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CORPORATE GOVERNANCE AND ITS IMPACT ON SMALL INVESTORS OF LISTED COMPANIES IN PAKISTAN

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Abstract

   The objective of this research paper is to analyze the effects of corporate governance on small investors of listed companies in Pakistan during the period of 2000 to 2019. Secondary data was used, which was collected from Worldwide Governance Indicators, World development indicators, Pakistan Economic Survey and Pakistan stock exchange. We developed a model in which CGI (Corporate Governance Index) was taken as a dependent variable while GDP (Gross Domestic Product), CPI (Corruption Perception Index), EPS (Earnings per Share), IR (Interest Rate) and POV (Poverty level) were taken as independent variables. Auto Regressive Distributive Lag ARDL) model was used to check short and long run relationship between dependent and independent variables. Our findings show that GDP, CPI, EPS and IR have positive association with the corporate governance whereas, poverty level has an inverse relationship with corporate governance and firm's performance.

Key Words: Corporate governance; firms' performance; Small investors; Poverty.
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1. Introduction

1.1 Background of Study

Pakistan's economy is facing various problems with multiple natures. One of the major problem is weak Corporate Governance with a negative effect on the whole economy. Corporate Governance is considered very important due to its massive impact on economic activities. Mainly, it is reflected through government inability to generate sufficient revenues and fails to cover expenditures resulting in high budget deficit. In this context, we have intended to discuss the following terms briefly: -

● Corporate Governance

● Weak Corporate Governance

● Its impact on small investors

The term "Corporate Governance" is a system by which firms are controlled and managed. "Weak Corporate Governance" means a doubt on a firm's reliability, integrity and lower short-term expected returns or more risk for the investors. As Weak Corporate Governance impairs a firm's financial health and leaves a huge amount of debt on it. It also increases the amount of corruption, poverty, income inequality and leads to capital market deterioration. It affects the development & functionality of capital markets and also affects resource allocation in the economy. The effects of weak corporate governance exert a sharp impact on small firms, shareholders, investors and somehow on the economy because of presence of volatility in stock market. Poor Corporate Governance is closely related to increase in poverty level. If power and authorities are misused, then the poor would be deprived from basic necessities of life. Pakistan did not progress well in Governance as compared

to other South Asian countries and it was at the lowest rank among them which can be assessed from the data given in the Figure 1.

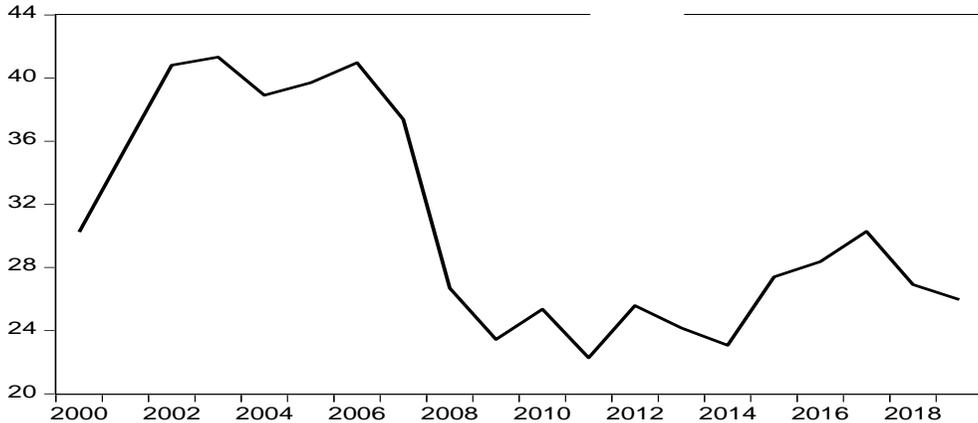Figure 1:Trends of Corporate Governance during 2000-2019

Figure 1 shows the trends of Pakistan's corporate governance index, changing from year to year. It shows the declining trend in corporate governance index over the period of time. These changes occur due to changes in poverty, inflation, and market capitalization. These all problems lead to larger reduction in asset prices, functioning of corporations and small investors face the risk of expropriation. It enhances the amount of debt burden of Pakistan. In 2003, Osborne ranked Pakistan 41 out of 58 countries indicating bad governance impact. Overall, Pakistan's governance scenario is not satisfactory as per reports of World Bank, World Economic Forum, United Nations, Human Development etc.

1.2 Main Research Problem

Our main research problem is to analyze "Corporate Governance and its impact on Small Investors of listed companies in Pakistan."

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1.3 Problem Statement

The topic under study deals with the effects of corporate governance on the small firms, shareholders, investors and somehow on the economy because of presence of volatility in the Pakistan stock market.

1.4 Objectives of Study

The objectives of study are as under:

1. To study the state of corporate governance in Pakistan and effect on small investors in different sectors of economy.
2. To examine relationship between corporate governance and firm's performance in Pakistan.
3. To investigate the causes of corruption, economic instability and poverty in Pakistan.
4. To analyze negative effect of weak corporate governance on performance of business firms.
5. To find the ways for improving the performance of corporate governance in Pakistan.
6. To study the negative effects of weak corporate governance on small investors of listed companies in Pakistan.

1.5 Scope of Study

The scope of this study is wide because it has investigated issues which are facing almost all developing countries. So its specific results can be generalized and policy makers, academicians and researchers of developing countries can reap benefit from them. Like Pakistan, the developing countries such as Bangladesh, India, Egypt, Indonesia, etc., are also facing problem of stability of prices, high unemployment, political instability, budget deficit,

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debt burden, poverty and high inflation rate. Most of these variables are discussed in this study. Thus, this study has substantial scope.

2: Literature Review

The purpose of literature is to review the existing work of different researchers and authors relating to this study. We briefly explain these studies in the following: -

Boateng, et al. (2020) studied relationship between national culture, corporate governance and corruption. He concluded that the quality of corporate governance practices reduces the level of corruption and it varies substantially across different countries. On average, the level of corruption is low in countries with good corporate governance practices. Mahboob et al (2017) analyzed the effects of corporate governance on the Cement manufacturing firm's financial performance. The results found that the governance positively affects the performance of cement sector firms in Pakistan. Abbas and Awan (2017). Nawaz and Ahmed (2017) examined the impact of corporate governance and capital structure on performance of the firms on petroleum sector of Pakistan. Their findings indicate that the corporate governance positively affects the value of firms. Short and long term debt ratios have significantly negative correlation with returns on assets and equity. Skare and Hasic (2016) observed corporate governance, firm performance and economic growth. They showed well-defined corporate system attracts investment, helps in maximizing company's funds and leads to increase in firm's performance. Effective corporate governance counters financial challenges and enhances profitability of firms. Awan and Abbas

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(2016) stated that during the last two decades, regulators and policy makers all over the world have emphasized on developing strong and effective corporate governance policies. It is agreed by the experts that a good corporate governance mechanism is the one which facilitates the access of additional capital for corporations, boosts competitiveness, develop financial markets and encourage economic activity. They concluded that major characteristics of corporate governance are determined by firm's profitability and its size. However, firm's leverage and size have less effect on major attributes of corporate governance. Awan & Awan (2016) carried out a comparative study of Indian and Pakistani Stock Market and found similar situation of corporate governance. They concluded that the companies having strong corporate governance policy have strong profitability while the companies having poor corporate government suffered huge losses due to malpractices and irregularities as well as different kinds of inefficiencies. AL Mubarak and Hamdan (2016) analyzed relationship between the ownership of the board of directors and company's performance which encouraged executive directors to own shares within the company to improve their performance and thereby improve the company's profitability and performance in all areas, and at the same time reduce agency costs. Zahra and Awan (2016) explored impact of Cooperate Social Responsibility and Financial Performance of Banks in Pakistan. Their results show that there is significant impact of CSR on the financial performance of those banks which follow CSR practices vis-à-vis those which do not act upon them. Iqbal and Mehar (2015) examined governance issues in Pakistan and their impact on income inequality. A significantly negative relationship was found between governance indicators and income inequality. There is a deep and sharp impact of bad governance on

economy of Pakistan and it leads to higher debt, fiscal deficit and inflation. Vora-Sittha (2012) assessed governance and poverty issues in Thailand. The results showed correlation between growth and poverty indicators. The evidence shows that good governance reduces poverty and reinforces the process of being more equitable in income distribution while bad or weak governance raises the poverty level. Khatab, Masood, et al. (2011) investigated corporate governance and firm performance on Pakistan Stock Exchange. The results confirm significant effect of corporate governance on firm's performance. It implied that firms with good corporate governance performs well as compared to their competitors. Haider, Musleh-ud-din and Ghani (2011) studies the consequences of political instability, weak governance and bureaucratic corruption on inflation and growth. The results elaborate high and persistent inflation is harmful to economic growth whereas low and stable inflation is considered as conducive for the process of economic growth. Rajkumar and Swaroop (2008) found link among public spending, governance and outcomes. The results showed improved practices of governance lead to better development outcomes. The countries having high level of corruption had higher infant mortality rates and it also has strong negative impact on child mortality. Leuz, Linz and Warnock (2006) analyzed the behavior of investors about corporate governance in foreign holdings. They found that the information flows to outside investors were particularly poor for firms with weak corporate governance and firm-level proxies for governance problems and private control benefits had a negative relation to foreign investors' sentiment. Fitch Rating (2004) stated that the firms characterized by the worse mechanism of governance impaired financial

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position of the firm and leave debt on the shareholders/stakeholders of firm. The investors suffered huge losses due to bad governance. Klapper and Love (2004) focused on cross country firm level corporate governance practices, differences in legal systems and the administration's effect on the structure of ownership. Their results show improved practices of corporate governance are highly correlated with the better working performance, fully utilization of employed resources and the market valuation. Gugler, Mueller and Yurtoglu (2004) studied a link between corporate governance and the returns on investment. They concluded that agency problems exist in all countries and have significant impacts on investment performance of companies. They also deduct that legal systems strengthens shareholders' rights to bring about superior investment projects. Shleifer and Vishny (1997) investigated a survey of corporate governance. They argued that the legal protection of investor rights is one essential element of corporate governance. Their findings suggest that firms or corporations can raise external capital by adopting corporate governance mechanism to minimize fund raising cost.

3: Theoretical framework

Theoretical framework plays a very crucial role to guide the process of research study. Basically, it is a theory in the form of model which provides researchers a solid base. This research paper presents the related existing theories that connect corporate governance structures with the company's financial and corporate performance. Mallin, (2004) observed that the agents are managers; principals are owners and board of director's act as monitoring body. The clash of interest arises whenever the principal gives control and decision making authority to the agent. Jensen and Meckling (1976) described agency cost as:

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(a) Sum of monitoring expenditures by the principal to limit the abnormal activities of agent.

(b) Bonding expenditure by agent will guarantee that certain actions of the agent will not damage principal and he will be compensated if such damage occurs.

(c) The residual loss which may results in separation of decisions of the agent and Principal that would maximize the profit of principal. They also observed the effect of Firms with good corporate governance, have lower default risk and they pay a lower rate of interest thus lowers the cost of debt capital. It maximizes the value of the firm. Donald and Davis (1989) highlighted managers as responsible stewards of the assets they control. The goals and motives of managers are lined up with the objectives of principal. Steward's self-serving individualistic behavior has a diminishing utility than the collectivistic behavior of the firm Leyland and Pyle, (1977) declared that debt is an increasing function of shareholder's position of equity and thus the optimal structure of capital is mixture of equity and the debt. The work of Modigliani and Miller, (1958) stated that the main objective of the firm is to maximize its value in the perfect capital market and the selection between equity and debt has no effect on the firm's value or performance. They further explained that the companies that use debt will have higher firm value than firms that do not use debt.

3.1 Conceptual model

The conceptual model developed on the basis of theoretical framework is shown as Figure 2 -

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Figure 2: Conceptual Model of Variables
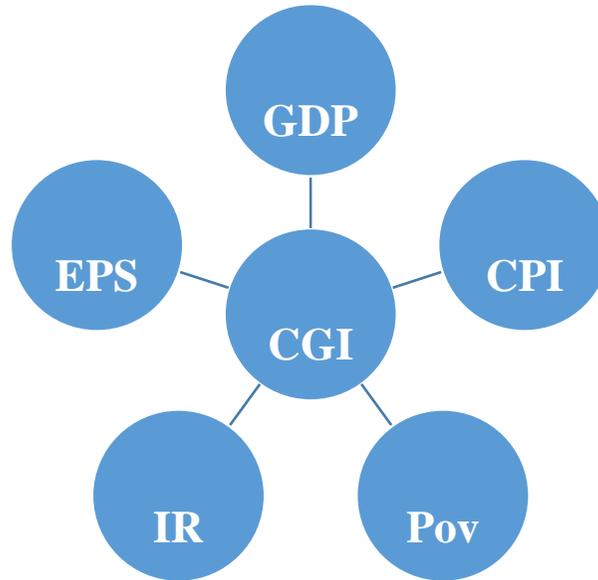
4: Research Methodology

4.1 Nature of Study

This study is quantitative in nature because time series panel data set of 20 years (2000-2019) has been used for empirical analysis.

4.2 Type of Data

Secondary data is used to estimate Corporate Governance which influences investors/firms either directly or indirectly in Pakistan. This type of data is collected from the following sources: -

- Securities and Exchange Commission of Pakistan database
- Worldwide Governance Indicators (Pakistan)
- Basic Statistic Reports for economic and social indicators in Asia by ADB.
- World Development Indicators (WDI)

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- Economic Survey of Pakistan (2000-2019)

- State bank of Pakistan (2000-2019)

- Pakistan Stock Exchange (2000-2019)

- The World Bank Reports (2000-2019)

- Transparency International (2000-2019)

- Asian Development Bank (Data Library)

4.3 Sample of Study

The sampling period of this research study is from 2000 to 2019.

4.4 Selected Variables

Corporate Governance Index is used as dependent variable while independent or explanatory variables are as follows:

- Gross Domestic Product (GDP)

- Poverty level (Pov)

- Corruption Perception Index (CPI)

- Earnings per Share of firms (EPS)

- Interest rate (IR).

The description of variables is given in Table 1.

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Table 1: Description of Variables

Variable Name		Symbol	Description
Corporate Governance		CGI	Corporate Governance Index from worldwide governance indicators
Gross Domestic Product		GDP	Gross domestic product at market price
Poverty level		POV	Proportion of population living below poverty line
Corruption		CPI	Corruption perception index
Earnings Per Share		EPS	Earnings per share of firms
Interest Rate		IR	Interest rate

4.5 Hypothesis of Study

The hypothesis of this research paper is given below: -

H_o: There is no significant impact of GDP, Poverty level, CPI, EPS and IR on the Corporate Governance Index of Pakistan.

H_1: There is a significant impact of GDP, Poverty level, CPI, EPS and IR on the Corporate Governance Index of Pakistan.

4.6 Econometric Model

CGI= f (GDP, POV, CPI, EPS, IR)

According to this function, following regression model is developed and presented in the following equation:

C.G= $\alpha+\beta1$ (GDP) $+\beta2$ (POV) $+\beta3$ (CPI) $+\beta4$ (EPS) $+\beta5$ (IR) $+\mu t$

Where

CGI = Corporate Governance Index

GDP = Gross domestic product at market price

POV = Poverty

CPI = Corruption Perception Index

EPS = Earnings per Share

α =   Constant tem or intercept.

β's = Slope coefficients of independent variables

μt = Random error term

4.7 Analytical Techniques

We have used following statistical techniques to analyze data: -

- Descriptive statistics

- Correlation matrix

- ADF test (Augmented Dickey Fuller Test based on Unit roots)

- ARDL based on Co-integration and long-run model

- Bounds test for long run relationship

- Granger Causality Test

5: Data analysis

The results of data analysis are shown in the following tables: -

5.1 Descriptive Statistics

Following table depicts the descriptive statistics of variables:

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Table 1:   Results of Descriptive Statistics

	CGI	**GDP**	**CPI**	**EPS**	**IR**	**Poverty**
Mean	30.72394	470.0000	3.122030	38.56450	11.91797	24.99650
Median	27.88460	470.3000	4.345621	28.95500	12.68528	23.85000
Maximum	41.32650	998.9000	6.496747	97.00000	14.53750	33.50000
Minimum	22.27490	160.7000	-3.909100	13.80000	6.990000	12.43000
Std. Deviation	6.828336	203.1282	3.195853	25.93633	2.267148	6.041554
Skewness	0.456803	0.633386	-1.408489	1.018950	-1.126661	-0.418627
Kurtosis	1.615605	3.551063	3.654287	2.807167	3.095013	2.821502
Jarque-Bera	2.292688	1.590316	6.969547	3.491848	4.450676	0.610713
Prob	0.317797	0.451510	0.030661	0.174484	0.132349	0.736861

5.1.1 Interpretation

The results in table 1 shows that mean value of CGI, CPI, EPS, GDP, IR and Poverty level is 30.72394, 3.122030, 38.56450, 470.0000, 11.91797 & 24.99650 respectively. Median value of CGI, CPI, EPS, GDP, IR and Poverty level is 27.88460, 4.345621, 28.95500, 470.3000, 12.68528 & 23.85000.CGI respectively. CPI, EPS, GDP, IR and Poverty level has standard deviation of 6.828336, 3.195853, 25.93633, 203.1282, 2.267148 & 6.041554. Skewness of CGI, CPI, EPS, GDP, IR and Poverty level is 0.456803, -1.408489, 1.018950, 0. 633386, -1.126661 & -0.418627. If we consider the Skewness of variables,

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then CGI, GDP & EPS are positively skewed while CPI, IR & Poverty level are negatively skewed. Statistical measure (Kurtosis) measures paakedness and flatness of data relative to normal distribution. Its values show that GDP, CPI and IR have leptokurtic/high peaked distribution (as these values are greater than 3) while the variables of GDP, EPS and Poverty are platykurtic (A distribution with kurtosis <3). The normality test of Jarque-Bera demonstrates the probability value of CPI is 0.030 which is very low than the conventional level of 0.09 exhibits that CPI is distributed normally. But, at the same time, the probability values of all other variables does not meet the corresponding level, therefore, these all are not normally distributed.

5.2 Correlation Analysis

The results of Correlation analysis are described in Table 2:

Table 2: Results of Correlation Analysis

	CGI	CPI	EPS	GDP	IR	POV
CGI	1	0.097745	0.684947	0.273004	-0.844320	-0.664671
CPI	0.097745	1	0.229343	-0.260428	0.043096	0.191666
EPS	0.684947	0.229343	1	0.224269	-0.596209	-0.490235
GDP	0.273004	-0.260428	0.224269	1	-0.424732	-0.230077
IR	-0.844320	0.043096	-0.596209	-0.424732	1	0.698174
POV	-0.664671	0.191666	-0.490235	-0.230077	0.698174	1

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5.2.1 Interpretation

It is assumed that good corporate governance is associated with the higher market valuation and better operational performances of firms. Corporate governance index (CGI) is developed as a proxy to examine the firm-level governance quality in Pakistan. The data in Table 5.2 shows that CGI has a moderately positive correlation of 0.273004 with GDP which means that if corporate governance is increased, the firm performance will also increase. When we regress CGI on sub-indices of corporate governance, we get positive and significant results for CPI as 0.097745, EPS as 0.684947, and GDP as 0.273004. CGI has negatively weak correlation with IR and poverty level as -0.844320 & -0.664671. CPI has a positive correlation of 0.097745 with CGI, correlation of 0.229343 with EPS, 0.043096 with interest rate and 0.260428 correlation with poverty. While it has a weak negative correlation with the GDP as the value -0.191666 shows. CGI (0.273004) and EPS (0.224269) are positively related with GDP while CPI (-0.260428), interest rate (-0.424732) and poverty (-0.230077) are negatively correlated with it. It means that an increase in CGI and EPS will lead to a rise in GDP of Pakistan's economy and have positive association with the firm's performance. While, GDP increases with the decrease in CPI, interest rates and poverty. Our results confirm our predictions that firms with better mechanism of capitalization have higher profits and offer better governance practices. EPS has a negative and inverse association of -0.596209 with interest rate and -0.490235 with poverty which reflects that with the fall of interest rate, the performance of corporate governance will enhance firms' performance and economic prosperity. EPS positively relates to CGI, CPI and GDP as the values show 0.684947,

0.229343 and 0.224269 respectively. Poverty remains a major problem in developing countries like Pakistan where majority of population live below poverty line. It is negatively related with CGI, GDP and EPS as it has a weak negative association of -0.664671 with CGI, -0.230077 with GDP and -0.490235 with EPS. It is positively correlated with CPI and interest rate variables as it has a correlation of 0.191666 with CPI and 0.698174 with interest rate. These results show that the major cause of poverty in Pakistan is due to the poor governance among business firms. The same results are shown in Figure 3 for purpose of clarity.

Figure 3: Correlation between variables

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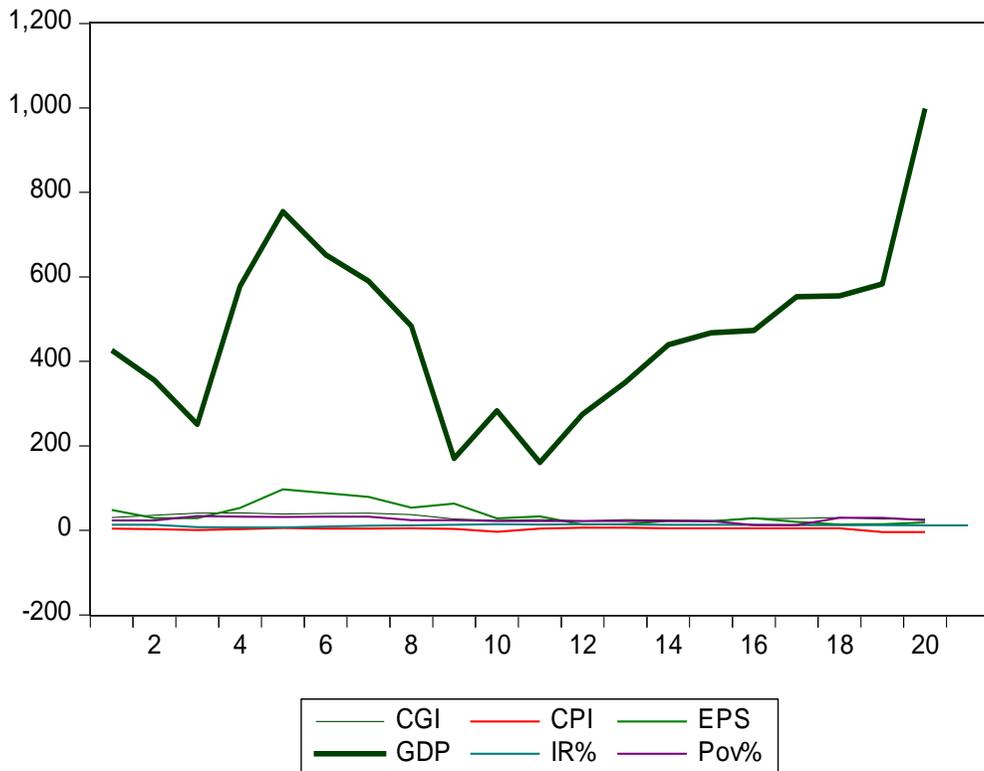
5.3 Augmented Dickey-Fuller (ADF) Test

The results of ADF test containing Unit Roots are shown in Table 3:

Table 3: Results of ADF Test

Variable	At Level			1st Difference			Remarks
	Intercept	T & I	None	Intercept	T & I	None	
CGI				-3.291577 (0.03)**	- 6.547863 (0.00)*	-3.336135 (0.00)*	I(1)
CPI				-4.663078 (0.00)*	- 4.777645 (0.00)*	-4.733101 (0.00)*	I(1)
EPS				-4.053949 (0.00)*	- 4.028217 (0.02)**	-4.184764 (0.03)*	I(1)
GDP				- 3.143353(0.04)**	- 4.083143 (0.03)**	-3.119410 (0.00)*	I(1)
IR	- 4.924904 (0.00)*	- 4.077187 (0.02)**	- 2.967832 (0.07)*				I(0)
POV				-3.950983 (0.00)*	- 3.814919 (0.04)**	-4.078323 (0.00)*	I(1)

The * is indicating the level of significance at 1%

The ** indicating the level of significance at 5%

*** indicating the level of significance at 10% . Values given in the parenthesis is probability value.

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5.3.1 Interpretation

ADF test is showing that dependent variable (CGI) can be determined through the identification of p-value along with the t-statistic value. Stationarity of variables depicting that these are not dependent over time/independent over time. The t-statistic values are 4.924904 with P-value of 0.00 at 1% level of significance, 4.077187 with the P-value of 0.02 at 5% level of significance and 2.967832 with P-value of 0.07 at 1% level of significance and implies that interest rate is stationer at level. GDP has t-statistics values of 3.732784, 3.734648 & 3.852326 while p-values are 0.01, 0.04 & 0.00 showing that these are all significant and stationer at 1st difference. T-statistic values of CGI are 3.291577, 6.547863 & 3.336135 with p-values of 0.03, 0.00& 0.00 shows that these values are also significant and stationer at 1st difference.

In the same way, all other variables (CPI, EPS and POV) used in this analysis show their t-statistic and p-values are non-stationary at level, but they become significant and stationer at their 1st difference. From the results, generated through ADF test, we can reach at the conclusion that interest rate is stationer at level only. Whereas, GDP, CGI, CPI, EPS and POV are stationer at 1st difference. The prerequisite condition for Stationarity has been checked. Now, we can apply ARDL (Auto Regressive Distributive Lag) model for our further analysis.

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5.4 Bounds Test

This test is used to detect long run relationship between variables. We have selected Alkaike criteria for choosing optimal lags and ARDL Bounds test's results are given in Table 4:

Table 4: Results of Bounds Test

Null Hypothesis: No long-run relationship exist

Test Statistic	Value	k		
F-statistic	388.4779	5		
Critical Value Bounds				
Significance	I0 Bound	I1 Bound		
10%	2.26	3.35		
5%	2.62	3.79		
2.5%	2.96	4.18		
1%	3.41	4.68		

R-squared	0.999796
Adjusted R-squared	0.996528
F-statistics	305.9245
Prob (F-statistics)	0.044885

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5.4.1 Interpretation:

According to necessary condition of this test: -

F-statistic value > Critical value of I_1 (Upper Bounds Value):

$388.4779 > 3.79$ at 5%. So we can interpret it as we accept alternate hypothesis that this test predicts the existence of a long-term relationship among variables. The R^2 value is quite high as 99% means that the model is best goodness of fit.

5.5 Short run relationship

Table 5: Results of ARDL Co-integration

Dependent Variable: CGI

Short-run Co-integrating Form

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(CPI)	-0.073754	0.065596	-1.124374	0.4628
D(CPI(-1))	0.054931	0.038254	1.435941	0.3873
D(EPS)	0.225216	0.027945	8.059161	0.0786
D(EPS(-1))	-0.251742	0.015210	-16.550557	0.0384
D(GDP)	0.031306	0.002270	13.793539	0.0461
D(GDP(-1))	0.012285	0.002007	6.121902	0.1031
D(IR_)	-3.239219	0.063493	-51.016908	0.0125
D(IR_(-1))	-3.507790	0.376163	-9.325192	0.0680
D(POV_)	-0.153941	0.017265	-8.916527	0.0711
D(POV_(-1))	0.624233	0.039475	15.813299	0.0402
CointEq(-1)	-0.956667	0.038003	-25.173292	0.0253

CointEq = CGI – (2100*CPI + 0.7396*EPS + 0.0235*GDP + 2.4868*IR_ - 0.8039*POV_ -21.1927)

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5.5.1 Interpretation

The negative sign of coefficient of CointEq indicates that the dependent variable converges towards equilibrium level. When we multiply this value (0.956) by 100 and it becomes 95% and shows 95% changes will occur in economy in next year and the corporate governance of the economy will go towards equilibrium in near future say next year. Now the value of coefficient of CointEq from above analysis is -0.956667 which is less than one which reveals that the model will move towards equilibrium in coming year, the value of t-statistic is 4.356413>2 and probability value is 0.0014<0.09 means that overall model is significant and we may conclude that Pakistan's firms shows high adjustment speed from the short to the long term.

## 5.6 ARDL-Long-run relationship

Table 6: Results of Long-run

Long Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CPI	0.210039	0.063322	3.316995	0.1864
EPS	0.739582	0.072910	10.143806	0.0626
GDP	0.023535	0.002156	10.915038	0.0582
IR_	2.486828	0.640810	3.880755	0.1606
POV_	-0.803888	0.073509	-10.935890	0.0581
C	-21.19267	9.885765	-2.143757	0.2779

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5.6.1 Interpretation

From our regression analysis, we have drawn the following results
The coefficient of CPI has magnitude of 0.210039. We interpret it as if CPI increases by one unit then the CGI will increase by 21%. It has significant t-statistic value (3.316995) with insignificant probability value (0.18). EPS of firm has positive association with CGI as the higher a company's EPS, the more profitable it is considered to be. The coefficient is 0.739582, t-statistics value is 10.143806 along with probability value of 0.06, so, model is significant and there exist a long run relationship between EPS and CGI. The coefficient value of GDP has value of 0.023535, t-statistics value is 10.915038 and the probability value is 0.05 that indicate the model is significant. The magnitude of coefficient of IR is 2.486828, t-Statistics value is 3.880755 which is significant but the probability value is 0.16 which made the model insignificant and shows no long-run relation exist. Poverty has a negative relation with the CGI as it has a coefficient value of -0.803888, t-Statistics value of 10.935890 and value of probability is 0.05, both these values are significant. We conclude that there is long-run relationship between poverty and CGI and model is significant too. These results are shown in Figure 4

Figure 4: Long-Run Relationship between Variables
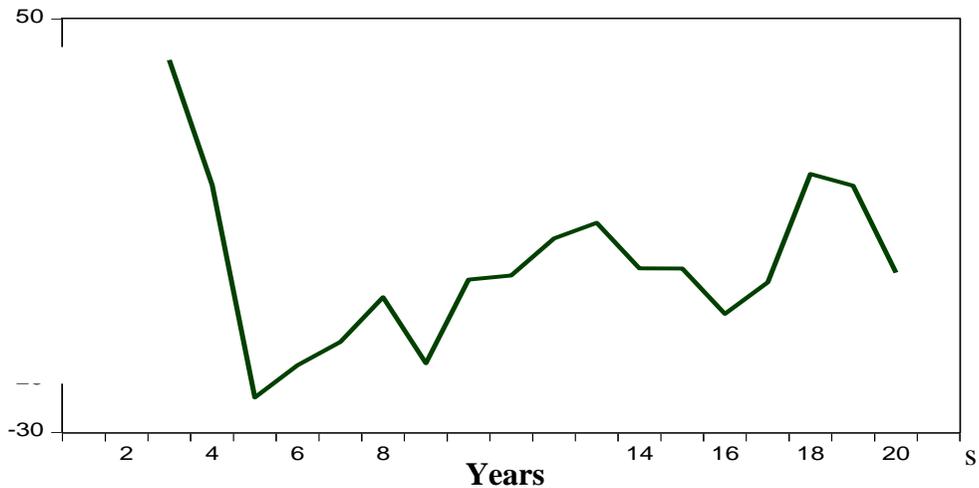
5.7 Hypothesis Testing through Granger Causality Test

This test checks causality between two variables in time series. We use two lags of all variables and we can't change the number of lags for different variables. F-Statistic and P-value is being checked for the acceptance and rejection of null/alternate hypothesis. The results of hypotheses testing are given in Table 7.

Table 7: Results of Granger Causality Test

Null Hypothesis:		F-Statistic	Prob.
CPI does not Granger Cause CGI		0.47443	0.6326
CGI does not Granger Cause CPI		0.38865	0.6856
EPS does not Granger Cause CGI		0.24749	0.7844
CGI does not Granger Cause EPS		5.52199	0.0184
GDP does not Granger Cause CGI		0.31621	0.7344

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CGI does not Granger Cause GDP		0.08645	0.9177
IR_ does not Granger Cause CGI		1.07171	0.3708
CGI does not Granger Cause IR_		2.41114	0.1286
POV_ does not Granger Cause CGI		0.03697	0.9638
CGI does not Granger Cause POV_		4.64690	0.0300
EPS does not Granger Cause CPI		0.32335	0.7294
CPI does not Granger Cause EPS		0.36218	0.7030
GDP does not Granger Cause CPI		2.36800	0.1328
CPI does not Granger Cause GDP		1.10300	0.3610
IR_ does not Granger Cause CPI		0.03533	0.9654
CPI does not Granger Cause IR_		0.26448	0.7716
POV_ does not Granger Cause CPI		1.96784	0.1792
CPI does not Granger Cause POV_		0.09218	0.9125
GDP does not Granger Cause EPS		3.74655	0.0519
EPS does not Granger Cause GDP		5.25828	0.0212
IR_ does not Granger Cause EPS		16.0249	0.0003
EPS does not Granger Cause IR_		1.06361	0.3734
POV_ does not Granger Cause EPS		3.67160	0.0544
EPS does not Granger Cause POV_		0.72442	0.5032
IR_ does not Granger Cause GDP		2.85634	0.0937
GDP does not Granger Cause IR_		0.27629	0.7629
POV_ does not Granger Cause GDP		0.97315	0.4038

GDP does not Granger Cause POV_		0.32034	0.7315
POV_ does not Granger Cause IR_		0.03383	0.9668
IR_ does not Granger Cause POV_		2.35915	0.1336

5.8 Graphical Presentation of Variables

The graphical presentation of each variable is shown in the following Figures 5.

5.8.1 Corporate Governance

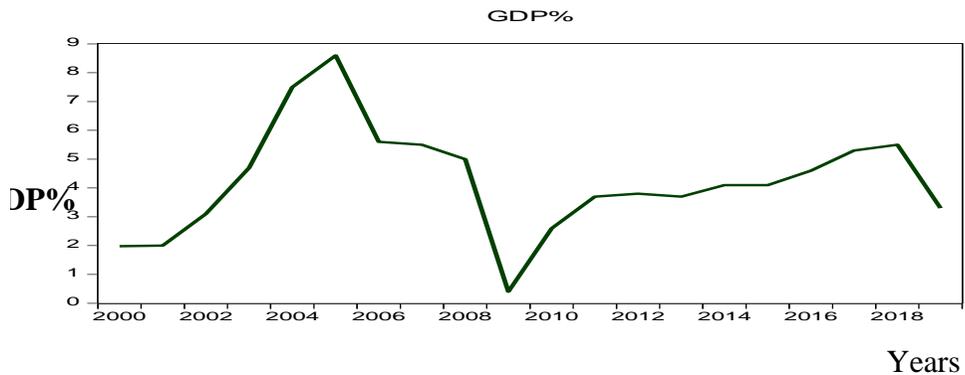Figure .5 Corporate Governance
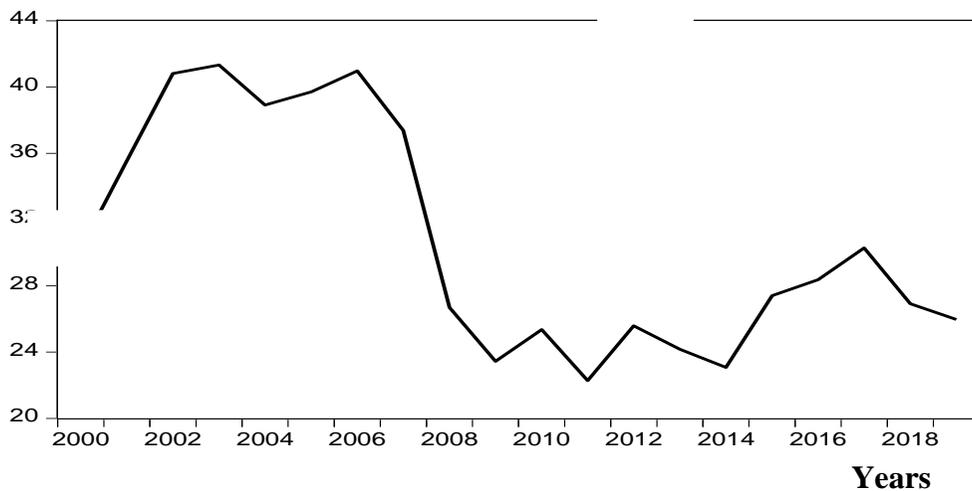
Source: Worldwide Governance Indicators (Pakistan)

In Figure 5, the trend line of corporate governance index shows that the values of CGI have gradually decreased with respect to time period.

5.8.2 Gross Domestic Products (GDP)

Figure 6: Trends of GDP growth during 2000-2019

GDP%

Years

Source: The World Bank Reports (The National Accounts)

Figure 6 shows the trend of gross domestic product by showing the highest value in 2005 and lowest value in 2009.

5.8.3 Corruption Perception Index.

Figure 7 shows corruption perception index results

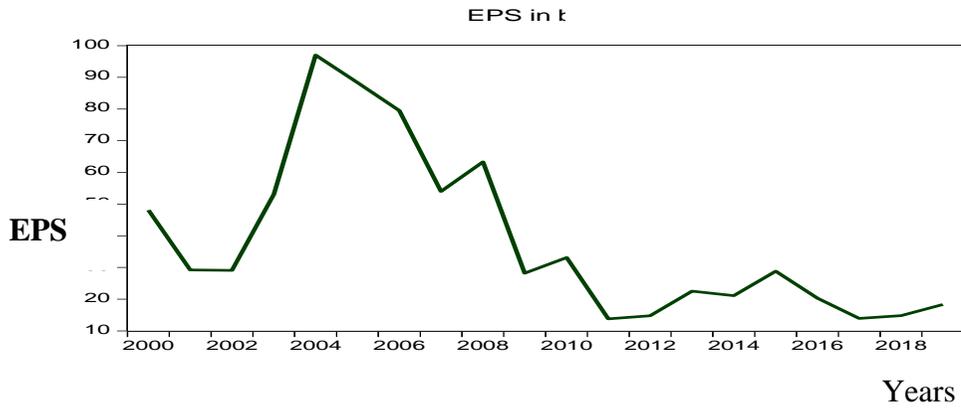Figure 7: Trends of Corruption Perception Index during 2000-2019

Years
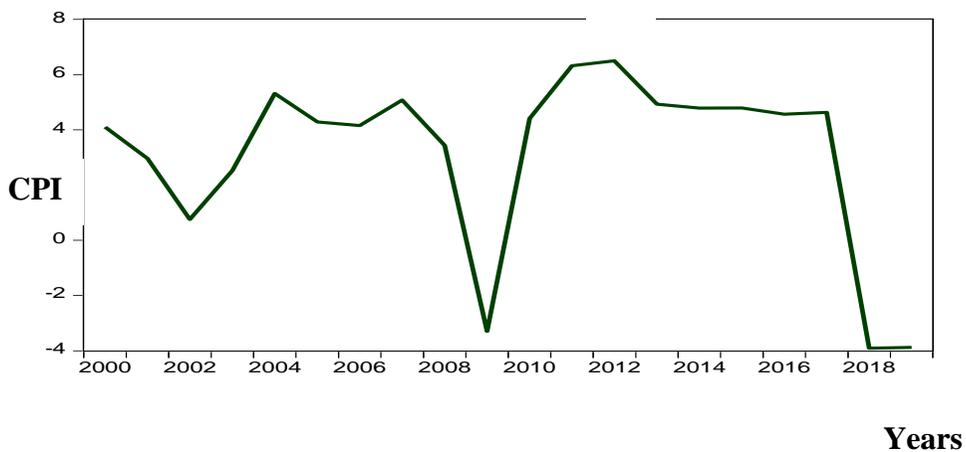
Source: Transparency International

5.8.4 Earnings per share

The earning per share of selected companies given below: -

Figure 8: Trends of EPS of firms
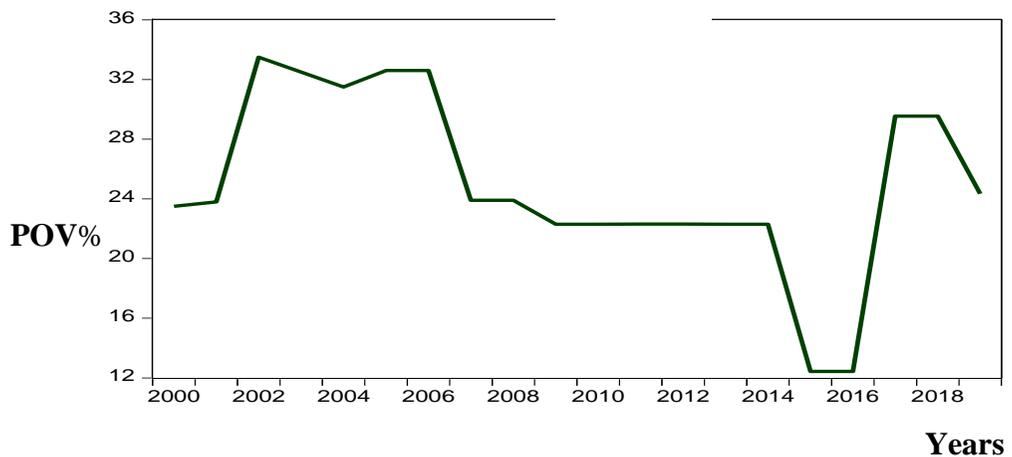
EPS in t

EPS

Years

Source: Pakistan Stock Exchange.

Figure 8 shows fluctuations in the earnings per share of the firms during study period.

5.8.5 Poverty level

The poverty trends during study period is shown in Figure 9

Figure 9: Trends in Poverty level in Pakistan 2000-2019

POV%

Years

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The data of variable poverty shows ups and down in its values during the study period. It has highest value in 2002 and lowest value during 2015-2016.

5.8.6 Interest Rate

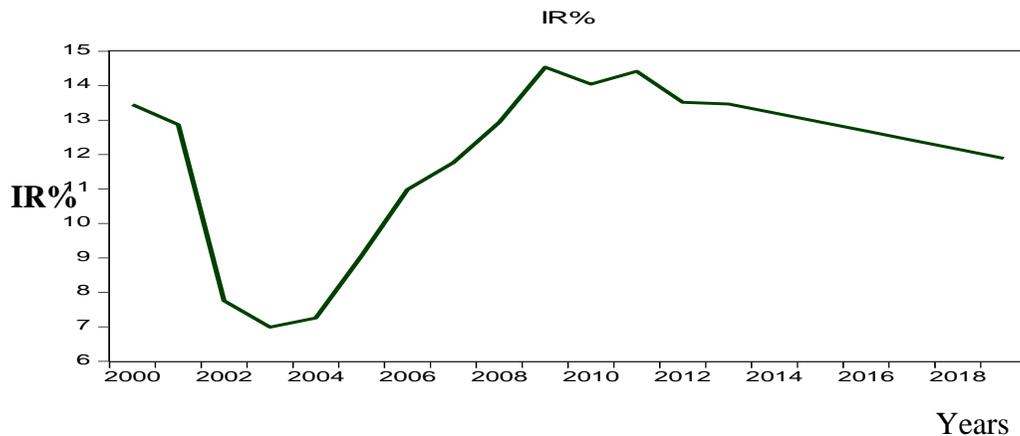Figure 10: Trends of Interest Rate during 2000-2019

IR%

IR%

Years

Figure 10 shows fluctuations in the interest rate during the period of 2000-2019. It was low during 2002 and 2004 and high from 2008 to 16.

6: Findings of study

Key findings are given below: -

• This research study establishes positive link between GDP and CGI in the long-term. This was also confirmed by S. Claessens and B. Yurtoglu (2012) in their study. The evidences find that corporate governance positively affects the financial performance of the firm.

• CPI has direct relationship with CGI, provide an evidence that the countries with proper standards of governance having lower levels of

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corruption as compared to those with weak corporate governance practices grow faster. This association was also noted in study of Boatang et al. (2020).

● EPS has positive relation with CGI in long-run. This relationship was also confirmed by Flora F. (2006), which stated that "The quality of governance has positive influence on earnings per share".

● The poverty exhibits inverse linkage to the corporate governance and this relation was confirmed by Asian Development Banks in (2002), stating that: "The poor/worse standards of corporate governance are main cause of the poverty in an economy".

7. CONCLUSION

This study concludes that good corporate governance weakens the self-interest behavior of the managers/board of directors and improves firm's quality, flow of information, and the value of firm. We further conclude that good corporate governance manages the firm efficiently and boosts the expectations of the investors towards the better firm's performance in the future. The coefficient of CPI is positive and exhibits a direct relationship with CGI. It means corruption discourage productivity and entrepreneurship in highly regulated countries that do not have effective government institutions and governance systems. It could potentially promote economic growth by removing bureaucratic barriers to entry by lowering country's transaction costs. Earnings per share of firms has a positive association with CGI. The country is more profitable having higher earnings per share of firms. There exists a direct relationship between gross domestic product (GDP) and CGI. This positive association depicts an effective governance system promotes the economic growth in developing economies. A positive relationship between interest rate and CGI implies higher interest rate charged by financial

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institutions, makes the cost of capital higher for the firms. But, a negative and inverse relationship is observed between poverty level and CGI.

8. Policy Recommendations

In the light of above discussion, we would like to make the following policy recommendations: -

- Pakistan's governance is a flexible or changing process and it demands much more than the sound governance policies. So, we recommend that the banks should charge low interest rates on lending from the firms, corporations and businesses to finance their new projects. This will help to control inflation, poverty and corruption levels in Pakistan. Corporate governance with fair management structure along with effective investment decisions will lead to higher profitability of firms.

- Government of Pakistan should opt the policies for boosting economic growth to help poor class, but the policy of pro-poor growth alone without good governance is not sufficient to reduce the level of poverty. Government should need to reform the quality of governance, political instability and control terrorism in order to reduce income inequality, poverty and inflation. Developing countries such as Pakistan should give more emphasis on equipping poor with the better facilities of education, training and health to increase their standards of living and productivity.

- To curb corrupt practices with strong regulatory mechanism in order to prevent leakage of funds and improper transactions.

- The decision making process of firms and code of corporate governance should be implemented by all firms and corporations to improve the performance of corporate governance in Pakistan.

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Declaration of Conflict of Interests

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Contribution of Authors

Both authors jointly carried out this research study and collaborated each other. The author 1 collected data, conducted its statistical analysis. She prepared initial draft of manuscript. The Author 2 helped Author 1 in selected of title of research, guided in statistical analysis and formatted final draft of manuscript. Both authors carefully read final draft of manuscript and find it fit for publishing.

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References

Abbas, Qamar, Awan, Abdul Ghafoor (2017). Relationship between Corporate Governance and Firm Performance: A case study of the Selected Companies from Pakistan Stock Exchange *Global Journal of Management, Social Sciences and Humanities*, 3 (4): 683-712.

Google Scholar

_____

ADB. (2002) *Poverty in Pakistan: Issues, causes and institutional responses*.
Google Scholar

━━

Agyenim Boateng, et al (2020) National culture, corporate governance and corruption: A cross country analysis *International Journal of Finance and Economics*. https://dora.dmu.ac.uk/handle/2086/19894 DOI: https://doi.org/10.1002/ijfe.1991 Google Scholar

_____

Adnan Haider, Musleh-ud-din and Ijaz Ghani. (2011) Consequences of Pakistan Instability, Governance and Bureaucratic Corruption on Inflation and Growth: The Case Study of Pakistan. *The Pakistan Development Review*, 2011, 50 (4) 773-807 Google Scholar

_____

Andrei Shleifer and Robert W. Vishny. (1997) A Survey of Corporate Governance *Journal of Finance*, 52 (2):737-783 Google Scholar

_____

Andrew Sunil Rajkumar, Vinaya Swaroop. (2008) Public Spending and outcomes: Does governance matters? *Journal of Development Economics*, 86 (1) 96-111. Google Scholar

_____

Athar Iqbal, Dr. Ayub Mehar, (2015) Governance Issues in Pakistan and Their Impact on Income Inequality, *IBT Journal of Business Studies* ,11, issue 2, 213-228. Google Scholar

_____

_____

Awan, Abdul Ghafoor, Abbas, Muhammad Ghazanfar (2016). Capital structure, Corporate Governance and firm performance in Pakistan. *Journal of Poverty, Investment and Development*,21:9-23

Google Scholar

_____

Awan, Abdul Ghafoor, Farah Adeba (2016).   Problems of small entrepreneurial firms operating in Pakistan. *Global Journal of Management and Social Sciences*, 1(1):31-45.   Google Scholar

_____

Awan, Anwar, Awan, Abdul Ghafoor (2015). Analysis of Pakistani and Indian Stock Markets: A comparative study. *Science International* 27 (6): 6327-6333.   Google Scholar

_____

Christian Leuz, Karl V. Lins and Francis E. Warnock. (2006) Do Foreigners Invest less in Poorly Governed Firms, NBER working paper series.

Google Scholar

_____

Davis, J. H. Schoorman, F. D and Donaldson, L. (1997) Toward a Stewardship Theory of Management, *Academy of Management Review*, 22(1), 20-47.

Google Scholar

_____

Donaldson, L & Davis, J. H. (1991) Stewardship theory or agency theory: CEO governance and shareholder returns, *Australian Journal of Management*, 16(1), 49-64.   Google Scholar

_____

_____

Fitch Rating. (2004) Evaluating Corporate Governance: The Perspective New York Credit Policy Special Report.   Google Scholar

_____

Flora F Niu. (2006) Corporate governance and the quality of accounting earnings: A Canadian   perspective, *International Journal of Managerial Finance*,   2   (4):   302-327.DOI: https://doi.org/10.1108/17439130610705508   Google Scholar

_____

Humera, Khatab,et al (2011) Corporate Governance and Firm Performance: A Case Study of Karachi Stock Market*, International Journal of Trade*, *Economics and Finance*, 2 (1).   Google Scholar

_____

Iftikhar, Usman, Awan,Abdul Ghafoor (2015). How does stock market development influence? the Economic Growth? *International Journal of Economics, Commerce and Managemen*t, 3 (1):1-19   Google Scholar

_____

Kamran, Klaus, et al (2004) Corporate Governance and Returns on Investment, The Journal of Law and Economics, *Finance working paper* No. 06/2003.   Google Scholar

_____

Leora F. Klapper, Inessa Love. (2004) Corporate governance, investor protection and performance in emerging markets, *Journal of Corporate Finance.*   Google Scholar

_____

Leyland, H.E. and Pyle, D.H. (1997) Informational Asymmetries, Financial Structure, and Financial Intermediation, *Journal of Finance*, 32, 371-387,
                    Google Scholar

_____
_____

Mallin, C.A. (2004) *Corporate Governance*, Oxford University Press

Google Scholar

_____

Marinko Skare, Tea Hasic. (2016) Corporate Governance, Firm Performance, and Economic Growth - Theoretical Analysis. *Journal of Business Economics and Management*, 17(1): pages 35–51   Google Scholar

_____

Michael Jensen and William Meckling. (2004) Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics* (4):308-321.   Google Scholar

_____

Modigliani, F. and Miller, M.H. (1958) The Cost of Capital, Corporation Finance and the Theory of Investment, *American Economic Review*, 48, 261-297.   Google Scholar

_____

Muneer Muhamed Saeed Al Mubarak, Allam, Muhammed Mousa Hamdan. (2016) The impact of corporate governance on market capitalization: evidence from Bahrain bourse. *International Journal of Economics and Accounting*. 8(1):1.DOI: 10.1504/IJEA.2017.10005962.

Google Scholar

_____

Nawaz and Nawaz Ahmad. (2017) "The Effect of Corporate Governance and Capital Structure on Firm's Performance: Investigation on Petroleum Sector in Pakistan, *Journal of Independent Studies and Research* 1 (15).

Google Scholar

_____

_____

OECD. (1997) Convention on Combating Bribery of Foreign Public Officials,
    International   Business   Transactions   and   Related   Documents.
    .www.oecd.org   Google Scholar

_____

Pornpen Vora-Sittha. (2012) Governance and Poverty Reduction in Thailand.
    Modern Economy. Issue 3 (05): 487-497   Google Scholar

_____

Stjin Claessens, B. Burcin Yurtoglu. (2013) Corporate governance in
    emerging markets: A survey. *Emerging Markets Review*. Electronic copy
    available at:http://ssrn.com/abstract=1988880.   Google Scholar

_____

Zahra Nazish, Awan, Abdul Ghafoor (2016). Corporate Social Responsibility
    and financial performance of banks in Pakistan. *Science International*,28
    (2):1659-16.   Google Scholar

_____