

**INSTITUTIONAL QUALITY AND FOREIGN PORTFOLIO  
INVESTMENT IN GHANA**

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**PROF. NDUGBU, M. O.**

Department of Banking & Finance  
Imo State University, Owerri.

**DR. IHEJIRIKA, Peters**

Department of Banking & Finance  
Imo State University, Owerri.

**ATOLE EDOSA FELIX**

Department of Banking & Finance  
Edo State Polytechnic, Usen

***ABSTRACT***

*The study investigated the relationship between institutional quality and foreign portfolio investment (FPI) in Ghana for the period 2006 to 2020. The study employed the granger causality test technique to analyze Ghana-specific data based on selected five institutional quality variables such as rule of law (RUOL), regulatory quality environment (RQT), political stability (POLS), government effectiveness (GOVEF) and control of corruption (CONC). The results from the empirical analysis generally revealed that a unidirectional causality exist between government effectiveness (GOVEF) and FPI; meaning that government effectiveness (GOVEF) granger cause FPI in Ghana. On the other hand, regulatory quality, rule of law, political stability and control of corruption do not granger cause FPI and FPI does not also granger cause those variables. Thus, government effectiveness (GOVEF) is the only factor determining the level of FPI inflows to Ghana over the period of investigation. Based on the outcome of this study, we recommend that the Ghanaian government should not only sustain and strengthens current foreign investment policies but should also evolve and implement new ones that will continue to attract foreign portfolio investors thereby making the economy a safe destination for FPI*

*Keywords: Institutional Quality, Foreign Portfolio Investment, Granger Causality Test.*

## SECTION ONE

### 1.1 Introduction

Institutional quality is a broad concept that captures law, individual rights and high quality government regulations. Institutional quality reinforces each other over a longer-term and unlocks growth potentials and does not intrinsically suffer from diminishing returns. In other words, institutions are the rule that structure economic, legal, political and social interactions and transactions such as laws, regulations and codes of conduct, as well as the mechanisms that enforce these rules (North, 1991; World Bank, 2002). Institutions determine the costs and risks of transacting in an economy and therefore the level of productive and economic activity (Alfaro, Areedam, Sebnem&Selin, 2018).

Investment as a catalyst for economic growth and development is an important prerequisite for an economy to attain and sustain industrialization. However, most developing countries lack the sufficient domestic capital to achieve the required level of investment necessary for growth. Thus, foreign capital is necessary to facilitate the investment-growth process. To attract adequate foreign capital needed for investment, capital market has been identified as one of the veritable means through which foreign investment flows into an economy. To compensate for the insufficient savings, many developing countries at times resorted to foreign borrowing while some try as much as possible to attract foreign investment into their economy.

Foreign investment could be in form of foreign direct investment or foreign portfolio investment, for the purpose of this study more emphasis will be on foreign portfolio investment. Foreign direct investment is the commitment of investible funds by the national of a country into either a new company or an existing one, in a country other than his own with the aim of exercising control over such company (Akimulegunn, 2001). Foreign portfolio investment on the other hand, involves owning financial assets or securities of companies by alien investor in a country other than their own country. Depending on the development and volatility of the capital market of recipient economy, portfolio investment offers liquidity to foreign investors. Foreign portfolio investment comes with huge capital into the recipient country through the financial market. These funds are usually intermediated through the financial market to facilitate domestic investment in the host country. Capital market has therefore been identified as one of the key

factor that influences the inflow of portfolio investment into an economy towards economic growth.

However, the level of capital market development of the host country will determine the influx of portfolio investment into such a country. In past few decades, foreign portfolio investment was not too known in Ghana as revealed by the available data which showed that Ghana has no record of portfolio investment, both inflow and outflow in her balance of payments account up to mid-1980s. Ozurumba (2012). This occurrence was as a result of the non-internationalization of Ghana's money and capital markets. The domestic nature of the recipient country capital market allowed for non-availability of vital information in portfolio investment in money and capital markets which do not encourage foreign investor. The liberalization of the financial market in mid-2000 resulted in the internationalization of the Ghana Stock Exchange (GSE), and has led to increase inflow of foreign investment into the nation through the capital market.

Several attempts have been made in the academic literature to examine the relationship between foreign investment with focus on foreign direct investment and economic growth like those of Adaramola&Obisesan (2015); Ajayi, Adejayan &Obalade (2017); Okpooto, (2015), Okafor, Egiyi& Eyisi (2017) Okonkwo (2016) and among others. It is carefully observed that the place of capital market development in attracting foreign portfolio investment into the nation's economy has been neglected by researchers in recent time. As a result of this, the need for empirical investigation to fill the gap arise. Thus, this study intends to examine the impact of institutional quality on foreign portfolio investment inflows in Ghana using market capitalization as a proxy on foreign portfolio investment in Ghana. The objective of this paper is to measure the relationship between institutional quality and foreign portfolio investment inflows in Ghana. The rest of the paper is structured into four sections. Section two discusses the literature review, and section three the methodology, while section four cover the discussion and analysis, concluding remarks and recommendations are made in section five.

## **SECTION TWO**

### **2.0 Synopsis of Reviewed Related Literature**

In this section, a comprehensive review of conceptual, theoretical, and empirical review of literature on institutional quality and foreign portfolio investment inflow in Ghana will be conducted.

#### **2.1 Conceptual Review**

##### **2.1.1 Institutional Quality**

Institutional quality is a broad concept that captures law, individual rights and high quality government regulations. Institutional quality reinforces each other over the longer-term and unlocks growth potentials and does not intrinsically suffer from diminishing returns. In other words, institutions are the rules that structure economic, legal, political and social interactions and transactions such as laws, regulations and codes of conduct, as well as the mechanisms that enforce n n1 these rules (North, 1991; World Bank, 2014). Laws and regulation constitutes formal rules, while behavioral norms or codes of conduct make up the informal rules. Institutions determine the costs and risks of transacting in an economy and therefore the level of productive and economic activity (Alfaro, Areedam, Sebnem&Selin, 2018).

##### **2.1.2 Foreign Capital Flows**

Foreign capital inflow as cross-border capital that is usually transmitted into the domestic economy in the form of FDI's, FPI's, foreign reserves draw-down, multilateral and bilateral loans and related credit facilities, foreign aids and foreign remittances. It is transfer of ownership of financial assets from one country to another. These assets are usually shown in the balance of payments of the recipient country. According to Nkoro&Uko (2015), foreign capital flow is the movement of capital from one economy to the other. Along this line, (Obadan, 2008) argues that FCF are often transmitted into the domestic economy in the form of FPI, FDI, foreign external loans and credits, multilateral or bilateral aids and foreign remittances in order to facilitate investment, portfolio acquisition and engage in development and non-development projects in the recipient country.

##### **2.1.3 Foreign Portfolio Investment (FPI)**

Foreign portfolio investment on the other hand, involves owning financial assets or securities of companies by alien investors in a company other than their own country. Foreign portfolio investment comes with huge capital into the recipient country through the financial market. These funds are usually intermediated through the financial market to facilitate domestic investment in the host country. Capital market has therefore been identified as one of the key factor that influences the inflow of portfolio investment into an economy towards economic growth. As an aspect of international capital flow, the inflow of foreign portfolio investment has been relatively unstable in Nigeria in the past years unlike other foreign capital inflows.

#### 2.1.4 Corruption control

The level of corruption is an institutional phenomenon which occurred from institutional failure. It is difficult to define and can exist in numerous forms and conditions. World Bank Group (2014) and United Nations Global Programme against Corruption (GPAC) (2014) define it as the utilization of position of power for personal financial non-financial gains. Transparency International (2015) sees it as the abuse of position of power for personal gains while the World Bank (2014) see it as misuse of power for self-gains. These international bodies believe that corruption is simply the use of position of authority for personal gains at the expense of the entire society.

#### 2.1.5 Regulatory Quality

Quality of regulation captures the ability of the government through its agencies to effectively regulate business (Kaufmann, Kray & Mastruzzi, 2010). It is the extent to which regulatory policy and environments help or hinder private businesses (Busse & Groizard, 2008). It entails regulation in capital markets which include proportion of time spent in completing forms and dealing with the requirements imposed by government regulatory agencies. It also explains cost of licensing and registering business and the manner at which stock market operations are controlled through sanctions and incentives (World Bank, 2015).

#### 2.1.6 Political Stability

Political stability has been defined as the degree to which a country is free from internal conflicts like ethnic violence and religious tensions (Kahsai, Hailu, Nondo & Schaeffer, 2011). It denotes the extent to which a country is absent from terrorism, free from frequent (or violent) changes in political power and have the probability of military gaining power or even as low likelihood of politically-motivated violence (Komlan & Kodjo, 2015).

### 2.1.7 Government Effectiveness

Government effectiveness captures perceptions of the quality of public service, the quality of the civil services and the degree of its independence from political pressure, the quality of policy formulation and implementation, and the credibility of the government commitment to such policies. Countries are evaluated based on the competence of civil service, effective implementations of government decisions and public service vulnerability to political pressure, ability to manage political alternatives without drastic policies changes or interruption in government services.

### 2.1.8 Rule of Law

This refers to the capacity of the judiciary, police force and related agencies to discharge their responsibilities in a timely and fair manner (Thomas & Christoph, 2003). It anchors on timeliness, credibility, fairness of justice and impartiality of the judiciary in the delivery of their services (Bouras, 2014; Yusuf, 2014). The rule of law is a principal of governance in which all persons, institution and entities (public and private) are responsible to law, which is consistent with international human rights norm and standard and which is declared public and equally applicable and independently adjust (Vera institution of Justice, 2008). However, the quality of law and order in Nigeria seems to be poor as observed in numerous delays, untimely and unfair manner in the way the judiciary discharges its responsibilities (World Bank, 2015).

## 2.2 Theoretical Review

This section presents an analysis on some of the widely recognized FPI theories in the literature, namely the mean-variance portfolio theory (MVPT), portfolio allocation model (PAM), neo-classical theory of foreign portfolio inflows, the model portfolio theory (MPT) among others.

### 2.2.1 Mean-Variance Portfolio Theory (MVPT)

The mean-variance portfolio Theory (MVPT) is developed by Markowitz (1952). It considers only the first two moments of expected utility theory (mean and variance). This theory implies that investors should optimize the first two moments of their expected utility. The relationship between an asset mean and variance is then used to construct an efficient set showing the mean-

variance combination positions by combining all assets in portfolio where an investor then chooses any point on the set depending on his choice, thereby rendering other points useless.

### **2.2.2 Portfolio Allocation Model (PAM)**

Feddeke& Liu (2012) developed Portfolio Allocation Model (PAM), which postulates that capital flows are driven by two classes of determinants which are rates of return and risk factor with positive responses to rate of return and negative to risk. PAM is a dynamic optimization model in which an individual seeks to maximize the present value of his utility derived expected return on a portfolio of capital assets driven by three component of the equilibrium capital flows namely; (a) initial divergence effect, (b) impetus effect (c) time path effect. The initial divergence between foreign and domestic (the starting level of capital stocks) and inter-temporal equilibrium holdings of foreign and domestic assets respectively. The stronger the divergence is in foreign assets holdings, the greater the capital inflows. The second effect depends crucially on the strength of the social rate of time discounting, marginal rate of return and marginal cost of adjustment and appropriation risk factors which are due to harsh domestic macroeconomic and policy environment. This serves to enhance or dampen the divergence effect. The time path effect features the optimal mix of flows of funds to foreign and domestic assets as they approach their inter-temporal equilibrium values. It also reinforces either positively or negatively the first two effects.

### **2.2.3 Neo-Classical Theory of Foreign Portfolio Inflows**

Neo-classical theory of foreign portfolio inflows which predicts that capital should flow from capital-rich countries to capital-scarce countries, and Lucas paradox or why private capital doesn't seem to flow from rich to the poor countries. It believes in basic economics argument that capital flows from low return avenues to high returns. However, what we find is opposite as capital flows from emerging markets (where returns are low).

### **2.2.4 The Modern Portfolio Theory**

Modern Portfolio Theory (MPT) was put forward by Harry Markowitz (1956) in his paper "Portfolio Selection" published in 1952. The theory emphasized that risk is an inherent part of higher reward. MPT is one of the most important and influential financial theories that deals with finance and investment. Modern Portfolio Theory (MPT) is a mathematical framework for assembling a portfolio of assets such that the expected return is maximized for a given level of

risk, defined as variance. Its key insight is that an asset's risk and return should not be assessed by itself, but by how much it contributes to portfolio's overall risk and return. MPT assumes that investors are risk averse. This means that given two portfolios that offer equal expected return, investors will prefer the less risky one. Thus, an investor will take an increased risk only if an investor who wants higher expected return must assume more risk. This theory submits that the exact trade-off will be the same for investors, but different investors will evaluate the trade-off differently based on individual risk behavior. MPT explained that by investing in more than one asset, an investor can reap the benefits of diversification, particularly a reduction in the riskiness of the portfolio, (not putting all eggs in one basket). Markowitz showed that investment is not just about picking assets, but about choosing the right combination of assets among which to spread one's risk.

### **2.3 Empirical Review**

There are several empirical studies on the relationship between institutional quality and foreign portfolio investment across the globe.

KunofiwaTsaurai (2022), examined the determinants of portfolio investment in BRICS (Brazil, Russia, China, South Africa) from period of 1998- 2020. The study used panel data analysis method such as Fully Modified Ordinary Least Square(FMOLS), fixed effects and pooled ordinary least square (OLS). The result revealed that economic growth under the fixed effect had a significant positive on FPI. Also, the FMOLS shows that savings impact on FPI was observed to be significantly positive.

Immaculate & Patricia (2021), investigated the co-integrating and causality relationship between foreign direct investment, foreign portfolio investment and institutional quality in a sample of 12 emerging market economies for the period 2007 to 2017. The panel Autoregressive Distributed Lag (ARDL) model and Error Correction Model were applied. The results confirmed unidirectional causality from FDI and FPI to institutional quality in the long run.

Sameh (2017) examined the effect of foreign portfolio investment (FPI); both in buying of shares or sale of shares by foreign investors, inflation and gross domestic product on the market capitalization in the Amman stock exchange for the period 2005-2016. The study concluded that there is a statistically significant effect on both the purchases sales by foreign investors on market capitalization.



Ohiaeri (2017) investigated the nature and direction of causality existing among foreign portfolio investment, capital flight and capital market performance in Nigeria for the period 2007-2016 using ex-post-facto and descriptive research designs. The data were analyzed using Vector Error Correction Model and co-integration test subject to the outcome of preliminary test. The study concluded that there was significant symbolic connectivity among the examined variables in Nigeria.

Muhammad, Shamila&Shujahat, (2017) examined the impact of stock market performance on foreign portfolio investment in China. Using quarterly time series data from 2007 to 2015, the study adopted auto regressive distributed lag model the results of the study showed that stock market performance has significant positive impact on foreign portfolio investment, whereas inflation was negatively associated with foreign portfolio investment. The study further revealed that historical events, such as Asian financial crisis of 2008 and the Shanghai composite stock index of 2015, significantly affected foreign portfolio investment in china.

Onyeisi, Odo& Anoka, (2016) empirically examined the impact of foreign portfolio investment inflows on stock market growth in Nigeria from 1986 to 2014. The study employed co-integration, vector error connection mechanism and Granger causality econometric analytical methods. They found that there is co-integration between foreign portfolio investment and stock market growth and that foreign portfolio investment has significant long-run impact on stock in market growth in Nigeria within the period of the study. However, the result of the study showed that there is no causality between foreign portfolio investment and stock market in Nigeria.

Okonkwo (2016) investigated the effect of foreign portfolio investment (FPI) on industrial growth in Nigeria with the view to establish empirical relationship among foreign portfolio investment and industrial productivity in Nigeria. Secondary data were employed in the study and were sourced from CBN Statistical Bulletin 2013 edition and the International Financial Statistics(IFS). The OLS estimation techniques was employed. The result revealed that there was statistically significant positive relationship existing among foreign portfolio investment, gross fixed capital formation, market capitalization and industrial growth.

Odo, Anoka, Nwachukwu& Promise (2016) determined the impact of portfolio investment inflows on stock market growth in Nigeria from 1986- 2014. This study used co-integration, vector error correction model and granger causality econometric tools. The result obtained

showed that the trace statistics indicate one (1) co-integrating equation at 5% level of significant, the vector error correction model indicates long run significant impact FPI on stock market growth in Nigeria.

Baghebo & Apere, (2014) attempted to assess the impact of foreign portfolio investment (FPI) on economic growth in Nigeria between 1986 and 2011. The study adopted three stage methodological processes to assume proper estimation of the included variables. From the findings of the study, it was discovered that foreign portfolio investment, market capitalization and trade openness have positive long-run relationship with real gross domestic product in Nigeria within the period of study. With the view to establishing empirical relationship between foreign portfolio investment and industrial productivity in Nigeria, Osmond, (2006) examined the effect of foreign portfolio investment on industrial growth in Nigeria from 1986 to 2013. Sourcing secondary data from Central Bank of Nigeria, the study employed Ordinary Least Square (OLS) estimation technique to establish the relationship among the included variables. The findings of the study revealed that there is statistically significant positive relationship among foreign portfolio investment, gross fixed capital formation, market capitalization and industrial growth in Nigeria.

Eniekezimene, (2013) empirically determined the impact of foreign portfolio investment on capital market growth in Nigeria. In an attempt to achieve its objective, the study x-rays the growth of FPI in the market as well as the transmission channels through which the change in foreign portfolio investment affect growth of the capital market. Adopting ordinary least square (OLS) method and parsimonious error correction model, the study reported that foreign portfolio investment has positive impact on capital market growth in Nigeria.

Ekeocha, Ekeocha, Malaolu&Oduh, (2012) studied the determinants of foreign portfolio investment in Nigeria over the period, 1981-2010. While modeling the long-run determinants on foreign portfolio investment (FPI), they included variables of market capitalization, real gross domestic product, interest rate, trade openness, real exchange rate to actually establish the extent to which each of the included variables influence the inflow of foreign portfolio investment into Nigeria. Using time series data, the study employed finite distributed lag model and the result

showed that foreign portfolio investment has positive relationship with market capitalization and trade openness in Nigeria.

From the reviewed literature, it is evident that there is no consensus as to the relationship between Foreign Portfolio Investment (FPI) and capital market development in Ghana. While the literature is innovated with the impact of Foreign Portfolio Investment either on Stock Market Growth or on Economic Growth, little attention has been given by Scholars to the study of the impact of institutional quality on Foreign Portfolio attraction into Ghana Economy. Therefore, this study intends to fill this gap by empirically investigating the effect of institutional quality on Foreign Portfolio Investment inflow in Nigeria.

### SECTION THREE

#### 3.0 Methodology

The longitudinal research design was employed for this study and it entails examination of relationships using real world historical data. The population of the study is the Ghana economy in terms of institutional quality and foreign portfolio investment (FPI) inflows using a census approach on aggregate data on the population, rather than a sample

#### 3.1 Model Specification

The model for this study is based on the institutional theory advocated by North (1990). It is stated in its functional form as follows:

$$FPI = f(RUOL, CONC, GOVEF, POLS, RQT) \dots\dots\dots (1)$$

However, the econometric form of the model is stated thus:

$$FPI = \alpha_0 + \alpha_1 RUOL_t + \alpha_2 CONC_t + \alpha_3 GOVEF_t + \alpha_4 POLS_t + \alpha_5 RQT_t + u_t \dots\dots\dots (2)$$

Where:

FPI = Foreign Portfolio Investment

RUOL = Rule of Law

CONC = Control of corruption

GOVEF = Government effectiveness

POLS = Political stability

RQT = Regulatory Quality Environment

$u_t$  = Error term

The Apriori expectations of the model are  $\alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5 > 0$

### 3.3 Method of Data Analysis

In this study, the Granger Causality test econometric technique was employed in the analysis of data. However, due to the nature of the data employed (time series) that are not usually stationary in their levels but in their first-order differences, the stationarity property of data sets was analyzed using the Augmented Decay Fuller Test in order to avoid spurious regression results (Akinlo&Folorunso, 1999; Nwaobi, 2003). The econometric literature noted that “the direction of causality established by Granger tests may depend critically on the number of lagged terms included” (Thornton & Batten, 1984). Here, the number of lagged terms included in all Granger tests conducted is following Schwarz Bayesian Criterion often utilized in applied econometric applications (Pindyck&Rubinfeld, 1998). Quoting Granger (1969) a time-series data based approach in order to determine causality. In the Granger-sense x is a cause of y if it is useful in forecasting y. In this framework ‘useful’ means that x is able to increase the accuracy of the prediction of y with respect to a forecast, considering only past values of y. The empirical results presented in this study are calculated within a simple Granger-causality test in order to test whether institutional quality variables Granger cause foreign portfolio investment (FPI)

Thus, following Mahdavi and Sohrabian (1991), the following two equations can be specified:

$$RUOL_t, CONC, GOVEF, POLS, RQT = \phi + \sum_{i=1}^m \alpha_i RUOL_{t-i}, CONC_{t-i}, GOVEF_{t-i}, POLS_{t-i}, RQT_{t-i} + \sum_{j=1}^n \beta_j FPI_{t-j} + \varepsilon_{1t} \dots (3.7)$$

$$FPI_t = \omega + \sum_{i=1}^p \gamma_i FPI_i + \sum_{j=1}^q \delta_j RUOL_{t-i}, CONC_{t-i}, GOVEF_{t-i}, POLS_{t-i}, RQT_{t-i} + \varepsilon_{2t} \dots (3.8)$$

Where:

FPI = Foreign Portfolio Investment

RUOL = rule of law

CONC = control of corruption

GOVEF = government effectiveness

POLS = political stability

RQT = regulatory quality environment

$t$  = time period

$m, n, p, q$  = time limit for the respective observations

$\varepsilon$  = stochastic error term.

## SECTION FOUR

### Data Analysis and Presentation of Results

#### 4.1 Unit Root Testing

In this section, the first set of analysis of the relationship between institutional quality and foreign portfolio investment (FPI) in Ghana is the unit root test carried out by the augmented dickey Fuller (ADF) test for the purpose ascertaining stationarity property of the data in order to avoid spurious regression result. The results are presented in levels and first difference in Table 4.1. From the results, it is seen that all the variables were not stationary in level but they were now stationary after their first difference. Thus, the variables are adjudged to attain stationarity after the first differences (i.e. integrated of order one (i.e. I [1])). The data is presented in appendix 1.

Table 4.1 Unit Root Test for Variables in Levels and First Difference

	In	Levels		At First	Difference	
Variable	ADF Test Statistic	95% Critical ADF Value	Remark	ADF Test Statistic	95% Critical ADF Value	Remark
FPI	-0.078705	-3.119910	Non-Stationary	-5.949037	-3.144920	Stationary
RUOL	-2.191340	-3.098896	Non-Stationary	-5.798705	-3.119910	Stationary
CONC	-1.744034	-3.098896	Non-Stationary	-5.493578	-3.119910	Stationary
GOVEF	-2.164069	-3.098896	Non-stationary	-3.121385	-3.119910	Stationary
POLS	-2.495295	-3.098896	Non-Stationary	-5.829230	-3.119910	Stationary

<b>RQT</b>	-1.457780	-3.098896	Non-Stationary	-5.727881	-3.119910	Stationary
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**Source: Author's Compilations (2022)**

## 4.2 Correlation Analysis

From the correlation matrix result in Table 4.2 below, foreign portfolio investment (FPI) has a strong positive correlation with control of corruption (CONC) and government effectiveness (GOVEF) (0.55109, 0.50922), and a moderate negative correlation value of -0.44831 with political stability (POLS), and a weak negative and positive correlation values of -0.22557 and 0.25365 with rule of law (RUOL) and regulatory quality (RQT).

On the other hand, rule of law (RUOL) has a strong negative correlation value of -0.52331 with control of corruption (CONC) and a weak negative correlation values of -0.32625, -0.14064 and -0.32584 with government effectiveness (GOVEF), political stability (POLS) and regulatory quality (RQT). Control of corruption (CONC) has a significant positive correlation values of 0.73562 with government effectiveness (GOVEF); while political stability (POLS) is moderately correlated with regulatory quality environment (RQT). Thus, with this outcome, we can conclude that there is no multicollinearity among the data set.

**Table 4.2: Pairwise Correlation Matrix**

	FPI	RUOL	CONC	GOVEF	POLS	RQT
FPI	1					
RUOL	-0.22557	1				
CONC	0.55109	-0.52331	1			
GOVEF	0.50922	-0.32625	0.73562	1		
POLS	-0.44831	-0.14064	0.06990	0.06351	1	
RQT	0.25365	-0.32584	0.41065	0.20831	0.47946	1

**Source: Author's Compilations (2022)**

## 4.3 Granger Causality Test

The result of the Granger causality test with respect to foreign portfolio investment (FPI) and all the explanatory variables are presented in Table 4.3 below. We consider the F values and

their corresponding probabilities in examining the direction of causality. The results for the null hypothesis is that FPI does not Granger cause rule of law (RUOL), neither RUOL causes FPI, as both failed the 5 percent significant level. Hence, we accept the null hypothesis that FPI does not Granger causes RUOL vice versa. This suggests that in Ghana, RUOL does not determine or influence the level of FPI inflows; and FPI does not also influence the level of RUOL. This finding does not agree with those of Buchan *et al.* (2012) Behera<sup>1</sup>, Mishra, Priyadarshini and Satpathy (2020) who submitted that institutional factors granger cause foreign investment inflows. It however aligns with those of Mfalomagoha and Raphael (2019) who demonstrated that regulatory (RQ), rule of law (RL), government effectiveness (GE), voice and accountability (VA) do not granger cause FPI/FDI and FPI/FDI do not granger -cause those variables.

It is also seen that control of corruption (CONC) does not Granger cause FPI, and FPI does not also Granger cause control of corruption (CONC) as both failed the 5 percent significance level. However, causality is observed to run from government effectiveness (GOVEF) to FPI. Meaning that GOVEF granger cause FPI in Ghana and not the other way round. In other word, there is a unidirectional relationship flowing from GOVEF to FPI. This finding therefore agrees with those of Masronet *al.* (2013), Jindřichovská *et al.* (2020), Behera<sup>1</sup>, Mishra, Priyadarshini and Satpathy (2020) who found strong causality between institutional factors and foreign direct investment.

For those of political stability (POLS) and regulatory quality environment (RQT), it was observed that no causal relationship exist between them and foreign portfolio investment (FPI). It therefore follows that these two variables (POLS and RQT) do not significantly influence the level of FPI inflows to Ghana overtime. This finding is in line with the findings of Mfalomagoha and Raphael (2019) who found that political stability (POLS) and regulatory quality environment (RQT) do not granger cause FPI and FDI vice versa. It however disagreed with those of Lucke and Eichler (2016) who found significant effect of regulatory quality on foreign investment inflows.

**Table 4.3: Pairwise Granger Causality Tests**  
**Sample: 2006 – 2020**

**Lags: 1**

Null Hypothesis:	Obs	F-Statistic	Prob.
RUOL does not Granger Cause FPI	14	0.01184	0.9153
FPI does not Granger Cause RUOL		0.00797	0.9305
CONC does not Granger Cause FPI	14	0.86874	0.3713
FPI does not Granger Cause CONC		0.12300	0.7324
GOVEF does not Granger Cause FPI	14	5.13910	0.0445*
FPI does not Granger Cause GOVEF		0.69549	0.4220
POLS does not Granger Cause FPI	14	0.37709	0.5517
FPI does not Granger Cause POLS		1.9E-05	0.9966
RQT does not Granger Cause FPI	14	3.43400	0.0909
FPI does not Granger Cause RQT		0.03300	0.8592

**Source: Author's Compilation (2022)**

### **Discussion of Findings**

It was observed that rule of law (RUOL) and control of corruption (CONC) have weak positive relationship with FPI as the variable failed the 5 percent significant level. This implies that in Ghana, rule of law and control of corruption do not play significant role in foreign portfolio investment inflows. The result obtain is not in line with those of Matthias and Carsten (2005), Bouras (2014), Kazeem (2013), Mouna and Mondher (2015) who found significant positive and negative relationship between rule of law, control of corruption and FPI. The finding however aligns with the finding of Asamoah et al (2021) in Ghana who concluded a non-significant relationship between rule of law, control of corruption and FPI.

Government effectiveness (GOVEF) granger cause FPI, meaning that GOVEF has significant positive effect on FPI based on its coefficient, it is significant at the 5 percent



level. This indicates that in the determination of the FPI inflows in Ghana, government effectiveness has played major role. As a result of this reason, Ghanaian government should focus more attention in developing/strengthening current policy that will continue to make the economy more attractive and a special destination for foreign portfolio investment. This finding agrees with those of Masronet *al.* (2013), Jindřichovská *et al.* (2020), Behera<sup>1</sup>, Mishra, Priyadarshini and Satpathy (2020) who found strong causality between government effectiveness and foreign direct investment; as well as those of Kaufmann *et al.* (2010), Kazeem (2013), Mouna and Mondher (2015) who found a significant impact of government effectiveness on FPI inflows while the finding of Asamoah *et al.* (2021) disagree with the findings of this study.

Political stability (POLS) and regulatory quality environment (RQT) do not granger cause foreign portfolio investment (FPI) and FPI does not also granger cause POLS and RQT. This shows that POLS and RQT are not potent factors that drive FPI inflow to Ghana. The policy implication here is that, the government of Ghana should deliberately review and improve its current political environment and on its current regulatory framework/policy that borders on investment environment so as to continue to attract more FPI to Ghana economy through stock market. This finding aligns with those of Asamoah *et al.* (2021) who observed a non- significant impact of regulatory quality environment and political stability on FPI. It however disagreed with the finding of Mouna and Mondher (2015), Kazeem (2013) and Makoni (2018) who found a significant positive relationship between political stability, FPI and FDI.

## SECTION FIVE

### 5. Conclusion

This study has empirically investigated the relationship between institutional quality and foreign portfolio investment (FPI) in Ghana for a period of 15 years (2006 to 2020). Theoretically, a country's quality of institution is believed to play significant role in determining the level of foreign portfolio investment inflows. Hence, the study employed the granger causality test technique to analyze Ghana-specific data based on selected five institutional quality variables such as rule of law (RUOL), regulatory quality environment

(RQT), political stability (POLS), government effectiveness (GOVEF) and control of corruption (CONC). The results from the empirical analysis generally revealed that a unidirectional causality exist between government effectiveness (GOVEF) and FPI; meaning that government effectiveness (GOVEF) granger cause FPI in Ghana. On the other hand, regulatory quality, rule of law, political stability and control of corruption do not granger cause FPI and FPI does not also granger cause those variables. Thus, government effectiveness (GOVEF) is the only factor determining the level of FPI inflows to Ghana over the period of investigation. Based on the outcome of this study, we recommend that the Ghanaian government should not only sustain and strengthens current foreign investment policies but should also evolve and implement new ones that will continue to attract foreign portfolio investors thereby making the economy a safe destination for FPI.

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## APPENDICES 1

### Pairwise Granger Causality Tests

Date: 12/11/23 Time: 10:26

Sample: 2006 2020

Lags: 1

Null Hypothesis:	Obs	F-Statistic	Prob.
RUOL does not Granger Cause FPI	14	0.01184	0.9153
FPI does not Granger Cause RUOL		0.00797	0.9305
CONC does not Granger Cause FPI	14	0.86874	0.3713
FPI does not Granger Cause CONC		0.12300	0.7324
GOVEF does not Granger Cause FPI	14	5.13910	0.0445
FPI does not Granger Cause GOVEF		0.69549	0.4220
POLS does not Granger Cause FPI	14	0.37709	0.5517
FPI does not Granger Cause POLS		1.9E-05	0.9966
RQT does not Granger Cause FPI	14	3.43400	0.0909
FPI does not Granger Cause RQT		0.03300	0.8592
CONC does not Granger Cause RUOL	14	7.80219	0.0175
RUOL does not Granger Cause CONC		1.42765	0.2573
GOVEF does not Granger Cause RUOL	14	1.79663	0.2071
RUOL does not Granger Cause GOVEF		3.35736	0.0941
POLS does not Granger Cause RUOL	14	0.22036	0.6479
RUOL does not Granger Cause POLS		5.98599	0.0324
RQT does not Granger Cause RUOL	14	0.02931	0.8672
RUOL does not Granger Cause RQT		19.1754	0.0011
GOVEF does not Granger Cause CONC	14	3.03370	0.1094
CONC does not Granger Cause GOVEF		1.43906	0.2555
POLS does not Granger Cause CONC	14	0.16953	0.6884
CONC does not Granger Cause POLS		0.77673	0.3970
RQT does not Granger Cause CONC	14	0.00011	0.9918
CONC does not Granger Cause RQT		3.03445	0.1094
POLS does not Granger Cause GOVEF	14	0.46204	0.5107
GOVEF does not Granger Cause POLS		0.27295	0.6117

RQT does not Granger Cause GOVEF	14	0.25957	0.6205
GOVEF does not Granger Cause RQT		1.36855	0.2668
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RQT does not Granger Cause POLS	14	0.04600	0.8341
POLS does not Granger Cause RQT		0.78643	0.3942
<hr/>			

## DATA

Country	Year	FPI	RUOL	CONC	GOVEF	POLS		
GHANA	2006	-65790000				0.01		
GHANA	2007	-312405000				-0.07		
GHANA	2008	127350000				-0.03		
GHANA	2009	-491818481			-0.05	0.03		
GHANA	2010	-775488860			-0.04	0.03		
GHANA	2011	-117562630			-0.05	0.17		
GHANA	2012	-1121820000			-0.05	0.13		
GHANA	2013	-658931000			-0.10	0.06		
GHANA	2014	-835933490			-0.28	-0.11		
GHANA	2015	-899999585			-0.22	-0.03		
GHANA	2016	-553701690			-0.17	-0.13		
GHANA	2017	-2536100000			-0.11	0.09		
GHANA	2018	-928957962			-0.21	-0.03		
GHANA	2019	-2297730000			-0.21	0.13		
GHANA	2020	-2297730000			-0.15	0.13		