

5th Annual International Research Conference on Securities Market

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Harnessing Technology, Innovation, and Regulations for Sustainable Growth

Good morning, ladies and gentlemen,

It is an honour to stand before you today and address such a distinguished gathering on a subject that is pivotal to India's financial future—"Harnessing Technology, Innovation, and Regulations for Sustainable Growth."

We are living in an era of rapid transformation. Technology is reshaping industries, innovation is unlocking new opportunities, and progressive regulations are ensuring stability in an evolving financial landscape. But as we embrace change, we must also recognize that with progress comes complexity. The challenge before us is clear—how do we strike the right balance between technological advancement, financial ingenuity, and regulatory prudence to ensure that growth is not just rapid, but also sustainable and inclusive?

Today, I will explore how these three pillars—Technology, Innovation, and Regulations—can work together to drive long-term economic growth. But before we delve deeper- let's take a quick snapshot of where we stand today.

Market Snapshot (Where do we stand today)-

India's financial markets have demonstrated unprecedented resilience and growth. At the end of Dec-24, Nifty stands at 23,645 and the Sensex at 78,139— testament to India's economic momentum. The total market capitalization of Indian stock exchanges has surpassed \$4.33 trillion¹, making India the fourth-largest stock market globally. The number of demat accounts has surged to 18.53 crore, with 3.88 crore on NSDL and 14.65 crore on CDSL—a clear indication of rising investor participation. Foreign Portfolio Investors (FPI) infused a net ₹25,938.34 crore into Indian equities in December 2024, reaffirming global confidence in our markets. IPO activity remains strong, with 259 issues raising ₹1,53,987 crore till Dec-24 with 73% of them from SME segment.

India's financial landscape is evolving rapidly. Market volatility is being mitigated by strong domestic participation, regulatory advancements, and digital financial inclusion.

Now let's explore the three pillars of sustainable growth one by one –

¹ On 23 January 2024, Bloomberg reported the combined value of shares listed on Indian exchanges reached US\$4.33trn compared with US\$4.23trn for Hong Kong and overtaking it as the world's fourth largest stock market.

I. Technology: The Catalyst for Transformation

Technology has become the backbone of economic progress. The fourth industrial revolution, driven by artificial intelligence (AI), blockchain, big data, cloud computing, and the Internet of Things (IoT), is reshaping how businesses operate, how consumers interact with financial markets, and how governments regulate industries.

Digital Transformation and Financial Inclusion

- India is now one of the fastest-growing FinTech markets in the world, with digital payments expected to cross \$10 trillion by 2026². The rise of FinTech has revolutionized financial services, making them more accessible, affordable, and efficient.
- Digital payments, mobile banking, and UPI (Unified Payments Interface) have democratized finance, bringing millions into the formal economy. According to data from the NPCI, 12.20 billion UPI transactions worth ₹18.41 lakh crore were processed in January 2024, representing a 41.72% increase in transaction value compared to January 2023.
- AI-driven investment platforms and robo-advisors have made stock market participation easier, more efficient, and accessible to retail investors.

AI and Machine Learning in Capital Markets

- AI-powered fraud detection and RegTech (Regulatory Technology) solutions are helping regulators identify anomalies and prevent market manipulations.
- Machine learning and various LLM models have enhanced market efficiency, but they also introduce challenges related to transparency and systemic risks.
- Use of block chain techniques in various areas of securities markets enhances transparency and trust in the system.

II. Innovation: The Engine of Economic Growth

Innovation is the lifeblood of a thriving economy. When harnessed effectively, financial and technological innovations can unlock new opportunities, enhance market efficiency, and drive sustainable development.

Financial Innovation and Capital Market Growth

- The emergence of fractional investing, zero-commission trading, and alternative investment products has made capital markets more inclusive.

² Report by PhonePe and Boston Consulting Group

- Instruments such as REITs (Real Estate Investment Trusts), InvITs (Infrastructure Investment Trusts), and Green Bonds are unlocking new avenues for capital flow into critical sectors.
- The rise of sustainable finance and ESG (Environmental, Social, and Governance) investing is a testament to how innovation can drive responsible growth.

The Role of Start-ups and Entrepreneurs

- The startup ecosystem is playing a pivotal role in driving disruptive innovation across industries.
- Government initiatives such as Startup India and regulatory sandboxes are enabling experimentation while ensuring consumer protection.
- DeepTech startups in AI, cybersecurity, and quantum computing are pushing the boundaries of technological progress.

Innovation in Regulatory Compliance (RegTech)

- Compliance in financial markets is increasingly complex, but RegTech solutions powered by AI and block chain are helping firms meet regulatory requirements efficiently.
- Automated reporting, risk assessment, and identity verification (eKYC, AML solutions) are reducing fraud and improving governance.
- The future of compliance lies in real-time regulatory monitoring through AI-driven surveillance mechanisms.

III. Regulations: The Guardrails for Sustainable Growth

While technology and innovation drive progress, regulations serve as the guardrails that ensure stability, fairness, and investor protection. The right regulatory framework can promote confidence, mitigate risks, and enable long-term economic resilience.

Striking the Right Balance: Innovation vs. Stability

The challenge for regulators is to foster innovation without stifling progress or exposing markets to undue risks. A proportionate and principle-based approach to regulations rather than a rigid rule-based framework ensures that markets remain agile and adaptable.

SEBI's Role in Shaping India's Capital Markets

SEBI has played a pivotal role in ensuring market integrity, investor protection, and corporate governance.

Initiatives such as T+0 settlement, tighter disclosure norms for IPOs, and stricter F&O regulations have strengthened market resilience.

The rise of retail participation demands greater investor education to mitigate risks associated with speculative trading.

Global Regulatory Trends and India's Positioning

- India is the first major economy to transition to T+0 settlement; it has been expanded to top 500 stocks beyond the initial 25 stocks.
- The European Union's MiFID II framework, the SEC's tightening oversight on digital assets, and China's evolving financial regulations offer lessons for India.
- As India aspires to be a \$5 trillion economy, regulatory policies must align with global best practices while catering to local market dynamics.
- Collaboration between regulators, industry participants, and technology providers will be key to crafting future-ready regulations.

The Path Forward: A Collaborative Approach

For sustainable growth, technology, innovation, and regulation must not work in silos—they must complement each other.

Public-Private Partnerships (PPPs)

- Governments, regulators, and the private sector must collaborate to drive responsible innovation.
- Sandboxing mechanisms and regulatory tech hubs can facilitate controlled experimentation.

Education and Awareness for Market Participants

Investor awareness initiatives need to be broadened to provide retail investors with a comprehensive understanding of market risks. In this regard, SEBI conducts investor education programs through Securities Market Trainers (SMARTs) who are empanelled by SEBI. As on March 31, 2024 SMARTs organised 25,531 programmes in 2023-24. SEBI runs numerous awareness programmes through digital channels as well, like SEBI investor website that had 8.35 lakh visitors with an average of 69k visitors per month during 2023-24.

Recently, SEBI launched digital knowledge repository **Dharohar** “Milestones in the Indian securities market” aimed at providing extensive information regarding the development of India's financial markets to the public.

Ethical Considerations in AI and Finance

- AI and automation must be transparent, unbiased, and accountable to ensure fair market practices.

- Ethical AI governance will be critical in maintaining trust in financial markets.

Conclusion: A Future Built on Resilience and Opportunity

Ladies and gentlemen, the future of India's financial markets will be defined by how well we harness technology, encourage innovation, and implement progressive yet protective regulations.

We stand at the cusp of a new financial era. By embracing technological advancements, fostering entrepreneurial dynamism, and strengthening regulatory frameworks, we can build a financial ecosystem that is resilient, inclusive, and globally competitive.

Let us work together—as regulators, industry leaders, policymakers, and innovators—to shape a market that drives sustainable growth, investor confidence, and long-term prosperity.

Thank you.