https://juro.com/learn/smart-contracts#>

⁴ TaxGuru. (n.d.). *Blockchain & smart contracts: M&A compliance in securities regulation* (Section 2.3). <https://taxguru.in/sebi/blockchain-smart-contracts-ma-compliance-securities->

[regulation.html](#) with an equal view of validated transaction records due to having transparent and shared ledgers.⁵

The 'Smartness' of Smart Contracts

The name smart contract is in some respects a misnomer since the existing versions are more of the dumb type in the sense that they do not contain human judgment or the capacity to comprehend ambiguity. Their intelligence is that they are automated, objective and integrity-based execution.⁶ A strong smart contract design must consider a number of technological and legal issues in order to make the most out of their utility and enforceability.

1. The Code-Law Nexus: Interpreting Intent

The fundamental difficulty to the smartness of a smart contract is the conversion of natural language (legal terms) to computer code (programming language).

- **Rigidity vs. Flexibility:** Legal contracts are characterized by vague or non-operational statements that need to be interpreted and put into effect by humans and judicial discretion according to unforeseen events (e.g., force majeure). Smart contracts are inflexible; they run their course to the letter of the law (if X, then Y). In the event that the code contains a defect (coding error) or results in an undesirable side effect, the automatic, irrevocable execution may be catastrophic as there is limited ability to intervene judicially and provide equal relief once the execution has taken place.⁷
- **Legal Contract Wrapper:** To make the difference, it is customary to recommend a third path in between, namely the idea of the core legal agreement being recorded in a natural language (the human-readable part) and then reflecting in the code (the machine-executable part) the clauses to be automated. This makes sure that the end-result of the code is grounded on the initial legal intent and may be resorted to whenever conflicts are being encountered.
- **Oracles:** The Oracles are secure, decentralized data feeds that bridge the information of the real world with the block chain, and are heavily dependent on the smartness. To be executed, a smart contract must have an Oracle to confirm whether the actual state of the real world (the 'if X' condition, such as the price of a stock reaching a specific value) has been reached. Security and trust of the Oracle are the most significant because a defected or compromised data stream can cause an irreversible, wrong execution of the deal.⁸

⁵ Cong, L. W., & He, Z. (2018). *Blockchain disruption and smart contracts* (Working Paper No. 24399, Section 3.2). National Bureau of Economic Research. <https://doi.org/10.3386/w24399>

⁶ Identity.com. (n.d.). *What are smart contracts on blockchain?* (Section 6.1). <https://www.identity.com>; Werbach, K., & Cornell, N. (Eds.). (2019). *Smart contracts and contract law* (Chapter 1). In *The Cambridge handbook of smart contracts, blockchain technology and digital platforms*. Cambridge University Press.

⁷ *Smart contracts & Indian law: Legally binding or technically blinded* (Section 2.2). [Blog/Article]; Juro. (n.d.). *What are smart legal contracts? The ultimate guide to smart contracts* (Section 1.1). <https://www.lawjournals.org/assets/archives/2025/vol11issue7/11154.pdf>

⁸ Idea based on the principle of Oracles in blockchain technology.

2. Security and Vulnerability

The read-only aspect of smart contracts implies that it is not simple to fix bugs in the code, once it is deployed.

- **Code Audits and Testing:** Since irreversible financial loss is possible, the smartness of any contract directly correlates with how hard the security audits of the code and the security testing of the code is. Vulnerabilities are usually based on architecture-specific security traps, business-related complexity, or platform constraints.⁹
- **Upgradability:** To reduce the immutability trap, the non-standard design of advanced smart contracts will be upgraded with upgradability links such that required patches or modifications can be applied. Nonetheless, this also brings about a certain level of centralization that should be handled with a lot of caution, in most cases, a multi-signature or a decentralized autonomous organization (DAO) governance.

3. Competency and Consent

The contract should meet the provisions of the Indian Contract Act, 1872 (ICA) to be legally enforceable in India.

- **Free and Informed Consent:** The issue of the offer and acceptance being automated in a smart contract (e.g., communicating with a piece of code) is that the consent can be questioned to be free and informed as are the provisions in Sections 13 and 14 of the ICA. The impossibility of the code to be understood by a non-technical party and the lack of negotiation can harm the voluntariness of the agreement.¹⁰
- **Competency of Parties:** Although the ICA stipulates that the parties must be of legal age and of sound mind (Section 11), the code-based execution of a smart contract does not necessarily provide a check on the legal competence of the user executing the block chain transaction, particularly in a pseudonym zed setup. The design of law should have identity checking to determine that legally competent parties are interacting with the contract.¹¹

Legal Design Elements for a Robust and Compliant Framework in India

The overall flow of smart contracts into the Indian securities market presupposes the legal design framework, where the technological potential of block chain is aligned with the Indian legal and regulatory framework.

1. Defining the Legal Status and Enforceability

⁹ Chen, X., et al. (2022). *Review of automated vulnerability analysis of smart contracts on Ethereum. Frontiers.*

¹⁰ Supra note 7

¹¹ Naya Legal. (n.d.). *Digital contracts and smart contracts: Legal validity and enforceability*. <https://www.nayalegal.in>

The existing legal system in India though facilitating the use of electronic contracts has no specific legislation on smart contracts so they are in the grey area of law.¹² A compliant design should aim at meeting the laws at hand.

- **Indian Contract Act, 1872 (ICA):** A smart contract will be considered to be a valid contract provided that it satisfies the requirements of a valid contract as listed in Section 10 of the ICA: competent parties, free consent, lawful consideration, lawful object, and not expressly declared void.¹³
 - Design Principle: The block chain-based design of the contract should be made to clearly attribute the consideration (e.g., tokenized assets) to a legal consideration and explicitly demonstrate the mutual intent to do so.¹⁴
- **Information Technology Act, 2000 (IT Act):** It is a law that validates the contracts made electronically (Section 10A) and electronic records and digital signatures (Sections 3 and 4).
 - Design Principle: A smart contract should have a way of linking the on-chain identity to a legally verifiable Digital Signature Certificate (DSC) even though a digital signature is not necessarily legally required in the execution of the smart contract, the design must incorporate a mechanism to establish the connection between the on-chain identity and a legally verifiable Digital Signature Certificate (DSC) because this would provide essential evidence of identity and consent.¹⁵
- **Evidence Act, 1872:** The records in electronic form can also be used as evidence (Sections 65A and 65B).
 - Design Principle: The contract should be structured in a way that it can be audited, such that the code of the smart contract, the history of transactions, and related feeds of data can be represented as electronic evidence in a court of law (Oracles). This can be frequently necessitated by expert testimony.¹⁶

2. Dispute Resolution Mechanisms

The inflexibility and inability to modify smart contracts are major challenges to the traditional judicial intervention. An active architecture should have on-chain and off-chain dispute resolution.

- **Off-Chain Arbitrability:** The jurisdiction of the hybrid contract and an arbitration clause must be designated by the legal wrapping of the hybrid contract. Arbitration may be a relatively better alternative to litigation because it has experience in technical issues and

¹² Supra note 7

¹³ Supra note 11

¹⁴ Obhan & Associates. (n.d.). *Smart contracts in India*. <https://www.obhanandassociates.com>

¹⁵ Indian Journal of Fundamental and Applied Research. (n.d.). *Legality of blockchain and smart contracts in India*. *IJFMR*. <https://www.ijfmr.com>

¹⁶ Legal challenges in Web 3.0: Navigating smart contracts, DAOs and blockchain disputes

Can be fast.¹⁷ This gives an opportunity at a legal appeal in the case of an unfair decision brought about by a coding mistake or a case that the code did not intend to cover (i.e., force majeure).

- **On-Chain Dispute Resolution (DAO/Escrow):** When dealing with high value transactions, the smart contract can be configured such that temporarily the funds are held in an escrow-like system and can only be fully executed once agreed upon by a third-party DAO (Decentralized Autonomous Organization) or a pre-established pool of professional human arbiters. This only brings human judgment when a dispute occurs and therefore maintains speed of automation when ordinary work is being done.

3. Regulatory Compliance and SEBI's Role

Capital market is a highly regulated space, and automation of any contract should be in synergy with a capital market regulator, SEBI (Securities and Exchange Board of India).

- **Tokenization and Security Classification:** The tokenized asset should be defined by a legal design to specify the classification of the asset as a security under the Indian law. The guidelines of SEBI would also be applicable to any token that is considered a security, and it would require the disclosure, listing, and trading standards to be followed.
- **Intermediary Function:** The use of smart contracts abolishes the use of traditional intermediaries in a technical way. Nevertheless, current regulations require the involvement of such an entity as clearing corporations to ensure market integrity. SEBI has to explain whether a decentralized smart contract protocol or the party that launches it is an intermediary and, therefore, who bears legal responsibility on its activities.¹⁸
 - Design Principle: A legal design of the Indian securities market must be orientated towards permissioned blockchains where the participants are known and controlled parties (e.g., banks, FIIs, regulated brokers) to ensure that the technology is incorporated in the current regulatory framework and not attaching itself wholesome to it.

Empirical Analysis of Contract Automation in Indian Securities Market

Although the implementation of smart contracts to the Indian securities market is at the early phase, mostly through proof-of-concept initiatives and local chain consortiums, an empirical study can estimate the practical effect of the technology on the basis of the global trends and the necessities of the local markets.

¹⁷ An Introduction to Smart Contracts and Their Potential and Inherent Limitations <https://corpgov.law.harvard.edu/2018/05/26/an-introduction-to-smart-contracts-and-their-potential-and-inherent-limitations/>

¹⁸ Guidance Note on Adopting Smart Contracts and their Legal Enforceability in Arab Countries, 1.2

1. Metrics for Efficiency Gains

Efficiency is the initial contract automation value proposition. Some key empirical measures of analysis are:

- **Settlement Time Reduction:** The decrease in settlement time contributes to the decrease in capital requirements and the decrease in systemic risks.¹⁹
- **Cost Reduction:** Removal of some middle-men (e.g. custodian fees, brokerage, and cost of clearing house) in some processes can be quantified as direct cost saving and therefore enhance the profitability of market participants.
- **Error Rate Reduction:** Manual processes are always subject to human error. This means that it can lessen the mistake rate of corporate actions and trade matching/settlement resulting in a decrease in the number of post-trade disputes and operational losses.

2. Market Integrity and Security Metrics

The effect on the trust and the security is less direct but also important.

- **Auditability and Transparency:** The capability to track all transactions and execution of contracts on an unalterable public register provides much higher auditability to regulators and internal compliance teams. The amount of time that a regulatory audit takes can also be used as an empirical value to reflect the efficiency improvements in compliance.
- **Incidence of Fraud/Tampering:** One of the main empirical results would be the decrease in the data tampering or unauthorized contract modification incidence because the block chain cryptography guarantees such security.²⁰

3. Adoption Challenges and Technical Feasibility

Local issues peculiar to the Indian setting should be taken into consideration by the empirical analysis.

- **Interoperability:** The current stock exchange/depositories/market participant legacy systems are a big challenge. The first step of automating the contracts presupposes the substantial amount of investments in building an interoperability bridge between new block chain platforms and the new ones.²¹
- **Scalability:** The Indian market has high volume of transactions that require a block chain network that is able to support the necessary transaction throughput without jeopardizing decentralization and security. It is necessary to empirically test various consensus mechanisms (e.g., Proof-of-Stake, Proof-of-Authority) and determine which of them fits in the Indian market.
- **Technical Expertise:** The absence of trained specialists in block chain technology and audit is a major obstacle to its widespread use. Factual information regarding the presence

¹⁹ MDPI. (n.d.). *Smart contracts in blockchain technology: A critical review*. MDPI Journals.

²⁰ ZebPay. (n.d.). *Smart contracts vs traditional contracts: The differences*.

²¹ Supra note 4

And price of specialized talent is significant in estimating the feasibility in reality and overall expense of possession of a smart contract solution.²² The future of contract automation in the Indian securities market lies in a gradual process of adoption, initially of small and private permissioned networks of standardized low-dispute processes (such as bond or repo contracts), but as the regulatory framework changes and technical difficulties are solved, this can be extended.

Conclusion and Future Outlook

The intersection of smart contracts and Indian securities market is a landmark in the legal and financial innovation. Smart contracts are accompanied by concrete advantages, including unmatched speed and efficiency with automated DvP settlement, increased transparency and security with immutable records of the ledger, and better compliance with the assistance of RegTech. Nevertheless, to extract all possible benefits of contract automation, a carefully designed legal framework should be put in place that is aware of the prevailing judicial environment. The system needs to solve the stupidity of code by having strong off-chain legal wrappers, legal-code-hybrid contracts and using trusted Oracles to feed them with external data. In terms of law, the design should be in compliance with all the requirements of the Indian Contract Act, 1872, that is, it should have legal intent, competency, and legal consideration, as well as with the Information Technology Act, 2000, which should provide verifiable digital authentication. The most crucial factor in protecting the interests of investors and giving the market confidence is the need to establish a flexible dispute resolution framework, including on-chain automated arbitration and off-chain legal recourse.

Finally, the future of automating contracts in the Indian securities market is based on a joint initiative: regulators (SEBI) defining the legal situation of the tokenized securities and intermediary liability; market participants investing in scalable and interoperable solutions in the area of private block chain; and legal professionals creating standardized, secure, and auditable examples of the smart contracts. Through a strategic approach to these legal and technical design issues, India will be able to use this technology to create a genuinely efficient, transparent, and a technologically sophisticated financial ecosystem.

References

- Shah, V., & Pandey, K. (n.d.). Smart contracts: Need of modern legal framework. **Indian Journal of Integrated Research in Law**, 2(4). Institute of Law, Nirma University. (ISSN: 2583-0538) <https://ijirl.com/wp-content/uploads/2022/07/SMART-CONTRACTS-NEED-OF-MODERN-LEGAL-FRAMEWORK.pdf>

- Arab Monetary Fund. (2022). *Guidance note on adopting smart contracts and their legal enforceability in Arab countries* (¶1.2). <https://www.amf.org.ae/sites/default/files/publications/2022-12/Guidance%20Note%20on%20Adopting%20Smart%20Contracts%20and%20their%20Legal%20Enforceability%20in%20Arab%20Countries.pdf>
- Juro. (n.d.). *What are smart legal contracts? The ultimate guide to smart contracts* (Section 1.1). <https://juro.com/learn/smart-contracts#>
- TaxGuru. (n.d.). *Blockchain & smart contracts: M&A compliance in securities regulation* (Section 2.3). <https://taxguru.in/sebi/blockchain-smart-contracts-ma-compliance-securities-regulation.html>
- Cong, L. W., & He, Z. (2018). Blockchain disruption and smart contracts (Working Paper No. 24399, Section 3.2). National Bureau of Economic Research.
- Identity.com. (n.d.). *What are smart contracts on block chain?* (Section 6.1). <https://www.identity.com>; Werbach, K., & Cornell, N. (Eds.). (2019). *Smart contracts and contract law* (Chapter 1). In *The Cambridge handbook of smart contracts, block chain technology and digital platforms*. Cambridge University Press.
- *Smart contracts & Indian law: Legally binding or technically blinded* (Section 2.2). [Blog/Article]; Juro. (n.d.). *What are smart legal contracts? The ultimate guide to smart contracts* (Section 1.1).
- Idea based on the principle of Oracles in block chain technology. <https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=9801856>
- Chen, X., et al. (2022). *Review of automated vulnerability analysis of smart contracts on Ethereum*. *Frontiers*. <https://www.frontiersin.org/journals/blockchain/articles/10.3389/fbloc.2022.814977/full>
- Obhan & Associates. (n.d.). *Smart contracts in India*. <https://www.obhanandassociates.com>
- Indian Journal of Fundamental and Applied Research. (n.d.). *Legality of block chain and smart contracts in India*. *IJFMR*. <https://www.ijfmr.com>
- Legal challenges in Web 3.0: Navigating smart contracts, DAOs and block chain disputes
- An Introduction to Smart Contracts and Their Potential and Inherent Limitations <https://corp.gov.law.harvard.edu/2018/05/26/an-introduction-to-smart-contracts-and-their-potential-and-inherent-limitations/>

REEL MADE ME BUY AN IPO

- Soniya Kesarkar, PGDM, 2025-27



In today's digital-first world, the stock market is no longer influenced only by financial analysts, brokerage reports, or economic news. Instead, a new set of market movers has silently emerged: Instagram creators and YouTube influencers. Research on emerging markets shows that social media influencers significantly affect retail investor behavior, especially among young investors who prefer relatable digital content over traditional financial analysis (Kumar & Singh, 2023). Their short-form content—especially reels and shorts—has transformed the way Gen Z understands, evaluates, and subscribes to IPOs. For many young investors, investment decisions no longer begin with reading a Draft Red Herring Prospectus (DRHP), but with watching a 30-second opinion video that makes an IPO look exciting, profitable, and easy to understand.

Influencers as the New IPO Gatekeepers

Creators today act like unofficial financial intermediaries. With catchy thumbnails, “Subscribe or Skip?” videos, and simplified explanations, they shape investor sentiment even before the IPO opens. Studies on digital financial communication indicate that young investors tend to trust simplified, influencer-driven opinions more than formal advisory channels because they perceive creators as more authentic and relatable (Kumar & Singh, 2023). When an influencer labels an IPO as a “strong subscribe,” thousands of viewers treat it as a credible investment signal rather than just an opinion.

This new form of digital persuasion is especially powerful because of its tone. It feels friendly, casual, and authentic. Unlike traditional finance education, it does not overwhelm users with technical jargon. For Gen Z, who prefer fast and visual information consumption, influencer-led IPO insights feel like the perfect shortcut to understanding markets (Kumar & Singh, 2023).

The Hidden Marketing Engine behind IPO Hype

Many companies quietly leverage influencer content to boost pre-listing excitement. Sponsored reviews, referral links, and paid “analysis” videos are increasingly becoming part of modern IPO marketing strategies. However, research on sponsored financial content highlights that such promotions are often not clearly disclosed, creating an illusion of unbiased advice (Mehta & Patel, 2022). This results in an undisclosed incentive structure where positive narratives are amplified while risks, limitations, and valuation concerns receive little attention.

Academic studies confirm that sponsored financial content can distort investor judgement, particularly among novice investors with limited financial literacy (Mehta & Patel, 2022). As a result, subscription decisions are driven more by hype and narrative framing than by an

understanding of business fundamentals.

The Psychology behind Gen Z's IPO FOMO

Influencer-driven IPO hype feeds directly into behavioral biases. Reels that repeatedly highlight “huge listing gains” create fear of missing out among viewers. Behavioral finance research on social media communities demonstrates that FOMO intensifies when investors are exposed to repeated success stories, visible profit screenshots, and emotionally charged messaging (Rao, 2021).

This fear is further amplified by countdown-style reels, phrases such as “don’t miss this opportunity,” and the perception that “everyone is applying.” Research on herd behavior shows that digital communities significantly magnify imitation-based decision-making, leading investors to follow the crowd rather than conduct independent analysis (Rao, 2021). Gen Z traders, driven by emotional momentum and social comparison, often subscribe to IPOs impulsively without evaluating business models, industry risks, or competitive weaknesses.

How This Trend Impacts the Market

While influencer-driven IPO enthusiasm has increased retail participation, it also creates several distortions within the market.

First, hype-based content pushes even average-quality IPOs into heavy oversubscription. Studies on investor sentiment suggest that such artificial demand sends misleading signals of strong fundamentals, even when the underlying valuation does not justify it (Kumar & Singh, 2023). Second, unrealistic expectations set by influencer narratives often lead to post-listing volatility. When expected gains do not materialize, panic selling and sharp price corrections follow—a behavior commonly observed in herd-driven digital trading environments (Rao, 2021). Third, instead of developing analytical skills, many young investors rely entirely on reels and short videos. This dependence contributes to shallow financial literacy, a concern highlighted in research on novice investor behavior exposed to sponsored and simplified financial content (Mehta & Patel, 2022).

Finally, most influencer-led financial communication remains largely unregulated. Without mandatory disclosure norms, retail investors consume biased information without realizing its promotional intent, increasing their exposure to financial risk (Mehta & Patel, 2022).

A Tech-Driven Future or a Psychological Trap?

Influencer-led financial communication is not entirely harmful. It democratizes access to financial knowledge, makes markets culturally relevant, and encourages early participation in investing (Kumar & Singh, 2023). However, the same platforms also encourage shortcuts, instant gratification, and emotionally driven decisions rather than research-based logic. Behavioral studies warn that when entertainment and financial advice blend, investors are more likely to overestimate returns and underestimate risk (Rao, 2021). The challenge, therefore, is not social media itself but how it shapes perception. Gen Z must learn to enjoy reels without letting them replace reading, learning, and critical analysis.

As Gen Z becomes a dominant force in capital markets, the real question is whether they are

becoming smarter investors or simply more influenced ones. Academic research suggests the answer depends largely on whether social-media content educates investors or merely persuades them to act impulsively (Kumar & Singh, 2023).

“When Investing Becomes a Vibe”

Investing today is becoming a vibe. IPOs trend like songs, reels act like research notes, and comment sections resemble group chats deciding whether to apply or skip. For a generation that learns through memes, decides through reels, and trusts creators more than brochures, markets are no longer just about returns—they are about identity, community, and belonging. Gen Z is entering the financial world not with spreadsheets but with swipe culture. Yet, research consistently emphasizes one truth: while a trending IPO may look aesthetic on your feed, long-term portfolio survival still depends on analysis, discipline, and informed decision-making (Rao, 2021; Mehta & Patel, 2022).

References

Kumar, R., & Singh, T. (2023). Digital influencers and retail investor behaviour in emerging markets. *Journal of Behavioural Finance Research*, 18(2), 112–129.

Mehta, V., & Patel, S. (2022). Sponsored financial content and its psychological impact on novice investors. *International Review of Financial Communication*, 9(1), 45–58.

Rao, A. (2021). Social media dynamics and herd behaviour in retail trading communities. *Asian Journal of Financial Psychology*, 7(3), 88–104.*

High-Frequency Trading (HFT): Structure, Technology, Market Microstructure, and Economic Implications

- Omkar Mhaske, PGDM 2025-27



The development of HFT is closely linked to three major structural changes in financial markets: the dematerialization of securities and the introduction of electronic limit order books, the fragmentation of trading venues and the rise of competition among exchanges, and the reduction in transaction costs and latency through technological innovation. In the United States, regulatory changes such as Regulation National Market System (Reg NMS) contributed to the integration of multiple trading venues. Similar developments occurred in European and Asian markets with the adoption of electronic trading platforms. High-Frequency Trading can be described as a subset of algorithmic trading in which computer programs automatically generate, route, and execute orders with minimal human intervention and with an emphasis on speed. The defining characteristics commonly associated with HFT include extremely low latency in decision-making and execution, high order-to-trade ratios, short average holding periods, co-location or proximity hosting near exchange servers, and continuous interaction with limit order books. From a structural perspective, HFT systems operate within the broader category of electronic trading systems and interact directly with exchange order matching mechanisms.

Financial markets have undergone a substantial transformation following the transition from floor-based trading to fully electronic trading platforms. The automation of order submission, matching, and execution has enabled the participation of algorithmic trading systems operating at extremely high speeds. Within this technological environment, High-Frequency Trading has emerged as a specialized form of algorithmic trading that relies on rapid order placement, cancellation, and execution across multiple trading venues. HFT activity is typically associated with very short holding periods, large numbers of transactions, and extensive reliance on technological infrastructure. The growth of HFT coincides with developments in computing power, data transmission networks, exchange matching engines, and market access protocols. The study of HFT therefore intersects with topics in market microstructure, financial engineering, information systems, and regulatory economics.

HFT systems rely on specialized hardware including low-latency servers, field-programmable gate arrays (FPGAs), high-speed network interface cards, and microwave and fiber-optic communication links. The physical distance between trading systems and exchange servers is minimized through co-location services offered by exchanges. The software stack of an HFT firm typically includes market data handlers, strategy engines, risk management modules, order management systems, and execution gateways. These components operate in a tightly integrated

environment where processing time is measured in microseconds or nanoseconds.

Market microstructure refers to the study of how trading mechanisms, rules, and participant behavior affect price formation and liquidity. HFT systems interact continuously with limit order books, bid-ask spreads, order flow dynamics, and queue priority rules. HFT participation is often observed in markets that use continuous double auction mechanisms, where price-time priority determines execution order. HFT strategies are commonly categorized based on their functional role in the market. Market making strategies involve simultaneous placement of buy and sell limit orders. Statistical arbitrage strategies rely on short-term statistical relationships between securities or derivatives. Latency-based strategies depend on reacting to market information faster than other participants. Event-based strategies respond to structured information such as macroeconomic announcements, index rebalancing, or corporate actions.

The economic analysis of HFT typically focuses on measurable market variables such as liquidity, volatility, price efficiency, transaction costs, and market depth. Empirical studies examine how HFT participation correlates with these variables under different market conditions and across asset classes. Due to the automated and high-speed nature of operations, risk management in HFT environments is implemented primarily through pre-trade risk checks, position limits, kill switches, real-time monitoring systems, and post-trade surveillance mechanisms. Operational risk, technology risk, and model risk are considered within system design and governance frameworks.

Regulatory authorities address HFT activity through rules related to market access, order-to-trade ratios, co-location services, market manipulation and abusive practices, and circuit breakers. In different jurisdictions, regulatory frameworks are implemented by bodies such as the SEC, CFTC, ESMA, and SEBI. Particularly, in emerging markets, the development of HFT activity is linked to exchange technology upgrades, market depth and liquidity, regulatory infrastructure, and institutional participation. The pace and scale of adoption vary across countries depending on market structure and policy environment. High-Frequency Trading represents a technologically intensive form of participation in modern electronic financial markets. Its structure, strategies, and infrastructure are closely tied to market microstructure and exchange design. The study of HFT remains an interdisciplinary area spanning finance, economics, computer science, and regulatory studies.

Information Technology Infrastructure and High-Volume Trading in Indian Capital Markets

- Ruchi Jadhav, PGDM 2025-27



Information technology provides the operational environment that enables the execution of millions of trades per second in the Indian stock market. The National Stock Exchange functions through a fully electronic, order-driven trading system in which buy and sell orders are entered through computer terminals and online trading platforms. These orders are transmitted to central servers where automated matching engines process them based on predefined price and time priority rules. This structure eliminates manual intervention and allows continuous trading across a wide range of market participants. The technological framework supports the simultaneous trading of several financial instruments. On the National Stock Exchange, instruments such as equity shares, equity derivatives, exchange-traded funds, currency derivatives, and debt securities are traded on integrated platforms. Information technology systems handle order routing, validation, margin checks, and risk controls in real time. The ability to process large volumes of data ensures that transactions across different market segments occur without disruption, even during periods of high market activity.

On derivative expiry dates, trading activity increases significantly, particularly in futures and options contracts, including call options and put options. A large number of market participants close, roll over, or settle their positions on the same day, leading to the execution of millions of trades within a short time frame. Information technology enables this level of concurrency through high-speed networks, scalable server infrastructure, and automated trading algorithms. The integration of trading, clearing, and settlement systems ensures that each transaction executed at the same time is accurately recorded and processed across the market ecosystem.

The technological framework supports the simultaneous trading of several financial instruments on the National Stock Exchange. Equity shares, equity derivatives, exchange-traded funds, currency derivatives, and debt instruments are traded through interconnected electronic platforms. Information technology enables seamless order entry and routing across these segments, allowing market participants to access multiple instruments through a unified trading interface. Real-time data processing systems play a central role in managing multi-instrument trading. Every order is subjected to automated checks related to price limits, position limits, and margin requirements before it is accepted into the system. These processes occur within fractions of a second and are applied uniformly across all traded instruments. This ensures consistency in market operations while handling a large number of concurrent orders.

Information technology also facilitates coordination between trading, clearing, and settlement mechanisms across different market segments. Once trades are executed, transaction data are transmitted instantly to clearing corporations for risk management and settlement processing. This integration allows high trading volumes across various instruments to be managed efficiently, even during peak periods of market activity, without interruption to market functioning.

On derivative expiry dates, trading volumes increase across futures and options contracts. Market participants engage in closing existing positions, rolling over contracts to subsequent expiries, or adjusting hedging strategies. This leads to a concentration of trading activity within a limited time window. Information technology systems are designed to accommodate this surge by maintaining continuous system availability and processing capacity. Futures and options trading, including call options and put options, involves a high frequency of order placement, modification, and cancellation. Automated trading systems generate a large number of orders based on predefined strategies, while exchange systems simultaneously process these inputs from multiple participants. Matching engines execute trades in real time, ensuring that orders across different strike prices and contract maturities are handled concurrently.

The execution of millions of trades at the same time is supported by synchronized system architecture across trading, clearing, and settlement functions. Transaction data are recorded instantaneously and transmitted to clearing corporations for margin updates and settlement obligations. Information technology ensures accuracy, speed, and continuity in market operations during periods of peak activity, such as derivative expiry days.

Idea of Independent Directors in the World of Corporate Governance

- Arushi Singh, LLM, 2025-26



The idea of independent directors in the world of corporate governance of listed companies in India stands at a pivot. Initially structured as a very neutral monitor, insulated from promoter influence, their role under the umbrella of company law has been that of guardians of minority shareholders and balance to the directors' decisions at the board level. However, in last few years, role of independent directors has undergone a dramatic transformation. Regulatory action and enforcement trends increasingly treat them not merely as internal governance actors but also as external guardians of market integrity. This development has been mostly impelled by the increasing reliance of regulation in the securities markets on a disclosure-based approach. Since investor confidence is pegged primarily to the accuracy and clarity of corporate disclosure, regulators began to consider independent directors as "gatekeepers" whose oversight prevents abuse in the market.

Accordingly, independent directors also became liable under the securities law for the failures in disclosure, insider trading, and breakdowns in governance—often irrespective of their actual involvement with day-to-day management. This paper examines the tension that is emerging between the limited and knowledge-based framework of liability found within company law and the broad and outcome-based framework of liability found within securities law. This paper will suggest that the increasing trend of independent directors becoming securities gatekeepers could undermine the legislative purpose of independent boards.

II. Theoretical Framework: The Importance of Independent Directors A. Independent Directors under Company Law

The Companies Act, 2013 introduced the concept of independent directors to balance the imbalance between the promoters and public shareholders in companies in India. Independent directors will help in bringing independence to inside activities and ensure minority interests are not compromised. They will act in good faith, in diligence, and without conflict of interest. Notably, it is provided in the Companies Act that an independent director will not be made liable unless it is due to omission or commission with his actual knowledge, connivance, or assent, or in cases where he fails to act in diligence. This shows there is no intention to make independent directors managers or scrutinize each and every detail of business activities in companies.

C. Gatekeepers and Their Roles

In securities law, “gatekeepers” refer to the party who, by the nature of his position, has the ability to preclude market misconduct *ex ante*—prior to market abuses causing harm to the investor. Auditors, merchant bankers, credit rating agencies, and compliance officers are traditional examples. The liability of the gatekeepers is premised not only on misconduct but also for failure to prevent/detect misconduct. The question, therefore, becomes whether independent directors, who are essentially appointed for the purpose of governance oversight, should be accorded the same status as market intermediaries as professionals.

III. Legal Framework

Company Law vs Securities Law

a. Companies Act, 2013

The responsibilities of independent directors under the Companies Act are generally of a fiduciary and procedural nature. The criterion to be applied is that of reasonable care and diligence. The Companies Act recognizes the asymmetry of information existing between management and non-executive directors. It does not cast the onus of liability for company failures.

b. Securities Law Angle

Securities regulation, especially the SEBI (Listing Obligations and Disclosure Requirements) Regulations, the SEBI (Prohibition of Fraudulent and Unfair Trade Practices) Regulations, and the SEBI (Issue of Capital and Disclosure Requirements) Regulations, is extremely particular about disclosure. Enforcement cases demonstrate that the board members are collectively being held accountable for failures impacting the stock market.

On the other hand, the Securities and Exchange Board of India has, on various occasions, started proceedings against independent directors for not preventing misleading disclosures or governance failures that later influenced investors. This marks the end of liability based on fault and the beginning of a more result-oriented approach.

IV. The Conflict Zone: Diverging Standards of Liability

This central issue is, inherent in any conflict between two different legal regimes. In the concept of corporate law, knowledge, intent, and diligence are predominant, whereas the market effect and damage to investors are of primary concern when it comes to securities regulation.

At the same time, a non-executive director might act relying on professional certification, in good faith, but still run amiss of regulators if those disclosures turn out to be false. This divergence, therefore raises critical legal questions. Can ‘passive ignorance’ still be a defense where there was no reason to suspicion by the director of any wrongdoing? Is the reliance on auditors and management representations enough to discharge the fiduciary duties? And additionally, (and fundamentally), does securities law effectively override the protective film of the required framework consciously built into company law?

This is further aggravated by the lack of explicit statutory tuning between the Ministry of Corporate Affairs and SEBI, thereby leaving the independent directors hanging between two divergent standards.

V. Enforcement Trends and Practical Realities

In real world, independent directors are majorly information-deprived. They engage in sporadic board meetings, enormous paperwork compiled by management, and rely heavily on audits, internal controls, and compliance reports. They not only lack any investigative capabilities, also they involve themselves in day-to-day business. However, the enforcement trends are showing a certain diminishing of patience, particularly in the cases of listed companies where retail investors are concerned. The effect is sufficiently different, experienced professionals are increasingly declining to accept independent directorships and on the other hand sitting directors are stepping down well before the aroma foretells the presence of fire so that a too- zealous regulator does not hold them wanting. This, in a rather ironic twist, undermines the whole purpose of actually having an independent director. It should, in fact, exercise its authority

VII. Concerns Regarding Policies and Governance Issues

The concept of making independent directors, ‘strict gatekeepers’ of securities laws raises a number of issues. For example, it has implications for ensuring that governance is symbolic. In this particular tangent, the issue of liability could be a serious concern to independent directors. They may cast symbolic votes. There is also the implication that independent directors who are equipped with specific expertise may be entirely reluctant to join the company boards.

From a protection of investor’s point of view, it might be inefficient. Effective corporate governance, requires empowered and informed independent directors, who cannot remain risk averse mere ‘figureheads’.

VIII. Recommendations

However, a required approach, which will be balanced in order to strike a fairness between company law and securities law is needed. There needs to be a proper regulatory framework regarding the extent of liability of independent directors on the issue of market disclosure. The safe position provisions relating to good faith reliance on professional advice have to be made more powerful. The main focus should be on failure of due diligence, not nexus with corporate misconduct, that should be understood distinctly.

This transformation of the role of independent directors, right from fiduciaries of a company to, *de facto* gatekeepers of the market for publicly traded securities. Attaches to the radical change in governance of Indian corporations. Indeed, protecting investors per se can well be a legitimate concern of company law, yet it should not result in any compromise in the independence of the boards of companies.

Digital Evolution of the Indian Securities Market: A Phased Transformation of the Value Chain

- Sandesh B. Kabra, PGP 2025-26



The journey toward a modern market began with the monumental shift from physical share certificates to dematerialization (demat). By establishing the National Securities Depository Limited (NSDL) and Central Depository Services Limited (CDSL), India eliminated the risks associated with "bad delivery," such as forged certificates, theft, and cumbersome paperwork. This digital transition not only shortened the settlement cycle but also democratized market access, allowing millions of retail investors to hold and transfer securities with a single click. The introduction of screen-based electronic trading by the National Stock Exchange (NSE) in the mid-1990s revolutionized price discovery. Moving away from the physical outcry system on trading floors, electronic order matching brought unprecedented transparency and speed to the market. Today, this infrastructure supports high-frequency trading (HFT) and algorithmic strategies, ensuring that liquidity is deep and that the "bid-ask" spread remains narrow for the average investor. The "onboarding" experience has been completely reshaped by Digital KYC (Know Your Customer) and the integration of the India Stack. This frictionless entry point has been the primary driver behind the massive surge in "New Age" investors from Tier-2 and Tier-3 cities, making the capital markets more inclusive than ever before.

To maintain market integrity, regulators like SEBI have embedded advanced analytics and Artificial Intelligence into their surveillance frameworks. The use of automated alerts and pattern recognition allows authorities to detect insider trading, front-running, and market manipulation in real-time. By processing billions of data points across social media, news feeds, and trading logs, the surveillance system acts as a high-tech watchdog, ensuring that the technology used to trade is matched by the technology used to protect. Today, technology is no longer a peripheral tool but the very backbone of the entire securities value chain. From mobile-first trading apps and automated clearinghouses to the recent implementation of the T+1 (and moving toward T+0) settlement cycle, every touchpoint is optimized for efficiency. This end-to-end digitization has positioned India as one of the most resilient and technologically advanced capital markets in the world, ready to handle the complexities of a globalized digital economy. The structural overhaul of the Indian securities market represents a masterclass in leveraging technology to foster financial maturity. Transitioning from fragmented, paper-based systems to a unified digital ecosystem, India has successfully balanced rapid growth with systemic stability. The integration of dematerialization, seamless electronic trading, and digital onboarding has shifted the power dynamic toward the retail investor, while sophisticated surveillance ensures that this accessibility does not come at the cost of integrity. Ultimately, this technology-led evolution has not only enhanced operational efficiency but has also built a foundation of trust, positioning the Indian capital markets as a resilient and competitive force on the global stage.

Uncertain Climate, Uncertain Market

- Sangeetha Paduvadurai, PGPISM, 2025-26



Climate change marks a major role in market behavior and its stability. While major developing economies are focusing on the advent of economic policies and their implementation, one of the major problem they are facing is the lack of attention given to the climate policy uncertainty [CPU]²³. These policies are highly understudied and undervalued factors that are affecting the major emerging companies. It addresses the unpredictability relating to government policies, regulations and actions designed to address climate change. The major reason that these climatic factors affect the developing countries more is their price sensitivity to climate change.²⁴

India, South Africa and Indonesia market have experienced sincere destabilization due to the CPU affecting the derivative pricing and policies. The changes can be viewed in the carbon pricing frameworks withdrawals or reversals in renewable energy incentives, or arbitrary delays in implementing emissions legislation due to the inconsistency in the government policies. The reaction of the investors is not only to ever-changing price instabilities but also the rumpus of the change, hedging strategies and expectations of the consumer often leading to dramatic results.

²³ Nicholas Bloom, The Impact of Uncertainty Shocks, 77 *Econometrica* 623 (2009).

²⁴ Scott R. Baker, Nicholas Bloom & Steven J. Davis, Measuring Economic Policy Uncertainty, 131 *Q.J. Econ.* 1593 (2016).

In the specific case of India²⁵, in 2022 the government suddenly announced the withdrawal of the coal subsidy reforms which created volatility in the energy future prices. Brazil's differentiated deforestation policies between 2018-2023²⁶, causes fluctuation in the overall agricultural output. The delay of South Africa²⁷ in the implementation of carbon taxes led to inconsistency in the hedging and risk management in the country. This shows the importance of climate policy uncertainty in the actual regulatory world and the urgency of its implementation. Illustrations from the UN COP26 summit²⁸ in 2021 show that oil futures in India and Indonesia spiked following announcements on fossil fuel financing, while similar reactions in mature markets such as the U.S. and EU were muted, underscoring the greater sensitivity and structural fragility in emerging economies.

The major challenges will be faced by the key stakeholders specifically in the energy oriented and carbon sensitive trading while on the other hand the establishing a stable and predictable climate policy or climate based trade regulation framework may help ensure longer term investor confidence. The cost of unclear or poorly communicated policy decisions is therefore both economic and environmental, demanding better cross-sector collaboration and more transparent governance.

In Conclusion, an inconsistent climate regulatory framework will cause shockwaves to an entire financial market and disrupt the risk management system of the country focusing specifically on the smaller and developing companies majorly through volatility, liquidity and sentiment channels. As developing nations continue to advance carbon pricing and green finance initiatives, there is an urgent need to understand CPU's implications for market stability and effective policy rollout. This calls not only for enhanced empirical research and better data, but also for a reinvigorated commitment to policy clarity and consistency from national governments.

²⁵ National Stock Exchange of India Ltd., Historical Data: Energy Derivatives, <https://www.nseindia.com>(last visited Dec. 2, 2025).

²⁶ B3 – Brasil Bolsa Balcão S.A., Derivatives Market Data, <https://www.b3.com.br>(last visited Dec. 2, 2025).

²⁷ Carbon Tax Act 15 of 2019 (S. Afr.).

²⁸ U.N. Framework Convention on Climate Change (UNFCCC), Glasgow Climate Pact, U.N. Doc. FCCC/PA/CMA/2021/10/Add.1 (Nov. 13, 2021).

Milestones Achievements:



Atharv Agrawal
CFA Level I



Tinu Nahata
CMT Level III



Sanyam Agrawal
CFA Level I



Elanishi Agrawal
Decode The Corporation,
2025 IIM Rohtak



Harish Yadav
CS Professional



Simran Singh
U.P. Achiever Award



Rushikesh Ugale Singh
MCX IPF 2026
Zonal Winner



Naman Jain
Published Research
Paper in IIM Bodhgaya



Krishnakumar
Advanced Diploma In
Accounting and
International Journals
Business (ACCA)

Activities in the Student Academic Club:

Debate Competition

Mindverse, the Academics Club of National Institute of Securities Markets, conducted a high-intensity debate on “Are Social Media Finfluencers Guiding Investors to Fortune or Folly?” to examine the impact of digital financial influence.

Held on Children’s Day (14th Nov. 2025), the event featured a parliamentary-style format with over 25 participants presenting evidence-backed arguments and rebuttals.

The competition strengthened analytical thinking, public speaking, and responsible engagement with emerging trends in the financial ecosystem.

Winners:

For the Motion

1st Position: Sanjay Chidambaram – PGPISM

2nd Position: Harsh Gulati – PGDM (SM)

3rd Position: Anishka Vardhan Kushwaha – PGDM (SM)

Against the Motion

1st Position: Aditya Ojha – LLM (I & SL)

2nd Position: Urvi Priyadarshini – PGDM

(SM) 3rd Position: Yash Raj Singh – PGDM

(SM)

FINBRAIN BATTLE | The Ultimate Finance Quiz Challenge

The Academics Club at the National Institute of Securities Markets (NISM) conducted FINBRAIN BATTLE, a quiz competition designed to test financial awareness, market comprehension and decision-making on 24th Nov. 2025.

The event covered finance fundamentals, current market developments, Market Infrastructure Institutions (MIIs), and the banking ecosystem, enabling participants to apply academic knowledge in a fast-paced competitive environment.

Structured across multiple rounds, the quiz assessed accuracy, speed, and teamwork and risk appetite. The competition began with an individual digital screening round on Wayground, progressed to collaborative Twin Battles, and culminated in a high-stakes

Rapid Fire buzzer round, demanding sharp reflexes, strategic thinking and conceptual clarity.

Winners

1st Prize: Harsh Gulati – PGDM

2nd Prize: Mohit Singh Chauhan – PGDM 3rd

Prize: Gopal Saini – PGDM





PromptClash

PromptClash event (27 November 2025 - 15 December 2025) challenged participants to translate conceptual thinking into tangible outputs using AI tools, testing precision in prompting, creativity, and decision-making through a structured evaluation and public polling process, culminating in institutional recognition and certification.

Winners

Best Name Vishwa Khiloshiya (PGDM)

Best Logo Vishwa Khiloshiya (PGDM)

Best Tagline Shailesh Patel (PGCSM)



Beyond the Exchanges: The Hidden World of Derivatives Markets

Beyond the Exchanges: The Hidden World of Derivatives Markets on 17th December 2025 delivered direct exposure to institutional finance through an expert-led session on OTC (Over the Counter) derivatives, integrating regulatory theory, global market practice and career pathways with active student engagement via Q&A and a post-session quiz.

Winners

- 1st Position – Anurag Rajput (PGCSM)
- 2nd Position – Harsh Gulati (PGDM-A)
- 3rd Position – Sanjay Chidambaram (PGPISM)



FundMaster League

Event Overview

FundMaster League was a multi-round investment competition designed to test participants' understanding of fundamentals, macroeconomics, company-specific developments, and brokerage research interpretation.

Total Participation: 115

Total Teams Participated: 20

Total Stocks Analyzed: 6

Total Rounds: 4

Quiz Rounds: 4

Main Competition Winners: 3 Teams

Quiz Winners: 4 (one per quiz)



Round 1 – Fundamental Factor Analysis

In Round 1, teams evaluated six stocks based on fundamental factors such as business model strength, financial performance, profitability ratios, growth prospects, valuation metrics, and risk factors. Teams presented investment rationales supported by financial data and valuation frameworks.

Round 2 – Macro News Based Analysis

Round 2 focused on macroeconomic developments. Teams analyzed the impact of macro news such as interest rate changes, inflation data, GDP growth, and global economic cues on the selected stocks and adjusted their strategies accordingly.

Round 3 – Company-Specific News and Rumors

This round tested teams' ability to respond to company-specific developments, including earnings announcements, management commentary, regulatory updates, and market rumors. Emphasis was placed on differentiating between confirmed news and unverified information.

Round 4 – Brokerage Reports Analysis

In the final round, teams reviewed brokerage reports, including target prices, recommendations, and underlying assumptions. Teams compared brokerage views with their own analysis and justified whether to follow or take a contrarian position.

Quiz Competitions

Between each round, a quiz competition was conducted to test participants' market awareness and financial knowledge. A total of four quizzes were conducted, resulting in four quiz winners.

Conclusion

The FundMaster League successfully provided a comprehensive platform for participants to apply theoretical knowledge to real-world market scenarios. The event enhanced analytical thinking, teamwork, and decision-making under dynamic market conditions.



Team Winner

Team Name: Bear Cartel

1. Sahil Mutha
2. Haris Nachiyappan S
3. Sharang Amate
4. Prashant Dorle
5. Shubham Shivankar



2. Capital Guardian

1. Anindita Nandakumar
2. Aditya Ojha
3. Rudra Vyas
4. Abhimanyu Kasana
5. Ajay Krishna



3. Alpha Youth

1. Rahul Mehta
2. Ashutosh Balla
3. Bothra Kalp
4. Sai Rajath
5. Rahul Yadav



Quiz Winner

1. Harish Yadav
2. Ram Joukani
3. Vaishali Singh
4. Ashutosh Balla

Stock Guess Winner

1. Akshay Pal
2. Ashutosh Bhalla



Activities in NISM's Student Culture club

1. GANPATI CELEBRATION



-Date of the event: 27th – 28th August 2025

-Ganesh Chaturthi 2025 was a one-and-a-half-day celebration marked by devotion, cultural unity, and student participation. The event commenced on the evening of 26th August with the Aagaman and band procession, followed by the Sthapana on 27th August. The same day featured cultural performances by students, while the celebrations concluded with the Visarjan procession across the campus on the evening of 28th August. The event reflected strong teamwork, enthusiasm, and community spirit.

2. NISM GARBA RAAS NIGHT



- Date of the event: 27 September 2025

We celebrated Garba Night on our campus with great enthusiasm and vibrant energy. The campus came alive with colourful traditional attire, lively music, and joyful dance circles. It was a beautiful evening of culture, togetherness, and unforgettable memories.

- Names of winners:

1. Female Best Dress- Avani Firke (PGPISM)
2. Male best dress- Mohit Chauhan (PGDM)
3. Female Best Dance - Jaini pasad(PGPISM)
4. Male best dance -Akshay Pal (PGDM)



Activities in NISM's Students Sports Club

Name of the Event: Badminton Mania 2025

Date of the Event: 22–23 November 2025

Description: Badminton Mania 2025 was a two-day inter-batch badminton tournament of PGDM, PGPISM and LLM, organized to encourage competitive sports and active student participation. The event provided players with a structured platform to showcase technical skills, match discipline, and sportsmanship while fostering a high-energy and engaging sporting atmosphere.

Price Distribution: The Price distribution ceremony formally concluded Badminton Mania 2025 and recognized the outstanding performances of participants across all categories. The ceremony celebrated achievement, perseverance, teamwork, and fair play in the presence of peers and faculty.

Names of Winners:

Men Singles: Gold – Tejas Salunke, Silver – Rishabh Malpani, Bronze – Dheeraj Naraparaju

Women Singles: Gold – Deekshitha R, Silver – Supriya Jain, Bronze – Yamini Pokhriyal

Mixed Doubles: Gold – Rishabh Malpani & Deekshitha R, Silver – Dheeraj Naraparaju & Jaini Pasad, Bronze – Aadi Mehta & Roli Singh





Name of the Event: Football Tournament

Date of the Event: 21 September

The football tournament was organized on 21st September and witnessed enthusiastic participation from students across different batches. The event highlighted teamwork, endurance, and competitive spirit, creating an energetic sporting environment and encouraging active student engagement.



Winners: PGDM Batch



Runners-up: PGPISM Batch



INDUSTRY AND CONFERENCE VISITS

GLOBAL FINTECH FEST 2025



Visit at National Stock Exchange



Visit at Bombay Stock Exchange



SEBI SAMVAD 2026



REPRESENTING NISM WITH PRIDE

ASSOCIATION OF INVESTMENT BANKERS OF INDIA 2026



CDSL REIMAGINE IDEATHON 2026



5th position

**MCX COMQUEST 2026 (ZONE FINALIST)
FINALIST)**



6th position

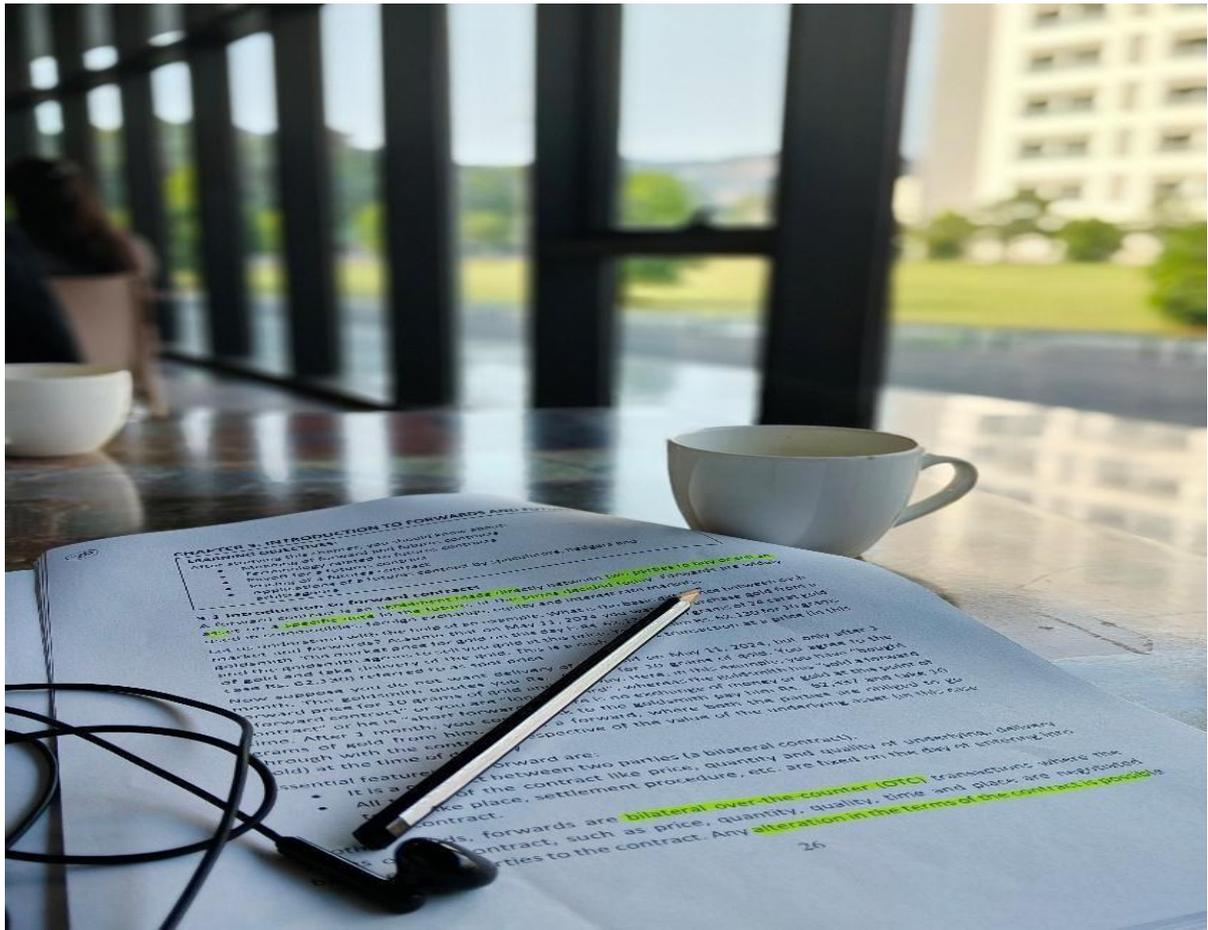
KSHITIZ FINSTREET 2026 (TOP 15)



LIFE at NISM









About NISM Certification Examinations

National Institute of Securities Markets (NISM) performs two functions delegated to it under the SEBI (Certification of Associated Persons in Securities Markets) Regulations, 2007.

- Offering mandatory Certification Examinations to associated persons of the securities market intermediaries, and
- Offering Continuing Professional Education (CPE) Programs to associated persons of the securities market intermediaries.

Sr.	NISM Certification Examinations - Mandated By SEBI	Duration (in mins)	Max Marks	Pass Marks(%)	Negative Marks(%)	Certificate Validity (in years)	Fees (₹)
01	NISM-Series-I: Currency Derivatives	120	100	60%	25%	3	₹1500
02	NISM-Series-II-A: Registrars to an Issue and Share Transfer Agents - Corporate	120	100	50%	-	3	₹1500
03	NISM-Series-II-B: Registrars to an Issue and Share Transfer Agents - Mutual Fund	120	100	50%	-	3	₹1500
04	NISM-Series-III-A: Securities Intermediaries Compliance (Non-Fund)	120	100	60%	25%	3	₹1500
05	NISM-Series-III-C: Securities Intermediaries Compliance (Fund)	120	100	60%	25%	3	₹1500
06	NISM-Series-IV: Interest Rate Derivatives	120	100	60%	25%	3	₹1500
07	NISM-Series-V-A: Mutual Fund Distributors - English	120	100	50%	-	3	₹1500
08	NISM-Series-V-A: Mutual Fund Distributors - Hindi	120	100	50%	-	3	₹ 1500
09	NISM-Series-V-B: Mutual Fund Foundation	120	50	50%	-	3	₹ 1200
10	NISM-Series-VI: Depository Operations	120	100	60%	25%	3	₹ 1500
11	NISM-Series-VII: Securities Operations and Risk Management	120	100	50%	25%	3	₹ 1500
12	NISM-Series-VIII: Equity Derivatives	120	100	60%	25%	3	₹ 1500
13	NISM-Series-IX: Merchant Banking	120	100	60%	25%	3	₹ 1500
14	NISM-Series-X-A: Investment Adviser (Level 1)	180	150	60%	25%	3	₹ 3000
15	NISM-Series-X-B: Investment Adviser (Level 2)	180	150	60%	25%	3	₹ 3000
16	NISM-Series-X-C: Investment Adviser Certification (Renewal)	60	50	50%	-	3	₹ 2500
17	NISM-Series-XIII: Common Derivatives	180	150	60%	25%	3	₹ 3000
18	NISM-Series-XV: Research Analyst	120	100	60%	25%	3	₹ 1500
19	NISM-Series-XV-B: Research Analyst Certification (Renewal)	60	50	50%	-	3	₹ 2500
20	NISM-Series-XVI: Commodity Derivatives	120	100	60%	25%	3	₹ 1500

Sr. NISM Certification Examinations - Mandated By SEBI		Duration (in mins)	Max Marks	Pass Marks(%)	Negative Marks(%)	Certificate Validity (in years)	Fees (₹)
21	NISM-Series-XIX-C: Alternative Investment Fund Managers	180	150	60%	25%	3	₹ 3000
22	NISM-Series-XIX-D: Category I and II Alternative Investment Fund Managers	120	100	60%	25%	3	₹ 1500
23	NISM-Series-XIX-E: Category III Alternative Investment Fund Managers	120	100	60%	25%	3	₹ 1500
24	NISM-Series-XXI-A: Portfolio Management Services (PMS) Distributors	120	100	60%	10%	3	₹ 1500
25	NISM-Series-XXI-B: Portfolio Managers	180	150	60%	25%	3	₹ 3000

Sr. NISM Certification Examination - Mandated By PFRDA		Duration (in mins)	Max Marks	Pass Marks(%)	Negative Marks(%)	Certificate Validity (in years)	Fees (₹)
01	NISM-Series-XVII: Retirement Adviser	120	100	60%	25%	3	₹ 1500

Sr. NISM Certification Course - Mandated By IFSCA		Duration (in mins)	Max Marks	Pass Marks(%)	Negative Marks(%)	Certificate Validity (in years)	Fees (₹)
01	NISM-IFSCA-01: Certification Course on AML and Counter Terrorist Financing in the IFSC	60	50	50%	-	2	₹ 885

Sr. NISM Certification Examinations - Non-Mandatory		Duration (in mins)	Max Marks	Pass Marks(%)	Negative Marks(%)	Certificate Validity (in years)	Fees (₹)
01	NISM-Series-XII: Securities Markets Foundation	120	100	60%	-	3	₹ 1770
02	NISM-Series-XIX-A: Alternative Investment Funds (Category I and II) Distributors	120	100	60%	10%	3	₹ 1770
03	NISM-Series-XIX-B: Alternative Investment Funds (Category III) Distributors	120	100	60%	10%	3	₹ 1770
04	NISM-Series-XXIII: Social Impact Assessors	120	100	60%	25%	3	₹ 1770
05	NISM-Series-XXIV: AML and CFT Provisions in Securities Markets	60	50	50%	-	3	₹ 885

Sr. Investor Awareness Test		Duration (in mins)	Max Marks	Pass Marks(%)	Negative Marks(%)	Certificate Validity (in years)	Fees (₹)
01	SEBI Investor Awareness Test (Available in English, Hindi, Marathi, Telugu, Bengali)	60	50	50%	-	2	Free

Sr. IBBI Certification Examinations - Administered by NISM		Duration (in mins)	Max Marks	Pass Marks(%)	Negative Marks(%)	Certificate Validity (in years)	Fees (₹)
01	IBBI: Valuation Examination in the Asset class: Land and Building	120	100	60%	25%	-	₹ 5900
02	IBBI: Valuation Examination in the Asset class: Plant and Machinery	120	100	60%	25%	-	₹ 5900
03	IBBI: Valuation Examination in the Asset class: Securities or Financial Assets	120	100	60%	25%	-	₹ 5900

Revalidation of Certification through Continuing Professional Education (CPE) Program

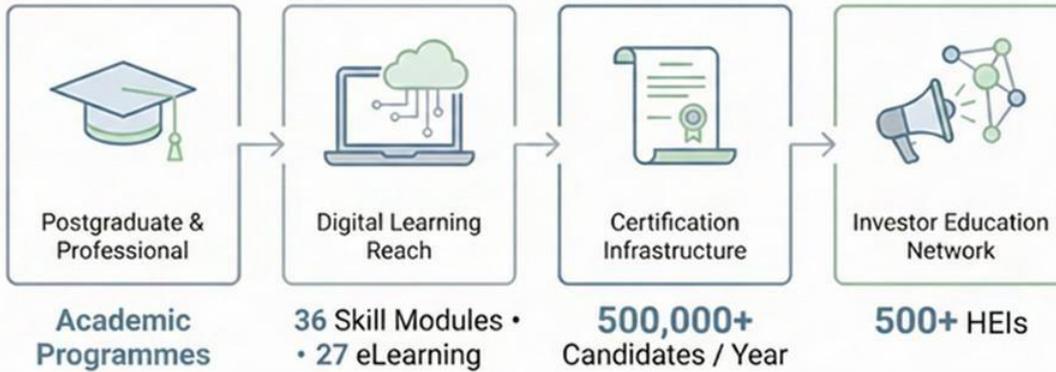
Upon expiry of the validity of the certificate obtained by an associated person, the certificate shall be re-validated by passing the relevant NISM Certification Examination before the expiry of the existing certificate or by successfully completing a program of relevant Continuing Professional Education (CPE) or the relevant renewal examination as may be specified by NISM during 12 months preceding the date of expiry of the existing certificate.

NISM offers its CPEs both in the physical (classroom) format as well as in the online eCPE format.

Sr. NISM CPE Certifications – Physical/Classroom CPEs		Duration (approx.)	Certificate Validity (in years)	Fees (₹)
01	NISM Series-I: Currency Derivatives	6 hrs	3	₹3000
02	NISM-Series-II-A: Registrars to an Issue and Share Transfer Agents-Corporate	6 hrs	3	₹3000
03	NISM-Series-II-B: Registrars to an Issue and Share Transfer Agents-Mutual Fund	6 hrs	3	₹3000
04	NISM Series-III-A: Securities Intermediaries Compliance (Non-Fund)	6 hrs	3	₹3000
05	NISM Series-IV: Interest Rate Derivatives	6 hrs	3	₹3000
06	NISM Series-V-A: Mutual Fund Distributors	6 hrs	3	₹3000
07	NISM Series-V-B: Mutual Fund Foundation	6 hrs	3	₹3000
08	NISM Series-VI: Depository Operations	6 hrs	3	₹3000
09	NISM Series-VII: Securities Operations and Risk Management	6 hrs	3	₹3000
10	NISM Series-VIII: Equity Derivatives	6 hrs	3	₹3000
11	NISM Series-IX: Merchant Banking	6 hrs	3	₹3000
12	NISM Series-XIII: Common Derivatives	6 hrs	3	₹3000
13	NISM Series-XVI: Commodity Derivatives	6 hrs	3	₹3000
14	NISM Series-XVII: Retirement Adviser	6 hrs	3	₹3000
15	NISM-Series-XXI-A: Portfolio Management Services (PMS) Distributors	6 hrs	3	₹3000
16	NISM-Series-XXI-B: Portfolio Managers	6 hrs	3	₹3000

Sr.	NISM eCPE Certifications – Online CPEs (eCPEs)	Duration (approx.)	Certificate Validity (in years)	Fees(₹)
01	NISM Series – I: Currency Derivatives	3-5 hrs	3	₹2500
02	NISM-Series-II-A: Registrars to an Issue and Share Transfer Agents-Corporate	3-5 hrs	3	₹2500
03	NISM-Series-II-B: Registrars to an Issue and Share Transfer Agents-Mutual Fund	3-5 hrs	3	₹2500
04	NISM Series – III-A: Securities Intermediaries Compliance (Non-Fund)	3-5 hrs	3	₹2500
05	NISM Series – IV: Interest Rate Derivatives	3-5 hrs	3	₹2500
06	NISM Series – V-A: Mutual Fund Distributors	3-5 hrs	3	₹2500
07	NISM Series – V-B: Mutual Fund Foundation	3-5 hrs	3	₹2500
08	NISM Series – VI: Depository Operations	3-5 hrs	3	₹2500
09	NISM Series – VII: Securities Operations and Risk Management	3-5 hrs	3	₹2500
10	NISM Series – VIII: Equity Derivatives	3-5 hrs	3	₹2500
11	NISM Series – IX: Merchant Banking	3-5 hrs	3	₹2500
12	NISM Series – XIII: Common Derivatives	10-11 hrs	3	₹2500
13	NISM Series – XVI: Commodity Derivatives	3-5 hrs	3	₹2500
14	NISM-Series-XXI-A: Portfolio Management Services (PMS) Distributors	3-5 hrs	3	₹2500
15	NISM-Series-XXI-B: Portfolio Managers	3-5 hrs	3	₹2500

'NISM 2025: Building Market Capability at Scale'



LAUNCH OF HANDS-ON TRAINING AT NISM BLOOMBERG FINANCE LAB

NISM

Bloomberg Finance Lab

THE LAB WHERE KNOWLEDGE MEETS MARKETS

Hands-On Training at NISM Bloomberg Finance Lab Now Available.

NISM has launched a dedicated Bloomberg Finance Lab to enhance experiential learning for students across finance and capital market domains. The state-of-the-art lab provides hands-on exposure to Bloomberg Terminals, enabling students to gain practical, industry-relevant skills. HEIs interested in Bloomberg training now have an opportunity to design customized campus visits at NISM. Participants can learn directly on Bloomberg Terminals and experience real-time financial data analysis. This initiative reinforces NISM's commitment to bridging academia with industry-driven learning.

NISM National Institute of Securities Markets
A Capacity Building Initiative of SEBI

Academic programs offered:

Residential Programs

- ▶ PGDM (SM)
- ▶ LL.M (I&SL)
- ▶ PGPISM
- ▶ PGCSM

Non-Residential Programs

- ▶ PGPFP
- ▶ PGP (PM/IA/RA)
- ▶ CPDS (Advance)
- ▶ CPDS (Basic)

Applications Now Open



SCAN HERE

+91-82680 02412 | www.nism.ac.in/long-term-programs/

APPLICATIONS ARE NOW OPEN FOR THE NISM PG PROGRAMMES

Interested candidates are invited to apply and take the next step toward building a career in the securities and financial markets.



NATIONAL INSTITUTE OF SECURITIES MARKETS

NISM REGISTERED OFFICE

- 5th Floor, NCL Cooperative Society,
Plot No. C-6, E-Block, Bandra Kurla Complex,
Bandra East, Mumbai – 400051
- Board Line: +91-22-41738811

NISM CAMPUS

- Plot No. IS 1 & IS 2, Patalganga Industrial Area,
Mohopada, Rasayani, District Raigad,
Near Navi Mumbai, Maharashtra – 410222
- Board Line: +91-2192-668300/01

NISM NAVI MUMBAI OFFICE

- NISM Bhavan, Plot No, 82, Sector-17,
Vashi, Navi Mumbai – 400703



X @NISM_Official

Instagram nism_official

Facebook nismindia

www.nism.ac.in

LinkedIn NISM.Linkedin

Facebook NISM Official