# Greening Indian Financial Markets for Sustainable Development

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**Abstract**

This article summarizes the recent developments in India's securities markets regulations, instruments, and intermediaries. It documents the latest and first-ever initiatives in the Indian securities markets such as the implementation of the T+1 settlement cycle, introducing social stock exchange with Zero Coupon and Zero principal bonds, a stronger framework for green debt securities through blue, green, and yellow bonds. The article also dwells upon the regulations related to Business Responsibility and Sustainable Reporting (BRSR), and ESG disclosures and ratings aimed at setting up an efficient market structure by strengthening the governance system. The fourth annual international capital markets conference was organized to foreground India's multiple challenges and to encourage policy discussion about the latest developments in the Indian securities market. A brief summary of relevant papers presented in the conference and published in this issue is provided at the end of the article.[4]

**JEL:** G10, G20, G30, G40 **SDG:** SDG8, SDG17

**Keywords:** Indian securities markets, sustainable finance, recent developments

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[4] **Acknowledgement**

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## Introduction

The Indian securities market is one of the developed markets worldwide that has been innovative in introducing new instruments and exchanges. It provides access to all the categories of investors and market participants, has robust, effective risk management, and is overseen by an effective regulator who balances market development and investor protection, ensuring the market remains efficient and relatively free from abuse. A series of policy initiatives led by the market regulator has helped diversify the market in terms of products, participation and process improvements, resulting in faster and default-free clearing and settlement. Recent initiatives that have become news headlines include the establishment of the social stock exchange - introduction of zero coupon and zero principal instruments, interoperability of the clearing corporation, the introduction of T+1 rolling settlement, the establishment of online KYC process for onboarding of clients, strengthening the margining and risk management system, pilot introduction of T+0 settlement process.

In terms of the number of listed companies worldwide, India ranks at the topmost, followed by the USA at number two and Japan and China at number three and four, respectively. India's market capitalization is $ 4.7 trillion (Rs.394 Lakh crore) as of 31st March 2024) and is ranked fourth globally, after the USA, China, and Japan (Source: NSE Market Pulse, April 2024). The introduction of online KYC helped to increase the number of DMAT accounts to 16.9 crores by April 2024, from 4. 1 crore in March 2020, resulting in 312% growth in four years. The Indian mutual fund industry's total asset under management (AUM) first crossed ₹ 10 Trillion in 2014 and crossed ₹ 20 Trillion in August 2017. The AUM crossed ₹ 30 Trillion for the first time in November 2020, and the same is ₹ 57.26 Trillion as of April 30, 2024. Further, the mutual fund industry crossed ten crore folios in 2021 and stood at 18.15 crore as of April 30, 2024 (Source: AMFI).

The Indian equity markets generated more than 11% Compound annual growth rate (CAGR) in five and ten years, more than 13% CAGR in 15 and 25 years, and more than 12% in 20 years, the highest worldwide. Indian equity market was dominated by foreign portfolio investors (FPIs) before COVID-19. However, due to the unprecedented phenomenal increase in the participation of individual investors, supported by Domestic Institutional Investors (DIIs), we now have a market where the individual investors, DII and FPI, evenly contribute to the daily turnover in the market. Hence, we rarely see markets falling due to FPI booking profit or selling. The NSE market Pulse April 2024 reports that in the case of percentage participation of different categories of investors in the cash markets, individual investors contribute the highest (35%), followed by the proprietary traders(28%), FPIs (15%), DIIs(11%) and others 4%. At the same time, in the equity options, proprietary traders contribute the most (50%), followed by individuals (35%), and the FPIs' participation is just 9%. However, FPIs participate more in equity futures (22%) after Propritory traders (35%), and the individual investor participation is 20%.

Brokers are the key players in any securities market and play a crucial role in expanding the market reach, facilitating transactions, providing investment advisory services, and ensuring compliance with regulatory norms. The simplified online KYC process led to a new class of online discount brokers, who leveraged technology to provide easy access to investing platforms with low transaction costs and penetrated the retail segment, resulting in increased participation in the segment over time. The online discount brokers grew too big too soon, adding millions of new clients in a short period. These changes have led to substantial shifts in the rules and regulations for brokers, reflecting the evolving nature of the industry. Based on criteria like the total number of active clients, daily trading volumes, the value of total client assets and amount of end-of-day margin obligations, SEBI brought out a particular category of stock brokers known as Qualified Stockbrokers by amending SEBI (Stock Brokers) Regulation 1992 in January 2023. The stock broker designated as a QSB shall be required to meet enhanced obligations and discharge responsibilities to ensure appropriate governance structure, appropriate risk management policy and processes, scalable infrastructure and appropriate technical capacity, framework for orderly winding down, robust cyber security framework, and investor services including online complaint redressal mechanism. The exchanges were also required to monitor and supervise the QSBs and ensure compliance. The regulation was a pre-emptive measure aimed at protecting investors' interests and ensuring the markets' orderly functioning.

The exchange-traded Indian derivatives markets started with the introduction of equity derivatives in 2000, commodity derivatives in 2003, and currency derivatives in 2008. The interest rate derivatives have seen a rise and fall with the introduction and re-introduction in 2003, 2009, 2011, and 2014. The 2014 interest rate derivatives are picking up and have succeeded. The Securities and Exchange Board of India (SEBI) is the sole equity and commodity derivatives regulator. However, for the interest rate and currency derivatives, the spot is under the Reserve Bank of India (RBI), and exchange-traded derivatives are under the regulatory supervision of SEBI. In 24 years, Indian derivatives have continuously set examples worldwide based on volumes traded in equity and currency derivatives. India dominates global derivatives trading, ranking number 1 in volume, equity index options, and currency futures and options. While ranking 4th in single stock futures and 6th in single stock options, India remains a strong player across the derivatives market. Within the derivative space, the regulatory interventions to protect and expand the markets include announcing a physical settlement mechanism for stock derivatives, permitting eligible foreign entities to participate directly in the Indian commodity derivative market, and permitting mutual funds to access the commodity derivative markets.

The Indian debt market is evolving, adding more feathers to its journey with the inclusion of sovereign gold bonds and more colours to the bonds like Green Bond and its subcategories like Yellow bonds (solar energy and related industries) and Blue Bonds (for sustainable maritime activities like sustainable fishing and water management). Many banks, financial institutions, and the Government of India have issued green bonds for specific projects in domestic exchanges and India's international stock exchange. The JP Morgan emerging bond market index announced to include India in June 2024 led to more debt inflows from FPIs. The Indian government and the corporate bond market will prosper with this inclusion. Significant regulatory intervention here includes the regulatory framework for online bond trading platforms.

The rest of the sections in this article are organized in the following manners- Section two presents the market infrastructure institutions (MIIs); section three briefly reports the governance and sustainable finance initiatives taken in India; section four summarises the papers included in this special issue, which is followed by acknowledgement of the effort of various stakeholders to make the fourth capital markets conference a grand success.

**Market Infrastructure Institutions (MIIs):**

The Securities and Exchange Board of India (SEBI) was established in 1988 and got statutory power in 1992 to regulate the securities markets in India. Before SEBI, the Comptroller of Capital Issue (CCI) of the Ministry of Finance was regulating the securities markets in India. Bombay Stock Exchange (BSE) was established under a Banyan tree in 1875, marking its history as Asia's oldest stock exchange. Further, 24 regional stock exchanges in India operated across each state and closed in 2012 due to low volume. The National Stock Exchange (NSE) was the first electronic stock exchange established in 1993, and its operations started in 1994. Further, the Metropolitan Stock Exchange of India Limited (XMSE) was established in 2008. India currently has three stock exchanges – BSE, NSE, and XMSE- that deal with trading for equity cash and derivatives, currency derivatives, commodity derivatives and interest rate derivatives. India started two small and medium enterprise exchanges in 2012, with a new platform under the existing stock exchanges, the BSE SME exchange and the NSE EMERGE, to encourage and support SMEs in raising funds with less stringent regulations than the mainboard. As of 2022-23, 719 SMEs have raised funds worth ₹9348.48 Crore through SME exchange. With the growing number of not-for-profit organizations (NPOs), India started setting up social stock exchanges (SSE) to help the NPOs do more social activities for sustainable development. BSE and NSE began SSE to use new platforms with existing exchanges in 2022. The social stock exchange brought one innovative instrument: zero coupons and zero principal instruments (ZCZP). So far, seven social enterprises listed on the NSE SSE platform issued ZCZP instruments. Two depositories in India are National Securities Depository Limited (NSDL), established in 1996, and Central Depository Services Limited (CDSL), established in 1999. The clearing and settlement are done through the clearing corporations. Currently, India has two clearing corporations. The National Securities Clearing Corporation Limited (NSCCL) was established in 1995 and started operation in April 1996, and the Indian Clearing Corporation Limited (ICCL) was established in 2007. The interoperability of clearing corporations in 2019 further increased the confidence of investors and market participants.

India has a long history of dealing with commodity derivatives. The establishment of BSE started with cotton trading in 1875. The Forward Market Commission (FMC) has regulated India's exchange-traded commodity derivatives markets from 1953 to 2015. The FMC merged with SEBI on 28th September 2015, and commodity derivatives were declared as one of the securities, amending the Securities Contract Regulation Act (1956). Currently, India has three special commodity exchanges -The Multi Commodity Exchange (MCX), established in 2003, specialized in energy and metal commodities; The National Commodities and Derivatives Exchange (NCDEX), established in 2003, specialized in agricultural commodities. The Indian commodity exchange (ICEX), established in 2017, is the first commodity exchange in the world to start with Diamond trading. Unlike the regional stock exchanges, India had several regional commodity exchanges, but the same has been closed with the development of trading platforms. Since commodity derivatives are considered securities, the existing stock exchanges started their commodity trading platform after 2015.

The real estate investment trusts (REITs) and the infrastructure investment trusts (InvITs) were introduced by SEBI in India in 2014. So far, 28 listed InvITs and eight unlisted InvITs raised ₹ 83,390 crore and ₹ 27 903 crore, respectively. At the same time, eight listed REITs raised ₹ 18,840 crore. The first InvITs, both listed and unlisted, and REITs started in 2019-20 and, in total, raised ₹ 1,30,133.6 crore. (Source: SEBI). In 2023, SEBI introduced fractional REITs to bring more liquidity to the instrument. The alternative investment funds industry is proliferating in India.

**Internationalization of Indian Securities Markets:**

Based on the International Financial Services Authority (IFSCA) Act 2019, India set up IFSCA in 2020 to develop and regulate financial products, financial services, and financial institutions in IFSC at Gift City, Gandhinagar in Gujrat. NSE and BSE started their international stock exchanges in Gift City, establishing NSE International Exchange (NSE IX) and India International Exchange Limited (India INX), respectively, in 2016 and started their operation in 2017. Various instruments, including equity, debt, commodity, and currency derivatives listing, are available for trading on these international exchanges, providing opportunities for all global companies, investors, and intermediaries to participate. This will result in India becoming an international hub.

**Governance and Sustainable Finance Initiative**

SEBI introduced the corporate responsibility and sustainability report (BRSR) to cover listed companies' ESG and sustainable aspects. The BRSR covers nine principles of the 'National Guidelines on Responsible Business Conduct' (NGBRCs), with reporting divided into essential and leadership indicators for each principle. The top 1000 listed businesses (by market capitalization) must use BRSR from 2022-23, replacing business responsibility reports (BRR). To enhance the sustainability performance of the corporations, SEBI mandated a business responsibility and sustainability report (BRSR) for the top 1000 listed companies by market capitalization, replacing BRR from 2022-23. Further, SEBI introduced the BRSR core to include the environmental, social and governance (ESG) attributes comprising a set of Key Performance Indicators (KPIs) under 9 ESG attributes. The BRSR core is applied to the top 150 listed companies by market capitalization since 2023-24. SEBI also introduced the framework for ESG rating providers to streamline the ratings for Indian-listed companies in 2022-23. To track the sustainable performance of the stocks, companies with strong ESG practices were included in the ESG indices such as the NIFTY 100 ESG index, Nifty 100 enhanced ESG index, S&P BSE Carbonex and S&P BSE Greenex index. Several fund houses started introducing ESG funds in 2018 to include ESG in mutual funds. The mutual fund industry ESG AUM crossed more than 10 thousand crores.

**Summary of Papers included in this special issue**

Against the backdrop of the above events and regulations, the Fourth Annual International Capital Markets Conference, 2023, was organized by NISM in association with the Systemic Risk Centre of the London School of Economics and Political Science (LSE). The conference's broad theme was Securities Market: Governance, Instruments, and Regulation for Sustainable Development.

In this special issue, articles covering investment decisions and advice are Agarwal and Singh (2024); Singh and Sarva (2024); Mainkar, Borawake and Ranjane (2024); Vijaya, Hati and Thenmozhi (2024); Ali and Masood (2024). Several articles are focussed on the ESGs and finance: Dash and Sethi (2024); Mathath and Kumar (2024); Neethu and Arun (2024); Dwibedi, Pahi, and Sahu (2024); Panda Chari and Smark (2024); Pandey and Sharma (2024).

A number of articles in this special issue also addressed stock exchange studies and indexes. These include Meher and Mishra (2024); Mishra, Panda, Pradhan, Panda and Smark (2024); Nazareth and Reddy (2024); Sharma, Bamba, Verma and Verma (2024); Subba, Pandian and Vishal (2024). We thank the academics, reviewers, students, and organizers who worked so hard to make this special issue successful.

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