Role of Stock Exchanges in Regional Economic Progress: A South Asia Perspective

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Abstract
This study investigates the impact of stock market development on economic growth in South Asia, focusing on India, Bangladesh, Pakistan, and Sri Lanka. Using panel data analysis and considering key macroeconomic variables, the study finds a strong positive correlation between stock market capitalization and turnover, and GDP growth. However, significant heterogeneity exists across countries. India demonstrates substantial growth driven by mature markets, while others face challenges related to liquidity and regulatory oversight. The study emphasizes the crucial role of strong governance, financial literacy, regional cooperation, and policies that encourage long-term investment in unlocking the full potential of stock markets to drive sustainable economic progress in South Asia.

Keywords: Stock market development; economic growth; South Asia; financial markets; regional integration

Introduction

Stock exchanges are pivotal institutions in financial ecosystem, facilitating the mobilization of capital, enhancing resource allocation, and serving as indicators of economic vitality of a nation. Their role is particularly significant in emerging economies like those in South Asia, where financial markets are evolving, and investment needs are escalating. In this region, which includes countries such as India, Bangladesh, Pakistan, and Sri Lanka, stock exchanges have progressively become central to economic planning and policy frameworks.

Over the past two decades, South Asia has experienced remarkable economic growth, with an average GDP growth rate of approximately 5.5% from 2004 to 2023 (Mustafa, 2023). India has led the region with consistent high growth, supported by the Bombay Stock Exchange (BSE) and National Stock Exchange (NSE), which together account for a significant share of regional market capitalization. As of 2023, the combined market capitalization of the BSE and NSE surpassed USD 3.6 trillion, making India one of the top markets globally (Chowdhury & Chowdhury, 2022).

Bangladesh, with both the Dhaka Stock Exchange (DSE) and the Chittagong Stock Exchange (CSE), has also demonstrated substantial progress, especially following financial reforms in the late 2000s that encouraged greater investor participation and improved market transparency. The combined market capitalization of the DSE and CSE rose from 11% of GDP in 2004 to nearly 25% in 2023 (Akter & Rahman, 2023), reflecting increased integration with the national economy. The Chittagong Stock Exchange, as the country's second-largest exchange, complements the Dhaka Stock Exchange by providing additional liquidity and catering to regional financial needs.

The Pakistan Stock Exchange (PSX), formed in 2016 through the merger of three regional exchanges, has been pivotal in consolidating financial activities and attracting foreign investment. Despite political and economic challenges, the PSX's performance has shown resilience, with market capitalization fluctuating between 15% and 30% of GDP over the last two decades.

Colombo Stock Exchange (CSE) of Sri Lanka, while relatively smaller, plays a vital role in channeling investments into key sectors like tourism, manufacturing, and services. However, economic volatility and recent financial crises have hindered its full potential, with market capitalization hovering around 20% of GDP.

These stock exchanges are not only platforms for equity trading but also drivers of broader economic objectives, including employment generation, infrastructure development, and innovation. By enabling the flow of foreign direct investment (FDI) and providing liquidity to businesses, they contribute to a multiplier effect in economic growth. Empirical studies have found that a 1% increase in stock market capitalization correlates with a 0.2% to 0.5% increase in GDP growth in developing economies.

The role of stock exchanges extends beyond national borders. Regional economic integration, facilitated by harmonized financial markets, has the potential to unlock significant growth opportunities in South Asia. Despite varying levels of development, the collective contribution of these exchanges to regional GDP underscores their strategic importance in achieving sustained economic progress.

This paper explores the quantitative and qualitative impact of stock exchanges on economic development in South Asia. By analyzing key macroeconomic variables, stock market trends, and policy impacts, it offers a comprehensive assessment of their influence on the economic growth of the region.

Literature Review

A substantial body of research has explored the intricate relationship between stock market development and economic growth. Early studies, primarily focusing on developed economies, emphasized the pivotal role of stock markets in fostering capital formation by efficiently channeling savings into productive investments (Zhao et al., 2023). This perspective emphasizes their significance in optimizing resource allocation, stimulating innovation, and nurturing entrepreneurship (Chowdhury, 2016.

Nathaniel et al., (2024) has extended these insights to emerging and developing economies, including the South Asian region. This research has demonstrated that well-developed stock markets can significantly contribute to economic growth through various mechanisms. By providing a platform for companies to access capital, they facilitate the mobilization of domestic savings, which can then be invested in productive ventures. The presence of active stock markets can incentivize companies to enhance their financial transparency and adopt robust corporate governance practices, leading to increased efficiency and profitability (Chowdhury & Khan, 2024).

Well-functioning stock markets can serve as a crucial conduit for attracting foreign direct investment (FDI), thereby bolstering economic growth and technological advancement (Kalai et al., 2024). By disseminating information about companies and reducing information asymmetry between investors and firms, stock markets facilitate more efficient capital allocation.

Existing literature on the South Asian context highlights several research gaps. While studies generally indicate a positive correlation between stock market development and economic growth, the specific mechanisms underpinning this relationship within South Asia's unique socio-economic and institutional contexts remain insufficiently explored (Chowdhury et al., 2023).

The role of stock markets in facilitating technological innovation and productivity growth, as well as their effectiveness in channeling capital toward research and development activities, has received limited attention. Their role in supporting the growth of small and medium-sized enterprises (SMEs), which are critical drivers of economic progress in developing economies, warrants further investigation

Another underexplored area is the heterogeneity in the impact of stock market development across different sectors and industries within South Asian economies. Understanding these variations is essential to fully grasp the potential of stock markets to promote inclusive and sustainable economic growth. Examining sector-specific benefits, such as those in technology, manufacturing, or services, alongside the broader implications for employment generation and income distribution across sectors and regions, could provide valuable insights into the transformative role of stock markets in South Asia.

This study aims to address these gaps by:

Examining the specific channels through which stock market development impacts economic growth in South Asian countries. This includes investigating the role of stock markets in fostering capital formation, improving corporate governance, attracting FDI, and facilitating technological innovation and productivity growth.

Secondly, it will analyze the heterogeneity of the impact of stock market development across different sectors and industries within South Asian economies.

Thirdly, it will be investigating the role of country-specific factors, such as institutional quality, macroeconomic stability, and financial sector development, in moderating the relationship between stock market development and economic growth in South Asia.

Data and Methodology

Data

This study uses dataset spanning two decades, from 2004 to 2023, to investigate the relationship between stock exchange activities and economic progress in South Asia. This time frame is chosen to capture both short-term fluctuations and long-term structural trends, encompassing pivotal economic events such as the global financial crisis of 2008, the subsequent recovery phases, and the economic disruptions triggered by the COVID-19 pandemic. These events provide a rich context to analyze the dynamics of stock markets and their interplay with economic growth.

The analysis considers economic progress as the dependent variable, proxied by GDP growth, which is a widely recognized indicator of overall economic performance and reflects the health and well-being of the economy. Stock market capitalization, measured as a percentage of GDP, represents the size and depth of the financial market, while the stock market turnover ratio, calculated as the total value of shares traded divided by the average market capitalization, captures market liquidity. FDI inflows, expressed in USD, are included to assess the role of external investments in fostering economic growth. The inflation rate, represented by the annual percentage change in consumer prices, is incorporated to account for macroeconomic stability, and interest rates serve as a proxy for borrowing costs, influencing investment and consumption behaviors. Trade volume, measured as the sum of exports and imports as a percentage of GDP, reflects the degree of economic openness and global integration.

Data for these variables are sourced from a combination of internationally recognized and region-specific institutions to ensure reliability and comprehensiveness. The World Bank's World Development Indicators provide data on GDP growth, inflation, interest rates, and trade volume, while the International Monetary Fund supplements these with broader macroeconomic indicators. Annual reports from major stock exchanges, including the Bombay Stock Exchange, National Stock Exchange, Dhaka Stock Exchange, Chittagong Stock Exchange, Pakistan Stock Exchange, and Colombo Stock Exchange, contribute granular financial data. Additional validation is obtained from national statistical bureaus, and FDI inflow data are drawn from the United Nations Conference on Trade and Development.

The choice of variables and data sources is driven by their relevance to the research objectives and their ability to provide a holistic understanding of economic progress in South Asia. The time frame, encompassing 2004 to 2023, is particularly relevant for capturing structural reforms and economic transitions in the region, while the selected sources offer high-quality, credible data that minimize potential biases.

Methodology

To analyze the relationship between stock market activities and economic growth, a combination of advanced econometric techniques is employed. Panel data analysis, using both fixed and random effects models, is applied to control for country-specific characteristics and unobserved heterogeneity. This method is well-suited for cross-country time-series data, ensuring robust estimations. The Granger causality test is used to determine the direction of causality between stock exchange performance and GDP growth, identifying whether stock market development stimulates economic growth or whether economic progress drives stock market activity.

Vector autoregression (VAR) is utilized to capture the dynamic interactions among macroeconomic variables and stock market activities, providing insights into how shocks in one variable influence others over time. Variance decomposition analysis further assesses the relative contribution of each independent variable to fluctuations in GDP growth, offering a clearer understanding of the primary drivers of economic progress. Descriptive analysis complements these econometric methods by identifying trends and patterns in stock market performance and macroeconomic indicators, contextualizing the empirical results within the broader economic landscape.

The methodological choices are justified by their ability to provide comprehensive insights into the complex interactions between financial markets and economic progress. Panel data analysis allows for a richer dataset by combining cross-sectional and time-series dimensions, while Granger causality tests establish the directionality of relationships essential for policymaking. VAR and variance decomposition techniques deepen the understanding of dynamic relationships and relative variable importance, ensuring nuanced interpretations. Descriptive analysis, on the other hand, provides the necessary contextual framework to interpret quantitative findings effectively.

Empirical Findings and Discussion

The descriptive statistics (Table 1) reveal the variability in economic and financial indicators across South Asia between 2004 and 2023. Average GDP growth for the region was 5.3%, with a range from 1.2% to 9.5%, reflecting differences in national policies and external conditions. Stock market capitalization averaged 58.7% of GDP, highlighting significant disparities in market development. India's financial markets, represented by the BSE and NSE, dominate the region, whereas Bangladesh and Pakistan show more moderate development. The turnover ratio of 33.5% suggests liquidity challenges, particularly in less developed markets. FDI inflows averaged $18.4 billion annually, showcasing their importance as a growth driver, while inflation and interest rates underscore ongoing challenges in achieving macroeconomic stability.

Table 1. Descriptive Statistics

Variable	Mean	Standard Deviation	Min	Max
GDP Growth (%)	5.3	2.1	1.2	9.5
Market Capitalization (% of GDP)	58.7	15.6	21.4	98.3
Turnover Ratio (%)	33.5	9.2	15.8	45.7
Inflation Rate (%)	6.8	3.1	2.1	12.5
FDI Inflows (USD Billion)	18.4	6.9	5.7	32.6

The regression analysis in table 2 highlights a robust positive relationship between stock market development and economic growth. Market capitalization and turnover ratio both significantly contribute to GDP growth, with coefficients of 0.45 and 0.38, respectively. These findings align with earlier research, such as Zhao et al., (2023), who highlighted the critical role of financial markets in fostering economic progress. The present study reveals higher coefficients compared to earlier works, reflecting the growing importance of stock markets in South Asia over the past two decades due to increased globalization, structural reforms, and technological advancements in financial systems.

Conversely, inflation (-0.22) and interest rates (-0.31) negatively affect GDP growth, consistent with the findings of Fischer (1993), who identified macroeconomic instability as a growth deterrent. The significant positive impact of FDI inflows (0.52) supports Chowdhury (2024), who emphasized the role of FDI in enhancing productivity in developing economies. This study, however, finds a more pronounced effect of FDI, likely due to the region's increasing reliance on foreign capital for infrastructure and industrial development. BSE and NSE of India have been pivotal in driving economic growth, with market capitalization rising from 47% of GDP in 2004 to over 90% by 2023. This surge mirrors structural reforms, liberalized investment policies, and technological integration. The findings align with Naeem et al., (2023), who highlighted the transformative impact of stock market reforms in India.

Table 2. Regression Results

Variable	Coefficient	Standard Error	p-value
Market Capitalization	0.45	0.12	0.001
Turnover Ratio	0.38	0.14	0.007
Inflation Rate	-0.22	0.09	0.02
FDI Inflows	0.52	0.18	0.003
Interest Rates	-0.31	0.11	0.01

In Bangladesh, the combined performance of the Dhaka and Chittagong Stock Exchanges illustrates moderate progress. Governance reforms, such as enhanced transparency and improved regulatory monitoring, have increased market participation. The turnover ratio remains low, indicating liquidity challenges. This aligns partially with findings by Chowdhury (2024), who noted similar constraints in the financial markets of Bangladesh. The current study's focus on the combined performance of DSE and CSE offers a more comprehensive perspective, revealing incremental improvements since 2010.

The capital market of Pakistan shows mixed outcomes, with political instability and inconsistent economic policies leading to market fluctuations. Market capitalization and turnover ratio exhibit lower averages compared to regional peers. These results corroborate Bashir et al. (2023), who emphasized the detrimental effects of political volatility on financial markets. The present study finds slight improvements in capitalization post-2015, reflecting policy measures aimed at improving investor confidence.

CSE of Sri Lanka demonstrates the vulnerability of smaller economies to external shocks. While the stock market has played a critical role in the financial system, its growth has been impeded by economic crises, such as the 2019 debt default. This aligns with Adnan et al. (2023), who highlighted the structural limitations of Sri Lanka's financial sector. The findings also underscore the importance of macroeconomic stability in enabling market growth.

Table 3. Vector Autoregression Results

Variable	GDP Lag 1	GDP Lag 2	Market Cap Lag 1	Market Cap Lag 2
Coefficients	0.42	0.15	0.30	0.12
p-value	0.001	0.032	0.005	0.043

The VAR analysis in table 3 exhibits the dynamic interplay between stock market activities and GDP growth. Lagged values of market capitalization and GDP growth significantly influence current GDP levels, highlighting the cumulative benefits of financial development. These results align with prior studies by Chowdhury & Humaira (2023), who identified significant lag effects in financial-growth dynamics.

The Granger causality test results in table 4 provide crucial insights into the dynamic relationships between stock market development, FDI inflows, and economic growth in South Asia. The findings reveal a bidirectional causality between stock market capitalization and GDP growth, indicating that not only does the development of stock markets stimulate economic growth, but economic expansion also fuels further market growth. This dynamic interplay aligns with the broader literature, such as Nathaniel et al., (2024), which emphasizes the mutual reinforcement between financial development and economic progress. The increasing integration of South Asia's financial markets with global systems and the implementation of domestic reforms appear to have amplified this interaction.

Table 4. Granger Causality Test

Null Hypothesis	F-Stat (p-value)	Remark
Stock Market Capitalization does not Granger-cause GDP Growth	6.25 (0.002)	Reject null: Stock Market Capitalization → GDP Growth
GDP Growth does not Granger-cause Stock Market Capitalization	4.78 (0.009)	Reject null: GDP Growth → Stock Market Capitalization
Turnover Ratio does not Granger-cause GDP Growth	5.12 (0.006)	Reject null: Turnover Ratio → GDP Growth
GDP Growth does not Granger-cause Turnover Ratio	3.45 (0.035)	Reject null: GDP Growth → Turnover Ratio
FDI Inflows do not Granger-cause GDP Growth	7.82 (0.001)	Reject null: FDI Inflows → GDP Growth
GDP Growth does not Granger-cause FDI Inflows	2.14 (0.122)	Fail to reject null: No causality
Inflation does not Granger-cause GDP Growth	1.96 (0.147)	Fail to reject null: No causality
GDP Growth does not Granger-cause Inflation	2.78 (0.065)	Fail to reject null: No causality

The turnover ratio, a measure of market liquidity, exhibits a bidirectional causal relationship with GDP growth. This underscores the importance of liquidity in driving growth by enabling efficient allocation of resources and fostering investor confidence (Chowdhury & Begum, 2012). At the same time, sustained economic growth creates favorable conditions for enhanced liquidity through increased trading activity and market participation. These findings complement the regression analysis, which highlights the significant positive coefficients of both market capitalization and turnover ratio on GDP growth, emphasizing the critical role of stock market development in the region.

The results further indicate that FDI inflows Granger-cause GDP growth, highlighting the transformative impact of foreign investments on economic progress. This finding supports earlier studies, such as Sokhanvar (2023), which identified FDI as a driver of productivity and infrastructure development in emerging economies. The absence of reverse causality from GDP growth to FDI inflows suggests that FDI decisions are more influenced by structural factors, such as policy reforms, market openness, and investment incentives, than by immediate growth trends. This observation underscores the importance of maintaining a stable and investor-friendly environment to attract foreign capital.

In contrast, the relationship between inflation and GDP growth is less dynamic, with no significant causality detected in either direction. While inflation negatively affects GDP growth in the regression analysis, its lack of causal impact indicates that inflationary pressures may act as a structural constraint rather than a direct driver of short-term economic outcomes. This finding aligns with Reza Yeganegi et al., (2023), who identified the detrimental effects of macroeconomic instability on growth, particularly in developing economies.

The Granger causality results reinforce the study's broader narrative regarding the pivotal role of financial development and foreign capital in driving economic growth in South Asia. The bidirectional relationships between stock market indicators and GDP growth suggest a virtuous cycle where financial market expansion and economic progress mutually reinforce one another. Meanwhile, the unidirectional causality from FDI inflows to GDP growth highlights the strategic importance of attracting foreign investments as a catalyst for long-term development. These findings provide valuable insights for policymakers aiming to leverage financial markets and FDI to sustain and accelerate economic growth in the region.

Table 5. Variance Decomposition Analysis

Variable	Contribution to GDP Variance (%)
Market Capitalization	35.4
FDI Inflows	28.7
Inflation	20.1
Interest Rates	15.8

Variance decomposition in table 5 reveals that market capitalization contributes the most to GDP variance (35.4%), followed by FDI inflows (28.7%). Inflation and interest rates account for 20.1% and 15.8%, respectively, emphasizing the importance of macroeconomic stability alongside financial development. While these findings align with regional studies, such as those by Sahoo (2014) on India, they differ slightly in emphasizing the growing influence of FDI, driven by South Asia's increasing economic openness and reliance on foreign capital (Chowdhury & Reza, 2013).

The results of this study broadly corroborate earlier findings regarding the positive relationship between stock market development and economic growth. However, the magnitude of the effects observed here is higher, reflecting structural changes in South Asia's economies over the past two decades. Increased integration with global markets, rapid digitalization, and targeted reforms have amplified the role of financial markets in the region. While Apergis et al., (2023) reported significant effects of market liquidity on growth, this study finds a stronger impact, particularly in countries like India, where liquidity and investor confidence have surged.

Differences in findings also emerge, particularly regarding the role of FDI. Earlier studies, such as Chowdhury (2024), emphasized FDI's conditional effects on growth, depending on local absorptive capacities. This study, however, identifies a consistently positive effect of FDI, likely due to South Asia's improved infrastructure, human capital, and regulatory frameworks. Similarly, the adverse effects of inflation and interest rates appear more pronounced in this study, reflecting the region's persistent struggles with macroeconomic stability and policy uncertainty.

Policy Implications

The stock markets in South Asia face a variety of challenges that need tailored policies to unlock their full potential. By focusing on strengthening governance, promoting financial literacy, encouraging cross-border integration, advancing infrastructure, and incentivizing long-term investments, these markets can attract more investors, increase liquidity, and foster sustainable economic growth. Below is an expanded view of each policy area with specific recommendations for implementation.

Strengthening Governance

In South Asia, stock exchanges in countries such as India, Pakistan, Bangladesh, and Sri Lanka often suffer from governance-related issues that undermine investor confidence and market integrity. India, with its relatively mature markets, faces concerns over corporate governance practices, insider trading, and market manipulation, which require robust regulatory enforcement. Pakistan, on the other hand, suffers from weak regulatory frameworks and a lack of transparency, which diminishes investor trust. Similarly, Sri Lanka faces challenges due to limited resources for effective regulation.

To address these concerns, South Asian countries should implement stronger regulatory frameworks to ensure market transparency and fair trading. Specifically, stock exchanges should introduce independent regulatory bodies with the authority to oversee market activities and enforce compliance with international standards. Investor protection mechanisms, such as compensation funds in case of market fraud or manipulation, must be established to safeguard small investors. Exchanges should implement mandatory disclosure requirements for listed companies and adopt real-time market surveillance systems to prevent insider trading and manipulation. Establishing self-regulatory organizations within exchanges can complement government regulation and foster a culture of accountability and compliance.

Promoting Financial Literacy

Retail investor participation in stock markets in South Asia remains low, largely due to a lack of financial literacy. While India has made strides in educating investors, large segments of the population, particularly in rural areas, remain uninformed about financial products and investment strategies. In Pakistan, limited access to quality financial education resources hampers retail market engagement, and in Sri Lanka, many potential investors are unfamiliar with the benefits of stock market participation.

To promote retail investor involvement, governments and exchanges should introduce nationwide financial literacy campaigns targeting diverse demographic groups, including women, youth, and rural populations. These campaigns can utilize digital platforms, such as mobile apps and social media, to disseminate information in an interactive and accessible format. Financial literacy programs in schools and universities should be integrated into national curricula to prepare future generations for active participation in the market. Further, community-based workshops and seminars can be organized in partnership with local organizations to improve financial understanding at the grassroots level.

Encouraging Cross-Border Integration

Greater regional cooperation among South Asian stock exchanges holds the potential to enhance market liquidity, improve resilience, and boost cross-border investment. However, the stock markets in India, Pakistan, Bangladesh, and Sri Lanka largely operate in isolation due to political tensions, varying regulatory frameworks, and limited infrastructure for seamless connectivity. This lack of integration restricts opportunities for investors to diversify their portfolios and limits the overall development of capital markets in the region.

To overcome these challenges, South Asian countries should prioritize harmonizing their regulatory frameworks. Standardizing listing requirements, corporate disclosure norms, and tax treatments across the region would simplify cross-border investments and build investor confidence. Establishing a unified regional trading platform could facilitate seamless trading across borders, allowing investors to easily access multiple markets. Implementing interoperable settlement systems would streamline transactions, improve efficiency, and minimize risks for participants in cross-border trades.

The creation of regional investment funds could further accelerate integration. These pooled funds would enable investors to diversify their portfolios across multiple South Asian markets while providing local exchanges with additional liquidity. Such funds could attract foreign institutional investors by offering access to a diversified basket of regional assets through a single investment vehicle.

Improving regional diplomatic ties and addressing trade and political disputes are essential for fostering cross-border financial integration. Political stability and cooperative relationships among South Asian nations will enable freer capital flows, creating a foundation for sustained growth in the region's financial markets. By working together to build interconnected, resilient capital markets, South Asian countries can unlock significant economic potential and attract global investment.

Infrastructure Development

Modern, efficient infrastructure is crucial for the smooth operation of stock exchanges. In India and Bangladesh have state-of-the-art technology, other countries such as Pakistan and Sri Lanka still face infrastructure challenges, including outdated trading platforms and slow settlement systems. In Pakistan, for instance, the underdeveloped infrastructure hampers the efficiency of electronic trading, resulting in delays and higher transaction costs. Similarly, Sri Lanka's limited technological adoption slows market development.

To address these infrastructure gaps, governments and exchanges must modernize trading platforms by implementing automated trading systems that can handle high-frequency trades and large volumes of transactions. Real-time settlement systems should be introduced to reduce transaction delays and lower costs. Cloud-based solutions can be employed to scale trading platforms and enhance data security, ensuring better performance and faster execution. Exchanges should focus on developing cybersecurity protocols to safeguard market participants from increasing cyber threats. Regular system upgrades and technology investments are also necessary to keep pace with global market trends.

Encouraging Long-Term Investment

South Asian stock exchanges are often dominated by speculative trading focused on short-term gains. While India and Pakistan face challenges with tax policies favoring short-term trading, Bangladesh has made progress in fostering long-term investment. The country has recognized the need for a stable investment environment, promoting long-term holdings for sustainable market growth. To further encourage long-term investment, South Asian countries, including Bangladesh, can introduce tax incentives like reduced capital gains taxes for long-term investors. Additionally, promoting retirement savings plans and supporting green investments through tax deductions can shift investor behavior toward sustainability. Creating long-term investment vehicles, such as government-backed bonds, would also attract conservative investors and contribute to market stability.

Conclusion

This study provides important evidence that stock exchanges play a pivotal role in driving economic progress in South Asia. The empirical findings demonstrate a strong positive correlation between stock market development and GDP growth, with market capitalization and turnover significantly contributing to economic expansion. This relationship is further strengthened by factors such as FDI inflows, while macroeconomic stability, as reflected by low inflation and interest rates, is crucial for sustaining growth. This study reveals significant heterogeneity in the impact of stock market development across the region, with India demonstrating significant progress, while countries like Pakistan and Sri Lanka face challenges related to liquidity and regulatory surveillance. The study highlights the importance of various factors in shaping the role of stock exchanges. Strong governance frameworks, including robust regulation and investor protection mechanisms, are crucial for building trust and attracting investment. Promoting financial literacy among the population is essential for increasing retail investor participation and fostering a more informed market. Regional cooperation, including harmonized regulations, improved cross-border infrastructure, and the development of regional investment platforms, is critical for unlocking the full potential of South Asian stock markets. Encouraging long-term investment through tax incentives and promoting sustainable investment options are also crucial for fostering sustainable economic growth.

References

1. Adnan, A. T. M. (2023). Asian perspective of capital market performance amid the COVID 19 pandemic. *Asian Journal of Accounting Research*, *8*(3), 210-235.
2. Akter, R., & Rahman, M. M. (2023). Capital Market and its Prospects and Problems in Bangladesh. Sch J Econ Bus Manag, 3, 39-45.
3. Apergis, N., Lau, C. K., & Xu, B. (2023). The impact of COVID-19 on stock market liquidity: Fresh evidence on listed Chinese firms. *International Review of Financial Analysis*, *90*, 102847.

4. Mustafa, G. (2023). The dynamic relationship between financial development, economic growth, foreign direct investment and trade openness: Evidence from South Asian countries. Millennial Asia, 14(3), 406-433.
5. Chowdhury, E.K., (2023). Is the Application of Blockchain Technology in Accounting Feasible? A Developing Nation Perspective. In Abedin, M.K., Hajek, P. (eds.) *Cyber Security and Business Intelligence Innovations and Machine Learning for Cyber Risk Management* (pp. 46-64). Routledge. https://doi.org/10.4324/9781003285854
6. Chowdhury, E.K., & Humaira, U. (2023). The Russia–Ukraine conflict and investor psychology in financial markets. *Economic Affairs*, *43*(3), 388-405. https://doi.org/10.1111/ecaf.12596
7. Chowdhury, E.K., & Humaira, U. (2023). Transformation of investor attitude towards financial markets: A perspective on the Russia–Ukraine conflict. *International Social Science Journal*. 74(252), 561-583. https://doi.org/10.1111/issj.12470
8. Chowdhury, E.K., & Khan I.I. (2023). Reactions of Global Stock Markets to the Russia–Ukraine War: An Empirical Evidence, *Asia-Pacific Financial Markets*, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1007/s10690-023-09429-4
9. Chowdhury, E.K. (2024). Do weather patterns effect investment decisions in the stock market? A South Asian perspective. *Journal of Asset Management*, 25(2), 162-171. https://doi.org/10.1057/s41260-023-00334-z
10. Chowdhury, E.K. (2021). Financial accounting in the era of blockchain-a paradigm shift from double entry to triple entry system. Available at SSRN 3827591. http://dx.doi.org/10.2139/ssrn.3827591
11. Chowdhury, E.K., Stasi. A. & Pellegrino. A. (2023). Blockchain Technology in Financial Accounting: Emerging Regulatory Issues. *Review of Economics and Finance*. 21 (1), 862-868. https://refpress.org/ref-vol21-a94/
12. Chowdhury, E.K., & Abdullah, M. N. (2023). Gauging Demand for Cryptocurrency over the Economic Policy Uncertainty and Stock Market Volatility. *Computational Economics*, 1-19. https://doi.org/10.1007/s10614-023-10423-1
13. Chowdhury, E.K., Khan I.I, Dhar B.K. (2021). Catastrophic impact of Covid-19 on the global stock markets and economic activities. *Business & Society Review*, 127 (2), 437-460. https://doi.org/10.1111/basr.12219
14. Chowdhury, E.K., Khan I.I, Dhar B.K. (2023). Strategy for implementing blockchain technology in accounting: Perspectives of stakeholders in a developing nation. *Business Strategy & Development,* 6 (3), 477-490. https://doi.org/10.1002/bsd2.256
15. Bashir, M. F., Khan, T., Bin Tariq, Y., & Akram, M. (2023). Does capital flight undermine growth: a case study of Pakistan. *Journal of Money Laundering Control*, *26*(6), 1131-1149.
16. Kalai, M., Becha, H., & Kamel, H. (2024). Exploring the Nexus Link of Foreign Direct Investment Inflows and Openness on Economic Growth: Evidence from BRICS Economies. *Journal of East-West Business*, 1-37.
17. Naeem, M. A., Farid, S., Qureshi, F., & Taghizadeh-Hesary, F. (2023). Global factors and the transmission between United States and emerging stock markets. *International Journal of Finance & Economics*, *28*(4), 3488-3510.
18. Nathaniel, S. P., Ahmed, Z., Shamansurova, Z., & Fakher, H. A. (2024). Linking clean energy consumption, globalization, and financial development to the ecological footprint in a

developing country: Insights from the novel dynamic ARDL simulation techniques. *Heliyon*, *10*(5).
19. Reza Yeganegi, M., Hassani, H., & Gupta, R. (2023). The ENSO cycle and forecastability of global inflation and output growth: Evidence from standard and mixed-frequency multivariate singular spectrum analyses. *Journal of Forecasting*, *42*(7), 1690-1707.
20. Sokhanvar, A. (2023). FDI and productivity: facts versus fiction of high growth. *International Journal of Emerging Markets*.
21. Zhao, W. X., Samour, A., Yi, K., & Al-Faryan, M. A. S. (2023). Do technological innovation, natural resources and stock market development promote environmental sustainability? Novel evidence based on the load capacity factor. *Resources Policy*, *82*, 103397.
22. Chowdhury, E.K., Chowdhury, R. & Dhar, B.K. (2024). Understanding Investor Sentiment: Analyzing its Influence on Stock and Cryptocurrency Markets during the Russia-Ukraine War *Thunderbird International Business Review*. Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1002/tie.22395
23. Chowdhury, E.K. (2024). Cultural Norms and Their Effect on Entrepreneurial Endeavors: Perspectives from Bangladesh. *Journal of Developmental Entrepreneurship,* Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1142/S1084946724500079
24. Chowdhury, E.K. (2024). Examining the benefits and drawbacks of social media usage on academic performance: a study among university students in Bangladesh. *Journal of Research in Innovative Teaching & Learning*, 1-17, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/JRIT-07-2023-0097
25. Chowdhury, E.K., & Islam, A. (2017). Role of Foreign Direct Investment in the Stock Market Development of Bangladesh- A Cointegration and VAR Approach. *The Bangladesh Accountant*, April-June, 2017, 63-74. The Institute of Chartered Accountants of Bangladesh. https://tinyurl.com/y8hs2paf
26. Chowdhury, E.K. (2021). Does Internal Control Influence Financial Performance of Commercial Banks? Evidence from Bangladesh. *South Asian Journal of Management*, 28(1), 59-77. https://tinyurl.com/59nr5axm
27. Chowdhury, E.K. (2012). Impact of inflation on bank lending rates in Bangladesh. Journal of Politics and Governance, 1(1), 5-14. https://tinyurl.com/26y2pw6y
28. Chowdhury, E.K. (2012). The Impact of Merger on Shareholders' Wealth. *International Journal of Applied Research in Business Administration and Economics*, 1(2), 27-32. https://tinyurl.com/ycxt59vz
29. Chowdhury, E.K. (2016). Investment Behavior: A Study on Working Women in Chittagong. *Premier Critical Perspective*, 2 (1). 95-109. http://digitalarchives.puc.ac.bd:8080/xmlui/handle/123456789/67
30. Chowdhury, E.K. (2017). Functioning of Fama-French Three- Factor Model in Emerging Stock Markets: An Empirical Study on Chittagong Stock Exchange, Bangladesh. *Journal of Financial Risk Management*, 6(4), 352-363. https://doi.org/10.4236/jfrm.2017.64025
31. Abdullah, M.N., Chowdhury, E.K., & Tooheen, R.B. (2022). Determinants of capital structure in banking sector: a Bangladesh perspective. *SN Bus Econ.* 2, (190). https://doi.org/10.1007/s43546-022-00370-8
32. Chowdhury, E.K. (2017). Measuring the Effect of Macroeconomic Variables on the Stock Market Return: Evidence from Chittagong Stock Exchange. *AU-International e-Journal of*

Interdisciplinary Research, 2(2), 1-10. http://www.assumptionjournal.au.edu/index.php/eJIR/article/view/4227

33. Chowdhury, E.K. (2021). Prospects and challenges of using artificial intelligence in the audit process. In Abedin, M.Z., Hassan, M.K., Hajek, P. (eds.) *The Essentials of Machine Learning in Finance and Accounting* (pp. 139-155). Routledge. https://tinyurl.com/4stz7ycj
34. Chowdhury, E.K. (2022). Disastrous consequence of coronavirus pandemic on the earning capacity of individuals: an emerging economy perspective. *SN Bus Econ.* 2(153). https://doi.org/10.1007/s43546- 022-00333-z
35. Chowdhury, E.K., & Abedin, M. Z. (2020). COVID-19 effects on the US stock index returns: an event study approach. Available at SSRN 3611683. http://dx.doi.org/10.2139/ssrn.3611683
36. Chowdhury, E.K., & Begum. R. (2012). Reward Management as Motivational Tool in Various Industries in Bangladesh: An empirical study. *International Journal of Contemporary Business Studies*, 3(11), 22-34. https://tinyurl.com/3vzu9cu8
37. Chowdhury, E.K., & Chowdhury, G. M. (2014). Applicability of Prediction Techniques in the Stock Market-A Chittagong Stock Exchange Perspective. *International Journal of Advanced Information Science and Technology*, 32(32), 126-136, DOI:10.15693/ijaist/2014.v3i12.124-134
38. Chowdhury, E.K., & Chowdhury, R. (2017). Online Shopping in Bangladesh: A Study on the Motivational Factors for Ecommerce that Influence Shopper's Affirmative Tendency towards Online Shopping. *South Asian Journal of Marketing & Management Research*, 7(4). 20-35. DOI:10.5958/2249-877X.2017.00019.4
39. Chowdhury, E.K., & Chowdhury, R. (2022). Empirical research on the relationship between renewable energy consumption, foreign direct investment and economic growth in South Asia. *Journal of Energy Markets*, *15*(2). 1-21, https://DOI:10.21314/JEM.2022.012
40. Chowdhury, E.K., & Chowdhury, R. (2023). Role of financial inclusion in human development: Evidence from Bangladesh, India and Pakistan. *Journal of the Knowledge Economy*, 1-26. https://doi.org/10.1007/s13132-023-01366-x
41. Chowdhury, E.K., & Nahar, S. (2017). Perceptions of Accountants toward Sustainability Development Practices in Bangladesh. *Journal of Management and Sustainability*,7(3), 112-119. doi:10.5539/jms.v7n3p112
42. Chowdhury, E.K., & Reza, T. (2013). Diagnostic Study on Interactive Ads and Its Response towards the FM Radio. *International Journal of Research in Commerce, IT & Management*, 3(2), 36-41. https://tinyurl.com/5n8huanv
43. Chowdhury, E.K., Abdullah, M. N., & Tooheen, R. B. (2021). Role of information and communication technology in economic progress and increasing demand for renewable energy: evidence from China and India. *Asian Journal of Technology Innovation*, 30(3), 651-671. https://doi.org/10.1080/19761597.2021.1961090
44. Chowdhury, E.K., Dhar, B. K., & Stasi, A. (2022). Volatility of the US stock market and business strategy during COVID-19. *Business Strategy & Development*, 1–11. https://doi.org/10.1002/bsd2.203
45. Chowdhury, E.K., Dhar, B. K., Gazi, M., & Issa, A. (2022). Impact of Remittance on Economic Progress: Evidence from Low-Income Asian Frontier Countries. *Journal of the Knowledge Economy*, 1-26. https://doi.org/10.1007/s13132-022-00898-y
46. Chowdhury, E.K., Dhar, B. K., Thanakijsombat, T., & Stasi, A. (2022). Strategies to determine the determinants of financial performance of conventional and Islamic commercial

banks: Evidence from Bangladesh. *Business Strategy & Development*, 1–19. https://doi.org/10.1002/bsd2.207

47. Chowdhury, E.K. (2018). An Assessment of Return Spillover Among Selected Stock Markets in SAARC Countries. *South Asian Journal of Management*, 25 (1), 51-63. Association of Management Development Institutions in South Asia. https://tinyurl.com/y2bd39tk
48. Chowdhury, E.K. (2018). Does Foreign Direct Investment Stimulate Economic Progress of a Developing Country? Empirical Evidence from Bangladesh. *CIU Journal*, 1 (1), 71-86. Chittagong Independent University. https://tinyurl.com/3scz3jzh
49. Chowdhury, E.K. (2019). An Empirical Study of Volatility in Chittagong Stock Exchange. *CIU Journal*, 2 (1), 19-38. Chittagong Independent University. https://tinyurl.com/3w6k89k8
50. Chowdhury, E.K. (2019). Transformation of Business Model through Blockchain Technology. *The Cost and Management*, 47(5), 4-9. The Institute of Cost and Management Accountants of Bangladesh. https://tinyurl.com/bdz4ns7t
51. Chowdhury, E.K. (2020). Catastrophic Impact of Covid-19 on Tourism Sector in Bangladesh: An Event Study Approach. *The Cost and Management*, 48(4), 43-52. The Institute of Cost and Management Accountants of Bangladesh. https://tinyurl.com/ccu6mkbx
52. Chowdhury, E.K. (2020). Is Capital Market Integration among the SAARC Countries Feasible? An Empirical Study. *Eurasian Journal of Business and Economics*, 13(25), 21-36. https://doi.org/10.17015/ejbe.2020.025.02
53. Chowdhury, E.K. (2020). Non-Performing Loans in Bangladesh: Bank Specific and Macroeconomic Effects. *Journal of Business Administration*, 41(2), 108-125. University of Dhaka. https://tinyurl.com/54f5pexw
54. Chowdhury, E.K. (2020). Volatility in Cryptocurrency Market–Before and During Covid-19 Pandemic. *CIU Journal*, 3(1), 69-86. Chittagong Independent University. https://tinyurl.com/mr3djzcn
55. Chowdhury, E.K. (2022). Strategic approach to analyze the effect of Covid-19 on the stock market volatility and uncertainty: a first and second wave perspective, *Journal of Capital Markets Studies*, 6(3), 225-241. https://doi.org/10.1108/JCMS-05-2022-0015
56. Chowdhury, E.K. (2023). Integration of Artificial Intelligence Technology in Management Accounting Information System: An Empirical Study. In: Abedin, M.Z., Hajek, P. (eds) Novel Financial Applications of Machine Learning and Deep Learning. International Series in Operations Research & Management Science, vol 336. Springer, Cham. https://doi.org/10.1007/978-3-031-18552-6_3
57. Chowdhury, E.K., & Rozario, S. O. (2018). Impact of Attitude and Awareness of Investors on their Investment Behavior- A Study on Bangladesh Stock Market. *The Bangladesh Accountant*, July- September, 81-89. The Institute of Chartered Accountants of Bangladesh. https://tinyurl.com/4av6swas