



Innovative Financial Instruments and Investors' Interest in Indian Securities Markets

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Abstract

Indian securities markets have undergone significant transformations in the recent past. The paper discusses and documents initiatives taken by the market regulator to expand and deepen the securities markets, including encouraging innovations in financial instruments, improving market efficiency by appropriate and timely regulatory interventions, expanding issuers' base and investors' participation for inclusive growth, ensuring regulatory compliance for fair play of market forces. The study helps investors, intermediaries, and regulators outside India to gain insights into recent developments and opportunities they offer to make the Indian securities market their preferred investment destination. The study concludes with the papers' key findings on "Investor interest and innovative instruments" in the special issue.

Keywords Indian securities markets · Social stock exchange · Green bond · Interoperability · Investors' interest · Innovative instruments

JEL Codes G10 · G28

1 Introduction

Securities markets play a vital role in the growth and development of an economy. Historically, the organised financial systems in the world began with bank-based intermediation, which gradually moved towards market-based intermediation. While the securities market has taken significant strides globally in recent decades, investors generally park their savings into several asset classes, including real estate, fixed

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deposits, insurance, pension funds, mutual funds, equity, commodity, currency etc. Apart from direct investing, a significant portion of society's savings is channelised indirectly into the securities market through institutional investors, like, banks, insurance companies, mutual funds, etc.

Securities markets serve the requirements of multiple stakeholders in various ways. They help in capital formation for economic growth, value creation for the corporates and wealth creation for investors. Lately, the securities markets have also contributed to developing thematic financing vehicles like REITs and InvITs, promoting socially responsible and impactful financing transparently through the social stock exchange and financing for sustainable development through green bonds and putting in place a framework for ESG financing. Securities markets ultimately act as a contributing channel/ catalyst for economic growth, employment generation, improving investors' financial health, efficient price discovery of underlying assets, etc. However, securities markets face challenges in protecting the interest of investors and the integrity of the market from unfair and fraudulent practices, like insider trading, price manipulation, etc. In order to uphold market integrity, the market regulators keep aligning their regulation and oversight in the context of changing landscape of the market due to technological advances and their application in securities markets. They develop new or amend the existing regulations, propose risk management framework, enable supervisory and surveillance systems, and more effective investigative processes, promote adequate and timely disclosure and ensure strict compliance. This paper presents the recent introduction of innovative financial instruments in Indian securities markets, their growth and development, and critical regulatory developments to take care of the interest of the investors and summarises the articles included in this special issue. This article also provided food for thought for the researchers to work on these innovative instruments.

Section two of this article deals with the growth and development of Indian securities markets; section three presents the recent steps taken by SEBI to develop Indian securities markets; section four presents the summary of research papers included in this issue; and section five provides the concluding remarks.

2 Growth and Development of Indian Securities Markets

The Bombay stock exchange (BSE) is Asia's oldest stock exchange, established in 1875 under a banyan tree. The transformation from an open outcry system to physical and electronic share trading was speedy for India. The Indian securities market is considered one of the matured securities markets worldwide. The Indian securities markets regulator, the Securities and Exchange Board of India (SEBI) plays a vital role in encouraging the application of technological advances in market regulations. Further, SEBI provides an enabling environment for institutions and issuers to innovate new instruments, promote new and relevant intermediaries, and fit regulatory innovations not only to regulate but also to take responsibility for the development of the markets. Every evolving market learns regulatory lessons through episodes and instances of market manipulative and unfair market practices. The Indian securities market is not an exception. Each such instance in history has helped to strengthen the

regulatory ecosystem and develop prowess to deal with such undesirable episodes before they undermine the investors' confidence in the market. The National stock exchange of India (NSE) is India's first electronic stock exchange, established in 1994. The metropolitan stock exchange of India (XMSE) was established in 2008. Currently, India has three stock exchanges- BSE, NSE and XMSE. There were 22 regional stock exchanges in India, but they all closed down over time.

Further, in commodities derivatives, India has a long history of setting up both regional and national commodity exchanges. The regional commodity exchanges have closed, and now we have two active commodities exchanges: Multi Commodity exchange (MCX) and National Commodity and Derivative Exchange (NCDEX) both established in 2003. Existing stock exchanges like BSE, NSE and XMSE started commodity-trading platforms after the merger of the Forward markets commission into SEBI in the year 2015.

National Securities Depository Limited (NSDL), established in 1996, and Central Depository Services (India) Limited (CDSL), established in 1999, are two depositories operating in India. The introduction of online KYC resulted in a sharp increase in demat accounts registered with these two depositories to 10.81 crores (7.78 crores with CDSL and 3.03 crores with NSDL). Indian market provides better returns in comparison to emerging and developed markets. The compound annual growth rate (CAGR) of the Indian market is much higher than that of the USA market. The five years CAGR is 10.8% for India and 8.9% for the USA. Both USA and India markets provided higher CAGR in 15 years. However, in 25 years Indian market provided 12.84%, and the USA market provided the least (4.66%) CAGR (see panel A of Fig. 1). India is number one in listed companies and contributes almost 13%, whereas the USA contributes 10% to world-listed companies (see panel B of Fig. 1). India contributes 3% and the USA 42% as of 2022 to world market capitalisation (see Panel C of Fig. 1). The market cap as a percentage of GDP (known as the Buffet indicator) is used as a long-term valuation indicator. Based on the Buffet indicator, the Indian market is less overvalued than the USA (see panel D of Fig. 1).

Derivatives Indian derivatives markets started in 2000 with equity derivatives (Index futures in June 2000, Index options in June 2001, and stock options in July 2001). Further, commodity derivatives were introduced in 2003, and currency derivatives in 2008. The interest rate derivatives were introduced in 2003 and 2009 and reintroduced in 2014. Over the years, Indian derivatives markets secured the number one position in several derivative instruments. The National Stock Exchange of India is the largest derivatives exchange in terms of the number of contracts traded (17.26 Billion contracts traded in 2021). NSE stands number one in terms of the number of contracts traded in Index options, number two in currency futures, and number one in currency options (NSE Annual Report 2021-22)¹.

Mutual Fund The Indian mutual fund industry has grown in five phases. Phase-1 was from 1963 to 86, when the Unit Trust of India (UTI) mutual fund was the only player;

¹ <https://static.nseindia.com//s3fs-public/inline-files/NSE%20Annual%20Report%202022%20%281%29.pdf>.

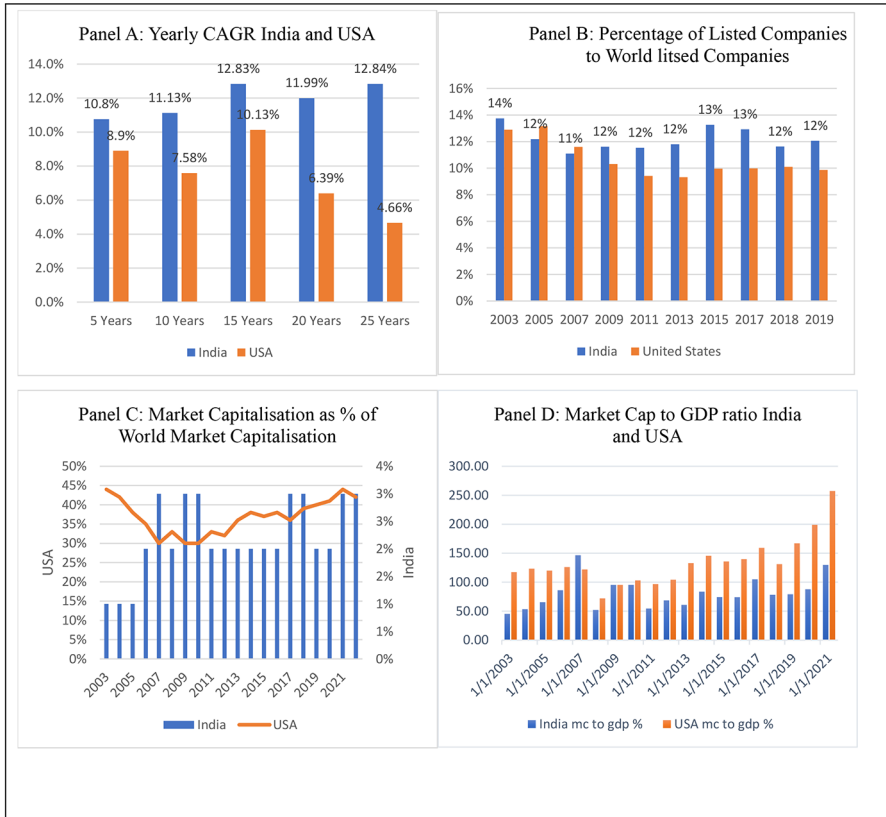


Fig. 1 Comparison between India and USA Market

Source: Bloomberg & Authors' calculation

phase II was from 1987 to 1992, in which PSU banks were allowed to enter into the mutual fund. During Phase III, from 1993 to 2002, private and foreign players were allowed to start their mutual fund houses. During Phase IV (from 2003 to 2014), the mutual fund industry's Asset under Management (AUM) crossed ₹ 10 trillion for the first time. We are in phase five, and the AUM has crossed ₹ 40 trillion. Forty-five mutual fund companies are operating, and several are waiting to start mutual fund companies in India.

3 Recent Initiatives by SEBI to Develop Indian Securities

This section contains the innovative financial instruments issued in India, new intermediaries, and new regulations to strengthen the Indian securities markets.

3.1 Innovative Financial Instruments

Zero Coupon Zero Principal Instrument Markets are familiar with Zero Coupon Bonds (ZCBs), but zero coupons zero principal is an innovative instrument. These instruments will be issued by non-profit organisations, listed in the social stock exchange, and considered securities². This instrument can be bought and sold in the market, but the social enterprise will not return either a coupon or principal.

REITs and InvITs The Real Estate Investment Trusts (REITs) owns, operates, and manages a portfolio of income-generating real estate assets, and the same is listed on the stock exchange. Investors benefit from investing in high-quality real estate assets in small ticket sizes. Infrastructure Investment Trusts (InvITs) help to provide additional financing for investment in infrastructure sectors in India. InvITs support the diversification of ownership of infrastructure assets (roads, ports, power transmission, renewable projects etc.)³. REITs and InvITs have been introduced in India since 2013.

Green Bond Green Bond is an innovative instrument first issued by World Bank in 2008 to finance environment-friendly projects. In India, SEBI introduced the green bond issue framework in 2017⁴ after a consultation paper in 2015⁵. So far, 15 companies in India have issued green bonds under SEBI regulations and raised ₹ 4539 crores.

Municipal Bond To fulfill the fund requirement of the municipality, SEBI is permitted to issue the municipal bond. Pune Municipal Corporation issued the first municipal bond in India in 2017. So far, fourteen municipal corporations have raised funds worth ₹ 2183.90 crores through issuing municipal bonds in India.

3.2 New Intermediaries

Gold Exchange The finance minister of India announced a gold spot exchange to be established by SEBI in the Union Budget 2021-22. The new gold exchange will provide transparency, enhance the gold trading and physical delivery ecosystem, increase the integration between gold and financial markets, and enhance efficient

² https://www.sebi.gov.in/legal/gazette-notification/jul-2022/declaration-of-zero-coupon-zero-principal-instruments-as-securities-under-the-securities-contracts-regulation-act-1956_60875.html.

³ https://www.sebi.gov.in/legal/master-circulars/nov-2021/master-circular-for-real-estate-investment-trusts-reits-_54300.html.

⁴ https://www.sebi.gov.in/legal/circulars/may-2017/disclosure-requirements-for-issuance-and-listing-of-green-debt-securities_34988.html.

⁵ https://www.sebi.gov.in/reports/reports/dec-2015/concept-paper-for-issuance-of-green-bonds_31167.html.

price discovery, which will help India to become a global price setter for gold. SEBI brought out the framework for operationalising the gold exchange in 2022⁶.

Social Stock Exchange Social stock exchange is now hot in the press. In her 2019-20 budget speech, the Hon'ble Finance minister announced that SEBI would start establishing a social stock exchange. Further, a working group committee was set up by SEBI in 2020. Based on the working group's recommendation, SEBI constituted a Technical Group (TG) to provide a regulatory framework for the governance of SSE. The social stock exchange will help social enterprises to raise funds. "A social enterprise, For-Profit Enterprise (FPE) and Not for Profit Organization (NPO) to qualify on the Social Stock Exchange (SSE) should be able to demonstrate that social intent and impact are its primary goals and that such intent is demonstrated through its focus on eligible social objectives for the underserved or less privileged populations or regions". The social stock exchange brought one instrument as zero coupons, zero principal instrument⁷.

3.3 Regulatory Developments

Online KYC SEBI permitted the online know-your-customer (KYC) to open a DMAT account or mutual fund folios. Digi locker and officially valid documents facilitate the proof of address, proof of identity and eSign. Technology advancement makes investors' life easy, and investors need not physically visit the intermediaries' office to open a trading and DMAT account. As required, during the online KYC, the intermediaries need to verify investors' mobile numbers, email addresses, and bank details to cross-check the authenticity of the information provided by the investors⁸. This has resulted in a sharp increase in the DMAT accounts during the COVID period.

Ease of Capital Raising To facilitate the ease of capital raising during COVID-19, SEBI allowed temporary relaxation on right/public issues by listed companies through fast-track issuances. This helped the listed companies to raise funds in less time with more flexibility. The qualifying criteria for the right issue were reduced to ₹ 100 crores from ₹ 250 crores in average market capitalisation of public shareholding. Further, the minimum subscription requirements have been reduced to 75% from 90%⁹.

⁶ SEBI (2022) https://www.sebi.gov.in/legal/circulars/jan-2022/framework-for-operationalizing-the-gold-exchange-in-india_55251.html.

⁷ https://www.sebi.gov.in/legal/circulars/sep-2022/framework-on-social-stock-exchange_63053.html.

⁸ https://www.sebi.gov.in/media/press-releases/apr-2020/sebi-eases-the-know-your-client-kyc-process-by-enabling-online-kyc-use-of-technology-app-by-the-registered-intermediary_46612.html#:~:text=SEBI%20has%20allowed%20the%20investor%20to%20complete%20the,the%20same%20to%20the%20intermediary%20under%20Esign%20C%20or.

⁹ https://www.sebi.gov.in/media/press-releases/apr-2020/measures-to-further-facilitate-fund-raising-from-capital-markets-in-the-backdrop-of-covid-19-pandemic_46538.html.

Accredited Investor SEBI categorised wealthy investors like portfolio management services (PMS) and alternative investment funds (AIF) as Accredited investors with a minimum investment threshold. These new categories of investors are designed to bear the higher risk. Accredited investors will get the flexibility to invest in PMS and AIF lesser than the mandated minimum investment threshold. This accredited investor category came into force with the amendment of SEBI Investment Advisors Regulations (2013)¹⁰. Currently, the threshold for investment under PMS is ₹ 50 lakhs, and under AIF is one crore rupees.

Implementing Margin Obligations SEBI has strengthened the margin system through upfront client-level margin collection for risk management with more investors. SEBI developed a framework “to reduce the risk of misuse of client securities available through the trading member (TM) / clearing member (CM) / depository participants (DP). Since June 1, 2020, TM/CM only takes collateral as securities from clients via’ margin pledge.”¹¹.

Segregation and Monitoring of Collateral at the Client Level On July 20, 2021, SEBI issued a circular on “Segregation and Monitoring of Collateral at the Client Level. The objective of this circular is to reduce the risk of misappropriation or misuse of client securities available with the Trading Member (TM) / Clearing Member (CM) / Depository Participant (DP), including the use of one client’s securities to meet the exposure, margin, or settlement obligations of another client or the TM / CM”. To provide visibility of client-specific collateral (for each customer) at all levels, namely, TM, CM, and Clearing Corporation (CC), the CCs must provide a reporting method that covers both cash and non-cash collateral¹².

Securities Market Trainers (SMARTs) Program SEBI introduced the SMARTs program in 2020 to enhance investor education and awareness. The first batch of SMARTs appointed by SEBI consists of 40 individuals from 16 states and union territories representing 31 districts across India. They are adequately trained and skilled through a term short-term training program at the National Institute of Securities Market (NISM), an education initiative by SEBI, the market regulator¹³.

Interoperability Among Clearing Corporations In November 2018, SEBI brought a framework for interoperability among clearing corporations¹⁴. “The interoperability of clearing corporations provides for the linking of multiple clearing corporations

¹⁰ https://www.sebi.gov.in/legal/circulars/dec-2021/investment-advisory-services-for-accredited-investors_54830.html.

¹¹ https://www.sebi.gov.in/legal/circulars/feb-2020/margin-obligations-to-be-given-by-way-of-pledge-repledge-in-the-depository-system_46082.html.

¹² https://www.sebi.gov.in/legal/circulars/jul-2021/segregation-and-monitoring-of-collateral-at-client-level_51265.html.

¹³ https://www.sebi.gov.in/media/press-releases/nov-2020/sebi-chairman-launches-securities-market-trainers-smarts-program-a-new-sebi-initiative-for-enhancing-investor-education-activities_48276.html.

¹⁴ https://icmai.in/upload/BI/BFSI_Chronicle_24072020.pdf?cv=1.

and allows market participants to consolidate their clearing and settlement functions at a single clearing corporation, irrespective of the stock exchange on which the trade is executed”¹⁵.

Development of Passive Funds SEBI allows asset management companies (AMCs) to introduce tax-saving schemes. Earlier, only active tax saving schemes were available in India. In 2020, SEBI allowed asset management companies to introduce passive equity-linked savings schemes (ELSS). However, a mutual fund AMC can start either active or passive ELSS. This will help the risk-averse investors to invest and get the tax benefit¹⁶.

Stewardship Code To protect clients’ wealth, SEBI introduced the Stewardship code regulation in 2019 and implemented it in 2020. The mutual funds and all categories of AIFs are following Stewardship codes for better governance, active participation in the voting, strategy, the operational and financial performance of the companies, material environment, social and governance (ESG), attending shareholders meetings etc.¹⁷.

Abridged Prospectus for uniformity among the to-be-listed companies, SEBI brought out the guidelines on the abridged prospectus with the required documents¹⁸.

Business Responsibility and Sustainability Report (BRSR) SEBI introduced the corporate responsibility and sustainability report (BRSR) to cover listed companies’ Environmental, Social and Governance (ESG) and sustainable aspects. The BRSR covers nine principles of the ‘National Guidelines on Responsible Business Conduct’ (NGBRCs), with reporting divided into essential and leading indicators for each principle. The top 1000 listed businesses (by market capitalisation) will be required to use BRSR from 2022-23, which will replace the present business responsibility reports (BRR)¹⁹.

SEBI SCORES One of the objectives of SEBI is to take care of the interest of the investors. SEBI SCORES is an online platform developed by SEBI to seek the complaints by the investors against the MIIs, brokers, companies and other entities involved in the trading and settlement process²⁰.

¹⁵ https://www.sebi.gov.in/legal/circulars/nov-2018/interoperability-among-clearing-corporations_41089.html.

¹⁶ https://www.sebi.gov.in/legal/circulars/may-2022/circular-on-development-of-passive-funds_59098.html.

¹⁷ https://www.sebi.gov.in/legal/circulars/dec-2019/stewardship-code-for-all-mutual-funds-and-all-categories-of-aifs-in-relation-to-their-investment-in-listed-equities_45451.html.

¹⁸ https://www.sebi.gov.in/legal/circulars/feb-2022/disclosures-in-the-abridged-prospectus-and-front-cover-page-of-the-offer-document_55920.html.

¹⁹ https://www.sebi.gov.in/legal/circulars/may-2021/business-responsibility-and-sustainability-reporting-by-listed-entities_50096.html.

²⁰ <https://www.sebi.gov.in/legal/circulars/aug-2020/investor-grievances-redressal-mechanism-handling-of-scores-complaints-by-stock-exchanges-and-standard-operating-procedure-for-non-redressal-of-griev>

Introduction of Future Contracts on Corporate Bond Indices SEBI, vide its recent circular dated January 10, 2023, has allowed stock exchanges to introduce derivatives contracts on indices of corporate debt securities rated AA+ and above. Currently, only futures contracts can be launched on corporate bond indexes. However, more investors seeking better avenues for speculation, hedging and portfolio management may introduce more contracts on these indices. This is also likely to enhance liquidity in the underlying corporate bond market, which is otherwise not very liquid and has miles to go before it is established as another great investment product in India²¹

SEBI Relaxes Framework for Offer for Sale (OFS) Mechanism In a recent circular dated January 10, 2023, SEBI modified its earlier framework for the offer for sale, commonly known as OFS. The notice window for intimation to the stock exchange has been extended till 6 pm in place of the earlier requirement of 5 pm. Among the major changes brought out in recent circular is other than that a promoter can offload his/her stake in a company without the requirement of 10% of equity capital. This move will help non-promoters to offload their stake in the market without affecting the price of the securities significantly. Also, REITs and InvITs have been allowed to use the OFS mechanism to offload shares to the general public for the first time. In place of the earlier cooling-off period of +/- 12 weeks for a company using the OFS framework, the current framework brings three different liquid criteria. Those are most liquid, liquid and illiquid stocks eligible for lesser cooling off time of 2 weeks, four weeks and 12 weeks, respectively. A company labelled most liquid by exchanges can do any market transactions before and after two weeks of OFS. This move is further likely to make the framework more attractive to FIIs who can use this platform rather than looking for block deal²².

T+1 Rolling Settlement Indian market always takes challenges to implement new regulations, new technologies, and innovative instruments. India is the first country to implement the T+1 rolling settlement for the securities traded in the secondary market. From 2021²³, it was optional; however, from January 27, 2023, it became mandatory. This is the fastest settlement cycle in the securities markets in the world.

Other Measures SEBI brought out the procedure for seeking prior approval for change in control of SEBI registered Portfolio Managers²⁴. Further, a listed firm is expected to submit a quarterly compliance report on corporate governance to a recog-

ances-by-listed-companies_47325.html.

²¹ https://www.sebi.gov.in/legal/circulars/jan-2023/introduction-of-future-contracts-on-corporate-bond-indices_67187.html.

²² https://www.sebi.gov.in/legal/circulars/jan-2023/comprehensive-framework-on-offer-for-sale-ofs-of-shares-through-stock-exchange-mechanism_67157.html.

²³ https://www.sebi.gov.in/legal/circulars/sep-2021/introduction-of-t-1-rolling-settlement-on-an-optional-basis_52462.html.

²⁴ https://www.sebi.gov.in/legal/circulars/may-2021/procedure-for-seeking-prior-approval-for-change-in-control-of-sebi-registered-portfolio-managers_50116.html.

nised Stock Exchange in the format determined by the Board from time to time (s)²⁵. All the market infrastructure institutions (MIIs), the business that has listed or seeks to get listed, other intermediaries and persons dealing with securities markets as well as the fees payable to SEBI, shall be subject to 18% Goods and services tax (GST) with effect from July 2022²⁶. To avoid multiple disclosures of the same person's holdings, the shareholding of the promoter and promoter group, public shareholder, and non-public non-promoter shareholder is to be consolidated based on the PAN and folio Number²⁷

4 Summary of Research Papers Included in This Special Issue

The papers included in this special issue on “Investor interest and innovative instruments” are part of the papers presented at the Second Annual Capital Markets Conference. The National Institute of Securities Markets (NISM), Mumbai, along with the State Bank of India as a sponsor and the Japanese Association of Financial Econometrics and Engineering (JAFEE) as a co-sponsor, organised this conference during 22–23 July 2021. NISM is always happy to provide a platform for securities market researchers by organising such conferences, providing publication opportunities, and helping the researchers to bring policy-oriented research output. The acceptance rate for NISM conferences is 10–15%, of which 12 papers are published in this special issue with a double-blind review process.

The first paper is “**Optimising hedging effectiveness of Indian agricultural commodity futures - a simulation approach**” by Sanjay Mansabdar and Hussain C Yaganti. The authors use a Monte Carlo simulation approach to identify the optimal selection of contract delivery specifications and give contract designers comprehensive guidelines for making choices of contract delivery specifications. The authors suggest regulators and exchanges focus on optimising commodity futures contracts' delivery specifications to improve hedger-hedging effectiveness. The second paper is “**Persistence of Large-Cap Equity Funds Performance, Market timing ability, and Selectivity: Evidence from India**” by Veeravel V and Balakrishnan A. The study forms and mimics portfolios by applying Jensens, Fama-French and Carhart models. The authors conclude benchmark index outperforms mutual funds and fund managers cannot generate abnormal returns. The third paper is “**A study of investment style timing of mutual funds in India**” by Pavithra S and Parthajit Kayal. The authors examine the timing ability of fund managers of actively managed funds to generate market returns using the four-factor, Treynor & Mazuy, and Henriksson & Merton models. The study concludes that the market timing factor plays a vital role

²⁵ https://www.sebi.gov.in/legal/circulars/may-2021/format-of-compliance-report-on-corporate-governance-by-listed-entities_50338.html.

²⁶ https://www.sebi.gov.in/legal/circulars/jul-2022/levy-of-goods-and-services-tax-gst-on-the-fees-payable-to-sebi_60880.html.

²⁷ https://www.sebi.gov.in/legal/circulars/dec-2017/disclosure-of-holding-of-specified-securities-and-holding-of-specified-securities-in-dematerialized-form_37028.html.

for all the fund categories, the momentum factor plays a vital role for large-cap funds, and the value and size factors for small-cap funds performance.

The fourth paper is **“Did ESG Save the Day? Evidence From India During the COVID-19 Crisis”** by Ved Dilip Beloskar and S.V.D. Nageswara Rao. Using event study, the study finds, ESG performance helps downside protection during crisis (COVID-19) time by reducing return volatility. However, during regular times, ESG performance factors are not helping to that extent. The fifth paper is **“Stock Returns Seasonality in Emerging Asian Markets”** by Khushboo Aggarwal and Mithilesh Kumar Jha. The authors cover the day-of-the-week effect, the month-of-the-year effect, turn of the month effect, and the holiday effect for six emerging Asian markets (India, Indonesia, Japan, Malaysia, Philippines, and South Korea). The study finds the presence of seasonality in emerging markets, which may vary across countries based on the size and maturity of the stock markets. The sixth paper is **“Nexus between Indian Financial Markets and Macro-economic Shocks – A VAR Approach”** by Prabhas Kumar Rath. Considering the impact of internal and external macroeconomic variables on significant segments of Indian financial markets, the study finds macro-economic variables impact the markets more during their unstable state. Moreover, the impact of US treasury yield and FPI flows is more during the crisis period. Further, financial market stability depends on the management of macroeconomic stability. The seventh paper is **“Investment Performance, and Tracking Efficiency of Indian Equity Exchange Traded Funds”**. The study uses risk-return analysis, risk-adjusted performance measures, tracking error, and multi-factor regression models to examine the study’s objectives. The study finds ETFs perform their tracking indices, and their returns are negatively correlated with risk and management fees. The eighth paper is **“Is Cross-Hedging Effective for Mitigating Equity Investment Risks in the Indian Banking Sector?”** by Babu Jose and Nithin Jose. Applying the diagonal BEKK GARCH model, the authors find that cross hedging helps to reduce risk by up to 53.74 per cent. Further, investors may use this strategy for a longer trade horizon to reduce risk. The ninth paper is **“The Stock Performance of Green Bonds Issuers During COVID-19 Pandemic: The Case of China”** by Jiongye Jin and Jianing Zhang. Using event study methods based on the market and Fama French models, the study concludes that green bond issuer companies provided positive cumulative abnormal returns when WHO announced COVID-19 as a pandemic. The tenth paper is **“The Dynamic Volatility Connectedness of Major Environmental, Social, and Governance (ESG) Stock Indices: Evidence based on DCC-GARCH Model”** by Muneer Shaik and Mohd Ziaur Rehman. Using DCC GARCH and Diebold and Yilmaz’s volatility spillover model, the study finds that contagion exists between developed and emerging markets. The eleventh paper is **“Market Efficiency of commodity derivatives with reference to Non-Agricultural Commodities”** by Hema Divya Kantamaneni and Vasu Deva Reddy. Using cointegration model, the study finds that lead-lag relationships exist from spot to futures markets and vice versa. The twelfth paper is **“Macroeconomic Response to BRICS Countries Stock Markets Using Panel VAR”** by Babita Panda, Ajaya Kumar Panda & Pradiptarathi Panda. Applying Panel VAR and Granger causality models, the study finds a significant impact of new age macroeconomic variables and traditional macroeconomic variables on stock returns for BRICS countries.

5 Concluding Remarks

This paper has attempted to highlight recent developments in the Indian securities market. This includes innovations in financial instruments, initiatives that expand the issuers' and investors' participation in markets, enabling interventions that contribute to market efficiency and selecting structural changes to ensure market integrity. It summarises the research findings of the papers published in this special issue. This will provide deeper insights and directions for the researchers to formulate their research questions. Introducing REITs and InvITs, green bonds, social stock exchange, gold exchange, T+1, rolling settlement processes, etc., will widen the scope of their research agenda. This will also help researchers to compare Indian securities markets with other emerging and developing market microstructures in the context of changing profiles and the role of the securities markets in economic development.

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