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Linking Corruption, Bribery, and Corporate Governance: A Country-Level Analysis

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Abstract:

The current study examines the impact of corruption and bribery on corporate governance compliance. The study uses panel data of 119 countries from 2010 through 2016. Data was collected from the world economic forum for GCI (Global Competitive Index) proxy of governance and CPI (Corruption Perception Index & Bribe Index) proxy for corruption and bribery. The nexus of the said variables was examined using the panel co-integration technique and vector error correction model. The findings revealed that elements of Corporate Governance: Ethical behavior of firms, Strength of Auditing and Reporting Standards, Efficacy of Corporate Boards, Protection of minority shareholder's interest, Strength of investor Protection, Firms Accountability and independent variables such as (Irregular payments, bribes and corruption) have long-run causality to each other. These empirical outcomes revealed that there is positive causality running from corporate corruption to corporate governance. Furthermore, the Impulse response function regarding a shock to corruption has increased in 10 years with a positive influence on corporate governance factors. The appraisal of that study would keep up all countries to more yearn to perceive to intend the bribery and corruption impact on corporate governance.

Keywords: *Corporate Governance, Corporate Corruption, CPI, GCI*

1. Introduction

As per social scientists, corruption is inherent in a person, but religion and good education reform the character of a person. There is a dire need to inculcate the qualities of personal integrity, honesty, and a sense of justice and fair play through religion and general education. Corruption, however, is a product of two agents, i.e., the corrupted and corruptor. Abuse of power mostly relates to the corrupted (Urinboyev & Svensson, 2018). Various actors, entities such as state-owned, private entities, trust, and welfares are the arenas, where corruption does exist. Corruption also exists in a formal or informal institution because of their complex interactions and relationship (Keig, Brouthers, & Marshall, 2015). However the level of corruption may vary on domestic or international. Corruption is considered as misuse of powers for the fulfillment of personal needs and desires (Cuervo-Cazurra, 2016). Corporate misconduct is also viewed as a kind of corruption where entrusts the power of the departmental officials to gain personal benefits by violating their duty to shareholders; corporate corruption is not only a problem for the shareholders but also the other stakeholders. Undermining social development because of the diversion of required resources for education, basic sanitation and health, and also participating to the spread of poverty among the lower classes (Barros, Rodrigues, & Panhoca, 2019; Joseph et al., 2016; Song & Han, 2017). Many countries are profoundly affected due to corruption compared to the rest of macroeconomic and sovereign factors,

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concisely speaking the countries having a weak legal framework, and instable regulatory authorities create significant room for corruption. It further has been observed that studies conducted on the micro-level survey to the individuals or single entities were not replicated on the big entities, even it was noted that studies do not claim the negative impact of corruption on the firms. Furthermore, it is unknown how entities in more corrupt areas could deal with few of the weaknesses with internal changes, such as a more robust corporate governance.

Corporate corruption and bribery preferences directly affect corporate governance, and these preferences also minimized the efficacy and ethical behavior of the firms. For the alignment of the interest of stockholders and managers, it is essential to pay attention to the financing decisions. Despite its importance in different countries, fewer researches can be found, providing empirical evidence on the nexus of corporate corruption and bribery effects on corporate governance relationships. Therefore, it requires the identification of determinants that influence the choice of corporate governance decisions. This research is an attempt to identify those determinants which influence corporate governance decisions. Many researchers have been testing this impact by taking three or four variables. To the best of the authors' knowledge, none of them examined the relationship of the variables (ethical behavior of firms, the strength of auditing and reporting standards, efficacy of corporate boards, protection of minority shareholder's interest, the strength of investor protection, and firms accountability). The current work assesses that either long-term causality or short term causality is more useful to examine the linkage of corporate corruption and bribery regarding 119 countries. The core objective of this research is to assess the long-term and short-term causality of corruption and bribery on factors of corporate governance, i.e., ethical behavior of firms, the strength of auditing and reporting standards, efficacy of corporate boards, protection of minority shareholder's interest, strength of investor protection and firms accountability.

2. Literature Review

In 1998 OECD and the World Bank shaped the best practices for the code of corporate governance (Bahoo, Alon, & Paltrinieri, 2019). OECD hosted the very first guidelines to meet corporate governance best practices having its "OECD Principles of Corporate Governance" (Ad Hoc Task Force on Corporate Governance, 1999), Later these principles were revised in 2004 and converted to the G20 version in 2015 (G20/OECD, 2015). The OECD set the regulatory framework to set the best corporate governance practices effectively in the five broad areas such as (1) Shareholders' Right, (2) Shareholders' Equitable Treatment, (3) shareholders' Role in the act of Corporate Governance, (4) Transparency and Disclosure, and Board of Directors (BoDs) responsibility. OECD best practices and principles are further recommended by the International Organization of Securities Commissions (IOSCO) specially for the emerging markets, even in contrast to well established framework to govern organization OECD serves as blueprint in application to the emerging countries.

In past studies, it has been observed that there is a strong significant relationship amid corporate governance and corruption, specifically in those countries which exhibit a high level of corruption reports weak corporate governance practice in organizations. Further, the entities which have a low level of compliance fulfillments and improper to act upon on the corporate governance practices drag firms to the full range of corruption and transparency inaccuracy. The area of corruption and corporate governance is the core topic of management and social science (Emmanuel, Chukwuma, Ann, & Agu, 2017; Grant & McGhee, 2017). They found a strong relationship between corporate governance and corruption. It is essential to combine two streams of the existing body of knowledge into one.

Grant and McGhee (2017) argued that bribery is a look like of corruption because of the goodness exhibit. It relates to conduct in which the influences of a public office are used for private gain. It is used to such a situation as giving or taking of bribes to government officials, embezzlement from the public treasury, abuse of power for personal advantage, or promotion of particular interest over the public good (Sampath & Rahman, 2019). (Barros et al., 2019) asserts that

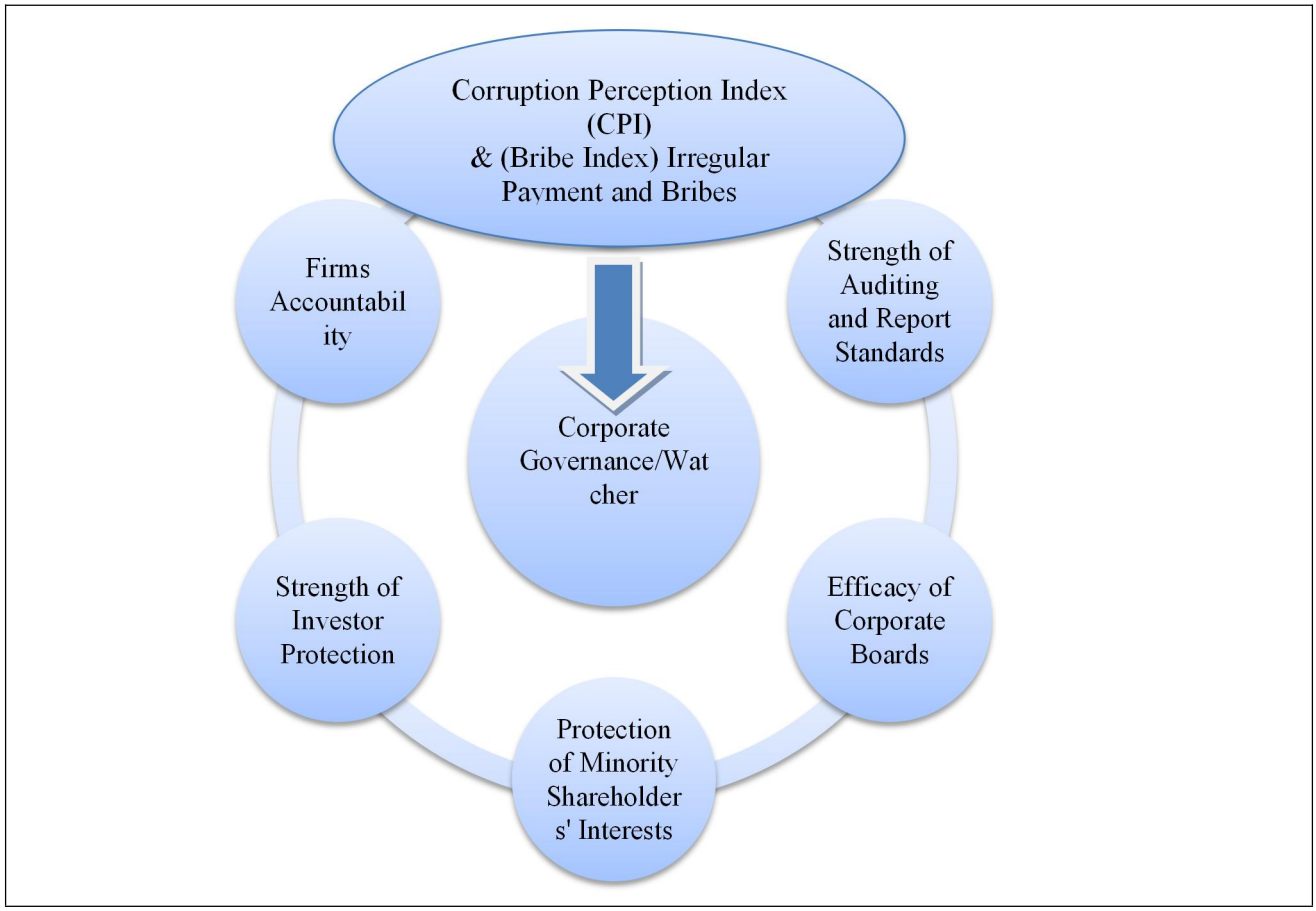
corporate governance is amid the main elements ascertain the measure of corruption and revealed that standards of corporate governance had a profound influence on the efficient of the worldwide against corruption fighting.

Abubakar Sani and Abdullahi (2018) discussed that bad corporate governance leads to an increase the corruption as there is no accountability. Moreover, it is destroying the importance of tranparency. Changes of assets, prices shifting, and thieving are the examples of investor's privilege dealing indicate that fabricating information exists. Naturally, investors' confidence is damaged due to aggravating lesser corporate governance standards and corruption pessimistic influence on financial strength. Higher the cost of capital and lower the firm's performance. Weak government policies which encourage the corruption and crime not only increase the country risk as well as it also impacts the business practices and its efficacy further crime and corruption is unignorable in any state of the world whether in the developed or emerging markets, but there is the indexing of each country as per the global competency report, moreover, it is always found costly to deal with corruption (Nakpodia, Adegbite, Amaeshi, & Owolabi, 2018).

Few of the studies in the world that claims a positive relationship between economic prospering and corporate governance. While corporate governance is negatively related to the corruption (Owoeye & Pijl, 2016), another stream of the study found " East Asia paradox" and connections higher levels of corruption with positive results at the firm or country level (Nguyen, Doan, Nguyen, & Tran-Nam, 2016; Sahakyan & Stiegert, 2012; Wang & You, 2012).

2.1 Conceptual Framework

Countries' Corporate Governance & Countries Corporate Corruption Variables



2.2 Construction of Hypothesis regarding Panel VECM:

H_{01}: Nexus of Irregular payments and bribes and corruption has positive and significant influence on Ethical behavior of firms but no long run causality between them regarding 119 countries

H_{02}: Nexus of Irregular payments and bribes and Corruption have no significant negative influence on Strength of Auditing and Reporting Standards but no long run causality between them regarding 119 countries

H_{03}: Nexus of Irregular payments and bribes and Corruption affect positively significant on Efficacy of Corporate Boards but no long run causality between them regarding 119 countries

H_{04}: Nexus of Irregular payments and bribes and Corruption have positively significant affect on protection of minority shareholder's interest but no long run causality between them regarding 119 countries

H_{05}: Nexus of Irregular payments and bribes and Corruption have not negatively significant impact on Strength of investor Protection but no long run causality between them regarding 119 countries

H_{06}: Nexus of Irregular payments and bribes and Corruption have significant impact on Firms Accountability positively but no long run causality between them regarding 119 countries

H_{07}: Nexus of Irregular payments and bribes and Corruption Ethical behavior of firms has insignificant influence on Ethical behavior of firms but no short run causality between them regarding 119 countries

H_{08}: Nexus of Irregular payments and bribes and Corruption have no significant influence on Strength of Auditing and Reporting Standards but no short run causality between them regarding 119 countries

H_{09}: Nexus of Irregular payments and bribes and Corruption affect insignificant on Efficacy of Corporate Boards but no short run causality between them regarding 119 countries

H_{010}: Nexus of Irregular payments and bribes and Corruption have insignificant affect on protection of minority shareholder's interest but no short run causality between them regarding 119 countries

H_{011}: Nexus of Irregular payments and bribes and Corruption have not significant impact on Strength of investor Protection but no short run causality between them regarding 119 countries

H_{012}: Nexus of Irregular payments and bribes and Corruption have insignificant impact on Firms Accountability positively but no short run causality between them regarding 119 countries

1. Methodology

The current study is quantitative as we develop an above hypothesis by working on several variables, having set two dependent and remaining independent variables. We have taken for seven years (2010-2016) as the sample period for 119 countries. The secondary data collected from GCI (Global Competitive Index) and CPI (Corruption Perception Index & Bribe Index) and the stationarity were tested using panel unit root test. At the same time, the relationships were examined using panel co-integration, vector error correction model along with (estimation method least square and wald test) to get delineate analysis. Table 1 below shows the variables and their measurement in a summarized form.

Table 1: Variables and Their Measurement

Factors of Corporate	Ethical behavior of firms	1 = weak corporate attitude among the firms and 7 = strong

Governance, Global Competitive Index		corporate ethics among the firms
	Accountability of firms:	1 = weak accountability among the firms and 7 = strong Accountability among the firms
	Strength of Auditing and Reporting Standards:	1 = weak auditing and reporting standards among the firms and 7 = strong auditing and reporting standards among the firms
	Efficacy of Corporate Boards	Management accountable to investor and board of directors gives [1= not at all, 7= to a great extent]
	Protection of minority shareholder's interest	The interests of minority shareholders protected by the legal system [1 = not protected at all; 7 = fully protected]
	Strength of Investor Protection:	Investor protection strength gives [1 = not protected at all; 7 = fully protected]
Corruption Variables	Irregular payments and bribes	(Bribe Index), world economic forum
	Corruption	Corruption Perception Index, world economic forum

2. Analysis and Findings

4.1 Panel Unit Root Test

In this Table-2 of panel unit root (PUR) test 119 countries have stationary exist at first difference 1(1) such as (Ethical behavior of firms, Strength of Auditing and Reporting Standards, Efficacy of Corporate Boards, Strength of investor Protection, Firms Accountability and corruption variables but only Protection of minority shareholder's interest and Irregular payments and bribes stationary at level 1(0). So, the majority of the variables are stationary at the first difference, and also this model denotes long-run association ship betwixt corporate governance and corruption.

Table 2: Panel Unit Root Test Model

Variables	Method	Statistic	Prob.	Combination Order
EBOF_VAL	**Levin, Lin & Chu t***	-25.2734	0.0000	**1(1)**
	Im, Pesaran and Shin W-stat	-5.66237	0.0000	
	ADF - Fisher Chi-square	407.429	0.0000	
	PP - Fisher Chi-square	534.256	0.0000	
SOARS_VAL	**Levin, Lin & Chut***	-24.4468	0.0000	**1(1)**
	Im, Pesaran and Shin W-stat	-4.66991	0.0000	
	ADF - Fisher Chi-square	378.716	0.0000	
	PP - Fisher Chi-square	484.628	0.0000	
EOCB_VAL	**Levin, Lin & Chut***	-18.3157	0.0000	**1(1)**
	Im, Pesaran and Shin W-stat	-3.53026	0.0002	
	ADF - Fisher Chi-square	355.328	0.0000	
	PP - Fisher Chi-square	464.575	0.0000	
POFSI_VAL	**Levin, Lin & Chut***	-14.6031	0.0000	**1(0)**
	Im, Pesaran and Shin W-stat	-2.8643	0.0021	
	ADF - Fisher Chi-square	329.205	0.0001	
	PP - Fisher Chi-square	459.071	0.0000	
SOIP_VAL	**Levin, Lin & Chut***	-6.81685	0.0000	**1(1)**
	Im, Pesaran and Shin W-stat	-3.03819	0.0012	

	ADF - Fisher Chi-square	370.562	0.0000	
	PP - Fisher Chi-square	420.907	0.0000	
FA_VAL	**Levin, Lin & Chut***	-30.554	0.0000	**1(1)**
	Im, Pesaran and Shin W-stat	-6.58969	0.0000	
	ADF - Fisher Chi-square	435.33	0.0000	
	PP - Fisher Chi-square	537.132	0.0000	
IPBRI_VAL	**Levin, Lin & Chut***	-15.9865	0.0000	**1(0)**
	Im, Pesaran and Shin W-stat	-1.91252	0.0279	
	ADF - Fisher Chi-square	303.488	0.0026	
	PP - Fisher Chi-square	387.577	0.0000	
CPIN_VAL	**Levin, Lin & Chut***	-27.4164	0.0000	**1(1)**
	Im, Pesaran and Shin W-stat	-6.60818	0.0000	
	ADF - Fisher Chi-square	434.488	0.0000	
	PP - Fisher Chi-square	504.679	0.0000	

We further move towards the co-integration test for the evaluation of the long-run relationship between corporate governance and corruption variables regarding 119 countries. The following part discusses Co-Integration test between (Ethical behavior of firms with Irregular payments, Strength of Auditing and Reporting Standards with Irregular payments, Efficacy of Corporate Boards with Irregular payments, protection of minority shareholder's interest with Irregular payments, Strength of investor Protection) and (Irregular payments, Firms Accountability with Irregular payments and bribes and corruption).

4.2 Pedroni Residual Co-integration Test:

In the Tables 3.1 to 3.6 below Pedroni Residual Co-integration Test using three trend methods (No Deterministic Trend, Deterministic Intercept and Trend and Deterministic Intercept and Trend) showed that there is no co-integration exists among three variables such as dependent variable (Ethical behavior of firms) and independent variables (Irregular payments and bribes and corruption) in Panel v-Statistic, Panel rho-Statistic and Group rho-Statistic that means five outcomes have shown insignificant in terms of t-stats and weighted-stats or p-value more than .05 or 5% and remaining six outcomes in Panel PP-Statistic, Panel ADF-Statistic, Group PP-Statistic and Group ADF-Statistic have shown significant. So, there are 11 outcomes getting, while six results have shown signs that means less than 5%. In other words, there is co-integrated among three variables, such as (Ethical behavior of firms, Irregular payments and bribes, and corruption) or they have long-run association ship to each other in the future.

In the same way, the co-integration does not exist between (Strength of Auditing and Reporting Standards) and independent variables (Irregular payments and bribes and corruption) 11 outcomes are getting. In comparison, six findings have shown signs that means less than 5%. In other words, there is co-integrated among three variables, such as (Strength of Auditing and Reporting Standards, Irregular payments and bribes and Corruption) or they have long-run association ship to each other in the future. Efficacy of Corporate Boards and independent variables Irregular payments and bribes and corruption showed, there are 11 outcomes getting while six findings have shown significant that means less than 5%. In other words, there is co-integrated among three variables, such as (Efficacy of Corporate Boards, Irregular payments and bribes and Corruption) or they have long run association ship to each other in the future. Similarly Pedroni Residual Co-integration Test using three trend methods (No Deterministic Trend, Deterministic Intercept and Trend and Deterministic Intercept and Trend) showed that there is no co-integration exists among three variables such as dependent variable

(Protection of minority shareholder's interest) and independent variables (Irregular payments and bribes and corruption). Same as the above relationships

no co-integration exists among three variables such as dependent variable (Strength of investor Protection) and independent variables (Irregular payments and bribes and corruption) in Panel v-Statistic, Panel rho-Statistic, Panel PP-Statistic (t-stats), Panel ADF-Statistic (t-stats), Group rho-Statistic and Group ADF-Statistic in no deterministic trend that means eight outcomes have shown insignificant or p-value more than .05 or 5% and remaining three outcomes have shown significant that means less than 5% in Panel PP-Statistic (weighted-stats), Panel ADF-Statistic (weighted-stats) and Group PP-Statistic. No co-integration exists among three variables such as dependent variable (Firms Accountability) and independent variables (Irregular payments and bribes and corruption) as there are 11 outcomes getting while 6 outcomes have showed significant that means less than 5%. In other words, there is co-integrated among three variables such as (Firms Accountability, Irregular payments and bribes and Corruption) or they have long run association ship to each other in the future. The above results clearly shows that no long-run relationship was found for corporate governance variables, corruption and bribes. The table II below depicts the results. The Kao Residual Co-integration Test also shows that no co-integration found for all six relationships.

Table 3.1: Ethical behavior of firms, Irregular payments and bribes, Corruption Perception Index

Trend	Statistic Type	Stats	P-Value	Weighted Stats	P-Value
No Deterministic Trend	Panel v-Statistic	-1.169	0.8788	-2.76745	0.9972
	Panel rho-Statistic	3.341763	0.9996	4.168348	1.0000
	Panel PP-Statistic	-10.213	0.0000	-8.15039	0.0000
	Panel ADF-Statistic	-9.2393	0.0000	-7.36176	0.0000
	Group rho-Statistic	8.95624	1.0000		
	Group PP-Statistic	-15.584	0.0000		
	Group ADF-Statistic	-10.908	0.0000		
Deterministic Intercept and Trend	Panel v-Statistic	-4.6249	1.0000	-6.67057	1.0000
	Panel rho-Statistic	8.021545	1.0000	8.925253	1.0000
	Panel PP-Statistic	-22.279	0.0000	-21.3011	0.0000
	Panel ADF-Statistic	-14.729	0.0000	-12.3023	0.0000
	Group rho-Statistic	12.68806	1.0000		
	Group PP-Statistic	-24.088	0.0000		
	Group ADF-Statistic	-14.897	0.0000		
No Deterministic Intercept or Trend	Panel v-Statistic	-7.1291	1.0000	-8.08504	1.0000
	Panel rho-Statistic	3.584421	0.9998	3.871247	0.9999
	Panel PP-Statistic	-11.378	0.0000	-9.97832	0.0000
	Panel ADF-Statistic	-7.3645	0.0000	-6.42825	0.0000
	Group rho-Statistic	6.578477	1.0000		
	Group PP-Statistic	-15.857	0.0000		
	Group ADF-Statistic	-12.681	0.0000		
No Deterministic Trend	ADF	-8.0806	0.0000		

Table 3.2: Strength of Auditing and Reporting Standard, Irregular payments and bribes, Corruption Perception Index

No Deterministic Trend	Panel v-Statistic	0.723861	0.2346	-2.03783	0.9792
	Panel rho-Statistic	3.357163	0.9996	4.367727	1.0000

	Panel PP-Statistic	-8.634	0.0000	-7.63008	0.0000
	Panel ADF-Statistic	-8.1176	0.0000	-6.90342	0.0000
	Group rho-Statistic	9.411220	1.0000		
	Group PP-Statistic	-16.331	0.0000		
	Group ADF-Statistic	-11.01	0.0000		
Deterministic Intercept and Trend	Panel v-Statistic	-0.246	0.5971	-5.76405	1.0000
	Panel rho-Statistic	8.207157	1.0000	8.808155	1.0000
	Panel PP-Statistic	-18.009	0.0000	-21.2089	0.0000
	Panel ADF-Statistic	-12.726	0.0000	-12.6159	0.0000
	Group rho-Statistic	12.73970	1.0000		
	Group PP-Statistic	-23.433	0.0000		
	Group ADF-Statistic	-15.437	0.0000		
No Deterministic Intercept or Trend	Panel v-Statistic	-7.0384	1.0000	-8.00958	1.0000
	Panel rho-Statistic	3.419551	0.9997	3.776113	0.9999
	Panel PP-Statistic	-11.714	0.0000	-5.33814	0.0000
	Panel ADF-Statistic	-7.7244	0.0000	-4.42378	0.0000
	Group rho-Statistic	6.527242	1.0000		
	Group PP-Statistic	-14.095	0.0000		
	Group ADF-Statistic	-10.625	0.0000		
No Deterministic Trend	ADF	-4.0559	0.0000		

Table 3.3: Efficacy of Corporate Boards, Irregular payments and bribes, Corruption Perception Index

No Deterministic Trend	Panel v-Statistic	1.15342	0.1244	-1.57646	0.9425
	Panel rho-Statistic	3.62655	0.9999	4.74606	1.0000
	Panel PP-Statistic	-4.1174	0.0000	-2.5166	0.0059
	Panel ADF-Statistic	-4.4015	0.0000	-3.00862	0.0013
	Group rho-Statistic	9.9923	1.0000		
	Group PP-Statistic	-5.9525	0.0000		
	Group ADF-Statistic	-1.9607	0.025		
Deterministic Intercept and Trend	Panel v-Statistic	1.54771	0.0608	-4.23437	1.0000
	Panel rho-Statistic	8.04357	1.0000	8.96734	1.0000
	Panel PP-Statistic	-18.363	0.0000	-18.2951	0.0000
	Panel ADF-Statistic	-13.435	0.0000	-11.2621	0.0000
	Group rho-Statistic	12.6491	1.0000		
	Group PP-Statistic	-21.51	0.0000		
	Group ADF-Statistic	-14.62	0.0000		
No Deterministic Intercept or Trend	Panel v-Statistic	-6.6965	1.0000	-7.72928	1.0000
	Panel rho-Statistic	3.18563	0.9993	2.01433	0.978
	Panel PP-Statistic	-8.3493	0.0000	-11.1	0.0000
	Panel ADF-Statistic	-6.5879	0.0000	-9.08758	0.0000
	Group rho-Statistic	6.53002	1.0000		
	Group PP-Statistic	-11.352	0.0000		
	Group ADF-Statistic	-8.1416	0.0000		

No Deterministic Trend	ADF	-5.6164	0.0000		

Table 3.4: Protection of Minority Shareholder's Interest, Irregular payments and bribes, Corruption Perception Index

No Deterministic Trend	Panel v-Statistic	-0.4041	0.6569	-3.22738	0.9994
	Panel rho-Statistic	2.82232	0.9976	3.99223	1.0000
	Panel PP-Statistic	-13.21	0.0000	-10.7673	0.0000
	Panel ADF-Statistic	-11.559	0.0000	-9.02208	0.0000
	Group rho-Statistic	8.72035	1.0000		
	Group PP-Statistic	-18.417	0.0000		
	Group ADF-Statistic	-11.249	0.0000		
Deterministic Intercept and Trend	Panel v-Statistic	-3.5847	0.9998	-8.48965	1.0000
	Panel rho-Statistic	7.98037	1.0000	9.00251	1.0000
	Panel PP-Statistic	-21.842	0.0000	-23.5391	0.0000
	Panel ADF-Statistic	-14.808	0.0000	-12.7137	0.0000
	Group rho-Statistic	12.6535	1.0000		
	Group PP-Statistic	-27.673	0.0000		
	Group ADF-Statistic	-15.301	0.0000		
No Deterministic Intercept or Trend	Panel v-Statistic	-6.6329	1.0000	-7.71411	1.0000
	Panel rho-Statistic	3.1439	0.9992	3.33688	0.9996
	Panel PP-Statistic	-11.339	0.0000	-9.26795	0.0000
	Panel ADF-Statistic	-7.9464	0.0000	-6.71176	0.0000
	Group rho-Statistic	6.09031	1.0000		
	Group PP-Statistic	-18.418	0.0000		
	Group ADF-Statistic	-13.008	0.0000		
No Deterministic Trend	ADF	-7.7389	0.0000		

Table 3.5: Strength of Investor Protection, Irregular payments and bribes, Corruption Perception Index

No Deterministic Trend	Panel v-Statistic	-2.3978	0.9918	-2.3877	0.9915
	Panel rho-Statistic	5.03459	1	4.9071	1.0000
	Panel PP-Statistic	0.05818	0.5232	-1.97393	0.0242
	Panel ADF-Statistic	-0.5272	0.299	-2.55615	0.0053
	Group rho-Statistic	10.1446	1		
	Group PP-Statistic	-3.3547	0.0004		
	Group ADF-Statistic	-0.5176	0.3024		
Deterministic Intercept and Trend	Panel v-Statistic	1.40595	0.0799	-3.84357	0.9999
	Panel rho-Statistic	8.22507	1.0000	7.79805	1.0000
	Panel PP-Statistic	-20.643	0.0000	-27.3607	0.0000
	Panel ADF-Statistic	-13.546	0.0000	-16.3619	0.0000
	Group rho-Statistic	12.191	1.0000		
	Group PP-Statistic	-28.231	0.0000		
	Group ADF-Statistic	-16.234	0.0000		
No Deterministic Intercept or Trend	Panel v-Statistic	-6.3167	1.0000	-7.49649	1.0000
	Panel rho-Statistic	3.03355	0.9988	3.15106	0.9992
	Panel PP-Statistic	-4.8602	0.0000	-2.49845	0.0062

	Panel ADF-Statistic	-4.6113	0.0000	-2.95116	0.0016
	Group rho-Statistic	7.33016	1.0000		
	Group PP-Statistic	-6.6633	0.0000		
	Group ADF-Statistic	-4.1599	0.0000		
No Deterministic Trend	ADF	-0.8443	0.1992		

Table 3.6: Accountability of Firms, Irregular payments and bribes, Corruption Perception Index

No Deterministic Trend	Panel v-Statistic	0.92137	0.1784	-3.00148	0.9987
	Panel rho-Statistic	2.48351	0.9935	4.03143	1.0000
	Panel PP-Statistic	-12.169	0.0000	-8.43856	0.0000
	Panel ADF-Statistic	-11.196	0.0000	-7.61768	0.0000
	Group rho-Statistic	8.85335	1.0000		
	Group PP-Statistic	-17.364	0.0000		
	Group ADF-Statistic	-10.376	0.0000		
Deterministic Intercept and Trend	Panel v-Statistic	-1.9887	0.9766	-7.65679	1.0000
	Panel rho-Statistic	7.71414	1.0000	8.73249	1.0000
	Panel PP-Statistic	-17.967	0.0000	-22.4121	0.0000
	Panel ADF-Statistic	-13.915	0.0000	-13.0817	0.0000
	Group rho-Statistic	12.3335	1.0000		
	Group PP-Statistic	-25.222	0.0000		
	Group ADF-Statistic	-16.213	0.0000		
No Deterministic Intercept or Trend	Panel v-Statistic	-7.3592	1.0000	-8.39565	1.0000
	Panel rho-Statistic	3.49954	0.9998	3.96371	1.0000
	Panel PP-Statistic	-11.957	0.0000	-13.2456	0.0000
	Panel ADF-Statistic	-7.7937	0.0000	-7.46549	0.0000
	Group rho-Statistic	5.7137	1.0000		
	Group PP-Statistic	-16.724	0.0000		
	Group ADF-Statistic	-13.171	0.0000		
No Deterministic Trend	ADF	-7.7619	0.0000		

4.3 Outcomes of all variables (Corporate Governance and Corruption) after Panel Co-Integration Models used:

There are three methods (individual intercept, individual intercept and individual trend and no intercept or trend) using two models named Pedroni Residual Co-integration Test and Kao Residual Co-integration Test are telling that Corporate Governance variables, i.e., Ethical behavior of firms, Strength of Auditing and Reporting Standards, Efficacy of Corporate Boards, Protection of minority shareholder's interest, Strength of investor Protection, Firms Accountability and independent variables such as Irregular payments and bribes and corruption are co-integrated or long-run association ship to each other only except that in no deterministic trend showed insignificant in Pedroni residual test and Kao residual co-integration test in Strength of investor Protection with Irregular payments and bribes and corruption. Still, overall significant results have gotten in all variables between corporate governance factors and corruption regarding 119 countries. After the use of the Panel Co-integration model with corporate governance and corruption results confirmed that long-run relationship exist. So, now move towards the Panel Vector Error Correction Model (P-VECM).

4.4 Panel Vector Error Correction Model

4.4.1 The causality of Ethical behavior of firms, Irregular payments, and bribes, Corruption Perception Index

Table 4.1.1 Long term causality (Estimation Method Least Square) Ethical behavior of firms, Irregular payments, and bribes, Corruption Perception Index

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-7.13E-02	2.11E-02	-3.382161	0.0007

In Table 4.1.1, there is an independent variable (Irregular payments and bribes and corruption) that influence the dependent variable (Ethical behavior of firms). In this model C (1) is an error correction term, which is -.0713; in other words, it should be the speed of adjustment is 7.13%, and the p-value is 0.0007or .07% which is less than .05 or 5%.

Irregular payments and bribes and corruption are adjusting on the dependent variable (Ethical behavior of firms) very fast, or it means going to long-run equilibrium very fast with 7.13% or symmetrically balanced quickly moving towards long-run equilibrium and remaining are the short-run co-efficient.

When C (1) is negative and significant, then we can say there is a long-run causality running from independent variables (Irregular payments and bribes and corruption) to the dependent variable (Ethical behavior of firms). So, we reject the null hypothesis that means there would be the speed of adjustment towards long-run equilibrium betwixt Ethical behavior of firms and Irregular payments and bribes and corruption to each other in the future very much.

4.4.1.1 Wald Test

The co-efficient of co-integrating model/equation:

C (1)*(EBOF_VAL (-1) + 0.434703405*IPBRI_VAL(-1) - 0.079887094338*CPIN_VAL(-1) - 2.51888415137)

Table 4.1.2 (Short term causality Wald Test):

Test Statistic	Value	Df	Probability
Chi-square	2.047302	4	0.7271

In this model, we cannot reject the null hypothesis because p-value 16.39% or .1639 is more than 5%, meaning that there is no short term causality among three variables such as the Ethical behavior of firms and Irregular payments and bribes and corruption. So, Irregular payments and bribes and corruption do not cause Ethical behavior of firms in the short term.

4.4.2 The causality of Strength of Auditing and Reporting Standards, Irregular payments and bribes, Corruption Perception Index

Table 4.2.1 Long term causality (Estimation Method Least Square) Strength of Auditing and Reporting Standards, Irregular payments and bribes, Corruption Perception Index

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-3.55E-02	1.08E-02	-3.276341	0.0011

There is an independent variable (Irregular payments and bribes and corruption) that influence the dependent variable (Strength of Auditing and Reporting Standards). In this model C (1) is an error correction term, which is -0.0355. In other words, it should be the speed of adjustment is 3.55%, and the p-value is .011 or 1.1%, which is less than .05 or 5%.

Irregular payments and bribes and corruption are adjusting on the dependent variable (Strength of Auditing and Reporting Standards) very fast, or it means going to long-run equilibrium very fast with 3.55% or symmetrically balanced quickly moving towards long-run equilibrium and remaining are the short-run co-efficient.

When C (1) is negative and significant, then we can say there is a long-run causality running from independent variables (Irregular payments and bribes and corruption) to the dependent variable (Strength of Auditing and Reporting Standards). So, we reject the null hypothesis that means there would be the speed of adjustment towards long-run equilibrium betwixt Strength of Auditing and Reporting Standards and Irregular payments and bribes and Corruption to each other in the future very much.

4.4.2.1 Wald Test

The co-efficient of co-integrating model/equation:

C(1)*(SOARS_VAL(-1) + 1.86030665789*IPBRI_VAL(-1) - 0.172093110055*CPIN_VAL(-1) - 4.94038654177)

Table 4.2.2 (Short term causality Wald Test):

Test Statistic	Value	df	Probability
Chi-square	2.770409	4	0.597

In this model, we can't reject the null hypothesis because p-value 59.7% or 0.597 is more than 5%, meaning that there is no short term causality among three variables such as Strength of Auditing and Reporting Standards and Irregular payments and bribes and Corruption. So, Irregular payments and bribes and corruption do not cause the Strength of Auditing and Reporting Standards in the short term.

4.4.3 The causality of Efficacy of Corporate Boards, Irregular payments and bribes, Corruption Perception Index

Table 4.3.1 Long term causality (Estimation Method Least Square) Efficacy of Corporate Boards, Irregular payments and bribes, Corruption Perception Index

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-7.71E-02	1.66E-02	-4.654477	0

There is an independent variable (Irregular payments and bribes and corruption) that influence the dependent variable (Efficacy of Corporate Boards). In this model C (1) is an error correction term, which is -0.0771in other words, it should be the speed of adjustment is 7.71%, and the p-value is 0.000 or 0%, which is less than .05 or 5%.
Irregular payments and bribes and corruption are adjusting on the dependent variable (Efficacy of Corporate Boards) very fast, or it means going to long-run equilibrium very fast with 7.71% or symmetrically balanced quickly moving towards long-run equilibrium and remaining are the short-run co-efficient.

When C (1) is negative and significant, then we can say there is a long-run causality running from independent variables (Irregular payments and bribes and corruption) to the dependent variable (Efficacy of Corporate Boards). So, we reject the null hypothesis that means there would be the speed of adjustment towards long-run equilibrium betwixt Efficacy of Corporate Boards and Irregular payments and bribes and Corruption to each other in the future very much.

4.4.3.1 Wald Test

The co-efficient of co-integrating model/equation:

C(1)*(EOCB_VAL(-1) + 1.27560938022*IPBRI_VAL(-1) - 0.120304197921*CPIN_VAL(-1) - 4.69047710822)

Table 4.3.2 (Short term causality Wald Test):

Test Statistic	Value	df	Probability
Chi-square	10.48131	4	0.0331

In this model, we reject the null hypothesis because p-value 3.31% or 0.0331 is more than .05 or 5%, meaning that there is short term causality among three variables such as Efficacy of Corporate Boards and Irregular payments and bribes and Corruption. So, Irregular payments and bribes and corruption do not cause the Efficacy of Corporate Boards in the short term.

4.4.4 The causality of Protection of minority Shareholders' Interest, Irregular payments, and bribes, Corruption Perception Index

Table 4.4.1 Long term causality (Estimation Method Least Square) Protection of Minority Shareholders' Interest, Irregular payments, and bribes, Corruption Perception Index

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-1.58E-02	7.23E-03	-2.179738	0.0294

There is an independent variable (Irregular payments and bribes and corruption) that influence the dependent variable (Protection of minority shareholder's interest). In this model C (1) is an error correction term, which is -0.0158. In other words, it should be the speed of adjustment is 1.58%, and the p-value is 0.0294 or 2.94%, which is less than .05 or 5%.

Irregular payments and bribes and corruption are adjusting on the dependent variable (Protection of minority shareholder's interest) very fast, or it means going to long-run equilibrium very fast with 1.58% or symmetrically balanced quickly moving towards long-run equilibrium and remaining are the short-run co-efficient.

When C (1) is negative and significant, then we can say there is a long-run causality running from independent variables (Irregular payments and bribes and corruption) to the dependent variable (Protection of minority shareholder's interest). So, we reject the null hypothesis that means there would be the speed of adjustment towards long-run equilibrium betwixt protection of minority shareholder's interest and Irregular payments and bribes and corruption to each other in the future very much.

4.4.4.1 Wald Test

The co-efficient of co-integrating model/equation:

C(1)*(POFSI_VAL(-1) + 2.95746528208*IPBRI_VAL(-1) - 0.242443722515*CPIN_VAL(-1) - 5.93468376235)

Table 4.4.2 (Short term causality Wald Test):

Test Statistic	Value	df	Probability
Chi-square	2.035648	4	0.7292

In this model, we can't reject the null hypothesis because p-value 72.92% or 0.7292 is more than 5%, meaning that there is no short term causality among three variables such as protection of minority shareholder's interest and Irregular payments and bribes and corruption. So, Irregular payments and bribes and corruption do not cause the protection of minority shareholder's interest in the short term.

4.4.5 The causality of Strength of Investor Protection, Irregular payments, and bribes, Corruption Perception Index

Table 4.5.1 Long term causality (Estimation Method Least Square) Strength of Investor Protection, Irregular payments, and bribes, Corruption Perception Index

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-1.26E-02	3.51E-03	-3.590235	0.0003

There is an independent variable (Irregular payments and bribes and corruption) that influence the dependent variable (Strength of investor Protection). In this model C (1) is an error correction term, which is -0.0126. In other words, it should be the speed of adjustment is 1.26%, and the p-value is 0.0003 or .03%, which is less than .05 or 5%.

Irregular payments and bribes and corruption are adjusting on the dependent variable (Strength of investor Protection) very fast, or it means going to long-run equilibrium very fast with 1.26% or symmetrically balanced quickly moving towards long-run equilibrium and remaining are the short-run co-efficient.

When C (1) is negative and significant, then we can say there is a long-run causality running from independent variables (Irregular payments and bribes and corruption) to the dependent variable (Strength of investor Protection). So, we reject the null hypothesis that means there would be the speed of adjustment towards long-run equilibrium betwixt Strength of investor Protection and Irregular payments and bribes and Corruption to each other in the future very much.

4.4.5.1 Wald Test

The co-efficient of co-integrating model/equation:

C(1)*(SOIP_VAL(-1) + 9.70191796026*IPBRI_VAL(-1) - 0.725027695557*CPIN_VAL(-1) - 14.1141659094)

Table: 4.5.2 (Short term causality Wald Test):

Test Statistic	Value	Df	Probability

Chi-square	23.88687	4	0.0001

In this model, we reject the null hypothesis because p-value .01% or 0.0001 is more than 5%, meaning that there is short term causality among three variables such as Strength of investor Protection and Irregular payments and bribes and Corruption. So, Irregular payments and bribes and corruption do not cause the strength of investor protection in the short term.

4.4.6 The causality of Firms' Accountability, Irregular payments, and bribes, Corruption Perception Index

Table 4.6.1 Long term causality (Estimation Method Least Square) Strength of Investor Protection, Irregular payments, and bribes, Corruption Perception Index

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-4.20E-02	1.35E-02	-3.116949	0.0019

There is an independent variable (Irregular payments and bribes and corruption) that influence the dependent variable (Firms Accountability). In this model C (1) is an error correction term, which is -0.042. In other words, it should be the speed of adjustment is 4.42%, and the p-value is 0.0019 or .19%, which is less than .05 or 5%.

Irregular payments and bribes and corruption are adjusting on the dependent variable (Firms Accountability) very fast, or it means going to long-run equilibrium very fast with 4.42% or symmetrically balanced quickly moving towards long-run equilibrium and remaining are the short-run co-efficient.

When C (1) is negative and significant, then we can say there is a long-run causality running from independent variables (Irregular payments and bribes and corruption) to the dependent variable (Firms Accountability). So, we reject the null hypothesis that means there would be the speed of adjustment towards long-run equilibrium betwixt Firms Accountability and Irregular payments and bribes and Corruption to each other in the future very much.

4.4.6.1 Wald Test

The co-efficient of co-integrating model/equation:

C(1)*(FA_VAL(-1) + 1.37715243225*IPBRI_VAL(-1) - 0.128067004219*CPIN_VAL(-1) - 4.62754181313)

4.6.2 (Short term causality Wald Test):

Test Statistic	Value	Df	Probability
Chi-square	4.665822	4	0.3233

In this model, we can't reject the null hypothesis because p-value 32.33% or 0.3233 is more than 5%, meaning that there is no short term causality among three variables, such as Firms Accountability and Irregular payments and bribes and Corruption. So, Irregular payments and bribes and corruption do not cause Firms Accountability in the short term.

4.7 Impulse Response Function

4.7.1 Analysis

Function-1 The outcome of the impulse response function of divulging that for ten years, a shock to ethical behavior of firms has a pessimistic influence on Irregular payments and bribes from the first year to tenth years while a shock to ethical behavior of firms has a positive impact on corruption but continue to exist in close to positive an area with slightly decline. Likewise, a shock to Irregular payments and bribes has a positive influence on the Ethical behavior of firms. Still, the impact of impairment over ten years and a shock to Irregular payments and bribes with corruption has increased from the first year to tenth with a positive impact.

Function-2 The outcome of the impulse response function of divulging that for ten years, a shock to Strength of Auditing and Reporting Standards has a pessimistic influence on Irregular payments and bribes from the first year to tenth years while a shock to Strength of Auditing and Reporting Standards has a positive impact on corruption but continue to exist in close to positive an area with slightly decline. Likewise, a shock to Irregular payments and bribes has a positive influence on the strength of Auditing and Reporting Standards. Still, the impact of impairment for ten years and a shock to Irregular payments and bribes with corruption has increased from the first year to tenth with a positive impact.

Function-3 The outcome of the impulse response function of divulging that for ten years, a shock to Efficacy of Corporate Boards has a pessimistic influence on Irregular payments and bribes from the first year to tenth years while a shock to ethical behavior of firms has a positive impact on corruption but continue to exist in close to positive an area with slightly increase. Likewise, a shock to Irregular payments and bribes has a positive influence on the Efficacy of Corporate Boards. Still, the impact of impairment for ten years and a shock to Irregular payments and bribes with corruption has increased from the first year to tenth with a positive impact.

Function-4 The outcome of the impulse response function of divulging that for ten years, a shock to the protection of minority shareholder's interest has a pessimistic influence on Irregular payments and bribes from first year to tenth years while a shock to the protection of minority shareholder's interest has a positive impact on corruption but continue to exist with steady in positive an area. Likewise, a shock to Irregular payments and bribes has a positive influence on the protection of minority shareholder's interest. Still, the impact of impairment for ten years and a shock to Irregular payments and bribes with corruption has increased from first-year than end with positive impact.

Function-5 The outcome of the impulse response function of divulging that for ten years, a shock to Strength of investor Protection has a pessimistic influence on Irregular payments and bribes from the first year to tenth years while a shock to the strength of investor protection has a positive impact on corruption but continue to exist in close to positive an area. Likewise, a shock to Irregular payments and bribes has a positive influence on the strength of investor Protection but the impact of impairment over ten years and a shock to Irregular payments and bribes with corruption has increased from the first year to tenth with positive impact.

Function-6 The outcome of the impulse response function of divulging that over ten years, a shock to Firms Accountability has a pessimistic influence on Irregular payments and bribes from the first year to tenth years while a shock to Firms Accountability has a positive impact on corruption but continue to exist in close to positive an area with slightly decline. Likewise, a shock to Irregular payments and bribes has a positive influence on Firms Accountability. Still, the impact of impairment over ten years and a shock to Irregular payments and bribes with corruption has increased from the first year to tenth with a positive impact.

3. Discussion:

The results revealed that EBOF, SOARS, EOCB, POFSI, SOIP, FA, and independent variables such as Irregular payments and bribes and corruption have long-run causality or association ship to each other. At the same time, there is short term causality exists among the variables of EOCB and Irregular payments, Strength of investor Protection with Irregular payments. Bribery and corruption have since a long time before run causality or alliance vessels to each other. At the same time, there is transient causality exist among the elements of EOCB and Irregular portions Strength of examiner Protection with Irregular portions and adjustments and corruption anyway remaining components of corporate organization factors

(Ethical behavior of firms, Strength of Auditing and Reporting Standards, Protection of minority shareholder's interest and Firms Accountability with Irregular payments and bribes and corruption) have no short-run association.

while all things considered, the firm is the standard subject of excitement for the overall business. Regardless, while isolating the relationship between corruption and the firm, specialists' control for firm-level factors, for example, performance, works out, pay the authorities, and proficiency. In this manner, firm-level factors, for example, age, industry, size, comprehensive experience, proprietorship, deals, fiasco rehash, and length of the working cycle, brief firms to participate in the deal with when driving overall business.

4. Conclusion:

The core point and reliance of this research study are to assess the determinants or factors of Corporate Governance such as Ethical behavior of firms, Strength of Auditing and Reporting Standards, Efficacy of Corporate Boards, Protection of minority shareholder's interest, Strength of investor Protection, Firms Accountability and independent variables such as Irregular payments and bribes and corruption have long-run causality or association ship to each other. At the same time, there is short term causality exists among the variables of Efficacy of Corporate Boards and Irregular payments. Strength of Investor Protection with Irregular payments and bribes and corruption but remaining factors of corporate governance variables (Ethical behavior of firms, Strength of Auditing and Reporting Standards, Protection of minority shareholder's interest and Firms Accountability with Irregular payments and bribes and corruption) have no short-run causality or association exist. So, overall corporate governance factors and corruption have long-run association ship to each other in the future or symmetrically balanced quickly moving towards long-run equilibrium regarding 119 countries. The majority of the variables are stationary at the first difference, and also this model denotes long-run association ship betwixt corporate governance and corruption.

In the summary of these empirical outcomes revealed that there is positive causality running from corruption to (EBOF, SOARS, EOCB, POFSI, SOIP & FA) in the long run and bribery to ethical behavior of firms, Strength of Auditing and Reporting Standards, Efficacy of Corporate Boards, Protection of minority shareholder's interest, Strength of investor Protection and Firms Accountability in the short-run causality while also positive causality running from Irregular payments and bribes to corruption in the long run in 119 countries exists.

Impulse response function regarding a shock to corruption has increased from first to the tenth year with positive influenced on corporate governance factors such as ethical behavior of firms, Strength of Auditing and Reporting Standards, Efficacy of Corporate Boards, Protection of minority shareholder's interest, Strength of investor Protection & Firms Accountability. In addition, corruption has risen in the third year but remains with a positive trend in the year ten. A shock to corruption has increased in the third year but end with a positive influence on corporate governance factors.

5. Recommendations:

Some points are as follows:

- This research is focused on corporate governance factors (EBOF, SOARS, EOCB, POFSI, SOIP & FA). In future other factors of CSR would be explored.
- More data samples should be taken in the future in terms of financial and non-financial sectors.
- More variables should be added in the future in terms of risk management.

References:

Abubakar Sani, I., & Abdullahi, U. M. (2018). Corruption and Bad Governance: A Threat to National Economic Security in Nigeria During Democratic Dispensation. *Ubali Muhammad, Corruption and Bad Governance: A Threat to National Economic Security in Nigeria During Democratic Dispensation (April 1, 2018)*.

Ad Hoc Task Force on Corporate Governance. (1999). OECD Principles of Corporate Governance: Paris: OECD.

Bahoo, S., Alon, I., & Paltrinieri, A. (2019). Corruption in international business: A review and research agenda. *International Business Review*, 101660.

Barros, A. d. N. F., Rodrigues, R. N., & Panhoca, L. (2019). Information on the fight against corruption and corporate governance practices: evidence of organized hypocrisy. *International Journal of Disclosure and Governance, 16*(2-3), 145-160.

Cuervo-Cazurra, A. (2016). Corruption in international business. *Journal of World Business, 51*(1), 35-49.

Emmanuel, K. A., Chukwuma, I. O., Ann, O., & Agu, A. O. (2017). Effect of corruption on corporate governance in selected area offices of deposit money banks in Enugu State, Nigeria. *International research journal of management, IT and social sciences, 4*(2), 27-47.

G20/OECD. (2015). G20/OECD principles of corporate governance.

Grant, P., & McGhee, P. (2017). Personal moral values of directors and corporate governance. *Corporate Governance: The International Journal of Business in Society*.

Joseph, C., Gunawan, J., Sawani, Y., Rahmat, M., Noyem, J. A., & Darus, F. (2016). A comparative study of anti-corruption practice disclosure among Malaysian and Indonesian Corporate Social Responsibility (CSR) best practice companies. *Journal of cleaner production, 112*, 2896-2906.

Keig, D. L., Brouthers, L. E., & Marshall, V. B. (2015). Formal and informal corruption environments and multinational enterprise social irresponsibility. *Journal of Management Studies, 52*(1), 89-116.

Nakpodia, F., Adegbite, E., Amaeshi, K., & Owolabi, A. (2018). Neither principles nor rules: Making corporate governance work in Sub-Saharan Africa. *Journal of Business Ethics, 151*(2), 391-408.

Nguyen, N. A., Doan, Q. H., Nguyen, N. M., & Tran-Nam, B. (2016). The impact of petty corruption on firm innovation in Vietnam. *Crime, Law and Social Change, 65*(4-5), 377-394.

Owoeye, O., & Pijl, M. V. d. (2016). Corporate governance in Vietnam-its significance and challenges. *International Journal of Corporate Governance, 7*(1), 60-77.

Sahakyan, N., & Stiegert, K. W. (2012). Corruption and firm performance. *Eastern European Economics, 50*(6), 5-27.

Sampath, V. S., & Rahman, N. (2019). Bribery in MNEs: The Dynamics of Corruption Culture Distance and Organizational Distance to Core Values. *Journal of Business Ethics, 159*(3), 817-835.

Song, C., & Han, S. H. (2017). Stock market reaction to corporate crime: Evidence from South Korea. *Journal of Business Ethics, 143*(2), 323-351.

Urinboyev, R., & Svensson, M. (2018). Corruption, social norms and everyday life in Uzbekistan *Corruption and Norms* (pp. 187-210): Springer.

Wang, Y., & You, J. (2012). Corruption and firm growth: Evidence from China. *China Economic Review, 23*(2), 415-433.