

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES
SCHOOL OF BUSINESS

**EFFECT OF FOREIGN PORTFOLIO INVESTMENT ON ECONOMIC
GROWTH IN GHANA**

BY

THEODORA ATTA CUDJOE

(PG4400318)

**A THESIS SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL
FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF**

MASTER OF BUSINESS ADMINISTRATION (FINANCE)

NOVEMBER, 2023

DECLARATION

I, the under-signed do hereby declare that, this research work, under the supervision of Dr. Nicholas Boamah is my own work towards the award of Master of Business Administration (Finance). To the best of my knowledge, it contains no material already published by someone else nor material which has been accepted for the honour of any other degree of the University, apart from where due affirmation has been made in the content.

Theodora Atta Cudjoe

PG4400318

Signature

Date

CERTIFIED BY:

Dr. Nicholas Boamah

(SUPERVISOR)

Prof. Kingsley Opoku Appiah

(Head of Department)

Signature

Date

.....

Signature

Date

DEDICATION

I dedicate this research work to God Almighty, my mother, Madam Mary Kwaw for her immense support, prayers, advice and motivational empowerment of always pushing and reminding me that I can always make it even when the going gets tough and seems impossible. I also dedicate my work to my lovely son, Henry Fiifi Nyiraba-Afful who has been my utmost inspiration in my quest to always be the best version of myself for his sake and also to my colleague and friend, Kenneth Agyei who is in Germany currently, for his encouragement into the pursuance of this master's degree program.



ABSTRACT

Increased liquidity in the capital market means better access to financing at lower cost of capital which is crucial to support economic activity. Capital flows have the ability to convey to destination economies benefits such as financial sector development, technological expertise, support for human capital development and investment purposes. The study examines the effect of foreign portfolio investment on economic growth in Ghana. The study population consisted of manufacturing sectors, services sector, industry and agriculture. The study used secondary data in estimating the result. The time frame ranged from 2009 to 2019. The data was obtained from the World Development Indicators (WDI, 2017) of the World Bank. Regression analysis was used. Analysis of the data revealed that: private capital flows had a positive weight on economic growth, and the effect was significant. Thus, an increase in capital flows led to increase in economic growth; portfolio equity had a positive weight on economic growth, and the effect was significant. Thus, an increase in portfolio equity led to an increase in economic growth; portfolio debt had a negative weight on economic growth, and the effect was significant. Thus, an increase in portfolio debt led to a decrease in economic growth. In the light of these findings, the study recommended that the government of Ghana should have a clear directive in relation to foreign portfolio investments in Ghana, and that these directives should come with clear cut strategies and policies, in the bid to attract foreign investment. Again, private capital flows and portfolio equity should be promoted, with portfolio debt reduced in regards to improving economic growth.

ACKNOWLEDGEMENT

I thank the Almighty God, who by His grace, direction, protection, and wisdom instilled in me considerable knowledge to carry out this research work. For all these, I say thank you Father! This is how far you have brought me.

With sincere appreciation, I also acknowledge the commitment and contributions of Dr. Nicholas Boamah of Kwame Nkrumah University of Science and Technology who supervised this research work and put forward his unflinching efforts in ensuring that it comes to an acceptable standard. His recommendations, advice and constructive criticisms were extremely useful. Indeed, I am indebted to him for such supervision.

My profound gratitude, likewise, goes to my family and friends who encouraged me to pursue the programme. Without their participation and support, this work would not have come this far. To each and every one of you, I say Ayekoo! and God bless you all immensely.

TABLE OF CONTENT

DECLARATION.....	ii
DEDICATION.....	iii
ABSTRACT.....	iv
ACKNOWLEDGEMENT.....	v
LIST OF TABLES.....	ix
LIST OF FIGURES	x
CHAPTER ONE	1
INTRODUCTION.....	1
1.1 Background to the Study	1
1.2 Problem Statement	2
1.3 Research Objectives.....	3
1.4 Research Questions	3
1.5 Summary of Methodology	4
1.6 Significance of the Study	4
1.7 Scope of the Study	5
1.8 Organisation of the Study	6
CHAPTER TWO	7
LITERATURE REVIEW	7
2.0 Introduction.....	7
2.1 Conceptual Review	7
2.1.1 Foreign Portfolio Investment	7
2.1.2 Determinants of Portfolio Flows.....	15
2.1.3 Economic Growth	19
2.2 Theoretical Review	20
2.2.1 International Arbitrage Portfolio Theory (IAPT):	20
2.2.2 Portfolio Allocation Model (PAM).....	21

2.3 Empirical Review.....	22
2.4 Conceptual Model and Hypothesis Development.....	24
2.5 Chapter Summary	25
CHAPTER THREE.....	26
RESEARCH METHODOLOGY	26
3.1 Introduction.....	26
3.2 Research Design.....	26
3.3 Sources of Data.....	26
3.4 Study Population.....	27
3.5 Theoretical Framework.....	27
3.6 Model Specification.....	28
3.6.1 Estimation Strategy	29
3.7 Variable Definition & Measurement, and Source.....	30
CHAPTER FOUR.....	31
DATA PRESENTATION AND ANALYSIS.....	31
4.1 Introduction.....	31
4.2 Descriptive Analysis	31
4.3 Panel Analysis.....	32
4.4 Discussion of the Study	33
CHAPTER FIVE	37
SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS ..	37
5.1 Introduction.....	37
5.2 Summary of Findings of the Study	37
5.2.1 The effect of Private Capital Flows on Economic Growth.....	37
5.2.2 The effect of Portfolio Equity on Economic Growth.....	37
5.2.3 The Effect of Portfolio Debt on Economic Growth.....	38
5.3 Conclusion	38

5.4 Recommendation of the Study.....	38
5.4.1 Recommendations for Practice	39
5.4.2 Recommendations for Future Research	39
REFERENCES.....	40



LIST OF TABLES

Table 1: Variable Definition & Measurement, and Source	30
Table 4. 1: Descriptive Analysis.....	31
Table 4. 2: Random Effect output with Economic Growth as the dependent variable	32



LIST OF FIGURES

- Figure 1: Author's own construction (2020) 24



CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Capital market integration through liberalisation of investment regulations is well-documented in the literature. Foreign Portfolio Investment (FPI) contributes positively in the development of an efficient domestic capital market and brings several benefits to the host country. Increased FPI leads to greater liquidity in the capital market, resulting in a deeper and broader market (Levine & Zervos, 1996). Feldman & Kumar (1995) and Shinn (2000) argue that the spill-over effects of positive competitive pressure to attract foreign investment require higher industrial standards and regulations through better corporate governance and greater business transparency, resulting in stronger investor protection and thus enhanced investor confidence. Better still, La Porta, *et al.* (1998) and Bekaert & Harvey (2003) posit that increased liquidity in the capital market means better access to financing at lower cost of capital which is crucial to support economic activity.

Shaghil & Andrei (2013) reason that capital flows boost economic growth and productivity because domestic savings are supplemented. Also, Prasad et al. (2003) argue that the growth improvement originates from the lower cost of capital, improved financial markets, and transfer of technology. More importantly, Hoti (2014) posits that the growth of recipient economies is boosted by capital flows to developing economies that serve as means of portfolio diversification to source economies. Interestingly, Prasad et al. (2003) followed Solow (1956) prediction and provide direct and indirect roots through which capital flows theoretically impacts growth positively. The argument is further extended by Gourinchas & Jeanne (2013) who contends that apart from the neoclassical position that capital flows improve

growth, they further suggest that more capital should flow from rich to developing economies that have achieved higher growth status relative to the world frontier growth.

Remarkably, Bailliu (2000) & Arteta et al. (2003) say that capital flows have the ability to convey to destination economies benefits such as financial sector development, technological expertise, support for human capital development and investment purposes. Gourinchas & Jeanne (2013) describe the recent situation of capital flows as an “allocation puzzle” in the sense that fast-growing developing economies are attracting fewer capital inflows compared to slow growing developing economies. Solidifying and expanding this argument, Prasad et al. (2007) contends that countries deemed to be fast-growing, with robust institutional qualities, good infrastructure, favourable investment landscape, and with a low propensity to default are instead attracting far fewer capital inflows than countries with relatively lower growth rates. Thus, the allocation puzzle is the case of an inverse association between the growth of the economy and the attraction of capital to developing economies.

1.2 Problem Statement

Laeven (2003), Knill (2004) & Beck et al. (2005) studied inflow of foreign portfolio investment into the stock market and concluded that FDI helps to alleviate financial constraints of firms. Studies relating to FPI and the domestic stock markets show favourable contribution of FPI in supporting the domestic stock market (Patro & Wald, 2005 and Kim & Singal, 2000). The multiplier effect further propagates the impact of growth in the stock market through the wealth effect. In this sense, capital flows act as catalyst to economic growth and contribute towards increased wealth creation. Ultimately, better access to financing provided by the free flow of portfolio

investments contributes to efficient allocation of capital (Wurgler, 2000; Love, 2003; Rajan & Zingales, 1998).

Plethora of studies have established the link between foreign portfolio investment and economic (Henry, 2007). However, these studies have not provided clear connection between foreign portfolio investment and economic growth. What the studies sought to do is to establish the soundness of the theoretical predictions, albeit with mixed findings (Edison et al. 2004; Chanda, 2005 and Durham, 2004). Departing from the reliance on aggregate growth indicators such as Gross Domestic Product (GDP) growth, and its per capita, the current study focuses on disaggregated growth and flows. The reliance on aggregated growth rates hide the heterogeneous dynamics of capital flows on the growth of the individual sectors that affect policy directions.

1.3 Research Objectives

The main objective of the study is to examine the effect of foreign portfolio investment on economic growth in growth.

Specifically, the study seeks to:

1. Investigate the effect of private capital flows on economic growth
2. Examine the effect of portfolio equity on economic growth
3. Examine the effect of portfolio debt on economic growth.

1.4 Research Questions

With respect to the objectives set, the study seeks to answer the following questions:

1. What is the effect of private capital flows on economic growth?
2. To what extent does portfolio equity affect economic growth?
3. To what extent does portfolio debt affect economic growth?

1.5 Summary of Methodology

The researcher adopts the positivists' research philosophy in the sense that the relationship between the independent variable and the dependent variable will be discovered by causal inferences (Cohen, Manion&Marison, 2011). Again, the adoption of positivists' research philosophy clarifies the understanding of the constructs by empirical tests and methods leading to high quality standard of validity and reliability (Cohen, 2007). Accordingly, this work adopts the explanatory research design because it sought to explain the relationship between two variables (foreign portfolio investment and economic growth). The study population consist of manufacturing sectors, services sector, industry and agriculture. In effect, the researcher uses secondary data in estimating the result. The secondary data will focus on private capital flows, portfolio equity, portfolio debt and growth. The researcher uses the dynamic panel data estimators in order to account for the time persistence in the foreign portfolio investment. The data will be obtained from the World Development Indicators (WDI, 2017) of the World Bank. The selection of the study period will be influenced by conclusions of Gourinchas& Jeanne (2013) that economies were financially open at the start of the 1980s. EVIEWS will be used to analyze the data.

1.6 Significance of the Study

Considering the dearth of literature that addresses the link between foreign portfolio investment and economic growth, the outcome of the research will serve as a useful literature for other researchers who want to work in this field of study. In this regard, the researcher will build a comprehensive database information on portfolio investment and economic growth for other researchers to draw information from. Again, the study will highlight new knowledge to literature regarding portfolio

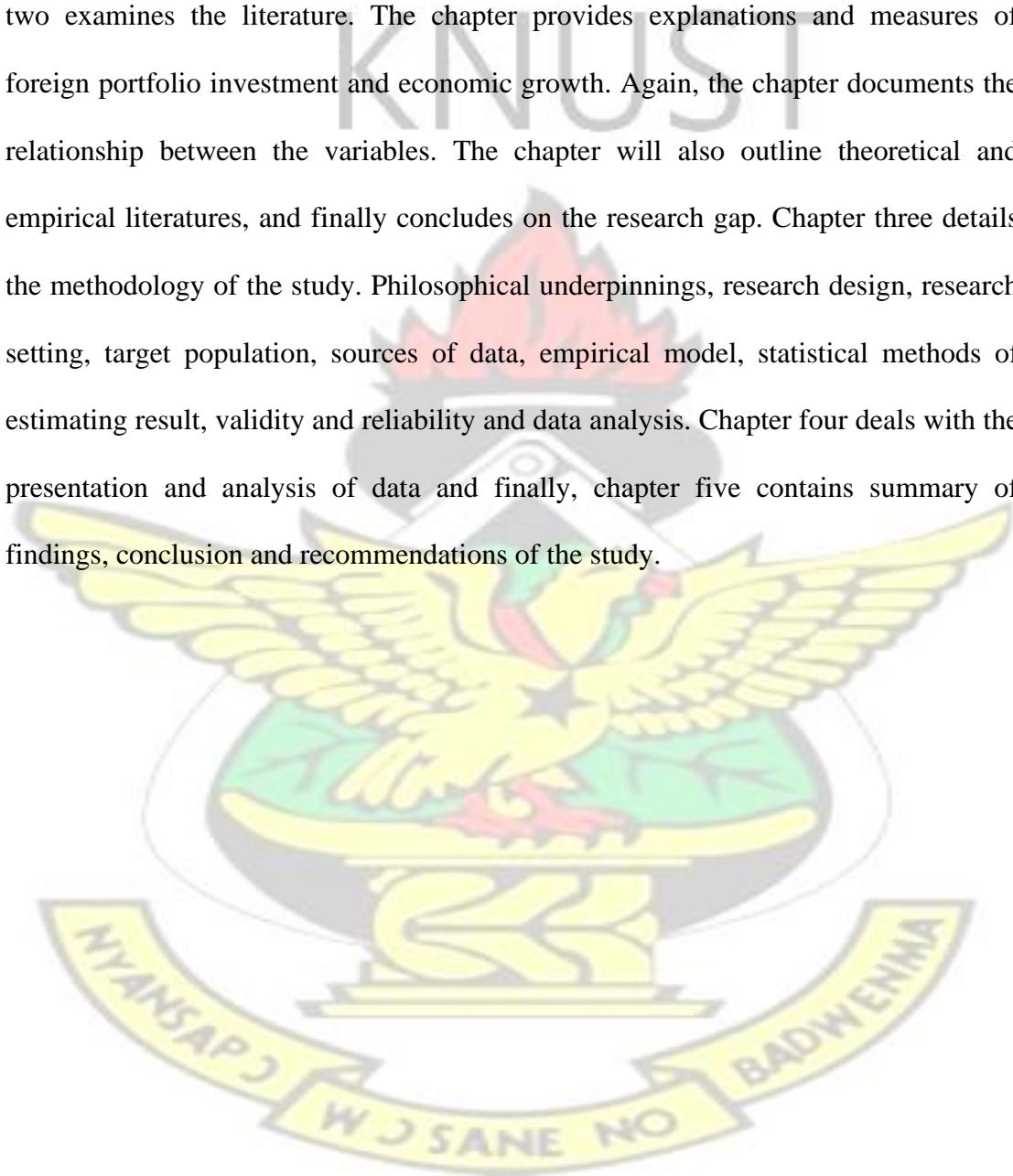
investment that influence growth and bring out the proxies of economic growth. Furthermore, the findings from this work will enable financial institutions know the importance of foreign portfolio investment on economic growth. Financial institutions, investors, entrepreneurs and other corporate professionals will also benefit from this research work making them aware of the issues in foreign portfolio investment. More importantly, the study will serve as an important literature guide, source of knowledge and reference work for academicians, investors, financial institutions, the general public, students, development partners and other stakeholders. Generally, theoretical and empirical reviews will furnish theoretical and practical implications of foreign portfolio investment and its effect on economic growth. In this respect, the study offers both managerial (from empirical literature) and theoretical (from theories) understanding of foreign portfolio investment.

1.7 Scope of the Study

The scope of the study captures both the delimitation and limitations. With respect to the delimitation, the study concentrates on investment in Ghana because the investment sector in Ghana possesses unique characteristics as compared to other sectors in other countries. Again, the study focuses on private capital flows, portfolio equity and portfolio debt. Putting these together, the study will not generalize the findings to cover other countries' investment sector. One of the limitations of the study will be time in that there is time constraint on the part of the researcher who has to combine academic activities with family life and work. Again, there is the limitation of financial constraints where the researcher has to commit personal resources into the project for transportation to the selected organizations for information gathering and the typesetting of the entire manuscript of this study. Lastly, the difficulty of getting appropriate data from the banks.

1.8 Organisation of the Study

The study is organized into the following chapters. The first chapter outlines the background to the study, problem statement, research objectives, research questions, summary of methodology, significance of the study and scope of the study. Chapter two examines the literature. The chapter provides explanations and measures of foreign portfolio investment and economic growth. Again, the chapter documents the relationship between the variables. The chapter will also outline theoretical and empirical literatures, and finally concludes on the research gap. Chapter three details the methodology of the study. Philosophical underpinnings, research design, research setting, target population, sources of data, empirical model, statistical methods of estimating result, validity and reliability and data analysis. Chapter four deals with the presentation and analysis of data and finally, chapter five contains summary of findings, conclusion and recommendations of the study.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The chapter reviews literature on what others have done similarly as regard the topic under study. In reviewing literature, the chapter considers the following broad areas: conceptual review delving in detail the idea of the constructs (foreign portfolio investment and economic growth). The discussion will focus broadly on foreign portfolio investment and economic growth and narrow it to the context of Ghana. Better still, the chapter discusses the relevant theory (ies) that underpin the study. More importantly, the chapter discusses empirical studies focusing on the findings from other studies as regard the relationship between foreign portfolio investment and economic growth. Hypothesis will be built from the discussions and findings gleaned from other scholarly works. Again, the chapter develops a model/framework to support the studies. The chapter then concludes on chapter summary.

2.1 Conceptual Review

The review looks at the nature, definitions and types of foreign portfolio investment and economic growth. With respect to foreign portfolio investment, the review extends further the diverse arguments of different individuals in different economies and how these investments have helped them. Economic growth argument will concentrate on the patterns of growth in different economies.

2.1.1 Foreign Portfolio Investment

The study of Foreign Direct Investment (FDI) became more noticeable in the early 1990s. This prompted a surge in the economic literature studying FDI and its effects on growth. Proponents of neoclassical growth models such as Sala-i-Martin (1996) and Solow (1956) posit that FDI can serve as an exogenous factor contributing to

growth through increases in investment volumes or its efficiencies. However, proponents of endogenous growth framework such as Romer (1986); Lucas (1988); and Barro & Sala-i-Martin (1995) argue that sustained economic expansions are an outcome of technological transfers, diffusion and spillover effects; and that FDI can play a paramount role in lifting long-run growth. In spite of the differences in fundamental assumptions, Dowrick & Rogers (2002) suggest that the empirical equations for both approaches are often similar. Following the assertion by the endogenous growth model, Grubel (1968); Levy & Sarnat (1970); Solnik (1974); Grauer & Hakansson (1987); Harvey (1991); and De Santis & Gerard (1997) use International Finance Theory (IFT) to argue that foreign portfolio investment (FPI) flows are an inevitable outcome of investors wanting to invest across countries in order to diversify the risk of their portfolio and achieve higher returns.

Interestingly, Schneider (2003) stands on this theory to define FPI as an aspect of international capital flows comprising of transfer of financial assets such as cash, stock or bonds across international borders in want of profit. According to Schneider, this occurs when investors purchase non-controlling interests in foreign companies or buy foreign corporate or government bonds, short-term securities or notes. Schneider further asserts that these trade flows result from individuals and countries seeking to maximize their wellbeing by exploiting their own comparative advantage, and also capital flows as individuals and countries seeking to make themselves better off, moving accumulated assets to wherever they are likely to be most productive.

In spite of all these interesting arguments on FDIs and FPIs, IMF (1993) defines foreign portfolio investment as equity and debt issuances including country funds, depository receipts and direct purchases by foreign investors of less than 10% control. Makola (2003) defines foreign portfolio investment as the foreign direct investor's

purchase of shares of an enterprise in a country other than its own. According to Holsapple, et al., (2006), foreign portfolio investment is associated with the passive ownership of financial securities, such as shares of a corporation or a limited partnership.

Again, Onuorah and Akujuobi (2013) describe Foreign Portfolio Investment (FPI) as an aspect of international capital flows' comprising of transfer of financial assets: such as cash; stock or bonds across international borders in want of profit stating that it occurs when investors purchase non-controlling interests in foreign companies or buy foreign corporate or government bonds, short term securities or notes. According to Graham and Spaulding (2005), foreign portfolio investment can simply be referred to as indirect investment which in contrast to direct investment, which is the investment of a company from one country making a physical investment into building a factory in another country. In various press releases by the United Nations Conference on Trade and Development (UNCTAD), foreign portfolio investment was defined as an investment involving long-term relationship reflecting an investor's lasting interest in a foreign entity.

Plethora of academic literature argue that capital flows are critical to the growth of the economy; and that by supplementing domestic savings capital flows have augmented economic growth and productivity (Shaghil & Andrei, 2013). Similarly, Prasad et al. (2003) assert that the growth improvement comes from the lower cost of capital, improved financial markets and transfer of technology. Remarkably, Hoti (2004) posits that while boosting the growth of recipient economies, capital flows to developing economies serve as means of portfolio diversification to source economies. The arguments of Shaghil & Andrei (2013) and Hoti (2004) are

consolidated by Prasad et al. (2003) by agreeing to the Solow (1956) prediction to providing direct and indirect roots through which capital flows supposedly impacts growth positively. Regardless of the neoclassical position that capital flows boost growth, Prasad et al. further posit that more capital should flow from rich to developing economies that have achieved higher growth status relative to the world frontier growth. Gourinchas & Jeanne (2013) describe the claim of Prasad et al. as “allocation puzzle” or the paradox of capital.

Prasad et al. agreeing with Gourinchas & Jeanne on their phenomenon “allocation puzzle” or the paradox of capital contend that countries deemed to be fast-growing, with robust institutional qualities, good infrastructure, favourable investment landscape, and with a low propensity to default are instead attracting far fewer capital inflows than countries with relatively lower growth rates. Prasad et al. therefore conclude that the allocation puzzle is the case of an inverse association between the growth of the economy and the attraction of capital to developing economies.

Following the well-reasoned arguments above, Ngowi (2001) maintains that African countries and other developing countries need substantial inflow of foreign capital to fill the saving and foreign exchange gaps associated with a rapid rate of capital accumulation and growth needed to overcome the widespread poverty in these countries. In addition, Ghose (2004); Knill (2005); and Vita & Kyaw (2008) reason that the developing countries are preferred to developed countries by foreign investors because of the higher rate of return on investment in these countries. This notwithstanding, Dell’Ariccia et al. (2008) and Obstfeld (2009) further posit that the developing countries across the globe have been making conscious efforts to attract foreign financial capital which provides an impetus to economic growth and financial market development. Interestingly, Fosu & Magnus (2006) and Omisakin, et al.

(2009) point out rightly that foreign capital inflow is an important vehicle for augmenting the supply of funds for domestic investment.

With specific reference to sub-Saharan African (SSA) countries, United Nations Conference on Trade and Development (UNCTAD, 2018) and Tyson (2015) maintain that foreign portfolio investment, especially portfolio equity flow into SSA has been fast growing since 2008 with an annual flow of approximately \$12 billion. Further, UNCTAD and Tyson argue that inclusive of private capital flows (FDI, portfolio equity debt, and other investments), total global external financing to developing economies stood at \$2 trillion as of 2010. There was a drop of 30 % by 2016 to settle at \$1.4 trillion. The fragility and unpredictability of the portfolio investments component (equity and debt) caused a significant drop in total flows amid the financial crisis and the middle of 2015 where capital flows accounted for only 4.7 % of global GDP. Before 2015, total capital flows as a percentage of global GDP stood at 7.1 % with FDI accounting for 2.5 %, portfolio debt (1.9 %), portfolio equity (1.1) and other investments (1.6).

However, flows dipped in 2015. The drop in 2015 was driven by declines in other investments relative to GDP (-0.9 %), while FDI, debt and equity sought to mitigate the decline. FDI contributed the largest share (4 %), followed by debt (1.1) and equity (0.5). There was a slight rebound in 2016. The rebound continued into 2017 with a GDP percentage of 6.9. Significantly, the rebound was due to slight increases in portfolio debt, equity, and other investments from 2015 through to 2017 (UNCTAD, 2018, 2017). The gradual increase in debt and equity, coupled with the drop in FDI presents countries with alternative sources of external financing. While FDI as a percentage of GDP dropped by 27.5 % between 2016 and 2019, portfolio debt and equity flow increased by 80 % and 50 % respectively within the same period.

Although the increase in capital flows to SSA has always been on the back of stable FDI flows, Sy & Rakotondrazka (2015) claim that portfolio investments have also seen improvements. Net equity flows as a percentage of SSA GDP rose from 0.3 % in 1993 to almost 3% (2.8) by the end of 1999. However, the flows dipped between 2000 and 2002 and peaked to its highest value of \$ 16.79 billion by 2016 (representing 2.2 % of GDP). As characteristics of its unpredictability, the onset of the financial crisis saw a massive drop in the flows by 2008 to negative \$ 5.69 billion that is a -0.57 % of GDP. However, flows began to gain momentum by recovering from a negative value recorded in 2008 to a value of \$16.04 by 2010. Portfolio investment flows again dip in 2011 (\$ 6.67 billion) and recovered in 2012 (\$ 14.34 billion). Between 2012 and 2016, there were annual drops in the quantum of flows until flows recovered by almost 12 folds in 2017 on the 2016 figures (\$16.04 billion) (World Bank, 2017, 2013, 2011). Portfolio equity flow into SSA has been fast growing since 2008 with an annual flow of approximately \$12 billion (Tyson, 2015).

Moving away from SSA and concentrating on Ghana, survey report from UNCTAD (2003) claims that Ghana is the Africa's front-runner in terms of FDI attraction. The report says that FDI was mainly in import-substitution manufacturing. Annual inflows were as high as \$68 million for about two years, but were much less in most years, even slipping to negative numbers (net outflows) and hovers at under \$5 million in the 1970s and 1980s.

With the introduction of the Economic Reform Programme (ERP) in 1983, Ghana undertook a relatively successful transition from an administrative system of economic management to a market economy. Gross domestic product (GDP) grew at an average annual rate of 5.4 per cent between 1984 and 1990 and gross fixed capital formation (GFCF) doubled as a percentage of GDP¹. FDI remained sluggish in the

years immediately following the start of reforms, accounting for less than 1 per cent of GDP. However, it soon picked up, and during the period 1991-1995, Ghana was considered a front runner, ranking among the top 10 investment locations in Africa. The increase in FDI was triggered by the adoption of policies in 1986 to attract investment in natural resources. Investor response to the new mining law enacted in 1986 was positive, causing a surge of investment similar to a mini “gold rush”. The divestiture programme also attracted FDI. When privatization began in 1988, there were 350 State-owned enterprises (SOEs), many of them unprofitable. The programme had a slow start, and in the first round of divestitures, only 55 SOEs were privatized while another 31 firms were liquidated.

A turning point came in 1994, when the Government put its most prized asset, Ashanti Goldfields Corporation (AGC), on the market. Consequently, 1994 saw an abrupt peak in FDI flows of \$233 million, reflecting the partial sale of AGC to the South African mining company, Lonmin. This deal, one of Africa’s largest privatization to date, put Ghana in the spotlight for international investment. FDI also flowed to services. Among another six divestitures in 1994, were those of Accra Breweries and Standard Chartered Bank. The most recent peak of FDI inflows was registered in 1996 when Telekom Malaysia bought 30 per cent of the shares of the then State-owned Ghana Telecom. To further attract FDI, an Investment Code was enacted in 1994, within the framework of a comprehensive development strategy: Vision 2020. The Investment Code – praised at the time as the best in Africa – eliminated the need for prior project approval; it also eased company establishment and provided incentives and guarantees to investors. In parallel, the Gateway strategy was launched, which identified the objective of developing Ghana as a regional

investment hub by “attracting a critical mass of export-oriented firms to kick start export-led growth

as well as facilitate trade by removing the constraints to the development of exports and investment”. However, Ghana’s front-runner status proved short-lived. After 1996, FDI inflows declined and Ghana barely just made the ranks of the top 20 FDI recipients in Africa in 1996-2000. Many of Ghana’s neighbours – such as Senegal and Côte d’Ivoire, which attracted less FDI than Ghana in 1991-1995 – have had a comparatively better experience in recent years.

Relative FDI indicators, adjusting for size of economy, also show Ghana’s recent performance to be weaker than that of neighbouring countries and similar resource-based economies. FDI flows to Ghana in the second half of the 1990s were less than those to the United Republic of Tanzania, a least developed country that has consistently ranked lower than Ghana in terms of attractiveness and which initiated economic reforms and opened up to FDI much later. In an attempt to revive investors’ interest, the Government announced in 1998 a new phase of the divestiture process. But expectations were not met, as the Government had already divested full and partial stakes in its largest banks, mining, manufacturing and service companies. Ghana, competing with other emerging markets for capital, faced difficulty in finding strategic buyers for its remaining assets, mainly in public utilities. The benefits of privatization were also questioned. The Government’s relationship with the largest privatized company – Ashanti Goldfields – was strained, which had implications for foreign investor perceptions of Ghana’s privatization programme.

2.1.2 Determinants of Portfolio Flows

Plethora of evidence from Black (1974); Stulz (1981b); Errunza et al. (1985, 1989); Eun et al. (1986); Alexander et al. (1987); Hietala (1989); Errunza et al. (1992); and Cooper et al. (2000) posit that international asset pricing have relaxed the assumption of perfectly integrated capital markets and assume partial integration of financial markets. This evidence implies that assets to which investors have unrestricted access are priced lower than the assets to which investors have restricted access. Though these studies assume partial integration of markets, Bekaert et al. (1995, 2003); Stulz (1999); Carrieri et al. (2007); and Arouri et al. (2012) hold the degree of financial market integration to be constant overtime. Based on these the potential variables used to explain portfolio flows are:

Domestic Stock Market Performance

The domestic stock market performance can have a positive or a negative influence on portfolio flows. An increase in portfolio flows in response to bullish stock markets (Agarwal 1997; Chakrabarti 2001; Rai et al., 2004; and Richards 2002) suggest that foreign investors are chasing returns. On the other hand, the relationship can turn negative if foreign investors buy (sell) when equity index is falling (rising), with the expectation that returns will rise (fall) in future (Gordon et al., 2003; and Griffin et al., 2002).

Domestic Growth

Domestic output growth indicates the soundness of macroeconomic and institutional fundamentals of the host country, which are important in attracting capital flows. A higher economic growth of the host country indicates rapidly expanding economic activity which in turn would mean greater profitability from investing in the corporate sector.

Exchange Rate

In a world of flexible exchange rate, capital can earn a return not only through yields on assets, but also through a change in exchange rate overtime. Appreciation of currency of the host country is an additional avenue of gaining returns for foreign investors.

Currency Risk

Volatility in exchange rate is expected to have negative impact on portfolio flows because it represents a higher degree of uncertainty in the returns received by foreign investor in terms of his home currency. Persson et al. (1989) observe that increased exchange rate variability has negative impact on international trade and capital flows.

Country Risk

Availability of sufficient liquidity in the host country indicates that in the event of withdrawal of funds by the investors, the country does not default on the payments. It is expected that countries with sufficient stock of reserves—to cover for imports and meet short run obligation are perceived to be credit worthy and the probability of their defaulting is less. Thus, lower financial risk of the country attracts greater portfolio flows.

Stock Return Risk

While investing in a developing country, where stock markets are characterized by volatility, the foreign investor takes into account not only the returns from investment in an asset, but also the variability associated with the returns. This is important in determining the expected returns from investment. Unless the investor is sufficiently compensated for the variance in returns, a higher variability in returns discourages foreign investment.

Risk Diversification

An investor invests in assets across countries to diversify the risk of the portfolio. The objective of the investor is to reduce the variance of the overall portfolio. If the addition of a country's assets reduces the overall risk of the portfolio (even if the variance of its own returns is high), there are potential gains from diversifying internationally. This depends on the degree of correlation between the domestic and the foreign markets. The lower the co-movement of domestic equity returns with the global equity returns, the greater the benefits from diversification and hence higher the portfolio flows received by a country.

Global Liquidity

Output growth in industrialized countries represents the profitability of investment in the corporate sector in these countries. A higher economic growth in industrialized countries could mean greater profits and hence greater funds available for investment in developing countries. On the other hand, a slowdown in the economic growth could also mean that the firms do not find it profitable to invest in their home country and hence they chose to invest in developing countries. In both the cases economic growth in industrialized countries could lead to an increased global liquidity. The evidence in this regard is mixed. While Calvo et al. (1993, 1996), Taylor et al. (1997) among others indicate a negative relation between financial flows to developing countries and growth in industrial countries, Verma et al. (2011) indicate a positive relation for the case of India.

Interest Rate Differential

Interest rate differential between the host and the source country also determines portfolio flows. The traditional open economy macroeconomic models proposed by Mundell and Fleming suggest that in a world where capital is mobile and exchange

rates are fixed, capital flows occur so as to restore interest parity, i.e., capital moves in or out of the country till the domestic and foreign interest rates equalize. Investors invest their capital wherever the interest rates adjusted for risk are higher. While most of the studies in the literature find that portfolio flows are sensitive to domestic and/or foreign interest rates, Verma et al. (2011) find that FII flows to India are not sensitive to interest rate differentials.

Returns in Other Emerging Markets

While diversifying globally, foreign investors can either invest in emerging markets or they can invest in financial markets of the industrialized countries. According to Buckberg (1996) investors follow a two-step process in deciding capital allocation. Firstly, the total capital to be invested in emerging markets is determined and then a part of that capital is allocated to each emerging market depending on returns. This implies that if total capital allocated to emerging markets is high—which will happen if equity returns in emerging markets is rising—then each emerging economy has a higher probability of

receiving greater amount of capital. Alternately, it is also important to view different emerging economies as competitors to each other, where each economy is trying its best to receive a greater share of foreign investment. In this case, higher equity returns in emerging markets implies a greater probability of foreign investment being received by competing economies.

Capital Controls

Though capital controls are used as a tool to manage financial flows, the evidence regarding their effectiveness in the literature is mixed. The broad view in the literature is that capital controls may not be effective in influencing the overall magnitude of capital flows, but they do affect the composition. The variables described above

capture different aspects of the mechanism that drive portfolio flows which can be put together to obtain the empirical model that is discussed in the next section.

2.1.3 Economic Growth

Economic growth, according to International Monetary Fund (IMF, 2012), is the increase in the inflation-adjusted market value of the goods and services produced by an economy over time, which is conventionally measured by statisticians as the percent rate of increase in real Gross Domestic Product (GDP). Growth is usually calculated in *real* terms that is, inflation adjusted terms to eliminate the distorting effect of inflation on the prices of goods produced. Bjork (1999) posits that the measurement of economic growth is by the use of national income accounting because growth is measured in terms of the annual percent change of gross domestic product (GDP). Bjork further states that economic growth rates of economies are commonly compared using the ratio of the GDP to population (per-capita income). Economists like Das (2019); Gordon (2016); Mankiw (2011); and Barro (2014) claim that an increase in economic growth caused by more efficient use of inputs (increased productivity of labor, of physical capital, of energy or of materials) is an *intensive growth*. In contrast, GDP growth caused only by increases in the amount of inputs available for use (increased population, for example, or new territory) counts as *extensive growth*.

Be it intensive or extensive growth, growth models suggest both direct and indirect ways that capital flows could influence economic growth. According to the neoclassical theory, growth is a function of capital, technology, and labour, suggesting a direct association. However, according to the endogenous growth model, capital could affect growth indirectly through the level of human capital. The capital could be either from foreign or local sources. Blanchard et al. (2016) argue that to test

for evidence of any association between real sector growth and portfolio investments, growth model must include measures of real sector growth and measures of portfolio investment. This assertion is premised on the view of Alfaro et al. (2014) that the adverse impact of debt flows on growth is due to the public debt component of total debt flows.

2.2 Theoretical Review

The review focuses on the relevant theories that underpin the study. The arguments under this section link the theories to foreign portfolio investment and economic growth. Upon review of the various theories, the study settled on international Arbitrage Portfolio Theory (IAPT) and Portfolio Allocation Model (PAM) as two most significant theories very relevant to the current study.

2.2.1 International Arbitrage Portfolio Theory (IAPT):

The International Arbitrage Portfolio Theory (IAPT) was developed by Ross & Walsh (1983). According to Ross & Walsh, IAPT is a multifactor model that considers additional determinants of expected returns, and the international diverse consumption tastes and relative price uncertainty. In augmenting the theory's argument, Fernandez-Arias and Mortiel (1996) developed Return and Credit Worthiness Model. The model further asserts that long run and short run changes in equilibrium capital flows are due to the initial shocks of liabilities, changes in pull factors such as domestic economic environment and push factor like external financial conditions. Standing on IAPT, UI-Haque, et al. (1997) again developed the money demand and productivity framework. The framework essentially traces the causes of capital flows to changes in money demand function, productivity of domestic capital and external factors such as international interest rate. Interestingly, UI-Haque, et al. argue that an upward shift of money demand function and increases in productivity of domestic capital generate

capital inflows, ceteris paribus, and vice versa. These factors usually result in sustained capital flows. Falling interest rate, all things being equal, cause inflow of capital while rising rates cause outflows.

2.2.2 Portfolio Allocation Model (PAM)

Portfolio Allocation Model (PAM) was developed by Feddeke & Liu (2002). PAM posits that capital flows are driven by two classes of determinants which are

rates of return and risk factors with positive responses to rates 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 from 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 and (c) time path effect. The initial divergence effect is the ratio of initial divergence between foreign and domestic (the starting level of capital stock) 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.

Linking the theories to the current study, capital could affect growth indirectly through the level of human capital. The capital could be either from foreign or local sources.

2.3 Empirical Review

The review concentrates on what others have done similarly to the current study. In understanding the study from diverse perspectives, the empirical review documents the particular context of study, methodologies, and findings from previous studies.

Akinmulegun (2018) explored the effect of capital market development on foreign portfolio investment in Nigeria from 1985 to 2016. The study employed descriptive statistics, Augmented Dickey Fuller (ADF) unit root test, Granger causality and Vector Error Correction Mechanism (VECM) for the analysis. It was revealed that capital market development has significant effect on foreign portfolio investment.

Again, using Augmented Dickey Fuller, Phillip Peron tests, Cointegration test, Vector Auto-Regressive technique, Variance Decomposition and Impulse Response analysis, Ibrahim & Akinbobola (2017) investigated the relationship between foreign portfolio investment, democracy and economic growth in Nigeria from 1986 to 2013. The results revealed that foreign portfolio investment inflow was more stable in democratic periods between 1999 and 2013 than the military periods between 1986 and 1998 and that the correlation between economic growth and foreign portfolio investment is positive and very significant.

Similarly, Shanab (2017) examined the effect of Foreign Portfolio Investment (FPI) on capital market indices for the period 2005-2016. The study employed Ordinary Least Square (OLS) for the analysis. The study revealed that there is a statistically significant effect on both the purchases and sales by foreign investors on market

capitalization. The study found no statistically significant effect between inflation and market capitalization.

Further, Haider et al. (2017) used series quarterly data from 2007Q1 to 2015Q4, to investigate the impact of stock market performance and inflation on foreign portfolio investment (FPI) in China. The study employed descriptive statistics for the analysis. The results showed that there was significant positive impact of stock market performance on the FPI, whereas inflation is found to be negatively associated with the FPI.

Also, Oladejo (2016) investigated the impact of foreign portfolio investment on economic growth in Nigeria for the period of 1991 to 2014. The ordinary least square estimation method was employed for the data analysis. The findings revealed, among others, that there were increase in the foreign portfolio investment for a given period, followed by decline, as a result of massive capital outflow and divestment by the investors, caused by the global recession.

More importantly, Tokunbo et al. (2010) stressed that despite the increased flow of foreign portfolio investment to developing countries in especially sub Sahara African countries. In their study, it was revealed that foreign portfolio investment, domestic investment growth and Net Export growth impacted positively and significance on economic growth in most SSA countries.

In addition, Calderon & Nguyen (2015) investigated a causal link between capital flows and output growth for a set of 38 SSA countries. Their study employed FDI, aid and foreign borrowing and measures of capital flows and GDP growth to proxy output growth. It was revealed that portfolio investment flows provide avenue for sectors that are less attractive to traditional FDI capital.

2.4 Conceptual Model and Hypothesis Development

The conceptual model explains the underlying theories as well as the empirical relationship that exist between the variables (dependent and independent). The model maps out how the variables relate to each other. According to the study, the dependent variable is economic growth which is measured by increase in Gross Domestic Product (GDP) whilst the independent variable is foreign portfolio investment which is measured by stock returns, inflation rate, interest rates, exchange rates, and equity index.



Figure 1: Author's own construction (2020)

Hypothesis Development

Foreign Portfolio Investment and Economic Growth

Calvo et al. (1993, 1996); Taylor et al. (1997); Fernandez-Arias (1996); Kim (2000), Byrne et al. (2011) stress that global factors like decline in interest rates and slowdown in growth of industrialized countries influence capital to developing economies. Again, Bohn et al. (1996), The World Bank (1997), Mody et al. (2001) and Felices et al. (2008), find that domestic factors like equity index, sufficient availability of domestic reserves, and country creditworthiness attract portfolio flows to developing countries. Remarkably, Chuhan et al. (1993); Montiel et al. (1999); De Vita et al. (2007); and Borensztein, De Gregorio et al. (1998) conclude that FPIs are an important vehicle to spur the technological transfer and support growth. Moreover, Mello (1999) argues that the productivity enhancing effects of FPI holds only when a sufficient absorptive capability for advanced technologies is available in the host

economy, and unless a given threshold is reached, the FPI in itself has no significant positive impact on growth. Interestingly, Mello concludes that there is a positive impact of FDI on long-run growth via technological upgrading and knowledge spill overs, both for developed and developing economies. In addition, Alfaro (2004); Hermes et al. (2003); and Durham (2004) argue that depth, financial intermediation effectiveness and financial sector regulation soundness are relevant in generating positive effects from FPI to growth. Similarly, Prüfer & Tondl (2008) posit that a positive FPI-growth nexus requires a functioning legal and institutional framework and political stability. From the foregoing arguments, it is hypothesized that:

Foreign Portfolio Investment positively and significantly affect Economic Growth.

2.5 Chapter Summary

The reviews focused on the concepts of the study documenting the relevant theories and what others have done, as well as the determinants that influence foreign portfolio investment. After thorough review, the study identified that most of the studies done on similar topic used times series analysis (Akinmulegun, 2018 and Ibrahim & Akinbobola, 2017). Again, others used foreign portfolio investment as dependent variable and macroeconomic variables such as aid, borrowing, FDIs etc. as independent variables (The World Bank, 1997; Mody et al., 2001; and Felices et al., 2008). The current study deviates from time series analysis and adopt panel data analysis. Again, the study uses foreign portfolio investment as independent variable and economic growth as dependent variable.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlined the methodology to be used in this study. The chapter discussed the research philosophical underpinnings and thereafter focused on the theoretical framework, model specification, estimation strategy, types and sources of data, description of variables and data collection, test for unit root and test for co-integration.

3.2 Research Design

The researcher used the quantitative method of study. The study gleaned informational data from secondary sources. Consequently, explanatory study design was used to understand the linkage between foreign portfolio investment and economic growth in Ghana. Explanatory study design, according to Yin (2014); Stake (1995) & Merriam (2009) focused on the scope, process, and methodological characteristics of the research, emphasising the nature of inquiry as being empirical, and the importance of context to the case. It is the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances. Despite its apparent flaws, the explanatory design provides detailed descriptions of specific cases.

3.3 Sources of Data

This investigation employed mainly secondary sources of information for its analysis. The time frame ranges from 2009 to 2019. The data will be obtained from the World Development Indicators (WDI, 2017) of the World Bank. The data focused on private capital flows, portfolio equity, portfolio debt and growth. The selection of the study

period will be influenced by conclusions of Gourinchas & Jeanne (2013) that economies were financially open at the start of the 1980s.

3.4 Study Population

The study population consist of manufacturing sectors, services sector, industry and agriculture. In effect, the researcher uses secondary data in estimating the result. Regarding the sample size, the study agreed with Israel (2009) that when the population required for the study is less than two hundred (200), the population should be taken to be equal to the sample size.

3.5 Theoretical Framework

The theoretical base for the study is Portfolio Allocation Model (PAM) developed by Feddeke & Liu (2002). PAM posits that capital flows are driven by two classes of determinants which are rates of return and risk factors with positive responses to rates 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 from 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 and (c) time path effect. The initial divergence effect is the ratio of initial divergence between foreign and domestic (the starting level of capital stock) 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.

3.6 Model Specification

Panel data was used in assessing the impact of Effect of Foreign Portfolio Investment on Economic Growth in Ghana. According to Baltagi (2001) cited in Gujarati (2004), by combining time series of cross-section observations, panel data gives more informative data, more variability, less collinearity among variables, more degrees of freedom and more efficiency.

By studying the repeated cross section of observations, panel data are better suited to study the dynamics of change. Since this panel data relate to different sectors over time, there is bound to be heterogeneity in these units. The techniques of panel data estimation can also take the inevitable heterogeneity relating to the study of the sectors over time explicitly into account by allowing for individual-specific variables (Gujarati, 2004). Panel analysis entails dataset where there is the observation of the behaviour of entities or individuals across time. These entities can include countries, firms, institutions and others (Green, 2008). In this study, twenty-three (23) different operating universal banks across time are used justifying the need to use panel regression.

Towing the line of Ezike et al. (2013) & Aymen (2013), the regression model in panel is specified using Ordinary Least Squares (OLS) as:

$$Y_{it} = f(X_{it}, Z_{it} \dots) + \mu_{it}$$

Where Y_{it} the dependent variable which represent economic growth. Furthermore, X_{it}, Z_{it} are the vector of the independent variables. μ_{it} is the error term which incorporated all other factors that were not included in the model. Precisely, the

model hypothesised the independent variables as Domestic Stock Market Performance (SMR), Exchange Rate (ER), and Interest Rate Differential (IN R). Operationally, the equation is simplified as:

$$Y_{it} = f(SMR_{it}, ER_{it}, IN R_{it})$$

$$Y_{it} = \gamma_1 + \gamma_2 SMR_{it} + \gamma_3 ER_{it} + \gamma_4 IN R_{it} + \mu_{it}$$

where,

γ_1 is a vector of constant term, $\gamma_2, \gamma_3, \gamma_4$ are the vector of coefficients of the explanatory variable (NPL) which measures the magnitude of impact on the economic growth. τ_t captured the time-specific effects respectively whiles μ_{it} is the vector of error term which was assumed to be uncorrelated with the explanatory variables.

3.6.1 Estimation Strategy

Diagnostic Test Procedure

The Classical Linear Regression Model (CLRM) estimated the value of a dependent variable y expressed in terms of a set of independent variables X . According to Brook (2008), CLRM is the best linear unbiased estimator because it has stood the test of four underlying assumptions - normality assumption, the absence of multicollinearity, autocorrelation and heteroscedasticity.

Following the CLRM equation, the equation for the present study was expressed in the form:

$$y = \beta_0 + \beta_1 X + \varepsilon$$

Where the error term ε was assumed to be independently identically distributed with zero expected mean and constant variance.

3.7 Variable Definition & Measurement, and Source

The study made use of secondary source of data obtained from the World Development Indicators (WDI, 2017) of the World Bank. The variables employed include the Domestic Stock Market Performance (SMR), Exchange Rate (ER), and Interest Rate Differential (IN R). The study based its analysis on annual dataset spanning the period 2009 to 2019. This time period and the respective banks were chosen based on the availability and accessibility of the data at hand.

Table 1: Variable Definition & Measurement, and Source

Variable	Measurement	Source
Domestic Stock Market Performance (SMR),	Foreign investors buy (sell) when equity index is falling (rising), with the expectation that returns will rise (fall) in future	Gordon et al., 2003; Griffin et al., 2002.
Exchange Rate (ER),	Appreciation of currency of the host country is an additional avenue of gaining returns for foreign investors.	Bank of Ghana
Interest Rate Differential (IN R).	capital is mobile and exchange rates are fixed, capital flows occur so as to restore interest parity, i.e., capital moves in or out of the country till the domestic and foreign interest rates equalize. Investors invest their capital wherever the interest rates adjusted for risk are higher.	Verma et al. (2011); Iwata (2010)
Economic Growth	Domestic output growth indicates the soundness of macroeconomic and institutional fundamentals of the host country, which are important in attracting capital flows.	Bank of Ghana

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

The chapter provides information on the data presentation and analysis of the study. The chapter details information on the analysis conducted to examine the effect of foreign portfolio investment on economic growth, as well as the results of such findings. The chapter, further, conducts a discussion of the results presented, in relation to literature. The main reason for the chapter was to find answers to the research objectives and questions, with the central reason of trying to reject⁴ or support the various hypotheses that developed for the study. The study used panel analysis in conducting the research, with mean, standard deviation, minimum and maximum as the descriptive statistics.

4.2 Descriptive Analysis

The descriptive statistics of the study was presented in this section. The information presented captured the variables such as the capital flows, portfolio equity and portfolio debt and economic growth. The period under review was from 2009- 2019, thus spanning an 11 year period. The descriptive statistics were displayed in table 4.1.

Table 4. 1: Descriptive Analysis

Variable	Mean	Std. dev.	Min.	Max.
Private Capital Flow	12.93	2.88	3.46	15.42
Port Folio Equity	15.42	3.42	2.88	13.69
Port Folio Debt	13.99	2.96	2.12	14.20
Economic Growth	16.45	1.69	6.24	16.32

Source: Estimations based on the annual reports

Table 4.1 presented information on the descriptive analysis of the study. The table displays that private capital flows had a mean score of 12.93, standard deviation of 2.88 and a range of 3.46 to 15.42. Furthermore, the table showed that portfolio equity had a mean score of 15.42, standard deviation of 3.42 and a range of 2.88 to 13.69. Portfolio debt, on the other hand, had a mean score of 13.99, standard deviation of 2.96 and a range of 2.12 to 14.20. Finally, economic growth had a mean score of 16.45, standard deviation of 1.69 and a range of 6.24 to 16.32.

4.3 Panel Analysis

The study conducted a panel analysis that examined the effect of private capital flows, portfolio equity and portfolio debts on economic growth. The analysis used year as the time series variable (11 years) and the country variable as the panel ID. The study used private capital flows, portfolio equity and portfolio debts as the independent variable and economic growth as dependent variable. The results are presented in table 4.2 below.

Table 4. 2: Random Effect output with Economic Growth as the dependent variable

Variable	coefficient	Std. Error	Z	P> z
Portfolio Debt	-.283	.014	3.712	0.000
Portfolio Equity	.346	.0509	3.421	0.017
Capital Flows	2.546	.046	1.73	0.000
Constant	-1.243	.425	-1.47	0.023
R-sq:				
within = 0.623				
between = 0.976				
F test that all	u_i = 0:	F (1, 19) = 11.18	Prob > F = 0.0042	

Source: Estimations based on Annual Reports

The table 4.2 presents the random effect output based on the panel analysis conducted on economic growth. The study findings showed the effect of portfolio debt, portfolio equity and capital flows on economic growth of a country. The results showed that generally the model was significant ($F_{1, 19} = 11.18, p = 0.0042$). Furthermore, the study presented information on the individual effects for Portfolio Equity (coefficient = .346, $z = 3.421, p>|z| = 0.017$), Capital Flows (coefficient = 2.546, $z = 1.73, p>|z| = 0.000$) and Portfolio Debt (coefficient = -.283, $z = 3.712, p>|z| = 0.000$). The study results showed that portfolio equity and capital flows had a positive weight, with portfolio debt having a negative weight. Furthermore, all the independent variables had significant effects with the effect size moderately high, with portfolio debt having a high effect, followed by portfolio equity and then capital flows.

4.4 Discussion of the Study

The purpose of the discussion is to put the findings of the study, within the context of extant literature and theories on foreign portfolio investment on economic growth in Ghana. The main objective of the study was to examine the effect of foreign portfolio investment on economic growth in Ghana. The study results showed that portfolio equity and capital flows had a positive weight, with portfolio debt. Furthermore, all the independent variables had significant effects with the effect size moderately high, with portfolio debt having a high effect, followed by portfolio equity and then capital flows. The results of the study were supported by literature.

The International Arbitrage Portfolio Theory supports the findings of the study. According to Ross & Walsh, IAPT is a multifactor model that considers additional determinants of expected returns, and the international diverse consumption tastes and relative price uncertainty. In augmenting the theory's argument, Fernandez-Arias and Mortiel (1996) developed Return and Credit Worthiness Model. The model further

asserts that long run and short run changes in equilibrium capital flows are due to the initial shocks of liabilities, changes in pull factors such as domestic economic environment and push factor like external financial conditions.

Furthermore, the Portfolio Allocation Model (PAM) supported the results of the study, especially in line with capital flows. PAM is a dynamic optimization model in which an individual seeks to maximize the present value of his utility derived from 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 and (c) time path effect. The initial divergence effect is the ratio of initial divergence between foreign and domestic (the starting level of capital stock) 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. Linking the theories to the current study, capital could affect growth indirectly through the level of human capital. The capital could be either from foreign or local sources.

Again, in line with the findings of the study, a study conducted by Ibrahim and Akinbobola (2017) found that foreign portfolio investment inflow was more stable in democratic periods between 1999 and 2013 than the military periods between 1986 and 1998 and that the correlation between economic growth and foreign portfolio investment is positive and very significant. Although, the methods and approaches used in conducting both studies were different. Similarly, Shanab (2017) examined the effect of Foreign Portfolio Investment (FPI) on capital market indices for the period 2005-2016. The study employed Ordinary Least Square (OLS) for the analysis.

The study revealed that there is a statistically significant effect on both the purchases and sales by foreign investors on market capitalization. The study found no statistically significant effect between inflation and market capitalization.

Ngowi (2001) maintains that African countries and other developing countries need substantial inflow of foreign capital to fill the saving and foreign exchange gaps associated with a rapid rate of capital accumulation and growth needed to overcome the widespread poverty in these countries. In addition, Ghose (2004); Knill (2005); and Vita & Kyaw (2008) reason that the developing countries are preferred to developed countries by foreign investors because of the higher rate of return on investment in these countries. This notwithstanding, Dell'Ariccia et al. (2008) and Obstfeld (2009) further posit that the developing countries across the globe have been making conscious efforts to attract foreign financial capital which provides an impetus to economic growth and financial market development. Interestingly, Fosu & Magnus (2006) and Omisakin, et al. (2009) point out rightly that foreign capital inflow is an important vehicle for augmenting the supply of funds for domestic investment.

Furthermore, using another approach, Oladejo (2016) found that an increase in foreign portfolio investment for a given period, followed by decline, as a result of massive capital outflow and divestment by the investors, caused by the global recession. This showed that the three variable had a collective impact, other than the individual effects created. More importantly, Tokunbo et al. (2010) stressed that despite the increased flow of foreign portfolio investment to developing countries in especially sub-Saharan African countries. In their study, it was revealed that foreign portfolio investment, domestic investment growth and Net Export growth impacted positively and significantly on economic growth in most SSA countries. In addition,

Calderon & Nguyen (2015) investigated a causal link between capital flows and output growth for a set of 38 SSA countries. Their study employed FDI, aid and foreign borrowing and measures of capital flows and GDP growth to proxy output growth. It was revealed that portfolio investment flows provide avenue for sectors that are less attractive to traditional FDI capital.



CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The previous chapter of the study detailed the data presentation and analysis. This set the precedence for the current chapter, which focuses on the summary of findings, conclusion and recommendation of the study. The highlights of the study are summarized, with conclusion presented from the findings, based on the research questions and objectives.

5.2 Summary of Findings of the Study

The main objective of the study was to examine the effect of foreign portfolio investment on economic growth in Ghana. The summary of findings presents a summary of the main findings of the study, for reference purposes and are outlined below based on the specific objectives noted for the study.

5.2.1 The effect of Private Capital Flows on Economic Growth

This objective investigated the effect of capital flows on economic growth in Ghana. The study findings showed that private capital flows had a positive weight on economic growth, and the effect was significant. Thus, an increase in capital flows led to increase in economic growth.

5.2.2 The effect of Portfolio Equity on Economic Growth

This objective examined the effect of portfolio equity on economic growth in Ghana. The study findings showed that portfolio equity had a positive weight on economic growth, and the effect was significant. Thus, an increase in portfolio equity led to a increase in economic growth.

5.2.3 The Effect of Portfolio Debt on Economic Growth

This objective examined the effect of portfolio debt on economic growth in Ghana. The study findings showed that portfolio debt had a negative weight on economic growth, and the effect was significant. Thus, an increase in portfolio debt led to a decrease in economic growth.

5.3 Conclusion

In conclusion, the main purpose of the study was to examine the role played by portfolio investment on economic growth in Ghana. The study was able to achieve its purpose and was able to determine the role played by portfolio investment. The study, achieved this by developing three main research objectives: to investigate the effect of private capital flows on economic growth; to examine the effect of portfolio equity on economic growth; to examine the effect of portfolio debt on economic growth.

The study used panel data analysis to observe the impact that independent variables (portfolio debt, portfolio equity and private capital flows) on the dependent variable (economic growth). The study findings were that both private capital flows and portfolio equity had a positive effect, with portfolio debt having a negative impact, with all of these effects noted to be significant. However, the study noted a few limitations as its focused was on secondary data, to the neglect of primary data, the study was unable to ascertain the reasons for the relationships noted.

5.4 Recommendation of the Study

The study makes various recommendations based on the findings, limitations and discussions that have been conducted on the study. The recommendations were generally categorized into two, namely recommendations for practice and recommendations for future studies.

5.4.1 Recommendations for Practice

The study makes various recommendations for practice in regards to foreign portfolio investment in Ghana and these are outlined below.

- The study recommends that the government of Ghana should have a clear directive in relation to foreign portfolio investments in Ghana.
- Again, the study recommends that these directives should come with clear cut strategies and policies, in the bid to attract foreign investment.
- Furthermore, the study recommends that private capital flows and portfolio equity should be promoted, with portfolio debt reduced in regards to improving economic growth.

5.4.2 Recommendations for Future Research

The study makes various recommendations for future research. These recommendations are in line with the limitations, findings and implications of the study.

- The study recommends that future studies should focus on using control variables like GDP, Exchange Rate and Interest Returns to ensure that the effect of the foreign portfolio investment on economic growth can be ascertained.
- The study recommends that future studies should consider using both primary and secondary data to ensure a rich set of data for analytical purposes.
- Furthermore, the study recommends that future studies should apply qualitative and quantitative methods (mixed methods) to ensure that the study explores the relationship effectively.

REFERENCES

- Abdi, M., & Aulakh, P. S. (2018). Internationalization and performance: Degree, duration, and scale of operations. *Journal of International Business Studies*, 49(7), 832–857.
- Adner, R., & Levinthal, D. A. (2004). What is not a real option: Considering boundaries for the application of real options to business strategy. *Academy of Management Review*, 29(1), 74–85.
- Alessandri, T. M., Tong, T. W., & Reuer, J. J. (2012). Firm heterogeneity in growth option value: The role of managerial incentives. *Strategic Management Journal*, 33(13), 1557–1566.
- Arreagle, J. L., Miller, T. L., Hitt, M. A., & Beamish, P. W. (2016). How does regional institutional complexity affect MNE internationalization? *Journal of International Business Studies*, 47(6), 697–722.
- Banalieva, E. R., & Dhanaraj, C. (2013). Home-region orientation in international expansion strategies. *Journal of International Business Studies*, 44(2), 89–116.
- Barkema, H. G., & Drogendijk, R. (2007). Internationalising in small, incremental or larger steps? *Journal of International Business Studies*, 38(7), 1132–1148.
- Barnard, H. (2010). Overcoming the liability of foreignness without strong firm capabilities—The value of market-based resources. *Journal of International Management*, 16(2), 165–176.
- Barney, J. B. (1986). Strategic factor markets: Expectations, luck, and business strategy. *Management Science*, 32(10), 1231–1241.
- Belderbos, R., & Sleuwaegen, L. (2005). Competitive drivers and international plant configuration strategies: A product-level test. *Strategic Management Journal*, 26(6), 577–593.
- Belderbos, R., Tong, T. W., & Wu, S. (2014). Multinationality and downside risk: The roles of option portfolio and organization. *Strategic Management Journal*, 35(1), 88–106.

- Belderbos, R., Tong, T. W., & Wu, S. (2019). Multinational investment and the value of growth options: Alignment of incremental strategy to environmental uncertainty. *Strategic Management Journal*, 40(1), 127–152.
- Berry, H., Guillén, M. F., & Zhou, N. (2010). An institutional approach to cross-national distance. *Journal of International Business Studies*, 41(9), 1460–1480.
- Bertrand, O., & Capron, L. (2015). Productivity enhancement at home via cross-border acquisitions: The roles of learning and contemporaneous domestic investments. *Strategic Management Journal*, 36(5), 640–658.
- Bos, B., Faems, D., & Noseleit, F. (2017). Alliance concentration in multinational companies: Examining alliance portfolios, firm structure, and firm performance. *Strategic Management Journal*, 38(11), 2298–2309
- Boyd, B. (1990). Corporate linkages and organizational environment: A test of the resource dependence model. *Strategic Management Journal*, 11(6), 419–430.
- Brauer, M. F., & Wiersema, M. F. (2012). Industry divestiture waves: How a firm's position influences investor returns. *Academy of Management Journal*, 55(6), 1472–1492.
- Brouthers, K. D., Brouthers, L. E., & Werner, S. (2008). Real options, international entry mode choice and performance. *Journal of Management Studies*, 45(5), 936–960.
- Buckley, P. J., & Tian, X. (2017). Internalization theory and the performance of emerging-market multinational enterprises. *International Business Review*, 26(5), 976–990.
- Carney, M., Estrin, S., Liang, Z., & Shapiro, D. (2019). National institutional systems, foreign ownership and firm performance: The case of understudied countries. *Journal of World Business*, 54(4), 244–257.
- Casillas, J. C., & Moreno-Menendez, A. M. (2014). Speed of the internationalization process: The role of diversity and depth in experiential learning. *Journal of International Business Studies*, 45(1), 85–101.
- Chan, C. M., Isobe, T., & Makino, S. (2008). Which country matters? Institutional development and foreign affiliate performance. *Strategic Management Journal*, 29 (11), 1179–1205.
- Chao, M. C. H., & Kumar, V. (2010). The impact of institutional distance on the international diversity-performance relationship. *Journal of World Business*, 45(1),

93–103.

- Chatain, O. (2014). How do strategic factor markets respond to rivalry in the product market? *Strategic Management Journal*, 35(13), 1952–1971.
- Chen, L., Li, Y., & Fan, D. (2018). How do emerging multinationals configure political connections across institutional contexts? *Global Strategy Journal*, 8(3), 447–470.
- Chi, T., & McGuire, D. J. (1996). Collaborative ventures and value of learning: Integrating the transaction cost and strategic option perspectives on the choice of market entry modes. *Journal of International Business Studies*, 27(2), 285–307.
- Chi, T., & Seth, A. (2009). A dynamic model of the choice of mode for exploiting complementary capabilities. *Journal of International Business Studies*, 40(3), 365–387.
- Chi, T., Li, J., Trigeorgis, L. G., & Tsekrekos, A. E. (2019). Real options theory in international business. *Journal of International Business Studies*, 50(4), 525–553.
- Clegg, J., Lin, H. M., Voss, H., Yen, I. F., & Shih, Y. T. (2016). The OFDI patterns and firm performance of Chinese firms: The moderating effects of multinationality strategy and external factors. *International Business Review*, 25(4), 971–985.
- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128–152.
- Connell, B. L., Haynes, K., Tihanyi, L., Gamache, D., & Devers, C. (2016). Minding the gap: Antecedents and consequences of top management-to-worker pay dispersion. *Journal of Management*, 42(4), 862–885.
- Connelly, B. L., Tihanyi, L., Ketchen, D. J., Jr., Carnes, C. M., & Ferrier, W. J. (2017). Competitive repertoire complexity: Governance antecedents and performance outcomes. *Strategic Management Journal*, 38(5), 1151–1173.
- Contractor, F. J., Kumar, V., & Kundu, S. K. (2007). Nature of the relationship between international expansion and performance: The case of emerging market firms. *Journal of World Business*, 42(4), 401–417
- Cuervo-Cazurra, A., & Genc, M. (2008). Transforming disadvantages into advantages: Developing-country MNEs in the least developed countries. *Journal of International Business Studies*, 39(6), 957–979.

- Cuervo-Cazurra, A., Ciravegna, L., Melgarejo, M., & Lopez, L. (2018). Home country uncertainty and the internationalization-performance relationship: Building an uncertainty management capability. *Journal of World Business*, 53(2), 209–221.
- Cui, L., Fan, D., Liu, X., & Li, Y. (2017). Where to seek strategic assets for competitive catch-up? A configurational study of emerging multinational enterprises expanding into foreign strategic factor markets. *Organization Studies*, 38(8), 1059–1083.
- Cuypers, I. R., & Martin, X. (2010). What makes and what does not make a real option? A study of equity shares in international joint ventures. *Journal of International Business Studies*, 41(1), 47–69.
- Dahlin, K. B., Chuang, Y. T., & Roulet, T. J. (2018). Opportunity, motivation, and ability to learn from failures and errors: Review, synthesis, and ways to move forward. *Academy of Management Annals*, 12(1), 252–277.
- Dau, L. A. (2013). Learning across geographic space: Pro-market reforms, multinationalization strategy, and profitability. *Journal of International Business Studies*, 44(3), 235–262.
- De Clercq, D., Sapienza, H. J., Yavuz, R. I., & Zhou, L. (2012). Learning and knowledge in early internationalization research: Past accomplishments and future directions. *Journal of Business Venturing*, 27(1), 143–165.
- Delios, A., & Beamish, P. W. (1999). Geographic scope, product diversification, and the corporate performance of Japanese firms. *Strategic Management Journal*, 20(8), 711–727.
- Delios, A., & Henisz, W. J. (2003). Political hazards, experience, and sequential entry strategies: The international expansion of Japanese firms, 1980–1998. *Strategic Management Journal*, 24(11), 1153–1164.
- Deng, P., Delios, A., & Peng, M. W. (2019). A geographic relational perspective on the internationalization of emerging market firms. *Journal of International Business Studies* (in press).

- Deng, Z., Jean, R.-j. B., & Sinkovics, R. R. (2018). Rapid expansion of international new ventures across institutional distance. *Journal of International Business Studies*, 49(8), 1010–1032.
- Deng, Z., Yan, J., & van Essen, M. (2018). Heterogeneity of political connections and outward foreign direct investment. *International Business Review*, 27(4), 893–903.
- Dess, G. G., & Beard, D. W. (1984). Dimensions of organizational task environments. *Administrative Science Quarterly*, 29(1), 52–73.
- Driouchi, T., & Bennett, D. (2011). Real options in multinational decision-making: Managerial awareness and risk implications. *Journal of World Business*, 46(2), 205–219.
- Fernhaber, S. A., & Patel, P. C. (2012). How do young firms manage product portfolio complexity? The role of absorptive capacity and ambidexterity. *Strategic Management Journal*, 33(13), 1516–1539.
- Flammer, C., & Bansal, P. (2017). Does a long-term orientation create value? Evidence from a regression discontinuity. *Strategic Management Journal*, 38(9), 1827–1847.
- Fung, H. G., Qiao, P., Yau, J., & Zeng, Y. (2020). Leader narcissism and outward foreign direct investment: Evidence from Chinese firms. *International Business Review*, 29(1), Article 101632.
- Gaur, A. S., & Kumar, V. (2009). International diversification, business group affiliation and firm performance: Empirical evidence from India. *British Journal of Management*, 20(2), 172–186.
- Goerzen, A., & Beamish, P. W. (2003). Geographic scope and multinational enterprise performance. *Strategic Management Journal*, 24(13), 1289–1306.
- Golgeci, I., Assadinia, S., Kuivalainen, O., & Larimo, J. (2019). Emerging-market firm's dynamic capabilities and international performance: The moderating role of institutional development and distance. *International Business Review*, 28(6), Article 101593.
- Guillen, M. F., & García-Canal, E. (2009). The American model of the multinational firm and the “new” multinationals from emerging economies. *Academy of Management Perspectives*, 23(2), 23–35.

- Guler, I., & Guillén, M. F. (2010). Institutions and the internationalization of US venture capital firms. *Journal of International Business Studies*, 41(2), 185–205.
- Hamilton, B. H., & Nickerson, J. A. (2003). Correcting for endogeneity in strategic management research. *Strategic Organization*, 1(1), 51–78.
- Han, X., Liu, X., Xia, T., & Gao, L. (2018). Home-country government support, interstate relations and the subsidiary performance of emerging market multinational enterprises. *Journal of Business Research*, 93, 160–172.
- Harvey, A. C. (1976). Estimating regression models with multiplicative heteroscedasticity. *Econometrica*, 44(3), 461–465.
- Hennart, J. F. (2007). The theoretical rationale for a multinationality-performance relationship. *Management International Review*, 47(3), 423–452.
- Hermelo, F. D., & Vassolo, R. (2010). Institutional development and hypercompetition in emerging economies. *Strategic Management Journal*, 31(13), 1457–1473.
- Hobdari, B., Gammeltoft, P., Li, J., & Meyer, K. (2017). The home country of the MNE: The case of emerging economy firms. *Asia Pacific Journal of Management*, 34(1), 1–17.
- Hope, O. K., Thomas, W., & Vyas, D. (2011). The cost of pride: Why do firms from developing countries bid higher? *Journal of International Business Studies*, 42(1), 128–151.
- Hoskisson, R. E., Wright, M., Filatotchev, I., & Peng, M. W. (2013). Emerging multinationals from mid-range economies: The influence of institutions and factor markets. *Journal of Management Studies*, 50(7), 1295–1321.
- Hu, H. W., & Cui, L. (2014). Outward foreign direct investment of publicly listed firms from China: A corporate governance perspective. *International Business Review*, 23(4), 750–760.
- Huang, Z., Zhu, H., & Brass, D. J. (2017). Cross-border acquisitions and the asymmetric effect of power distance value difference on long-term post-acquisition performance. *Strategic Management Journal*, 38(4), 972–991.
- Huber, G. P. (1991). Organizational learning: The contributing processes and the literatures. *Organization Science*, 2(1), 88–115.

- Hutzschenreuter, T., & Matt, T. (2017). MNE internationalization patterns, the roles of knowledge stocks, and the portfolio of MNE subsidiaries. *Journal of International Business Studies*, 48(9), 1131–1150.
- Hutzschenreuter, T., Voll, J. C., & Verbeke, A. (2011). The impact of added cultural distance and cultural diversity on international expansion patterns: A Penrosean perspective. *Journal of Management Studies*, 48(2), 305–329.
- Jackson, G., & Deeg, R. (2008). Comparing capitalisms: Understanding institutional diversity and its implications for international business. *Journal of International Business Studies*, 39(4), 540–561.
- Jain, N. K., Pangarkar, N., Yuan, L., & Kumar, V. (2019). Rapid internationalization of emerging market firms—The role of geographic diversity and added cultural distance. *International Business Review*, 28(6), Article 101590.
- Jiang, R. J., Tao, Q. T., & Santoro, M. D. (2010). Alliance portfolio diversity and firm performance. *Strategic Management Journal*, 31(10), 1136–1144.
- Johanson, J., & Vahlne, J. E. (1977). The internationalization process of the firm—A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8(1), 23–32.
- Khanna, T., & Palepu, K. G. (1997). Why focused strategies may be wrong for emerging markets. *Harvard Business Review*, 75(4), 41–50.
- Kim, H., Hoskisson, R. E., & Lee, S. H. (2015). Why strategic factor markets matter: “New” multinationals’ geographic diversification and firm profitability. *Strategic Management Journal*, 36(4), 518–536.
- Kirca, A. H., Roth, K., Hult, G. T. M., & Cavusgil, S. T. (2012). The role of context in the multinationality-performance relationship: A meta-analytic review. *Global Strategy Journal*, 2(2), 108–121.
- Klarner, P., & Raisch, S. (2013). Move to the beat—Rhythms of change and firm performance. *Academy of Management Journal*, 56(1), 160–184.
- Klingebiel, R., & Adner, R. (2015). Real options logic revisited: The performance effects of alternative resource allocation regimes. *Academy of Management Journal*, 58(1), 221–241.

- Kogut, B. (1983). Foreign direct investment as a sequential process. In C. P. Kindleberger, & D. B. Audretsch (Eds.), *The multinational corporation in the 1980s* (pp. 62–75). Boston, MA: MIT Press.
- Kogut, B. (1989). A note on global strategies. *Strategic Management Journal*, 10(4), 383–389.
- Kogut, B., & Chang, S. J. (1996). Platform investments and volatile exchange rates: Direct investment in the US by Japanese electronics companies. *Review of Economics and Statistics*, 78(2), 221–231.
- Kogut, B., & Kulatilaka, N. (1994). Operating flexibility, global manufacturing, and the option value of a multinational network. *Management Science*, 40(1), 123–139.
- Kostova, T., & Zaheer, S. (1999). Organizational legitimacy under conditions of complexity: The case of the multinational enterprise. *Academy of Management Review*, 24(1), 64–81.
- Kotabe, M., & Kothari, T. (2016). Emerging market multinational companies' evolutionary paths to building a competitive advantage from emerging markets to developed countries. *Journal of World Business*, 51(5), 729–743.
- Lee, S. H., & Makhija, M. (2009). The effect of domestic uncertainty on the real options value of international investments. *Journal of International Business Studies*, 40(3), 405–420.
- Lee, S.-H., & Song, S. (2012). Host country uncertainty, intra-MNC production shifts, and subsidiary performance. *Strategic Management Journal*, 33(11), 1331–1340.
- Levitt, B., & March, J. G. (1988). Organizational learning. *Annual Review of Sociology*, 14 (1), 319–338.
- Li, Y., & Chi, T. (2013). Venture capitalists' decision to withdraw: The role of portfolio configuration from a real options lens. *Strategic Management Journal*, 34(11), 1351–1366.
- Li, J., & Li, Y. (2010). Flexibility versus commitment: MNEs' ownership strategy in China. *Journal of International Business Studies*, 41(9), 1550–1571.
- Li, J., Meyer, K. E., Zhang, H., & Ding, Y. (2018). Diplomatic and corporate networks:

- Bridges to foreign locations. *Journal of International Business Studies*, 49(6), 659–683.
- Li, J., Xia, J., Shapiro, D., & Lin, Z. (2018). Institutional compatibility and the internationalization of Chinese SOEs: The moderating role of home subnational institutions. *Journal of World Business*, 53(5), 641–652.
- Lin, S. J., & Lee, J. R. (2011). Configuring a corporate venturing portfolio to create growth value: Within-portfolio diversity and strategic linkage. *Journal of Business Venturing*, 26(4), 489–503.
- Lin, W. T., Cheng, K. Y., & Liu, Y. (2009). Organizational slack and firm's internationalization: A longitudinal study of high-technology firms. *Journal of World Business*, 44(4), 397–406.
- Liu, X., Lu, J., & Chizema, A. (2014). Top executive compensation, regional institutions and Chinese OFDI. *Journal of World Business*, 49(1), 143–155.
- Lu, J. W., & Beamish, P. W. (2004). International diversification and firm performance: The S-curve hypothesis. *Academy of Management Journal*, 47(4), 598–609.
- Lu, J. W., Liang, X., Shan, M., & Liang, X. (2015). Internationalization and performance of Chinese family firms: The moderating role of corporate governance. *Management and Organization Review*, 11(4), 645–678.
- Lu, J., Liu, X., Wright, M., & Filatotchev, I. (2014). International experience and FDI location choices of Chinese firms: The moderating effects of home country government support and host country institutions. *Journal of International Business Studies*, 45(4), 428–449.
- Lundan, S. M., & Li, J. (2019). Adjusting to and learning from institutional diversity: Toward a capability-building perspective. *Journal of International Business Studies*, 50(1), 36–47.
- Luo, Y., & Bu, J. (2018). Contextualizing international strategy by emerging market firms: A composition-based approach. *Journal of World Business*, 53(3), 337–355.
- Luo, Y., & Tung, R. L. (2007). International expansion of emerging market enterprises: A springboard perspective. *Journal of International Business Studies*, 38(4), 481–498.

- Luo, Y., & Tung, R. L. (2018). A general theory of springboard MNEs. *Journal of International Business Studies*, 49(2), 129–152.
- Marano, V., Arregle, J. L., Hitt, M. A., Spadafora, E., & van Essen, M. (2016). Home country institutions and the internationalization-performance relationship: A meta-analytic review. *Journal of Management*, 42(5), 1075–1110.
- Marano, V., Tashman, P., & Kostova, T. (2017). Escaping the iron cage: Liabilities of origin and CSR reporting of emerging market multinational enterprises. *Journal of International Business Studies*, 48(3), 386–408.
- March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science*, 2(1), 71–87.
- McGrath, R. G., & Nerkar, A. (2004). Real options reasoning and a new look at the R&D investment strategies of pharmaceutical firms. *Strategic Management Journal*, 25(1), 1–21.
- McNamara, G. M., Halebian, J., & Dykes, B. J. (2008). The performance implications of participating in an acquisition wave: Early mover advantages, bandwagon effects, and the moderating influence of industry characteristics and acquirer tactics. *Academy of Management Journal*, 51(1), 113–130.
- Meyer, K. E., & Peng, M. W. (2016). Theoretical foundations of emerging economy business research. *Journal of International Business Studies*, 47(1), 3–22.
- Meyer, K. E., Ding, Y., Li, J., & Zhang, H. (2014). Overcoming distrust: How state-owned enterprises adapt their foreign entries to institutional pressures abroad. *Journal of International Business Studies*, 45, 1005–1028.
- Meyer, K. E., Mudambi, R., & Narula, R. (2011). Multinational enterprises and local contexts: The opportunities and challenges of multiple embeddedness. *Journal of Management Studies*, 48(2), 235–252.
- Miller, S. R., Lavie, D., & Delios, A. (2016). International intensity, diversity, and distance: Unpacking the internationalization–performance relationship. *International Business Review*, 25(4), 907–920.
- Musaji, S., Schulze, W. S., & De Castro, J. O. (2020). How long does it take to “get to” the learning curve? *Academy of Management Journal*, 63(1), 205–223.
- Nachum, L., & Song, S. (2011). The MNE as a portfolio: Interdependencies in MNE growth trajectory. *Journal of International Business Studies*, 42(3), 381–405.

- Nelson, R. R., & Winter, S. G. (1982). The Schumpeterian tradeoff revisited. *The American Economic Review*, 72(1), 114–132.
- North, D. C. (1990). *Institutions, institutional change, and economic performance*. Cambridge: Cambridge University Press.
- Pantzalis, C. (2001). Does location matter? An empirical analysis of geographic scope and MNC market valuation. *Journal of International Business Studies*, 32(1), 133–155.
- Pedersen, T., & Petersen, B. (2004). Learning about foreign markets: Are entrant firms exposed to a “shock effect”? *Journal of International Marketing*, 12(1), 103–123.
- Peng, M. W. (2003). Institutional transitions and strategic choices. *Academy of Management Review*, 28(2), 275–296.
- Peng, M. W. (2012). The global strategy of emerging multinationals from China. *Global Strategy Journal*, 2(2), 97–107.
- Piperopoulos, P., Wu, J., & Wang, C. (2018). Outward FDI, location choices and innovation performance of emerging market enterprises. *Research Policy*, 47(1), 232–240.
- Ramamurti, R., & Hillemann, J. (2018). What is “Chinese” about Chinese multinationals? *Journal of International Business Studies*, 49(1), 34–48.
- Rezk, R., Srai, J. S., & Williamson, P. J. (2016). The impact of product attributes and emerging technologies on firms’ international configuration. *Journal of International Business Studies*, 47(5), 610–618.
- Shi, W. S., Sun, S. L., Yan, D., & Zhu, Z. (2017). Institutional fragility and outward foreign direct investment from China. *Journal of International Business Studies*, 48(4), 452–476.
- Shinkle, G. A., & McCann, B. T. (2014). New product deployment: The moderating influence of economic institutional context. *Strategic Management Journal*, 35(7), 1090–1101.
- Singla, C., & George, R. (2013). Internationalization and performance: A contextual analysis of Indian firms. *Journal of Business Research*, 66(12), 2500–2506.

- Smit, H., Pennings, E., & van Bekkum, S. (2017). Real options and institutions. *Journal of International Business Studies*, 48(5), 620–644.
- Song, S., Makhija, M., & Lee, S. H. (2014). Within-country growth options versus across- country switching options in foreign direct investment. *Global Strategy Journal*, 4(2), 127–142.
- Spencer, J., & Gomez, C. (2011). MNEs and corruption: The impact of national institutions and subsidiary strategy. *Strategic Management Journal*, 32(3), 280–300.
- Tang, Q., Gu, F. F., Xie, E., & Wu, Z. (2020). Exploratory and exploitative OFDI from emerging markets: Impacts on firm performance. *International Business Review*, 29(2), Article 101661.
- Tong, T. W., & Li, S. (2013). The assignment of call option rights between partners in international joint ventures. *Strategic Management Journal*, 34(10), 1232–1243.
- Tong, T. W., & Reuer, J. J. (2007). Real options in multinational corporations: Organizational challenges and risk implications. *Journal of International Business Studies*, 38(2), 215–230.
- Tong, T. W., Reuer, J. J., & Peng, M. W. (2008). International joint ventures and the value of growth options. *Academy of Management Journal*, 51(5), 1014–1029.
- Trigeorgis, L., & Reuer, J. J. (2017). Real options theory in strategic management. *Strategic Management Journal*, 38(1), 42–63.
- van Hoorn, A., & Maseland, R. (2016). How institutions matter for international business: Institutional distance effects vs institutional profile effects. *Journal of International Business Studies*, 47(3), 374–381.
- Vermeulen, F., & Barkema, H. (2002). Pace, rhythm, and scope: Process dependence in building a profitable multinational corporation. *Strategic Management Journal*, 23(7), 637–653.
- Wan, W. P., & Hoskisson, R. E. (2003). Home country environments, corporate diversification strategies, and firm performance. *Academy of Management Journal*, 46 (1), 27–45.

- Wennberg, K., Wiklund, J., Hellerstedt, K., & Nordqvist, M. (2011). Implications of intra- family and external ownership transfer of family firms: Short-term and long- term performance differences. *Strategic Entrepreneurship Journal*, 5(4), 352–372.
- Witt, M. A., & Lewin, A. Y. (2007). Outward foreign direct investment as escape response to home country institutional constraints. *Journal of International Business Studies*, 38(4), 579–594.
- Wu, J., Wu, Z., & Zhuo, S. (2015). The effects of institutional quality and diversity of foreign markets on exporting firms' innovation. *International Business Review*, 24(6), 1095–1106.
- Xia, J., Ma, X., Lu, J. W., & Yiu, D. W. (2014). Outward foreign direct investment by emerging market firms: A resource dependence logic. *Strategic Management Journal*, 35(9), 1343–1363.
- Xie, E., Huang, Y., Stevens, C. E., & Lebedev, S. (2019). Performance feedback and outward foreign direct investment by emerging economy firms. *Journal of World Business*, 54(6), Article 101014.
- Yiu, D. W., Lau, C., & Bruton, G. D. (2007). International venturing by emerging economy firms: The effects of firm capabilities, home country networks, and corporate entrepreneurship. *Journal of International Business Studies*, 38(4), 519–540.**
- Zaheer, S. (1995). Overcoming the liability of foreignness. *Academy of Management Journal*, 38(2), 341–363.
- Zahra, S. A., Ireland, R. D., & Hitt, M. A. (2000). International expansion by new venture firms: International diversity, mode of market entry, technological learning, and performance. *Academy of Management Journal*, 43(5), 925–950.
- Zhang, Y., & Rajagopalan, N. (2010). Once an outsider, always an outsider? CEO origin, strategic change, and firm performance. *Strategic Management Journal*, 31(3), 334–346.

- Zhang, Y., Li, H., Li, Y., & Zhou, L. A. (2010). FDI spillovers in an emerging market: The role of foreign firms' country origin diversity and domestic firms' absorptive capacity. *Strategic Management Journal*, 31(9), 969–989.
- Zoogah, D. B., Peng, M. W., & Woldu, H. (2015). Institutions, resources, and organizational effectiveness in Africa. *Academy of Management Perspectives*, 29(1), 7–31.

