The impact of Corporate Governance quality on the financial performance of South Asian Stock Market

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ABSTRACT

The purpose of this study is to analyse the impact of governance quality (including institution's quality, government actions and policy uncertainty) on the stock performance. Panel data is collected from five South Asian countries (Pakistan, India, Bangladesh, Siri Lanka, and Nepal) for the period of 2000 to 2020. The indexes are based on the governance indicators. Annual stock returns and governance indicators based on country level data are considered in this study. The findings of the study suggest that governance quality and has positive impact on stock performance of south Asian countries. High governance quality, institutional quality, and policy certainty results in improved performance of stock. The result of this study provides significant implications for government institutions and policy makers of stock market.

Keywords: Corporate Governance, South Asian Stock Markets

1.INTRODUCTION

Corporate governance settings are controlled and driven by both governance at national level and firm level as well (Bauer et al., 2004). The country level governance plays essential part in shaping the governance mechanism of firms. Researchers have categorized corporate governance literature into two main strands, firm level governance and organization level governance (Aggarwal er al; 2010). The country level governance controls the attributes of legal, economic, and institutional framework that provides the boundary for the organizations to operate within. Researcher (Rajan and Zingales,2003; Claessens and Laeven,2003)) argued that when governance at country level is managing their creditors, stakeholders along with protection of property rights shape a well-organized and developed financial system. Such financial system enhances financial choices and strong economic base in comparison with weak legal structured countries. At the business level, corporate governance is linked to agency costs and management shirking. According to Low et al. (2011) the link between management avoidance and supervision costs is a delicate balancing act that necessitates careful measurement of important considerations since the costs of excessive monitoring are likely to outweigh the advantages. In a situation where legal and infrastructure of institutions are lacking and enterprises' capacity to acquire external finance is severely limited, such as in nations with poor investor protections, the possibility of management shirking is inherently high. The link between managerial avoidance and cost of monitoring necessitates careful calibration of parameters that allow agents' utility maximising behaviours to be adjusted (Krishnamurti et al., 2005).

The regulations of the stock market come under the country-level governance mechanism, it controls the legal framework, law enforcement institutions, listing rules for the stock market, business conduct, and business ethics (Djankov et al., 2008). The effective institutional and legal grounds provide the basic structure that outlines the governance characteristics at the organizational level. Shleifer and Vishny (1997), in a well-known analysis,

validate the preceding assumption and show that huge sums of money flow to enterprises functioning in economies that are market-based as an immediate reward for achieving their corporate governance challenges favourably. Furthermore, the diversity of corporate governance processes between nations, as well as the amount of legal protection granted to investors, have a substantial impact on the flow of capital to companies operating in a particular environment. Firms that implement stronger governance practices enjoy higher bargaining leverage in context of having approach towards capital required, according to country-level factors that perform considerably better in explaining the diversity in corporate governance (Doidge et al., 2007).

The institutional provisions of institutional governance reign the financial system of the country. The legal, political, and regulatory entities protect the interest and monitor business practices. Key determinants of governance include political dependability, legal procedural working, magnitude of institutional corruption are determinants of governance (Hooper et al.,2009). These determinants define the nature of entities and the capability to control the financial system and financial markets. Similarly, the firm's quality show absolute effects on institutional quality, transaction cost and firm's interaction. The global economy has seen a constant growth in the market share of developing nations over the last few decades. The major drivers of this trend are substantial improvements in the financial structures of developing and emerging nations. Capital flows from industrialised to emerging economies are also affected (Low et al., 2015).

Between 1990 and 2015, the ratio representing stock market development to GDP in emerging nations increased from 10% to 60%, according to several measurements (World Bank, 2015). However, in emerging countries, sustainable financial sector development is linked to an overall improvement in the country's governance. A lot of research has been conducted to establish the characteristics that contribute to well- performing stock markets. Only few researchers examined the inextricable association between the legal

structure, governance excellence, and performance of stock market, in different nations. La Porta et al. (2000) investigates legal theories with varying levels of enforceability across nations, as well as their links to stock market performance. The legal system's incapacity to defend shareholders' contractual rights frequently results in management expropriation and profit theft from shareholders. Furthermore, investor protection measures in legal systems look to enhance the amount of money risk-averse capitalists are ready to put into enterprises. Levine (2002) emphasises rule of law along with financial development in the progress of various countries' financial structure. The decision of investment is influence by the legal framework and governance efficiency the countries with weak and inefficient legal system fails to attract investment Aggarwal et al. (2003).

The better performance of corporate governance decreases agency cost and transaction cost through economies of scale. The better quality of governance improves shareholder's returns. The other view in literature argue that improved investor protection depends on the equity premium in highly competitive financial markets globally and reduces the stock returns. (Levine, 2002). Researchers put great emphasis on governance at national level for better firm level control. The indicators of firm governance are highly related to the successful implementation of effective governmental implementation. Firms are considered as sub-set of the country economy and cannot perform in isolation and is dependent on the laws and regulations that are monitored by the country government. Whatever policies and laws are designed and implemented effect the firm's performance and in turn the stock market performance, which is a centre to all organizations share trading. This study is particularly focused to investigate the effect of governance quality on stock market performance (Matadeen, 2007)

The objective of this study is to determine the effect of country level governance quality on financial performance of south Asian stock markets, whether this relationship is positive or negative. The study is focused to explore the country level governance of developing countries, where the

governance issues are not strong as compared to developed countries. The study is trying to find the answer to following questions. What is the relationship between governance at national level and stock market performance? How to measure the performance of stock? For South Asian countries, what is impact of governance indicators on stock market performance? What is the role of governance indicators that strengthen the laws of investor protection on stock market performance of Asian countries? Which part of governance indicators should be emphasized?

There are both theoretical and practical implications of current study. The exploration and confirmation of linkage between governance indicators and stock market performance will add and enhance the literature of developing countries. The agents of country have the power to influence the firm's profitability by reducing the agency cost and implementation of corporate governance. The study results add practical knowledge of the mangers to reshape their governance rule to outperform in the stock market.

This article is divided into five sections. The first section introduces the topic and the variables of study along with background information. Second sections present details of the existing studies related to our topic. Third section is about the methodological explanation of the study. Section four explains the data analysis and results of the study and last section gives the overall conclusion.

2. Literature Review

The financial and economic prosperity of any nation is highly dependent on the governance framework. The monitoring of institutions and nations as well influence the overall outputted governance rules are monitored and tested by several institutions including world bank, united nations, international monitory funds. These institutions make the governance reports and assess the positions of countries based on their governance performances. There has been a lot of research done on the link between governance and many indicators of growth in the past. Cule and Fulton (2013), for example, discovered that a moderate amount of bureaucracy

combined with a strong concern for correct rules to limit corruption should result in an impelling and cooperative atmosphere that boosts the whole economic landscape.

La Porta et al. (1997) explained improving corporate administration controls, as well as the execution and character of accounting rules, results in high trust in equity financing in businesses. The ability of an organization's managers to mobilise money at a higher level is directly influenced by the legal element, which also allows shareholders to monitor the organization's performance at a lower level. As a result of the supportive legal framework's potential to increase capital creation, risk-averse investors are more likely to put their money into enterprises. The influence of corporate norms and the legal environment on managing money and investments was investigated by Aggarwal, Klapper, and Wysocki (2002). The argument was also supported by Bhattacharya and Daouk (2002).

Previous governance research has focused on company-level organisation expenses resulting from firm control demarcation and ownership structure. the groundwork for the development of the relevant literature was laid by Jensen and Meckling (1976). When creating contracts, it was observed that the degree of agency cost is determined by common laws, statutory laws, and human talents. Modern organisations are concerned with both sophistication and contractual laws. Individuals have a great motivation to reduce agency costs with these goods. Transaction cost, in addition to agency cost, emerges in neoclassical economic theory as additional element of interaction between enterprises and institutions. This idea has been dismissed by market-oriented economic regimes. In the presence of transaction costs, according to Coase (1991), an economy can reach its potential productivity by distributing legal rights among economic players. By cutting transaction and agency costs, a better governance environment boosts shareholder profits (Hooper, Sim, & Uppal, 2009)

In current research, such as Agbor (2011), Asongu (2012), Zubair & Khan (2014), Shleifer and Wolfenzon (2002), and Mazhar and Goraya (2015),

focus of firm-specific governance has changed to country-specific governance. All other sub-governance institutions would be strengthened if a country has a good justice system (Chen, Chen, & Wei, 2009)

Maury (2002) looked at the influence of stock market returns and quality of governance in the Czech Republic, Latvia, Lithuania, Estonia Poland, Hungary, Slovakia, Romania, and Slovenia, all of which are in Central Europe and Eastern Europe. The author concluded that the efficacy of financial laws had the greatest impact on returns of stock market in the nations studied. variety of national equity returns based on a thorough literature review that included empirical studies over the previous 30 years were studied by Zaremba (2019). The empirical findings, according to the author, show a vast variety of cross-sectional trends in country equity indexes. Furthermore, while certain features, such as fund fluctuations or political risk, are like their stock-level duplicate, others, such as value, momentum, or seasonality, are unique to patterns of returns at country-level. Furthermore, Beek et al (2008) claimed that performance of stock market and the measurement of performance are subject to investor expectation because of the interrelationships among the variables including corporate performance, ownership, governance, and corporate capital structure. Non-financial based performance measurements centred on social aspects, environmental and governance issues as well (E.S.G.) variables, according to Khan (2019), are key indicators with a lot of potential to affect company financial performance. Governance has a beneficial influence performance of the national stock market and valuation, according to Klapper and Love (2004). On a micro level, governance of firm or institution is critical in nations where investor rights are poorly safeguarded. This may be due to a weak judicial system. They claimed that firm-level governance could not compensate for a shaky legal framework. In the field of finance, cross-country studies place a premium focus towards attribute of governance at corporate level and its legal implementations. Aggarwal et al., (2002) investigated same phenomena and concluded that mutual fund managers

increase investment than in nations with a strong legal framework and effective corporate governance norms. Yartey (2008) found governance performance boosts stock market development in emerging nations, the study was based on the data collected from 42 nations for the period of 1990 till 2004. Eita confirms the results as well (2015). Ajide (2014) utilised data collected for the period of 1996 to 2010. The data for 1996 is for first quarter and for 2010 fourth quarter. Time series was used to 2010Q4 to differentiate the long term effects and short term effects of Governance variables on stock performance in Nigeria.

Furthermore, the stock market and financial mediators are demonstrated to be complementary in the development result process. Using the International Asset Pricing model, Hooper et al. (2009) investigated the influence of governance on stock market development in G7 nations. The findings showed that economies with superior governance have reduced idiosyncratic risk and higher returns of equity. A study conducted by Songu (2012) also claimed that nations with high-quality changing governance aspects promote stock markets, which have larger market capitalization, better turnover ratios, and higher value in traded shares. The favourable influence of governance on performance of stocks is linked to the demand-centred paradigm, (Low, Kew, and Tee, 2011). According to this viewpoint, strong governance reduces the transaction costs of corporate operations and increases stockholder returns. This is accomplished through increased demand for equity financing. La Porta et al. (1997) suggested that improving corporate governance rules, their application and enforceability, and the integrity of accounting standards would result in a considerable reduction in enterprises' reliance on equity funding. According to Coffee (1999), differences in corporation law may be less relevant than differences in regulation intensity that characterises the techniques used by different nations on their stock markets. Large economic and political ratios consider and studied the relationship of global financial issues and political and national policies in a country. (Obstfeld and Taylor, 2004). Similarly, Beck et al. (2008) studied

the significance of law in the context of political circumstances and financial development. Furthermore, the degree of income has a substantial impact on the finance and growth link (Asongu, 2012). Economic growth can only be achieved if the quality of governance is encouraged to improve the rule of law (R.L.) enforcement, resulting in responsible public sector and efficient in combating misuse of financial resources and authority (International Monetary Fund, 2005). According to La Porta et al. (1997), corporations would use stock market financing more if corporate governance regulations and enforcement, as well as the quality of accounting standards, are significantly improved. According to Aggarwal et al. (2002). The legislative structure at national level and corporate governance standards are extremely important to investment fund managers. Several pragmatic studies have changed their study objectives from corporate governance towards country-specific governance (Shleifer and Wolfenson,2002). According to North (1994), strict property rights rules bring lower transaction costs, which leads to economic development.

La Porta et al. (1997) employed the 'rights of shareholders as an indicator for the first time and concluded that there was no significant corelation between return on equity and shareholders' right. They argued that the index created did not capture all features of the governing machinery and legal rules that impact the degree of protection of shareholders' rights,policymakers in transition economies must create a level playing field for investors to focus their consideration on seizing development opportunities without danger of losing the rights of property to reap the advantages of market-oriented developments.

Governance quality, as measured by continuity of government, corruption, efficient bureaucratic working, democratic responsibility, and peace and order, is risk factor for the countries and economies with poor governance quality, according to Narayan et al. (2015). A total of 38 nations were ranked according to their risk as evaluated by normal and poor credit ratings (AAA to BBB negative). Ten of the 38 nations have weak governance, which was

represented and translated by performance of the stock market through stock returns. The literature still need support against the argument that the quality of a country's governance can predict stock returns in nations with reasonably excellent governance. V.A. and R.L., which are favourably significant with returns calculated for stock equity returns in the case of 23 nations from the year 1996 to 2014, according to Boadi and Amegbe (2017). However, the multicollinearity problem, which is a prevalent and serious concern with World Governance Indicators, is not taken into consideration in their research. Estimated coefficients are inefficient and unreliable in the face of multicollinearity issues.

Concluding the foregoing debate, our research is unique in that it is the first of its type to investigate the influence the quality of governance on stock market performance in a group of South Asian nations. There is difference in conclusions drawn by various researchers for the relationship of two variable under consideration. Some found governance indicators and stock market returns positively related (Hooper et al., 2009). The study consulted by Low et al., (2011) concluded negative relationship between these two variables. However, another study conducted by Low et al., (2014) found this negative relationship as significant.

Further research to investigate governance quality and performance of stock market is required, to address the contradictory findings of various studies on these variables. This also presents the process through which governance enhances the performance of stock returns, including the cost of transaction and agency cost. Different studies conducted on these variables presented contradicting conclusions, but they are also ancient, dating back to a time when World Governance Indicator data was unavailable for a significant period, making it difficult to extract relevant results.

The focus of this study is to determine the dynamic relationship among the quality of governance (at country level) and stock market output using panel of Five South Asian countries Pakistan, India, Nepal, Bangladesh and Siri Lanka based on time series data for the period 2010 to 2020. The data comes

from a variety of sources including Asian development outlook, Worldwide governance indicators, stock exchange data and World Bank website

3. Methodology

This study is conducted on five South Asian countries including Pakistan, India, Nepal, Sri Lanka, and Bangladesh from 2000 to 2020. The research requires annual stock market data and the trading volume for the determination of the performance of the stock market which is obtained from DataStream International. The data of Governance indicators were obtained and downloaded from the website of the World Bank.

For the calculation of governance quality indicators at the country level, panel data-based regression analysis is used. Annual returns of stock market is dependent variable in current study, and the independent variable of the study is governance indictor. The control variables of the study include inflation and oil prices.

3.1 Governance Quality Indicator

The governance quality indicator which is the independent variable of the study is produced using principal component analysis. The data obtained from work bank websites is based on six indicators of governance quality including 1) Corruption control 2) Rule of Law 3) Regulatory quality 4) Government effectiveness 5) Political Stability 6) Voice and Accountability. These indicators are briefly explained below.

3.2 Corruption Control

In respect to a country, the first variable, CORP, addresses the existing or prospective corruption in the political structure, which involves financial corruption, which directly impacts the business sector and has repercussions for the broader economy. Excessive favouritism, nepotism, employment reservations, covers party financing, and suspiciously close relationships between politicians and businesses are all examples of corruption.

3.3 Political Stability

The amount of risk coupled with government unity, law-making strength, and public support is measured by government stability. Any deterioration resulting from these factors would hurt the economy's and business sector's overall performance.

3.4 Government Effectiveness

Bureaucratic quality measures the strength of a country's bureaucracy and the level of skill in governing, even in the face of a change in administration, without requiring major policy changes. This level of bureaucracy guarantees that services are not disrupted.

3.5 Rule of Law

This variable considers two essential features of the legal world: (1) the efficacy of the country's law enforcement process and public compliance with the rule of law; and (2) the legal system's strength and impartiality. The legal and law enforcement environment is an essential factor that influences country-level features.

3.6 Voice and Accountability

Accountability is a measure of a government's responsiveness to the beliefs of its citizens. The election procedure for selection of governments has a immediate impact on how governments respond to individuals' desires.

3.7 Regulatory Quality

Regulatory Quality depicts assessments of the ability of the government to prepare and execute sound policies and regulations that permit and promote private sector development.

The study variables on the line of regression include CORP (Corruption), BQ (Bureaucratic quality, GS (Government Stability, LD (Law and Order), AC (Accountability) inflation, GDP, and economic complexity index. The detail of these variables along with the source is given in table 1.

Table 1: Methods, Description of Variables, and Sources of Variables

Study Variables	Measurement of Variables	Sources
Independent Variable Corruption control Political stability. Governance Effectiveness. Rule of Law. Voice &Accountability Regulatory Quality	Time Series data, Cross-Sectional Data	**Website and Data streams** **Worldwide Governance Indicators.** https://knoema.com/WBWGI2017/worldwide-governance-indicators?country=1001460-pakistan **Worldwide Governance Indicators** https://databank.worldbank.org/reports.aspx?Report_Name=WGI-Table&Id=ceea4d8b **Worldwide Governance indicators** https://databank.worldbank.org/reports.aspx?Report_Name=WGI-Table&Id=ceea4d8b
Dependent Variable **Returns** Volume	Time-series and cross-sectional data of annual returns	**Data Portal** Pakistan Stock Exchange website (KSE-100) https://dps.psx.com.pk/ India stock exchange website (BSE SENX) https://www.nseindia.com/ Siri Lanka Stock Exchange website (CSE ALL SHARE INDEX) https://cse.lk/ Nepal Stock Exchange Website (DSEX) http://www.nepalstock.com/ Bangladesh Stock Exchange (DSEX) https://www.dsebd.org/

In this study, we divided six governance quality indicators into three indexes. Each index is based on two indicators. The explanation of these indicators is given below.

Table 2: Governance indicators, variable index, and index names

Governance indicators	Indexes	Index Name
Rule of law * control of corruption	Institutional Quality	InINQ
Regulatory Quality * Government Effectiveness	Government Actions	InGNA
Political Stability *Voice and Accountability	Policy Uncertainty	InPLU

This study also considers the risk factors such as inflation and GDP per Capita. There is evidence in the literature that establishes the relationship between these variables and the performance of stock. (Hail & Leuz, 2006; Hooper et al; 2009).

The core objective of this study is to determine the impact of governance quality on Asian stock market returns. For statistical analysis, the study uses regression estimation to calculate the beta sign and significance.

This analysis aims to regress the regression line given below.

Regression Line

$$\text{Returns} = \alpha + \beta_1 \text{Institutional Quality}_{j,t} + \beta_2 \text{ Government Actions}_{j,t} + \beta_3 \text{ Policy uncertainty}_{j,t} + \beta_4 \text{Inflation}_{j,t} + \beta_7 \text{GDP}_{j,t} + w_{j,t}$$

3.8 MODEL SPECIFICATION

Before model specification, the descriptive statistics of the variables are presented in table 2, showing 105 observations with their respective Mean and standard deviation. There is a potential problem of multicollinearity in world governance indicators due to the measurement of inter-linked dimensions of the variable. For the determination of the multicollinearity problem correlation matrix is produced and for further validation variance inflation factor (VIF) is calculated. Table 3 represents the correlation matrix of governance indicators INQ (Institutional quality), GNA (Government Actions), PLU (Policy Uncertainty), Inflation (INF), and Gross Domestic Production (GDP). The criteria for interpretation of correlation matrix are that if the correlation coefficient is more than or equal to 0.9, according to Guajarati (2021) there is the potential presence of multicollinearity. All the

correlation values are below the cut-off value the problem of multicollinearity is not established among the variables. For further confirmation the results of variance inflation factor for independent and dependent variables are less than 10, establishing the absence of multicollinearity among the variables (Guajarati,2021). Thus, the assumptions of classic regression are met. To test the heteroskedasticity Breusch-Pagan test is conducted, which assumes that errors terms are normally distributed. The P-value that corresponds to the Chi-square test is less than 0.05, thus we reject the null hypothesis and conclude that heteroscedasticity is present.

4. EMPIRICAL ANALYSIS

Table 3: Descriptive statistics

Descriptive Statistics					
Variable	**Obs**	**Mean**	**Std. Dev.**	**Min**	**Max**
lnSRE	105	0.01	0.30	-0.99	1.02
lnINQ	105	-1.55	1.06	-4.13	0
lnGNA	105	-1.23	0.92	-3.58	0
lnPLU	105	-0.76	0.59	-2.17	0.28
lnGDp	105	6.91	0.68	5.43	8.31
lnINF	105	1.81	0.50	0.69	3.11

Note: Table 3 represents the descriptive statistics of the variables including stock returns, institutional quality, government action, policy uncertainty, GDP, and inflation. The number of observations is 105, with their respective mean and standard deviations. Source: Author self-calculations.

Table 4: Correlation Matrix of Variable

Correlation Matrix						
	lnSRE	lnINQ	lnGNA	lnPLU	lnGDp	lnINF
lnSRE	1					
lnINQ	0.05	1				
lnGNA	0.0084	0.8247	1			
lnPLU	-0.0404	-0.5976	-0.7379	1		
lnGDp	-0.0337	-0.384	-0.4236	0.386	1	
lnINF	0.4176	0.0456	0.0683	-0.0012	0.1313	1

Note: Table 4 presents the index-wise correlation matrix among dependent and independent variables. Institutional quality and government actions variables are positively correlated with the independent variable i.e., stock returns. However, Policy uncertainty and control variables are negatively correlated. Source: Author's calculation.

Table 5: Variance Inflation Factor

VIF test for Multicollinearity		
Variable	VIF	1/VIF
lnGNA	4.52	0.221204
lnINQ	3.15	0.317859
lnPLU	2.24	0.447013
lnGDp	1.28	0.781587
lnINF	1.04	0.961239
Mean VIF	2.44	
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity		
chi2(1)	11.43	
Prob > chi2	0.0007	

Note: Table 5 presents the variance inflation factor (VIF). If VIF is greater than 10 for each variable, multicollinearity is present. No variable in this study is subject to multicollinearity. Source: Author's calculation.

For long tern analysis and determination of the cointegration of the variables Panel cointegration analysis is conducted including Kao Residual Cointegration test and Pedroni Residual test, given in table 6. These two-integration tests analyse the long rem relationship of the dependent and independent variables. Null hypotheses assume that there is no cointegration among the variables. An alternative hypothesis assumes there is cointegration among the variables. The results obtained are mixed results. Among the five statistics obtained through Kao residual cointegration and Pedroni residual cointegration, four probability values are less than 0.05 and one value are more than 0.05. The values less than 0.05 shows that we reject the null hypothesis concluding that there is long-term integration among the variables. The panel integration represents mixed results, so we proceed to further analysis for the robustness of the analysis. Table 7 explains the log selection criteria followed by table 8 which presents vector autoregression estimates (VAR Model) obtained. The VAR model explains the various variables on the dependent variable in lag period 1. Table 8 presents the

estimates of the model along with their *t*- values and standard errors. Graph The graph obtained by impulse functions explains the relationship between independent variables (Governance indicators) and dependent variables (Stock performance). The unit change in the independent variable affects the dependent variables to show change at some level which is explained in the graphs presented in figure 2. When institutional quality decreases the organization fails to perform at the optimal level which affects the profits of the business and stock performance. The institution's quality represents the implementation of law and control of bribery and dishonest. When authorities are strict in implementing equal laws and consider no one above the defined rules and regulations it is complimented with control of corruption. The results show the decreasing trend in corruption and rule of law causes an increase in the stock performance of businesses.

Their graph explaining the effect of Government action and stock returns shows a similar trend. The stock performance is negative when government fails to implement sound policies and regulations. The low public service and civil services cause negative stock returns. The government which implements the rule of law and ignores the political pressure increases the effectiveness of the government and the quality of the regulations which strengthens the economic conditions and provides opportunities for investments.

The relationship between policy uncertainty and stock returns is indirect. The increase in policy uncertainty shows a decreasing trend in stock performance. When the governments have no continuity there will be disturbed policies and the system of accountability and voice is also not strong. For stability and continuity of the policies, the stability of the governments is also necessary. The weak system of accountability will encourage false reporting and a decrease in social responsibility as well. The businesses may be inclined to maximize profits through the wrong means.

1 and presents the response functions associated with the estimated VAR model. This section explains that all the characteristics and features roots of

the VAR model fall within the unit circle, confirming the robustness of the results.

Table 6: Panel Cointegration Analysis

Panel Cointegration Analysis					
Kao Residual Cointegration Test					
				t-Statistics	Probability
	ADF			-2.7782	0.0027
		Residual variance		0.101458182	
		HAC variance		0.028098407	
Pedroni Residual Cointegration Test					
		t-Statistics	Probability	Weighted-Statistics	Probability
Panel v-Statistic		0.16711471	0.0336	-0.657015168	0.044414418
Panel rho-Statistic		-0.153418498	0.0390	-0.142894222	0.043186861
Panel PP-Statistic		-7.140315856	4.6675	-6.426402687	6.5345
Panel ADF-Statistic		-3.177875319	0.00074	-2.36643522	0.008980159

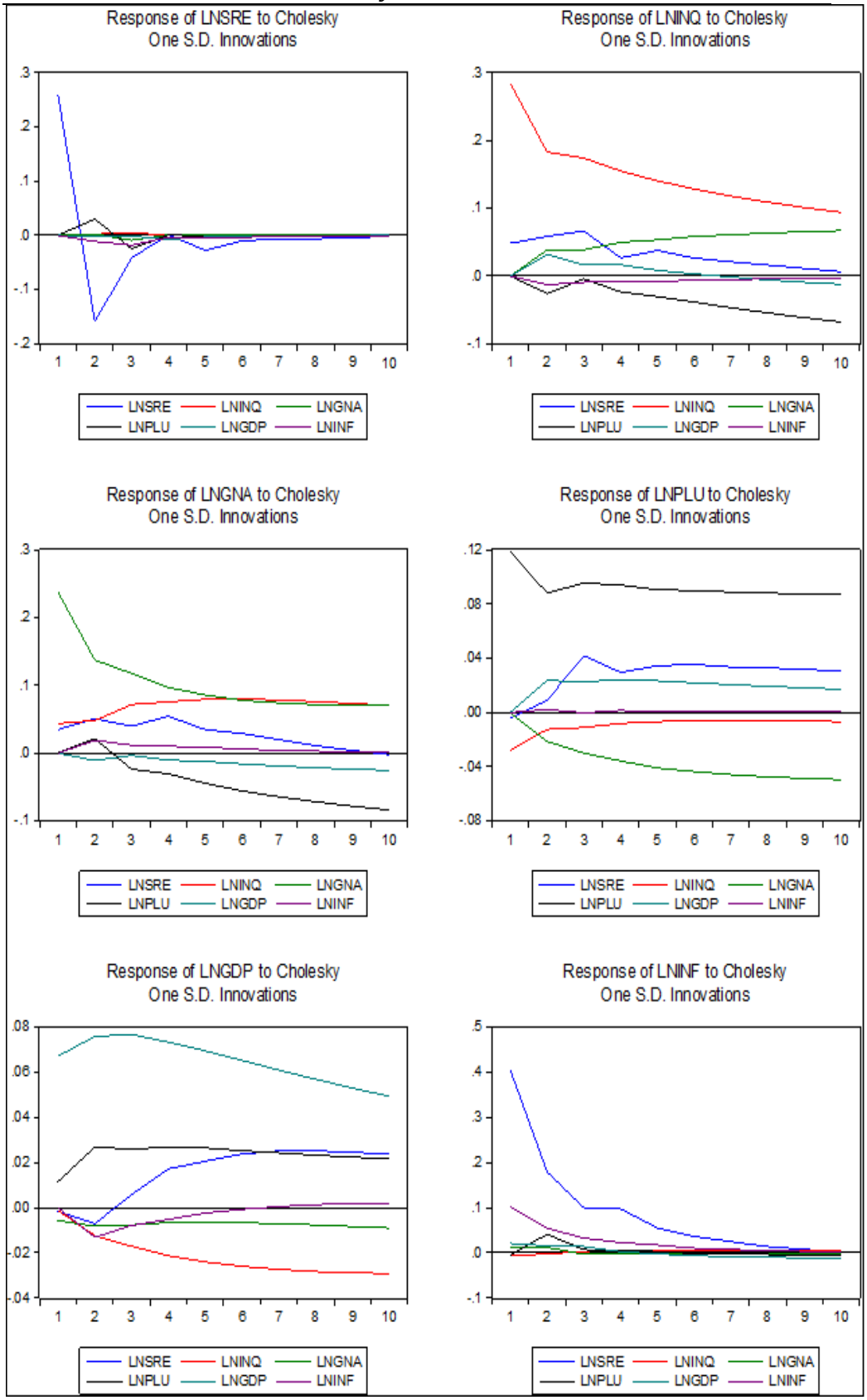
Table 7: Optimal Lag Selection Criteria

Optimal Lag Selection Criterion						
Lag	LogL	LR	FPE	AIC	SC	HQ
0	-317.0298178	NA	8.06E-05	7.600702	7.773124	7.670055
1	274.995367	1086.54	1.68e-10*	-5.482244*	-4.275287*	-4.996772*
2	305.1038854	51.00737	1.95E-10	-5.343621	-3.102129	-4.44203
3	334.8229441	46.15195	2.34E-10	-5.195834	-1.919808	-3.878125
4	374.1225875	55.48185*	2.30E-10	-5.273473	-0.962912	-3.539644

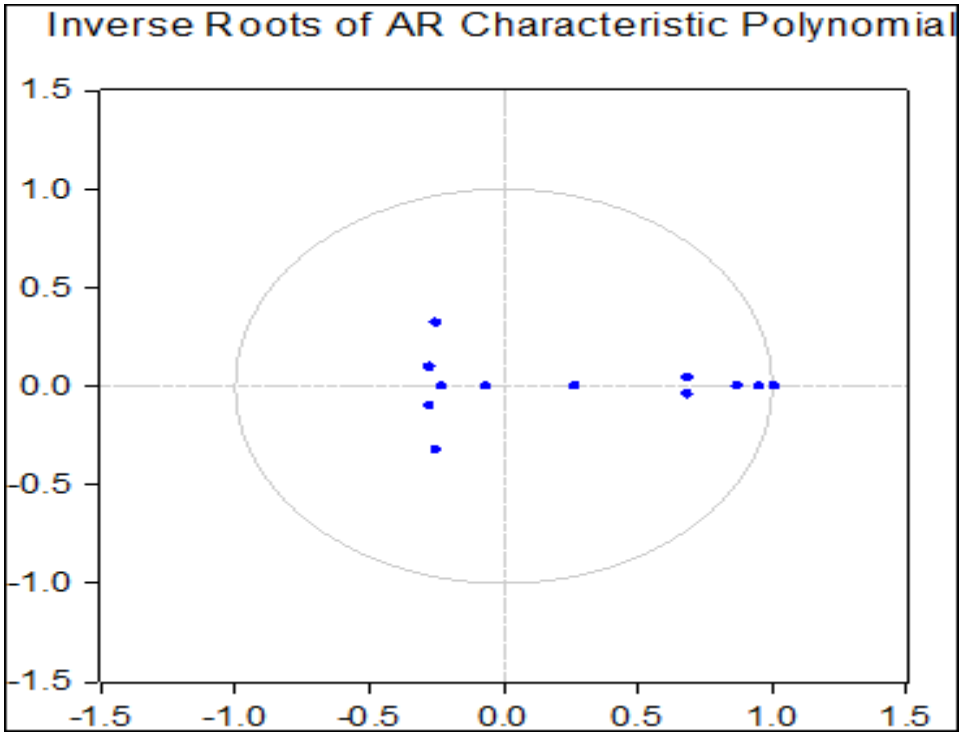
Table 8: Vector Autoregression Estimates

Vector Autoregression Estimates						
	LNSRE	LNINQ	LNGNA	LNPLU	LNGDP	LNINF
LNSRE(-1)	-0.441995965	0.284295747	-0.193372708	0.019748219	0.190622499	-0.15403775
	0.417368592	0.463041898	0.392222395	0.195780671	0.109867788	0.672009813
	[-1.05901]	[0.61397]	[-0.49302]	[0.10087]	[1.73502]	[-0.22922]
LNSRE(-2)	-0.099346468	0.151541629	-0.065124787	0.091917567	0.008463144	-0.130163686
	0.108747888	0.120648341	0.102195895	0.051011827	0.02862671	0.175096184
	[-0.91355]	[1.25606]	[-0.63725]	[1.80189]	[0.29564]	[-0.74338]
LNINQ(-1)	0.027050305	0.588951502	0.106434261	0.040549814	-0.030657397	0.035035119
	0.061614376	0.068356935	0.057902149	0.02890228	0.016219321	0.099205993
	[0.43903]	[8.61583]	[1.83817]	[1.40300]	[-1.89018]	[0.35316]
LNINQ(-2)	-0.017949051	0.236022669	0.021133836	0.021570154	0.002545142	-0.021826775
	0.057528476	0.063823908	0.054062421	0.026985652	0.015143752	0.092627239
	[-0.31200]	[3.69803]	[0.39092]	[0.79932]	[0.16807]	[-0.23564]
LNGNA(-1)	0.01647421	0.179303974	0.563157299	-0.081925667	-0.00035962	0.027374003
	0.081774082	0.090722749	0.076847244	0.038358863	0.021526146	0.131665358
	[0.20146]	[1.97639]	[7.32827]	[-2.13577]	[-0.01671]	[0.20791]
LNGNA(-2)	-0.014281448	-0.055272075	0.166818962	-0.020004902	0.015134461	-0.029436703
	0.068895247	0.076434563	0.064744351	0.032317616	0.018135932	0.110929004
	[-0.20729]	[-0.72313]	[2.57658]	[-0.61901]	[0.83450]	[-0.26537]
LNPLU(-1)	0.249846822	-0.271030757	0.209031904	0.710328811	0.108301896	0.363469438
	0.258894441	0.287225669	0.243296213	0.12144308	0.068151174	0.416848819
	[0.96505]	[-0.94362]	[0.85917]	[5.84907]	[1.58914]	[0.87195]
LNPLU(-2)	-0.243574791	0.16825924	-0.420832841	0.24683045	-0.109336534	-0.354944274
	0.262802902	0.29156184	0.246969191	0.123276474	0.069180034	0.423141876
	[-0.92683]	[0.57710]	[-1.70399]	[2.00225]	[-1.58046]	[-0.83883]

LNGDP(-1)	0.002501577	0.511762119	-0.224074737	0.345746201	1.168347771	0.066341498
	0.392835456	0.435824062	0.369167366	0.184272585	0.103409704	0.632508738
	[0.00637]	[1.17424]	[-0.60697]	[1.87628]	[11.2982]	[0.10489]
LNGDP(-2)	-0.056150677	-0.488759403	0.164973276	-0.352740385	-0.212106188	-0.143532305
	0.384842794	0.42695675	0.361656256	0.18052336	0.101305721	0.619639663
	[-0.14591]	[-1.14475]	[0.45616]	[-1.95399]	[-2.09372]	[-0.23164]
LNINF(-1)	-0.111153863	-0.124500802	0.189187511	0.021127457	-0.130168777	0.539023856
	0.261290746	0.289884206	0.245548142	0.122567147	0.068781975	0.420707137
	[-0.42540]	[-0.42948]	[0.77047]	[0.17237]	[-1.89248]	[1.28123]
LNINF(-2)	-0.174128262	0.117950458	-0.134653006	0.037688566	0.160089738	0.015020706
	0.262329601	0.291036745	0.246524407	0.123054457	0.069055443	0.422379809
	[-0.66378]	[0.40528]	[-0.54621]	[0.30628]	[2.31828]	[0.03556]
C	0.938086713	-0.396401301	0.036995399	-0.161960068	0.280175668	1.397375286
	0.343436608	0.381019419	0.322744766	0.161100406	0.090405989	0.552971102
	[2.73147]	[-1.04037]	[0.11463]	[-1.00534]	[3.09908]	[2.52703]
R-squared	0.35350348	0.93163822	0.938432097	0.964551026	0.990649513	0.316562269
Adj. R-squared	0.258894233	0.921634058	0.92942216	0.959363371	0.989281149	0.216546991
Sum sq. resids	5.532041035	6.80904874	4.885518237	1.217265996	0.383342192	14.34158308
S.E. equation	0.259738166	0.288161725	0.244089104	0.121838858	0.068373275	0.418207311
F-statistic	3.73645803	93.12505539	104.1552344	185.9319991	723.9663698	3.165139131
Log likelihood	0.258542199	-9.606998476	6.16191175	72.17114225	127.0542855	-44.99026151
Akaike AIC	0.268241217	0.47593681	0.143959753	-1.245708258	-2.401142852	1.220847611
Schwarz SC	0.617719107	0.8254147	0.493437643	-0.896230367	-2.051664962	1.570325501
Mean dependent	0.021770946	-1.545678361	-1.222214342	-0.772546612	6.991863883	1.862684903
S.D. dependent	0.301714147	1.029372626	0.91878567	0.604403514	0.660407903	0.472481865


Response of LNSRE to Cholesky
One S.D. Innovations
Response of LNINQ to Cholesky
One S.D. Innovations
Response of LNGNA to Cholesky
One S.D. Innovations
Response of LNPLU to Cholesky
One S.D. Innovations
Response of LNGDP to Cholesky
One S.D. Innovations
Response of LNINF to Cholesky
One S.D. Innovations
LNSRE
LNINQ
LNGNA
LNPLU
LNGDP
LNINF

Graph:2 VAR Roots of the Characteristics Polynomial



The graph obtained by impulse functions explains the relationship between independent variables (Governance indicators) and dependent variables (Stock performance). The unit change in the independent variable affects the dependent variables to show change at some level which is explained in the graphs presented in figure 2. When institutional quality decreases the organization fails to perform at the optimal level which affects the profits of the business and stock performance. The institution's quality represents the implementation of law without discrimination and corruption control. When authorities are strict in implementing equal laws and consider no one above the defined rules and regulations it is complimented with control of corruption. The results show the decreasing trend in corruption and rule of law causes an increase in the stock performance of businesses.

Their graph explaining the effect of Government action and stock returns shows a similar trend. The stock performance is negative when government fails to implement sound policies and regulations. The low public service and civil services cause negative stock returns. The government which

implements the rule of law and ignores the political pressure increases the effectiveness of the government and quality of the regulations which strengthens the economic conditions and provides opportunities for investments.

There is an inverse relationship between policy uncertainty and stock returns. The increase in policy uncertainty shows a decreasing trend in stock performance. When the governments have no continuity there will be disturbed policies and the system of accountability and voice is also not strong. For stability and continuity of the policies, the stability of the governments is also necessary. The weak system of accountability will encourage false reporting and a decrease in social responsibility as well. The businesses may be inclined to maximize profits through the wrong means.

5. CONCLUSION

This research demonstrates that the quality of governance influence positively the performance of stocks in South Asia. Stock markets that function inefficient governance and institutional context have higher stock returns and reduced risk. This may lead to the conclusion that risk-averse investors would not invest in nations that are not mean-variance efficient, implying that such risk-return relationships cannot maintain equilibrium. However, the international market characteristics, segmentations of the markets and the gains from diversification of stocks associated with poor governance is not considered in these arguments. This situation can be compared with risk averse investments who keep such investments in portfolios having high risk and lower return.

This study is supporting the argument that improved governance excellence decreases the agency cost and the cost incurred in processing the transaction having a positive effect on stock returns. The continuity in the government policies along with accountability provides large opportunities for the investors through financing options. When there is an increase in profitable projects there is an increase in the performance of stock returns. Thus, the countries providing supportive and profitable investments attract investors.

Due to time constraints and lack of data this study only considers four Asian countries and considered only two control variables. Future studies could be conducted on other Asian countries also including other control variables.

REFERENCES

Agbor, J. A. (2015). How does colonial origin matter for economic performance in sub-Saharan Africa?. In *Growth and institutions in African development* (pp. 331-350). Routledge.

Aggarwal, R., & Klapper, L. (2003). *Portfolio preferences of foreign institutional investors* (Vol. 3101). World Bank Publications.

Ajide, K. B. (2014). Quality of governance and stock market performance: the Nigerian experience. *Economic and Financial Review*, *52*(3), 6.

Asongu, S. A. (2012). Government quality determinants of stock market performance in African countries. *Journal of African Business*, *13*(3), 183-199.

Bauer, R., Guenster, N., & Otten, R. (2004). Empirical evidence on corporate governance in Europe: The effect on stock returns, firm value and performance. *Journal of Asset management*, *5*, 91-104.

Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of corporate finance*, *14*(3), 257-273.

Bhattacharya, U., & Daouk, H. (2002). The world price of insider trading. *The journal of Finance*, *57*(1), 75-108.

Boadi, I., & Amegbe, H. (2017). The link between quality of governance and stock market performance: International level evidence. *European Journal of Government and Economics*, *6*(1), 78-101.

Chen, K. C., Chen, Z., & Wei, K. J. (2009). Legal protection of investors, corporate governance, and the cost of equity capital. *Journal of corporate finance*, *15*(3), 273-289.

Claessens, S., & Laeven, L. (2003). Financial development, property rights, and growth. *the Journal of Finance*, *58*(6), 2401-2436.

Coase, R. (1991). The institutional structure of production. *Journal des économistes et des études humaines*, *2*(4), 431-440.

Coffee Jr, J. C. (1999). Privatization and corporate governance: The lessons from securities market failure. *J. Corp. L.*, *25*, 1.

Cule, M., & Fulton, M. E. (2013). Corporate governance and subjective well-being. *Applied Economics Letters*, *20*(4), 364-367.

Djankov, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2008). The law and economics of self-dealing. *Journal of financial economics*, *88*(3), 430-465.

Doidge, C., Karolyi, G. A., & Stulz, R. M. (2007). Why do countries matter so much for corporate governance?. *Journal of financial economics*, *86*(1), 1-39.

Gujarati, D. N. (2021). *Essentials of econometrics*. Sage Publications.

Hooper, V., Sim, A. B., & Uppal, A. (2009). Governance and stock market performance. *Economic Systems*, *33*(2), 93-116.

International Monetary Fund (IMF). (2005). The IMF approach to promoting good governance investors (MIT Sloan Working Paper 4328-03). http://documents.worldbank.org/curated/en/

Meckling, W. H., & Jensen, M. C. (1976). Theory of the Firm. *Managerial Behavior, Agency Costs and Ownership Structure*.

Khan, M. (2019). Corporate governance, ESG, and stock returns around the world. *Financial Analysts Journal*, *75*(4), 103-123.

Klapper, L. F., & Love, I. (2004). Corporate governance, investor protection, and performance in emerging markets. *Journal of corporate Finance*, *10*(5), 703-728.

Krishnamurti, C., Sěvić, A., & Šević, Ž. (2005). Legal environment, firm-level corporate governance and expropriation of minority shareholders in Asia. *Economic Change and Restructuring*, *38*, 85-111.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1997). Legal determinants of external finance. *The journal of finance*, *52*(3), 1131-1150.

Levin, A., Lin, C. F., & Chu, C. S. J. (2002). Unit root tests in panel data: asymptotic and finite-sample properties. *Journal of econometrics*, *108*(1), 1-24.

Low, S. W., Kew, S. R., & Tee, L. T. (2011). International evidence on the link between quality of governance and stock market performance. *Global Economic Review*, *40*(3), 361-384.

Low, S. W., Tee, L. T., & Kew, S. R. (2015). Does the quality of governance matter for equity market risk? Evidence from emerging and developed equity markets. *Journal of Business Economics and Management*, *16*(3), 660-674.

Goraya, N. S., & Mazhar, M. S. (2015). Issues of good governance in South Asia. *South Asian Studies*, *30*(02), 125-160.

Narayan, P. K., Sharma, S. S., & Thuraisamy, K. S. (2015). Can governance quality predict stock market returns? New global evidence. *Pacific-Basin Finance Journal*, *35*, 367-380.

North, D. C. (1994). Economic performance through time. *The American economic review*, *84*(3), 359-368.

Obstfeld, M., & Taylor, A. M. (2004). *Global capital markets: integration, crisis, and growth*. Cambridge university press.

Maury, C. B., & Pajuste, A. (2002). Controlling shareholders, agency problems, and dividend policy in Finland. *LTA*, *1*(2), 15-45.

Rajan, R. G., & Zingales, L. (2003). The great reversals: the politics of financial development in the twentieth century. *Journal of financial economics*, *69*(1), 5-50.

Shleifer, A., & Wolfenzon, D. (2002). Investor protection and equity markets. *Journal of financial economics*, *66*(1), 3-27.

Yartey, C. A. (2008). The determinants of stock market development in emerging economies: is South Africa different?.

Zaremba, A. (2019). The cross section of country equity returns: A review of empirical literature. *Journal of Risk and Financial Management*, *12*(4), 165.

Zubair, D. S. S., & Khan, M. (2014). Good governance: Pakistan's economic growth and worldwide governance indicators. *Pakistan Journal of Commerce and Social Sciences (ISSN: 1997-8553)*, *8*(1), 258-271.