



## From Boardrooms to Markets: Understanding the Influence of Governance, Structure on Stock Performance

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### ABSTRACT

The research aims to explore the relationships between structural dynamics, management and conduct within stock markets, external governance factors and stock market performance. We have collected secondary data of fifty-nine countries spanning from 1995 to 2021 have been studied. We have employed Fixed Effect Model and Arellano Bond Estimation accounting endogeneity concerns. The study concluded that previous year stock market performance is positively related with current year performance. Structure of stock markets, internal governance, individual using internet and external governance indicators except rule of law have positive and significant relation with stock market performance. Regulatory business environment, governance practices and easy access of knowledge to public improves the stock market performance. The study found that institutional quality, enhanced stability in politics and less corruption should be kept in prime focus by policy maker. Facilities like internet access make public more aware of stock market dynamics and improves the participation of public in stock markets. The previous year performance of market, result in an outlook which increase the expectations of investors for businesses and triggering further positivity in the market. This leads to anticipation regarding the trend that this behavior will continue, and it results in increasing returns. Findings of the research provide valuable insights for market regulators and policymakers seeking to promote stability in financial market and foster sustainable economic growth.

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## 1. Introduction

Governance explains the institutional frameworks which regulate financial markets, comprising legal, supervisory bodies, and political systems that guarantee cohesion and order in business activities. The equitable aspects such as fairness of legal processes, stability in politics, degree of accountability shape quality of these institutions and their effectiveness in overseeing markets. Effective governance impacts firm-institution interactions which impact transaction costs. The effective measures of governance results in performing organization. The attainment of goals of organization are due to identification of the structural dynamics of organization and tackling the governance measures. Stock markets are considered in fostering economic growth, channeling surplus savings into investments thus become economically valuable (Anigbogu & Nduka, 2014). They decrease costs, facilitating investments (Levine & Zervos, 1996). Stock price variations impact consumption and investment patterns, influencing economic performance (Shen, 2000). Stock markets help in mobilizing savings, while market liquidity augments economic activity (Levine, 1997). Liquidity in stock markets improves capital allocation, triggering economic growth (Levine & Zervos, 1996). By raising capital flow at low costs, stock markets contribute to advancement in the economy of country (Claessens, Djankov, & Klingebiel, 2000). In developing countries, Stock Markets have a fundamental role in circulation of savings

into investments, (Khan, 2004). Developing markets are attempting to restructure and modify financial systems by mobilizing resources and expand capital markets which promote availability of resources (Basu & Nag, 2013). Likewise, structure of organization operates like its anatomy, giving foundational framework enabling it to function. It influences the behavior of its members, with widespread effects on its operations (Dalton et al., 1980). The performance of organization will only be comprehended by recognizing that structural dimensions like procedures related to decision making, coordination, specialization and structure processes are crucial in determining the ability of organization to shape its aims, make changes, and to sustain at mark. Researchers have used various frameworks to calculate performance in relation to structure, using both quantitative metrics for evaluation of organizational structure on financial and operational results, and qualitative measures to evaluate internal dynamics and adaptability. These dimensions highlight how organizational structure influences communication flow, performance, and acceptance of external pressures (Dalton et al., 1980).

Besides, structural importance of organizations, governance is essential for the system prevailing in stock markets. Governance can be both internal and external. The financial system that operates according to legal system that governs is governance (Hooper, Sim, & Uppal, 2009). In banking sector, governance helps in reduced conflicts between managers and shareholders (Daadaa, 2020). Effectiveness of any institution's foundation lies in its political, legal and supervisory systems, which are molded by factors like legal frameworks, political stability, corruption control, and accountability (Hooper, Sim, & Uppal, 2009). Operative laws, stability, control of corruption are included in quality of governance (Low, Kew, & Tee, 2011). Good governance is critical for developed and secure societies, free from violence/ misconduct (Cheema, 2022) and fostering trust between creditors and debtors (Cheema, 2022). To maintain competitiveness of country in global financial markets, effective governance systems across financial and non-financial sectors are crucial. This underlines the fact that governance frameworks significantly shape the composition of investors in financial markets. Factors like classification, coordination influence the operation of firms and also further effects the performance (Low, Kew, & Tee, 2011). There are different phases of governance of a country in which politics stands out. The stock market are affected by political events. Political risk affects the national as well as international investors (Murtaza & Ali, 2015). Stock market performance appeals to both local and international investors, but factors like ineffective governance, weak oversight, corruption, and fraud can deter the trust of foreign investor (Low, Kew, & Tee, 2011). The factors, such as board decisions, management changes, and policies, also manipulate market performance (Osugwu, 2009). Political risk is a key concern for investors at domestic and international level (Murtaza & Ali, 2015).

### **1.1. Problem Statement**

In context of stock markets, the relation of structure of stock markets, internal governance within stock markets, external governance indicators affecting stock market and stock market performance are underexplored. It is imperative to undermine the research for structural frameworks of stock markets, internal governance procedures, external governance factors and performance of different stock markets across the world.

### **1.2. Significance of study**

The passage through which surplus money traveled to deficit units is called stock market. In other words, stock markets are middleman for transferring money from savings of creditors to debtors. The economic growth is facilitated and promoted by stock markets (Anigbogu & Nduka, 2014). Investors invest their savings through the channel of stock markets. Because of this trait, stock markets are vital for the economic growth of a country (Anigbogu & Nduka, 2014). Costs are associated with the mobilization of capital which is reduced by the stock markets (Levine, 1997). Consumption and investment patterns vary with the stock prices (Shen, 2000). According to Levine (1997), stock markets mobilize the savers for investment. The future of economic activity is assessed through stock markets. The public put their expectations in financial markets. By boom and recession, the stock prices rise or fall respectively (Osakwe, Ogbonna, & Obi-Nwosu, 2020). By considering the function, the importance of the stock market is evident and apparent. The economic activity of a country is affected by the stock market liquidity. Investors want to invest in liquid markets because it decreases the uncertainty and costs related to it. The allocation of capital makes the investment easier, and it flourishes the economy (Levine & Zervos, 1996). The flow of capital at low cost is done under the roof of stock markets (Claessens, Djankov, & Klingebiel, 2000). Keeping in view about the importance of stock markets, it is very imperative

to understand the factors that influence of stock markets performance. The research will contribute to development of efficient system for operations of financial market.

### 1.3. Research questions

As our study titled, it circulates around the structural dynamics, conduct, management , and functioning of stock markets. By exploring the literature, we came across many questions. We came across questions like why some stock exchanges are performing better than other stock exchanges in the world. What are factors the affect stock market performance? How governance impacts the stock markets? What is the difference between governance within an institution and governance outside the institutions? How such Governances can be segregated? What are the factors of structure of stock markets affecting the stock market performance? By roaming through this number of questions we have developed the following three main research questions around which our study circulates.

- How is the conduct and management of affect the stock market performance?
- How is the Stock exchange market affected by its structural dynamics?
- How is the Stock exchange market performance influenced by external Governance?

Based on the research questions we have developed the objective of the study.

### 1.4. Objectives

This research investigates how the dynamics of organization structure and system of governance practices within stock markets can affect their performance. The study conjectures about the mechanisms within organization are crucial for operations and financial results. The correlation between governance systems and performance of markets are analyzed in this study. This study will put contribution in policy making and regulations that can improve and enhance the structure of governance and economic sustainability.

$H_0^1$ : *The internal conduction and mechanisms of stock markets have no relation with the performance of stock markets.*

$H_0^2$ : *The structural dynamics of stock markets is not related to their performance outcomes.*

$H_0^3$ : *The quality of external governance mechanism and the performance of stock markets are not linked.*

### 1.5. Organization of the study

We have explained the literature review related to our research area in section 2. Theoretical framework is provided in Section 3. In section 4, we have explained methodology and data of the study. In section 5, we have explained results of the study. In the last section we have explained conclusion with policy suggestions.

## 2. Literature Review

Studies underscore the factors that cause impact on stock market performance. All share price index of Colombo Stock exchange analyzed by OLS from 2006 to 2016. The study found that interest rate and the industrial production index affect negatively. As the civil war ended in Sri Lanka it has attracted foreign investments (Jayasundara, Rathnayake, & Fernando, 2019). Ahmady, Mehrpour and Nikooravesh (2016) investigated the dynamics of governance and stock market performance for South Asian countries. The study concluded that the governance factors like control of corruption, accountability and rule of law have positive and significant relation on stock market development through market capitalization. Similar results are found by except for regulatory quality and accountability (Modugu & Dempere, 2020). The study by Imran et al. (2020) have analyzed the twenty-five countries for understanding the stock market returns and governance indicators. A country with good governance procedures and systems has effective implementation of rules and regulations and it enhances stock markets functioning. The excellence of institutions in a country reduces the agency costs and make the financial projects profitable by increasing the investor confidence. The healthiness of country is indicated by the stock market indices. Setiawan (2020) conducted research and found that if the GDP of a country improves the stock market indices are improved. Similarly, the inflation has positive relation with stock market performance. The exchange rate and interest rate have negative impact on stock market performance. The positive relation of growth of economy and stock market development are found in numerous studies. Keeping this in mind, research has been conducted to check the

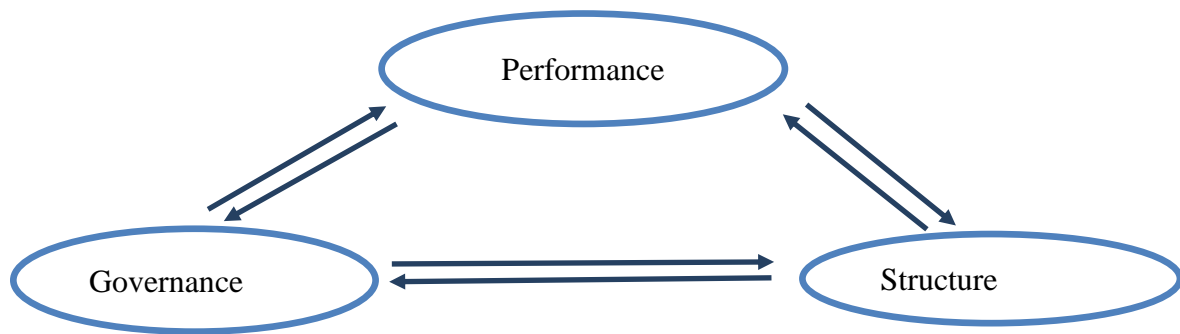
elements which are important for the stock market development. Governments aim to design the policies in such a way that help in economic development of a country. Trade openness, money supply and economic growth impact stock market development positively (Chiad & Hadj Sahraoui, 2021).

Jumaah et al. (2023) explored how the quality of governance indicators affects the stock market performance. The study concluded that the accountability and stability in politics have positive impact on the stock market performance except the rule of law in the integrated market. Research was conducted on Indonesian stock market by Amelia et al. (2021) and concluded that the good governance practices within the financial market improves the stock market returns. Study by Udo, Odey and Jacob (2022) on macroeconomic variables effecting the stock market performance in Nigeria gross domestic product, exchange rate and saving rate effect stock market performance positively while inflation effect stock market performance negatively. In context of Pakistan research was conducted by Khan et al. (2022) on stock market performance of Pakistan. The research concluded that the governance indicators affect the stock market performance in such a way it increases the capitalization of stock market and improves the turnover ratios. The governance indicators of Brazilian stock markets are investigated by Ribeiro and Souza (2023). According to the research, the investors feel confident to invest in companies which are well governed. They have proposed the index for governance which is the effective instrument for assessment of companies. The governance indicator that is suggested by the study is the instruments for reducing the agency problems. The political instability reduces the business in stock markets by decreasing its size and increasing transaction costs (Obenpong Kwabi et al., 2024). The Indian stock market performance by application linear regression model was done by Garg and Gupta (2023). The study aimed to investigate the governance and stock market prices. The companies which have better governance practices have better stock performance in terms of prices. The research suggested that the regulators should work on strengthening the assessment and governance frameworks. The information disclosure and stock prices are investigated by Vietnam by Ha, Nguyen and Ho (2024) for 30 listed companies. The research found that there is positive relation of disclosure with the stock market prices. The investor decisions rely on the available information of stock market.

The review of past studies has found diverse relation between governance and stock market performance. Several studies found positive impact of GDP, trade, exchange rate, interest rate on conduct of stock markets. While some factors like inflation have negative impact on stock market performance. In case governance indicators the political stability, regulatory quality, control of corruption has positive impact on stock market performance. The voice and accountability and rule of law has mixed effect on stock market performance. Despite all these findings there is noticeable gap in research in which structure of stock markets is missing. From the perspective of theories like agency theory and stewardship the relation of internal governance factors with the stock market performance in review of literature is missing. The focus of agency theory is shareholders and managers. The stewardship focuses on the cooperation between parties. There is research gap in fields of structure of stock markets and its effect on the stock market performance. The present research aims to explore the implication of these theories to check the relation of structure, governance and stock market performance. We have interlinked structure, governance and performance is shown by figure 1. The process of implementing strategies, policies and actions within an organization requires governance. It includes attitudes and behavior in the organization. The design of an organization which includes resource allocation, roles and hierarchy is structure of organization. The given diagram shows a bidirectional relation of variables performance, governance, and structure. This diagram illustrates if one of the factors changes and is affected by others. Continuous feedback and different types of adjustment help in improving the performance of organization.

The structure of organization is design of hierarchy that contains the division of labor, departments, resource allocation which helps in attaining goals. There is alignment of strategies, processes, aims, operations, costs, management with the structuring of an organization. The scalability and adaptability of organization increase the confidence of investor. The practices that govern the rules, routines and processes can monitor the overall performance of organization are included in governance. This involves accountability, transparency and fairness which triggers the efficiency of decisions and management within an organization.

**Figure 1: Interconnection between performance, governance, and structure**



On the other hand, bad governance leads to inefficient management and decisions that negatively affect the performance of organization. So, there is cyclical relationship of structure, governance and stock market performance. It involves a constant and regular revised approach regarding structure, governance and performance to attain success of stock market. The functioning of financial markets is the barometer of economic health of country. The stock prices also show the health of businesses and companies. The practices, routine, rules by which an organization is monitored and supervised is called governance (Asaduzzaman et al., 2016; Javed, Iqbal, & Hasan, 2006). Performance of institutions with protection of investors rights are protected by the effective governance, practice of rule of law, transparent channels of accountability which leads to stability of financial market (Bovaird, Loeffler, & Martin, 2003; Cohen, Krishnamoorthy, & Wright, 2002; Darko, Aribi, & Uzonwanne, 2016; Imran et al., 2020). Alignment of shareholder interest with goals of companies is supervised by good governance which leads to stock market performance. There is difference in corporate governance practices in developing and developed countries Azeez (2015), and this governance circles around the community, social, organizational, national global channels (Mees & Smith, 2019). The elements like proficiency, codification, regulation, consistency, layout, design and customization are included in structure of organization Dalton et al. (1980) and Ahmady, Mehrpour and Nikooravesh (2016). These aspects of structure are the key factors by which the activities of organization are overseen and reviewed. The proper structure of organization leads to streamlined optimization of resources, coherent communication and rational decision processes which ultimately leads to attainment of organizational goals. As shown in figure that the structure, governance practices and organizational performances are cyclical and dual directional. As the governance practices alter the structure of organization which converges on the organizational performance. The long-term success of organization, risk management continuous growth, investor well-being and equilibrium maintenance is necessitated by this iterative channel. The streamlined development of capital and maximized capital use is done in stock markets. Organizational structure and governance practices influence factors like capitalization of, number of list companies, turnover and value traded (Asongu, 2012; Zafar, Qureshi, & Abbas, 2013). The sustainability of businesses in markets is the interplay of structure, governance which eventually results in good financial market performance.

### **3. Theoretical Framework**

In the field of management Contingency theory has been influential, as it recognizes the importance of adapting management practices to different contexts. Additionally, some have argued that the theory may overemphasize the importance of external factors at the expense of internal factors such as culture and leadership (Fiedler, 1964), Donaldson (2001) and Burns and Stalker (1961). Three types of variables are defined by contingency theory (Luthans & Stewart, 1977) which includes environmental, resource and management. As stated by contingency theory the former stated variables are primary variables of system. The external and internal factors within an organization are different. Factors like federal legislation that affect outside organization and some factors affect the internal environment of organization which can be controlled by system prevailing within organization. The secondary variables include variables which are related to situation. It is an interlink of resources that are in the organization with the dealing of manager. Another secondary variable is performance. This performance is connected to how much progress is made to achieve the goals of organization by managers and keeping in view the interaction of environmental variables. In the last contingency theory explained tertiary

variable, in which interaction of three variables resource, management and environment variables. Tertiary variable is the performance of whole system and organization.

#### 4. Methodology and Data

Structure, governance, and stock market performance are main focus of the study. The relationship among these variables is empirically examined through the subsequent regression. The model of the study is given as follows:

$SMP = f(\text{Internal control, Structural dynamics of Stock market, Governing Economy related variables, Macroeconomic variables})$

Model can be written as:

$$SMR_{it} = \alpha_0 + \alpha_1 BDI_{it} + \alpha_2 MCP_{it} + \alpha_3 CCR_{it} + \alpha_4 PSV_{it} + \alpha_5 GEF_{it} + \alpha_6 RGQ_{it} + \alpha_7 ROL_{it} + \alpha_8 VAC_{it} + \alpha_9 SMV_{it} + \alpha_{10} GDP_{it} + \alpha_{11} LLB_{it} + \alpha_{12} INET_{it} + \epsilon_{it} \tag{1}$$

Where, SMR is stock market return. BDI is extent of Business disclosure index, MCP is market capitalization, CCR is control of corruption, PSV is political instability, GEF is government effectiveness, RGQ is regulatory quality, ROL is rule of law, VAC is voice and accountability, GDP is gross domestic product, BMS is Liquid Liabilities % of GDP and INET is individual using internet. By adding dynamic effects in the model:

$$SMR_{it} = \beta_0 + \beta_1 SMR_{it-1} + \beta_2 BDI_{it} + \beta_3 MCP_{it} + \beta_4 CCR_{it} + \beta_5 PSV_{it} + \beta_6 GEF_{it} + \beta_7 RGQ_{it} + \beta_8 ROL_{it} + \beta_9 VAC_{it} + \beta_{10} SMV_{it} + \beta_{11} GDP_{it} + \beta_{12} LLB_{it} + \beta_{13} INET_{it} + \mu_{it} \tag{2}$$

Where,  $SMR_{it-1}$  is lag of dependent variable, the subscript  $i$  denotes the  $i$ th country ( $i = 1, 2, \dots, 59$ ) and the subscript  $t$  denotes that  $t^{th}$  year ( $t = 1, 2, \dots, 26$ ). We have examined fifty-nine stock markets spanning from 1995 to 2021. Governance variables are divided into internal and external categories. Business extent of disclosure index are used as proxy for internal control. External governance includes Voice and Accountability, Political Stability, Regulatory Quality, Rule of Law, Control of Corruption, and Government Effectiveness. Stock market structure is proxied by market capitalization to GDP (%), and Stock market performance is proxied by year-on-year stock market return (%). Countries included in analysis are shown in Appendix A. To gather data on external governance, internal governance, structure and stock market performance we sourced information from the World Development Indicators (WDI). To ensure the robustness of our findings, we incorporated liquid liabilities (% of GDP), Gross Domestic Product (GDP), stock market volatility, inflation, individuals using internet (%) as our control variables. Individuals using internet (%) is the number of individuals using internet. Incorporating dummy variables for key events like the 2007-2009 financial crisis and COVID-19 pandemic, enriches the analysis of stock market performance. This analysis underscores the critical role of external events in shaping market dynamics. The description of variables is given in Table 1. Descriptive statistics of all variables are shown in Table 2.

**Table 1: Description of variables**

Variables name (Symbol)	Description
Year-on-year stock market return (SMR)	Annual growth rate of the average stock market index (%)
Business Disclosure Index (BDI)	It is index of financial information. It ranges from 0 to 10.
Stock Market Capitalization to GDP (MCP)	The values of stocks traded % of GDP.
Liquid Liabilities (LLB)	Broad money % of GDP
Individuals using Internet (INET)	Internet users of population (%)
Stock Market Volatility (SMV)	Average volatility over a 360-day period of stock market index.
Gross Domestic Product (GDP)	Addition of gross value added by all resident producer with product taxes and subtract subsidies.
Financial Crisis 2007-2009 (FCR)	Dummy for years 2007-2009
Covid-2019 (COV)	Dummy for years 2020-2021
Control of Corruption (CCR)	Aggregate indicator of extent to which public power is exercised for private gain. It ranges from -2.5 to 2.5.
Government Effectiveness (GEF)	Aggregate indicator of public services. It ranges from -2.5 to 2.5.
Political Stability (PSV)	Aggregate indicator of likelihood of political instability. It ranges from -2.5 to 2.5

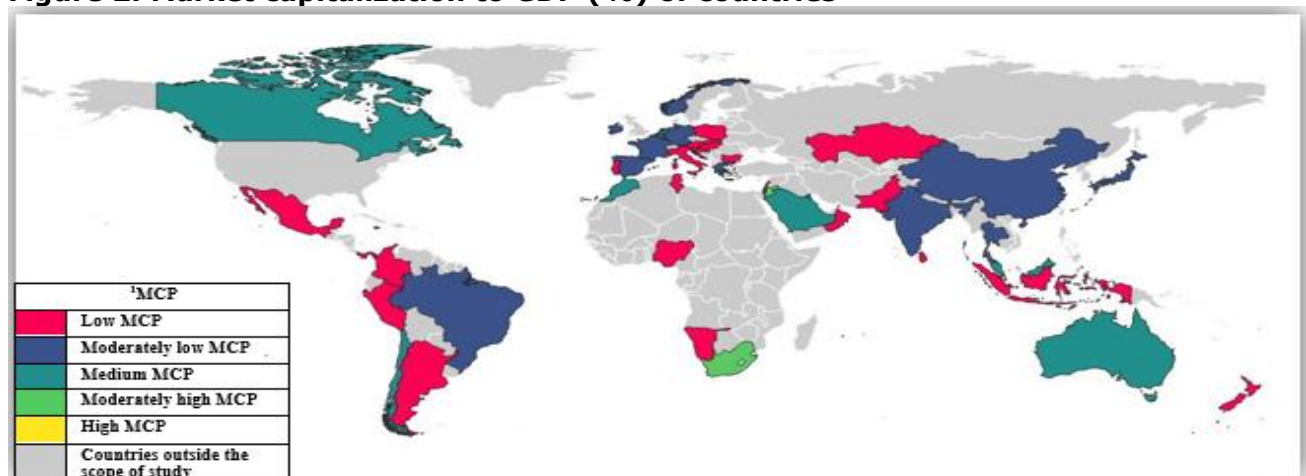
Regulatory Quality (RGQ)	Aggregate indicator of government regulations. It ranges from -2.5 to 2.5
Voice and Accountability (VAC)	Aggregate indicator for freedom of expression. It ranges from -2.5 to 2.5
Rule of Law (ROL)	Aggregate indicator to abide by law. It ranges from -2.5 to 2.5
Lagged Stock Market Return (LSMR)	Lagged of Stock market return (%)

**Table 2: Descriptive Analysis of variables**

Variable	Obs.	Mean	Std. Dev.	Min	Max
SMR	1521	0.0933	0.2544	-0.6266	2.0882
MCP	1381	0.7562	1.3409	0.0000	17.775
SPV	1535	19.5749	9.4767	3.2768	79.6996
BDI	1625	6.5204	2.4013	1	10
LLB	1541	0.9098	0.9393	0.0841	9.2743
INET	1610	42.2816	32.4400	0.0001	100
CCR	1380	0.4607	0.9671	-1.5020	2.3803
GEF	1380	0.6245	0.8109	-1.3122	2.4696
PSV	1380	0.1544	0.9186	-2.8100	1.7586
RGQ	1380	0.6322	0.7796	-1.2928	2.2522
ROL	1380	0.5192	0.8816	-1.5125	2.0243
VAC	1380	0.3782	0.8990	-1.9071	1.7380
GDP	1560	11.2990	0.7552	9.5249	13.3310

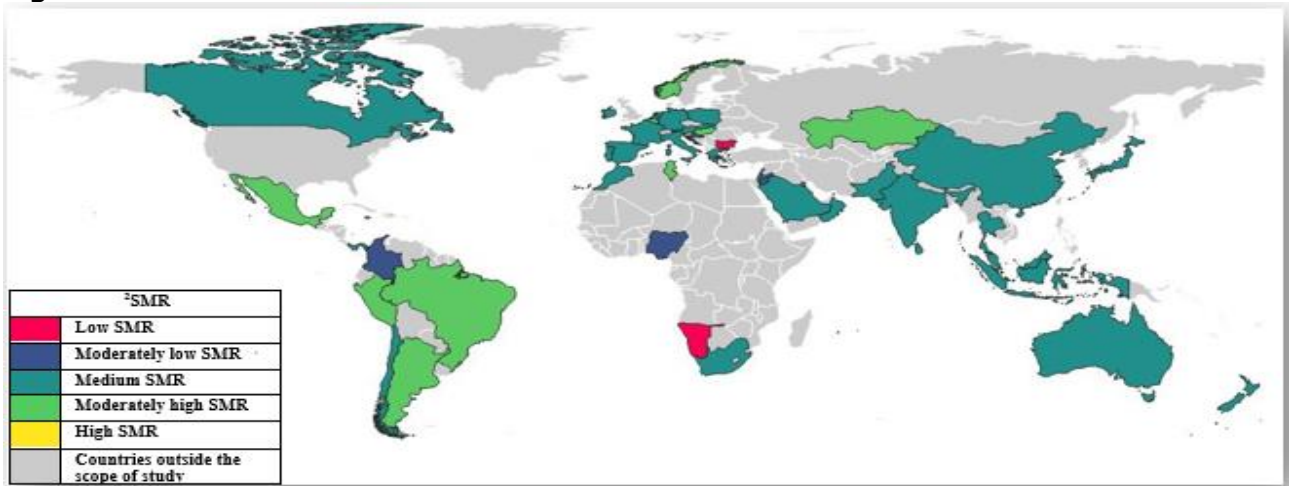
The Figure 2 depicts the market capitalization of countries. Slovakia has lowest market capitalization. The reason could be due to small economy size of Slovakia. It has a small corporate sector therefore it is less attractive for investors. The favorable business environment in Hong Kong has put it on highest market capitalization. Hong Kong is hub of financial market; it boosts the corporate growth which again attracts investment. Figure 3 shows the stock market return of countries. Slovenia has highest stock market return due to its diversified and stable economy. This encourages the investor to participate more, and they get good returns. Bulgaria has lowest stock market return which depicts the challenges Bulgaria might be facing in businesses. Figure 4 shows the internal governance of countries. The difference in regulatory environments, governance practices and transparencies lead Thailand, China, Bulgaria, Malaysia, New Zealand and Singapore to highest business disclosure index. While Hungary is at lowest business disclosure index. The reason could be that the framework for investor protection is less developed, and enforcement of regulations are weaker in Hungary. Figure 5 depicts the New Zealand is highest in external governance while Nigeria is lowest in external governance. New Zealand has enforced strong corporate governance standards while Weak enforcement of governance laws and systems are practiced in Nigeria. It struggles to cope with corruption, political instability and exploitation.

**Figure 2: Market capitalization to GDP (%) of countries**



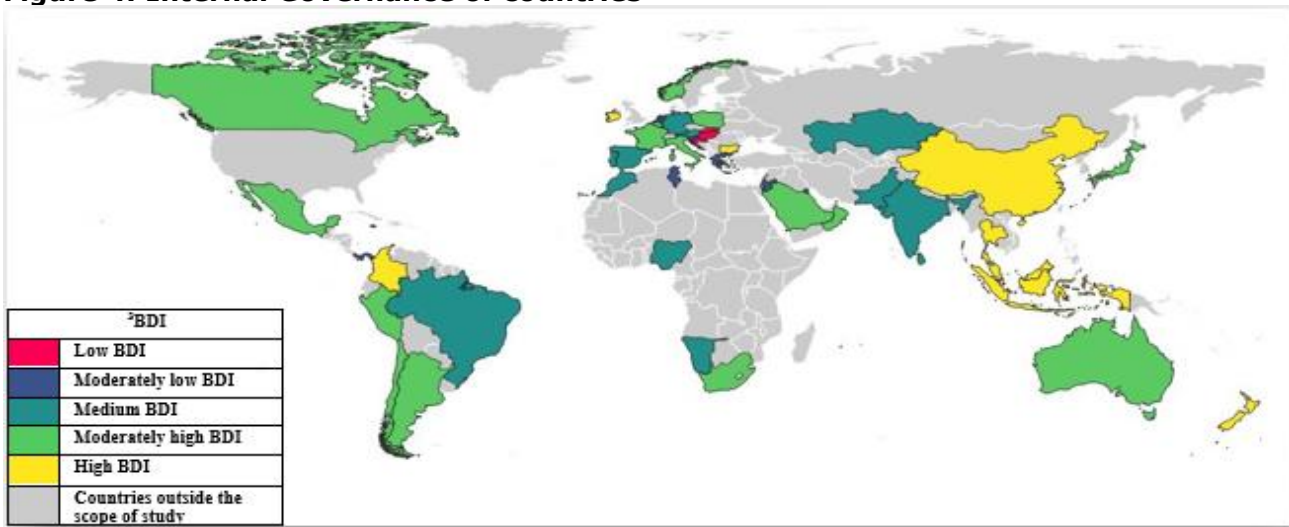
Note: Low MCP ranges from 0.04-0.41, Moderately low MCP ranges from 0.41-0.83, Medium MCP ranges from 0.83-1.44, High MCP ranges from 1.44-3.87

**Figure 3: Stock market return of countries**



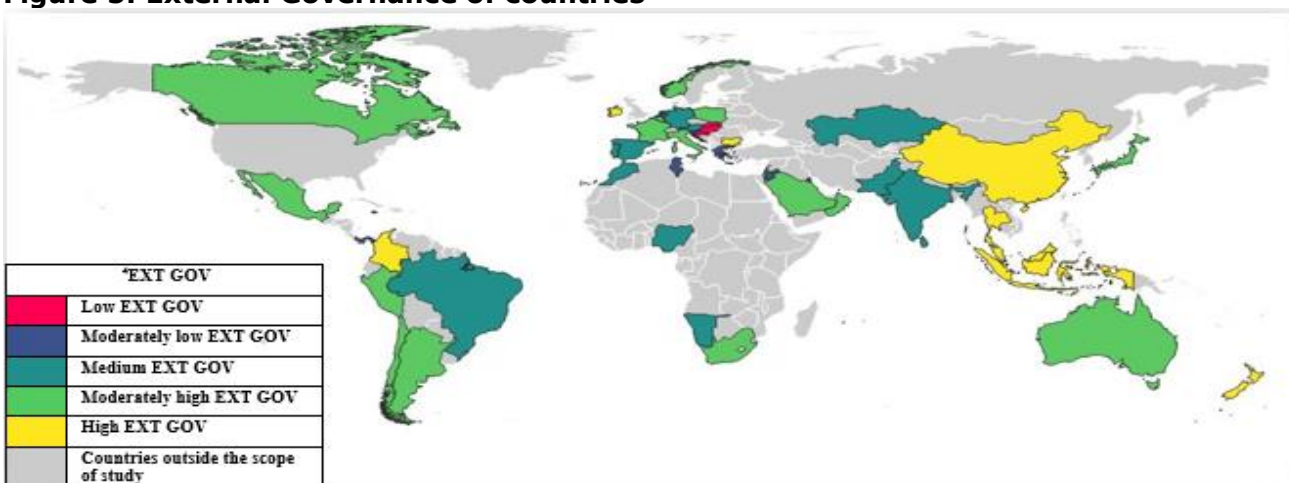
Note: Low SMR ranges from -0.45- -0.26, Moderately low SMR ranges from -0.26- -0.05, Medium SMR ranges from -0.05-0.12, Moderately high SMR ranges from 0.12-0.26, High SMR ranges from 0.26-0.84

**Figure 4: Internal Governance of countries**



Note: Low BDI ranges from 2-3, Moderately low BDI ranges from 3-4.3, Medium BDI ranges from 4.3-6.5, Moderately high BDI ranges from 6.5-8, High BDI ranges from 8-10

**Figure 5: External Governance of countries**



Note: Low EXT GOV ranges from -1.12- -0.44, Moderately low EXT GOV ranges from -0.44-0.14, Medium EXT GOV ranges from 0.14-0.75, Moderately high EXT GOV ranges from 0.75-1.3, High EXT GOV ranges from 1.3-1.76

## 5. Results

Research questions, hypothesis and aims of study are guidance to select the estimation technique. Endogeneity issues and time dynamics give the need to employ dynamic models. We have employed Fixed effect model to tackle the variation across countries and time so that



estimation bias that is related to country effects can be addressed. Moreover, the Arellano bond model is used to tackle the issue of endogeneity that is recommended by Hansen (1982). We have applied Fixed effect and Arellano bond test to assess the relations of variables given in methodology section. The results are given in table 3. The fixed effect resulted in insignificant relationship between BDI and SMR. Dynamic models resulted in positive significant relation between BDI and SMR. The transparency of information about business increases the trust and confidence of investors leading to market performing. While there is a negative insignificant relation between MCP and SMR in fixed effect model. The one unit increase in MCP causes 0.007 units decrease in SMR. While there is positive and significant relation of MCP and SMR in dynamic model. It means that market capitalization signals towards stability which have a positive effect on stock market return. Assuming other factors same the a unit increase in broad money causes a decrease in stock market return by 0.5226 and this relationship is significant at 1% level in dynamic model. This could be due to reason tight monetary policy results in dampening of stock market performance. The liquid liabilities % of GDP has negative and significant relation with stock market return. As the liquid liabilities increase by one unit the stock market return decreases by 0.5226 units. If the broad money grows faster than the GDP it results in inflationary pressures. Central banks deal with this inflation by increasing the interest rate which decreases investment in stocks. As stocks become less attractive, which leads to low stock market return. In fixed effect model, one unit increase in INET decreases SMR by 0.0021 units. The negative influence could be due to the pace of information spread and changes in the investor behavior due to information.

In the dynamic model, the relation between INET and SMR is positive and significant. The usage of internet is the reason for the spread of information which can be the reason for increase in efficiency in stock market. It enables the large number of people to participate in the stock market. The internet increases the access of stock market information and financial news. As the individuals get informed, more individuals participate in the stock market. This makes the stock market more liquid. Liquid markets increase the volume of trade. Before addressing endogeneity issues, fixed effect models resulted in relation of SPV and SMR which is negative and significant. It means that as there is one unit increase in SPV, 0.0153 units of SMR also decreases. Every Investors perceives volatility differently. When there is high volatility the risk averse investors result negatively which could be the reason for low returns. The relation of GDP and SMR is negative and significant in dynamic model as shown in table 3. When economy flourishes, the stock market may not react in same manner due to an increase in interest rates and an increase in prices. The growth of the economy leads to high competition which reduces the profits of business. Sometimes the investor becomes more risk averse and starts business outside the stock market. Further when we analyze the GDP and SMR by Fixed effect model, then we get positive and insignificant results.

**Table 3: Results of Fixed effect model and Arellano Bond Model**

Variables	Regression - I FE Model	Regression - II FE Model	Regression - III FE Model	Regression - IV FE Model	Regression - V FE Model	Regression - VI FE Model	Regression - VII FE Model	Regression - VIII Dynamic Model
SMR <sub>t-1</sub>	---	---	---	---	---	---	---	0.3205 (42.08)***
SMR <sub>t-2</sub>	---	---	---	---	---	---	---	-0.1584 (-19.72)***
MCP	0.0156 (1.38)	0.0173 (1.53)	0.0162 (1.44)	0.0143 (0.127)	0.0151 (1.32)	0.0103 (0.91)	0.0149 (1.30)	0.1797 (8.22)***
BDI	-0.0026 (0.820)	-0.0003 (-0.03)	-0.0009 (0.932)	-0.0023 (-0.20)	-0.0016 (-0.14)	-0.0019 (-0.17)	0.000 (0.01)	-0.5226 (-15.22)***
SPV	-0.0150 (-14.72)***	-0.0150 (-14.72)***	-0.0150 (-14.70)***	-0.0148 (-14.61)***	-0.0149 (-14.67)***	-0.0152 (-14.97)***	-0.0153 (-15.03)***	---
LLB	-0.2515 (-7.44)***	-0.2528 (-7.48)***	-0.2522 (-7.46)***	-0.2589 (-7.66)***	-0.2522 (-7.46)***	-0.2451 (-7.29)***	-0.2540 (-7.52)***	0.00365 (8.83)***
INET	-0.0021 (-3.66)***	-0.0024 (-4.05)***	-0.0023 (-3.99)***	-0.0020 (-3.46)***	-0.0022 (-3.88)***	-0.0021 (-3.63)***	-0.0021 (-3.51)***	0.0036 (9.99)***
GDP	0.0834 (0.221)	0.1038 (1.50)	0.0937 (0.168)	0.0501 (0.73)	0.0870 (1.27)	0.0881 (4.20)***	0.0795 (1.15)	-0.8465 (-24.38)***
CCR	0.0548 (0.263)	---	---	---	---	---	0.0327 (0.54)	-0.0625 (-2.61)***
GEF	---	0.1038 (0.134)	---	---	---	---	-0.0918 (-1.53)	-0.0655 (-2.31)**
PSV	---	---	-0.0204 (-0.66)	---	---	---	-0.0288 (-0.87)	-0.0435 (-3.67)***
RGQ	---	---	---	0.1420 (2.90)***	---	---	0.1884 (3.31)***	-0.1125 (-3.79)***
ROL	---	---	---	---	0.0224 (0.39)	---	-0.1181 (-1.58)	-0.0456 (-1.07)
VAC	---	---	---	---	---	0.2067 (4.20)***	0.2228 (4.12)***	0.2828 (7.16)***
	1593	1593	1593	1593	1593	1593	1593	1416

No. of observations	53.55	53.49	53.41	54.82	53.35	56.46	34.41	---
F statistics	---	---	---	---	---	---	---	Prob > chi2 =
Sargan test								0.2340

Note: Authors' own work. \*, \*\*, \*\*\* denote significance at 1%, 5% and 10% level of significance, respectively

Holding all other factor constant, the relation of CCR and SMR are positive and insignificant in fixed effect model and in dynamic model the relationship between CCR and SMR gets negative and significant. This might be due to the intervention of the government. Implementation of stringent regulations by government can result in inefficiency which can reduce the profit. Strict regulations can slow the innovative processes which can increase costs related to operations and can negatively affect SMR. Further in the fixed effect model is applied the relation of GEF and SMR is negative and insignificant which means that as one unit of GEF is increased this decreases SMR by 0.0918 units. The relation of GEF with SMR is significant but negative which can be interpreted as one unit of GEF increases the SMR decreases by 0.0655 units in dynamic model. The control and intervention of government like increased taxation, price control or nationalization may lead to inefficiencies which may decrease the profits and results in dampening of SMR. Political instability like the centralized power with crackdowns and less freedom have negative affect on SMP. These effects are confirmed by the results of dynamic models which depict the negative effect of PSV with SMR. Such concerns may decrease the confidence of investors in the market and push them to sell stocks, which may lead to an effect on the SMR negatively. The relation of RGQ and SMR are linked positively and significantly with SMR in fixed effect model. The relation between RGQ and SMR is linked negatively and significantly with SMR in dynamic models. Short term losses can be suffered by companies when the government implements strict rules and regulations. In fixed effect model, one unit of VAC increases then SMR increases by 0.2228 units. Similarly, when we check the relation of VAC with SMR in dynamic model the one unit of VAC increases then SMR increases by 0.2828 units. When one unit of ROL increases then SMR decreases by 0.1181 units in fixed effect model. The dynamic model shows insignificant negative relation of ROL and SMR as shown in table 3. The relationship of first lagged dependent variable of SMR is significant and positive with SMR. The previous year's market performance resulted in an outlook which increased the expectations of investors for businesses and triggered further positivity in the market. The previous year's price moment is analyzed by investors before making decisions. This leads to anticipation regarding the trend that this behavior will continue, and it results in increasing returns. The results of AR (2) show that there is no effect of second lag on the present changes in the variable. So, the dependence on dynamics is not proven by the AR (2) test. The results of Sargan test (Prob.>chi2=0.2340) depict that there is no violation of assumption of instrument validation. It means that instruments are not correlated with error terms. The reliability of the model is proven by the results of Sargan test.

## 6. Discussion

We have found that there is positive relation of stock market capitalization with stock market return. Similar positive results are found by (Dev & Shakeel, 2013; Dewan Muktadir-Al-Mukit et al., 2014; H.M.S.P, 2020; KAMRAN et al., 2018). Contradictory results are found by Borteye and Peprah (2022) and proxied stock market size by market capitalization of stock market. The study found there is a moderate negative relationship between market size and economic growth. We have proxied internal governance with extent of business disclosure index and our research concluded that there is negative relation between business disclosure index and stock market return. Contrary to our findings Shrivastav and Kalsie (2017) found that more disclosure of information improves the governance mechanism and results in higher performance. Ha, Nguyen and Ho (2024) research found that there is positive relation of disclosure with the stock market prices. We found negative relation of GDP with the stock market return. On contrary, Bui (2023); Ho (2019) found positive relation of economic growth with stock market performance. We have found positive relation of money supply with the stock market return. Likewise, Rakhal (2018) found positive relation of money supply and stock market return. Individuals using internet have positive effect on stock market performance. Similar results re found by Talpsepp, Liivamägi and Vaarmets (2020); Zhang, Lu and Xiao (2023). In case of external governance there are mixed results. We have found that there is negative relation of control of corruption, government effectiveness, political instability, regulatory quality and rule of law except for voice and accountability with stock market return. Similar negative results are found by Low, Kew and Tee (2011) except Voice and accountability has no significant association with stock market performance. In case of Nigeria, Omodero, Ekwe and Ihendinihu

(2018) found that corruption and stock market are positively related. Control of corruption and government effectiveness has a positive effect on stock market performance. Political stability had a dampening impact on stock market performance (Ajide, 2014). Modugu and Dempere (2020) found that stability in politics and rule of law improves stock market performance.

## **7. Conclusion**

The research aimed to identify the relation of stock market structure, internal governance within stock market, external governance indicators with stock market performance. For this purpose, in this we have employed fixed effect model and Arellano bond estimation on 59 stock markets spanning from 1996 to 2021. In dynamic panel model, the study found that Market capitalization has positive impact on the stock market performance and this impact is statistically significant. Further when we analyzed that business disclosure in stock markets have negative impact on the stock market performance. The relation of liquid liabilities has positively impacted stock market returns. The investor confidence is enhanced by the liquidity of market. The results further depicted that Individuals using internet affect the stock market return positively. It means that the knowledge of stock markets helps the individuals to get fully aware of patterns and behavior of stock markets. Moreover, we have found that as the GDP grows it affects the stock market returns negatively. When GDP grows it can create inflationary pressures, and central banks must increase the interest rate to deal with inflation. this can reduce the consumer spending. This reduced spending of consumer can lead to low stock market return. All governance indicators like control of corruption, government effectiveness, political stability, regulatory quality and rule of law have negative impact on stock market returns. While voice and accountability have positive impact on stock market return.

### **7.1. Policy suggestions**

Our study underscores the need for regulatory bodies and nations to implement effective disclosure policies to ensure transparency, stability and market efficiency. Transparency reduces information asymmetry, preventing market inefficiencies and build trust of investor. However, regulations must avoid being burdensome to hinder competitiveness and innovation. Timely reporting on financials, risks, governance, and strategies ensures market integrity and informed decisions. Optimal governance protects shareholder rights and ensures management accountability for efficient market operations. A regulatory framework should integrate effective corporate governance practices that includes board autonomy, transparent CEO-board chair roles, and vigorous controls that runs internally. Such practices are critical for efficient stock market operations, facilitate economic growth and confidence of investor. The current features multifaceted factors affecting returns of stock market, with inflation having a key role by influencing purchasing power, interest rates, corporate profits, and investor behavior. In conclusion, strong governance frameworks and effective disclosure policies are critical to ensure efficiency, transparency and investor confidence in financial markets. The protection of shareholder rights and understanding factors affecting stock market are crucial for promoting a healthy investment environment and achieving optimal financial results. Collaboration between companies, regulatory bodies, and investors is central in maintaining transparency, clarity, efficiency in markets which support sustainability and stability in economy. Our study explains complex dynamics influencing stock market returns, highlighting that performance is formed not only by the broader economic environment but also by sectoral and corporate activities. Inflation plays a critical role by eroding purchasing power, affecting interest rates alongside investor behavior and influencing corporate profits. To safeguard portfolios, investors must adeptly manage inflation risks through strategic approach to investment, considering real estate, inflation-linked bonds, and goods as potential hedges. By adopting a cautiously informed investment approach along with awareness to market dynamics and regulatory changes, investors can make judicious choices, optimizing financial outcomes amidst volatility. Adjusting strategies by monitoring economic indicators helps in maintaining resilience under uncertain conditions. In end, efficient disclosure strategies, vigorous standards of governance bases, and association among governing entities, firms, and shareholders are keys to make certain transparency, efficiency, and long-term market stability.

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