UNIVERSITY OF GHANA

IMPACT OF SOVEREIGN WEALTH FUNDS ON ECONOMIC DEVELOPMENT

BY

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DECLARATION

I, Ekua Amoakoma Essuman, do hereby declare that, except for references to other people's work, the study herein presented is the first of its kind to be submitted to the University of Ghana under the supervision of Dr Emmanuel Sarpong-Kumankoma. I take sole responsibility for any mistakes or shortcomings that may be found in this thesis.

…… ……...

Ekua Amoakoma Essuman **Date**

(10702801)

CERTIFICATION

I hereby certify that this long essay was supervised in accordance with procedures laid down by the University of Ghana. The work has been submitted for examination with our approval as supervisors.

……. …….

Dr Emmanuel Sarpong-Kumankoma Date

(SUPERVISOR)

DEDICATION

This long essay is dedicated to God Almighty, author, finisher, and perfecter of my faith and all else that pertains to life here on earth (Is 30.21). Also, to my parents, Dr. and Dr. Mrs. Akye Essuman and my siblings Akoma and Ju. Your constant advice, prayers, and correction have paid off. I appreciate your constant guidance and direction.

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LIST OF ABBREVIATIONS

AAAA	*Addis Ababa Action Agenda*
ADIA	*Abu Dhabi Investment Authority*
AuM	*Assets under Management*
DAC	*Development Assistance Committee*
FDI	*Foreign Direct Investment*
DRM	*Domestic Resource Mobilisation*
GDP	*Gross Domestic Product*
GHF	*Ghana Heritage Fund*
GNI	*Gross National Income*
GSF	*Ghana Stabilization Fund*
HDI	*Human Development Index*
IMF	*International Monetary Fund*
LDC	*Least Developed Country*
LIC	*Low-Income Countries*
LLDC	*Land-locked Developing Country*
LMIC	*Lower Middle-Income Countries*
ODA	*Official Development Assistance*
OEC	*Observatory of Economic Complexity*
OECD	*Organization for Economic Cooperation and Development*
OOF	*Other Official Flows*
SDGs	*Sustainable Development Goals*
SIDS	*Small Island Developing States*
SWF	*Sovereign Wealth Fund*
SWFI	*Sovereign Wealth Fund Institute*

UMIC	*Upper Middle-Income Countries*
UN	*United Nations*

ABSTRACT

This research was aimed at assessing the impact of Sovereign Wealth Funds (SWFs) as a transition finance tool on the development of a country. The research had a study population of the 60 largest SWFs in the world in 2014 and used a sample of 34 SWFs in its analysis.

The study used secondary data as the main and only source of data, and collected the needed data from secondary sources like the IMF Working Paper Series, FocusEconomics, and Sovereign Wealth Fund Institute (SWFI) amongst others. The results and findings from this study are based on the data collected from the 34 sampled SWFs and their respective countries. Descriptive statistics was used in analysing the data and finally presenting the output.

The profile summary of the sampled SWFs showed that 41.2% of the sampled SWFs that were established before the year 2000 dominated the top ten largest SWF from 2014 to 2016; most of the sample fell into one of three mandate categories (savings, stabilization, and development), and that 58.8% of the SWFs sampled were funded through the earnings gained from natural resources.

The study conducted a correlation analysis using GDP per capita as an indicator for development, and the value of the SWFs Assets under Management (AuM) over a three-year period (2014-2016) and the results from the analysis showed that though there was a relationship between development (GDP per capita) and the size of the SWF in a country (value of AuM), the relationship was very weak and insignificant.

This showed that the size of a country's SWF was not necessarily a determinant of the development of a country.

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

The Sustainable Development Goals (SDGs), also referred to as Agenda 2030, was created at the United Nations Conference on Sustainable Development in Rio de Janeiro in 2012 as a replacement of the Millennium Development Goals which were instituted in 2000. The SDGs, a set of 17 goals, was formulated "as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity" (see Appendix 1) (United Nations Development Programme, n.d.), and the objective was to "produce a set of universal goals that meet the urgent environmental, political, and economic challenges facing our world" (United Nations Development Programme, n.d.). As the world progresses towards the development of all economies, the rallying goal of ensuring that no country gets left behind, as well as an understanding of the concept of development and its facets, is key to achieving Agenda 2030.

There are varied definitions of development. According to traditional welfare economics, development occurs when "there is an increase in the income levels of a country's citizens, while a decrease in income denotes a denigration in the well-being of the citizens" (Barder, 2012). The Gross Domestic Product (GDP) and the Gross National Income (GNI) are commonly used as indicators to measure an economy's development. Modern welfare economics, however, has a different perspective on what development means. Amartya Sen, a modern welfare economist, defined development as the "enhancement of freedoms that allow people to lead lives that they have reason to live" (Goodpal, 2018). Sen's definition of development led to the formulation of the United Nations Human Development Index (HDI), and the multidimensional poverty index

(PI), composite indicators used to measure development in a country. The HDI, the more popular of the two, takes into consideration the literacy rate, income per capita, and life expectancy rate of a country. The underlying belief being that development was not to be measured only by the changes in the per capita income levels of a country's citizens, but by other factors like their choices and freedom as well (Barder, 2012). Development, then, can be defined as an improvement in the economic, demographic, social, and political aspects of the lives of a population (Taylor, 2015; Alisonlettuce, 2016). Considering that all countries are at different stages of their development process, an understanding of the classification of economies (United Nations, 2014), and a working knowledge of the development continuum is key in determining what financing mix, as well as, policies are necessary to aid in the development of a country.

Many institutions have differing opinions on how development is classified and how that feeds into the structure of the development continuum. The United Nations' World Economic Situation and Prospects (2018), classifies countries into three major groupings reflect the basic economic conditions in each country; these are, developed economies, economies in transition, and developing economies. The World Bank (n.d.) classifies countries into four income groups: low income, upper-middle-income, lower-middle-income, and high income and these classifications were based on the gross national income per capita. Wallerstein's world-systems theory classified countries into the core, semi-periphery, and periphery countries, the basis for these classifications being the output of the country (HRF, n.d.).

The development continuum, defined as the gradual transition of an economy through the varied stages of development, classifies countries into Newly Industrialized Countries (NICs), Recently Industrializing Countries (RICs), Least Developed Countries (LDCs), Less

Economically Developed Countries (LEDCs), and More Economically Developed Countries (MEDCs) (Allisonlettuce, 2016).

Least developed countries (LDCs) are "low-income countries confronting severe structural impediments to sustainable development. They are highly vulnerable to economic and environmental shocks and have low levels of human assets" according to the United Nations (n.d.). Recently industrializing countries (RICs) are countries at the beginning stages of the industrialization process (McCoy, 2018). Newly industrialized countries (NICs) are described as countries whose level of economic development ranks them somewhere between the developing and highly developed classifications. These countries have moved away from an agriculture-based economy and into a more industrialized, service-based economy (Majaski, 2019). Less Economically Developed Countries (LEDCs) are poor countries with lower income per capita and standards of living for citizens and are typically agriculture-based economies (BBC, 2011). More Economically Developed Countries (MEDCs) are countries with higher income per capita and standards of living and they are typically manufacturing and services-based economies. (BBC, 2011)

The idea of Transition financing as conceptualised by the Organisation for Economic Co-operation and Development (OECD) is aimed at "understanding the challenges and opportunities faced by countries as they move along the development continuum" (Piemonte, Cattaneo, Morris, Pincet, & Poensgen, 2019). Introduced as a new concept, the OECD defines transition as the path charted to sustainable development, and transition finance as the financing of this endeavour. An economic analysis of this concept focuses primarily on the evolution and interaction of public and private sources of finances (Piemonte et al., 2019). A development perspective, comparatively, would view transition finance as the financing of the global effort of all countries to achieve the

2030 deadline set for the SDGs. Transition, in an economic sense, takes into consideration the traditional welfare economics view connoting an upward progression in income levels usually measured by a nation's gross national income per capita. However, due to the multi-dimensionality of development, and to get a better grasp of a country's struggles in its journey towards development, most studies look beyond the traditional economic performance indicators, into indicators that take into consideration the wellbeing of the citizens of a country as well as income. Sovereign Wealth Funds (SWFs) are "state-owned investment funds that commonly are comprised of pools of money gained from a country's reserves" (Twin, 2019). These reserves are funded "out of balance of payments surpluses, official foreign currency operations, the proceeds of privatizations, fiscal surpluses, and/or receipts resulting from commodity exports" (International Working Group of Sovereign Wealth Funds, 2008; Das, Lu, Mulder & Sy, 2009, p. 5). According to data gleaned from the Sovereign Wealth Fund Institute (SWFI), SWFs are either created through commodity exports (commodities) or "through the transfer of assets from official foreign exchange reserves [non-commodities]" (SWFI, n.d.), and are classified into five types of funds – Stabilization Funds, Savings or Future Generations Funds, Pension Reserve Funds, Reserve Investment Funds, and Strategic Development Sovereign Wealth Funds (SWFI, n.d.).

1.2 RESEARCH PROBLEM

With the recent discovery of oil reserves in Ghana, saving for development today and for Ghana's future generations is possible. The Ghana Stabilization Fund (GSF) and the Ghana Heritage Fund (GHF), Ghana's two SWFs, were created in 2011 under the Petroleum Revenue Management Act, 2011 (Act 815) as vehicles to protect against oil-related risks and to store oil profits for future generations respectively. These funds are overseen by the Public Interest and Accountability

Committee. The Act states that on the depletion of Ghana's natural resources, both SWFs would become defunct and all assets would be transferred into the Ghana Petroleum Wealth Fund. Since their creation, Sovereign Wealth Funds have been used by more economically developed countries to store budget surpluses for several purposes including providing for future generations, like Norway's SWF, or to diversify investments and shore against oil-related risks, like the United Arab Emirates SWF (Twin, 2019). SWFs are for all intents a luxury product to less economically developed countries. However, in recent times, there has been a steady rise in discussions surrounding the use of SWFs as a financing tool to aid in the development process for developing countries like Ghana (Ghosh, 2019; UNCTAD, 2012). Ghana, according to the Observatory of Economic Complexity (OEC), is the "70th largest export economy in the world" (Simoes, n.d.). In 2017, Ghana exported USD 17.1 billion worth of goods, out of which the top exports were natural resources i.e. gold, crude petroleum, cocoa, coconuts, cashews, and brazil nuts which totaled USD 13.953 billion (77.9% of total exports) (Simoes, n.d.). With approximately seventy-eight per cent of its total exports being natural resources, Ghana is a likely candidate for the resource curse, a phenomenon "where countries with large non-renewable resource endowment have less economic growth in comparison with countries with little to no resources" (Chen, 2018). This research seeks to explore the possibility of SWFs helping Ghana transition to development and escape the resource curse and differs from existing published works like Amoako-Tuffour (2016) because it focuses on examining the possible correlation between development and the presence of an active growing SWF.

Following Ghana's agreement to join the global effort to achieve the Agenda 2030 (United Nations Development Programme , n.d), as well as the continent's effort to achieve the African Union's Agenda 2063 (African Union, n.d.), and in line with the flagship theme of the New

Patriotic Party's rule "Ghana Beyond Aid" (Jotie, n.d.), it is key to find a financing mix which is specific to Ghana's economy, and internally generated to push Ghana's development. The decision on what kind of financing mix and mechanisms to use in gradually moving Ghana from its reliance on development aid to self-reliance is key to all three agendas listed. The OECD's (2018) "*The Global Outlook on Financing for Sustainable Development*" further buttresses this assertion that domestic resources are key to the financing of [Ghana's] development agenda. Research has proven that though foreign aid in the form of grants has been a vital boost to Ghana's economic growth, foreign aid given in the form of loans have proven to have a negative impact due to interest payments on loans which lead to an increase in Ghana's debt stock (Appiah-Konadu, Shitsi Junior, Abokyi & Twerefou, 2016). Appiah-Konadu et al, (2016) also discovered that another reason for the negative impact foreign aid had on Ghana's economic growth was that most of the aid was not invested in projects with direct future cash flows. The aid was invested primarily in consumption i.e. payment of government workers' salaries. This study will analyze trends in development in SWF dominant nations like Norway, Saudi Arabia, Angola, and Botswana in order to determine if a SWF can be channeled to fuel development for other countries like Ghana as a domestic resource mobilisation tool.

1.3 RESEARCH OBJECTIVES

The main aim of the study is to determine the effects of using Sovereign Wealth Funds as a financing tool for transitioning along the development continuum for developing countries like Ghana. The specific objectives of the research are;

I. To determine if there is a relationship between the development of a country and the presence of a sovereign wealth fund,
II. To understand the concept of transition finance.

1.4 RESEARCH QUESTION

The questions this research seeks to address include:

I. Does the existence of a Sovereign Wealth Fund necessarily lead to the development of a country's economy?
II. Is a SWF an essential addition to the transition finance portfolio required to take Ghana, a developing country, from its current stage of development to the next?

1.5 SIGNIFICANCE OF STUDY

This research aims to understand transition finance, sovereign wealth funds and the role these concepts play in helping developing countries like Ghana reach a developed state and achieve the United Nations Agenda 2030. The outcome of this study will contribute to existing literature and academic insights on development, and the financing of a country's development. The findings of this research would serve as a starting point on a conversation around diverse forms of domestic revenue mobilization apart from tax revenue and toll booth revenue.

1.6 RESEARCH LIMITATIONS

This research in seeking to determine the impact of SWFs on the development of a country would face some considerable limitations. First, due to time and financial resource constraints, the sample size would be restricted to information provided from the online database of the Sovereign Wealth

Fund Institute. Also, the availability of data poses a challenge, especially in developing countries, since data collection and aggregation are generally not up to standard quality.

1.7 ORGANIZATION OF STUDY

The study is organized in five chapters. Chapter One discusses Sovereign Wealth Funds, development and the development continuum, and the concept of transition finance and lays the foundation for the rest of the discussion.

Chapter Two intends to offer an understanding of Sovereign Wealth Funds, transition finance and the role these tools play in moving a country along the development continuum. This literature review would be divided into five parts: an introduction, an overview of SWFs (history, theories, SWF creation and management, etc), an overview of SWFs in developing countries, the concept of transition finance, and benchmarking transition in a country's development.

Chapter Three focuses on the research methodology and expands on the methods and techniques to be used in carrying out this study.

Chapter Four discusses the results of the data analysis. It presents the study's major findings and discusses the results in relation to its agreement or disagreement to already existing literature.

Finally, Chapter Five summarises the findings and provides recommendations for future studies. The chapters are followed by appendices and references.

CHAPTER TWO

LITERATURE REVIEW

2.1. INTRODUCTION

Since the inception of the first SWF by the Kuwait Investment Authority in 1953 as a solution to storing excess oil revenues (Wilson, 2018; Twin 2019), SWFs have been used as a solution by "developed economies and some developing economies for diverse purposes which include storage of excess reserves from budget surpluses, foreign currency operations, privatizations earnings, transfer payments" (Das, Lu, Mulder & Sy, 2009, p. 5; Twin, 2019). The conventional routes most developing economies take when developing are external debt finance and resources that are mobilized locally, an example being tax and toll revenue. SWFs have been viewed in economic terms as luxury goods which are used by developed and high-income economies as a reservoir of sorts for excess revenue from commodities traded, and budgetary surpluses. The concept of SWFs being used as tools to trigger development among developing nations and to move them along the development continuum is still a nascent concept. Proponents for this concept in several papers argue that SWFs are helpful in preserving wealth for future generations and to help in managing volatility in their economies, however, argue against replicating the model of the developed economies (Wills, 2017; Wills 2015; Wills, Senbet & Simbanegavi, 2016). The Organization for Economic Co-operation and Development in March 2019 introduced the concept of Transition Finance. The concept was created to better understand the challenges faced and the opportunities available to economies as they transition along the development continuum (Piemonte, Cattaneo, Morris, Pincet, & Poensgen, 2019).

2.2. SOVEREIGN WEALTH FUNDS: HISTORY, CREATION, AND MANAGEMENT.

Sovereign Wealth Funds (SWFs) are state-owned investment funds that commonly are comprised of pools of money gained from a country's reserves (Twin, 2019). These reserves are funded "out of balance of payments surpluses, official foreign currency operations, the proceeds of privatizations, fiscal surpluses, and/or receipts resulting from commodity exports" (International Working Group of Sovereign Wealth Funds, 2008; Das, Lu, Mulder & Sy, 2009, p. 5). According to data gleaned from the Sovereign Wealth Fund Institute (SWFI), SWFs are either "created through natural resource exports (commodities) or through the transfer of assets from official foreign exchange reserves (non-commodities)" (SWFI, n.d.), and are classified into five types of funds – Stabilization Funds, Savings or Future Generations Funds, Pension Reserve Funds, Reserve Investment Funds, and Strategic Development Sovereign Wealth Funds (SWFI, n.d.). SWFs and their impact on a global spectrum have attracted attention in the emerging literature on SWFs. As detailed by Ping & Chao (2009), the SWF was first created in 1953 by the Kuwait Investment Board to store excess oil revenue, and also reduce Kuwait's exposure to oil-related risks and reduce Kuwait's reliance on its finite oil resources. The Kuwait Investment Authority in 1965 was created to manage the ten per cent allotment of Kuwait's annual oil revenue and invest in global assets for returns. According to Ping & Chao (2009), the second fund to spring up in 1956 was the Revenue Equalization Reserve Fund set up by the Republic of Kiribati (formerly Gilbert Islands) to harvest and invest its revenue from phosphates. After these, the world witnessed two distinct waves of SWF creation: the first wave was in the 1970s with notable creations like the Abu Dhabi Investment Authority (ADIA) in 1976 and the Singapore Temasek Holdings in 1974. The second wave occurred in the 1990s with the creation of the Iran Oil Stabilization Fund and the Foreign Exchange Reserve Fund in 1999 and the Qatar Investment Authority in 2000, and

the China Investment Corporation. The first time the term "Sovereign Wealth Fund" was used was in 2005 by Andrew Rozanov, a U.S. State Street Bank economist. He advocated for a dedicated investment institution to manage excesses accumulated for improved fiscal balance and budgetary surpluses, amongst others, and advocated that the investment institution be named a "Sovereign Wealth Fund". Due to the rapid growth in SWFs, several definitions for what a SWF was sprung up from several world-renowned institutions.

The International Monetary Fund (IMF) describes SWFs as "government-owned, special purpose investment funds or arrangements […] usually set up by the general government to hold or manage assets to achieve financial objectives and they employ investment strategies which include investing in foreign financial assets" (Ping & Chao, 2009). SWFs could be distinguished based on what their main objectives are, whether stabilization funds, savings funds, reserve investment corporations, development funds, or contingent pension reserve funds, which provide for contingent unspecified pension liabilities (Ping & Chao, 2009).

The OECD considers SWFs as the medium through which governments make investments and note that they were mainly financed by foreign exchange reserves (Ping & Chao, 2009). According to the U.S. Treasury, SWFs are government investment vehicles made up of foreign exchange assets, and which should be managed separately from the FX reserves controlled by the monetary authorities (Ping & Chao, 2009).

Based on the above definitions, the key elements of a SWF can be identified as follows:

1. **Ownership**. The SWF should be entirely owned by the country's government.
2. **Source of Funding**. Mainly funded from foreign exchange reserves or export revenues
3. **Purpose and style of investment**. Created to yield investment returns to stabilize the country's economy and aid the volatility of the national income.

With an "estimated total size of more than USD 7 trillion total assets under management in 2015, SWFs total volume is greater than that of all hedge funds and hedge funds combined" (SWFI, 2015 as cited in Braunstein, 2015, p. 9). As emphasised earlier, SWFs are not one-size-fits-all organizations; they vary in diverse ways including ownership, legal status, mandates, and governance standards amongst others. Between 1960 and 1990, there were a great number of countries creating SWFs, beginning with the Kuwait Investment Authority, and followed by SWFs from Singapore, Abu Dhabi and other places. Katzenstein attempted to summarise the era in which these economies existed as one of "global inflation, increases in trade rivalries and protectionism, prolonged recession, volatile foreign-exchange markets, skyrocketing interest rates and debts, and structural adjustment" (Katzenstein, 1985, p. 22), clearly highlighting the pressures countries like Kuwait and Singapore were facing in this period. Many countries created SWFs during that period in order to adjust to the global economic environment they were faced with, and also to shore up against windfalls in revenues from traded commodities like oil-related exports (Tranøy, 2010, as cited in Braunstein, 2015, p.10). Another interesting difference noted was the difference in mandates for the SWF setup. The mandate determined the investment strategy and pattern, as well as the governance standards implemented (See appendix 4).

A SWF with a savings mandate was most likely to invest long term, spreading its risk over a large array of assets in foreign financial markets whilst a SWF with a development mandate was established under company law which allowed it to invest in both domestic and international markets. (Al-Hassan, Papaioannou, Skancke & Sung, 2013, as cited in Braunstein, 2015, p.11).
A SWF with a stabilization mandate "was established under monetary law and was controlled by the country's central bank, and their investment choices were limited to liquid assets like bonds" (Al-Hassan et al., 2013, as cited in Braunstein, 2015 p. 11). There are two schools of thought

regarding the creation of SWFs, and both emphasize the role played by macro-economic factors in understanding why countries create SWFs in the first place. As summarised by Braunstein (2015), the schools of thought are grouped into "diffusion-based" and "efficiency-based" accounts. The Efficiency-based theory treats all nations as unified actors that act rationally. This theory is "macro-level focused and incorporates the primacy of state interest" (Braunstein, 2015, p. 9). The Diffusion theory "emphasises the role of exogenous expert networks, perceptions, and ideas and their impacts on state interests" (Tranoy, 2010, as cited in Braunstein, 2015, p.10).

The Efficiency-based approach focuses on efficiency and determines, given the set of macroeconomic conditions the country has, what is optimal for the country. For example, countries would set up SWFs "to shore up against budget volatility or to avoid the effects of the Dutch disease if blessed with huge natural resource endowments" (Lee, 1997; Braunstein, 2015) or would set up an SWF in order to "smoothen budget volatility" (IMF, 2008; Braunstein, 2015). Scientific work conducted by economists in this approach is dominated by Aizenman and Lee (2005), Aizenman and Glick (2007, 2009), Truman (2008), Das et al. (2009), and Blundell (2008) who state that the focal point for SWF creation can be found in macroeconomic issues like reserve and stabilization management and draw on models like the "foreign reserve management" (Flood & Marion, 2001), "resource endowment" (Lee, 2007), and draw on established concepts like "the Dutch disease" (Lee, 1997), and hypotheses like the "permanent income hypothesis" (IMF, 2008).

The foundational assumption for all efficiency-based theories is that "countries with similar macro-economic characteristics, that are exposed to similar external pressures, make similar choices about the creation of SWF types" (IMF, 2008; Aizenman and Glick, 2009; Lee, 2007; Das et al, 2009, as cited in Braunstein, 2015, p.13). Das et al. (2009) in their working paper on "Setting up a Sovereign Wealth Fund" offered possible policy and operational suggestions that

policymakers could consider in setting up an SWF. The document sought to answer the following questions: when to set up an SWF; what the SWF objectives were; and what the funding, withdrawal, and spending rules of the SWF should be (rules for transferring funds between an SWF and its owner). According to Das et al (2009), though a number of countries had set up SWFs to manage fiscal surpluses, there were no theoretical models for deciding the ideal conditions for setting up an SWF. Most countries' standards were employed on an ad hoc basis such as when there were large budgetary surpluses and reserves and this explained why SWFs were usually set up after the discovery of massive resource reserves, and or commodity price increases. Das et al (2009) finally concluded that a SWF could be created when there was a clear source and objective of increasing reserves. In answering what a SWF's objectives were, Das et al (2009) concluded that in line with the source of the fund, a SWF could be distinguished along their objectives, which the IMF broadly categorised into five types: reserve investment corporations that aimed to enhance returns on reserves, pension-reserve funds, fiscal stabilization funds, fiscal savings funds, and development funds that used returns to invest for development purposes. To summarize the Efficiency-based theories, it is expected that "countries similar in their international economic exposure, economic development, demographics, culture, the size of the domestic market, and resource endowment would make similar choices of SWF type" (Braunstein, 2015, p. 14).

The Diffusion-based approach is of the view that countries in similar classifications create the same type of SWF in order to address similar economic policy challenges (Chwieroth, 2014; Braunstein, 2015). Major proponents of this approach are scholars such as Chwieroth (2014) and Helleiner and Lundblad (2008). Braunstein, (2015, p.14) argues that "even the starkest SWF variations, among oil-exporting economies, should be explained in terms of ideas, culture, and strategy. Given the lack of transparency, the adoption of SWFs may not be driven by similar

rational concerns but more by fad". Although both theories offer valuable insights into SWFs in general terms, they do not clearly specify why countries create certain types of SWFs and why they vary from country to country with similar economic characteristics. This is as a result of their excluding the role domestic politics plays in the creation of SWFs.

2.3. OVERVIEW OF SOVEREIGN WEALTH FUNDS IN DEVELOPING COUNTRIES

Countries with enormous natural resource endowments have sought to diversify their exposure to resource-related risk and SWFs have been noted as a vehicle to help in achieving this. Mainly because of its "low leverage and exposure to alternative assets gave them resilience during the global financial crisis in 2008" (Chatham House, 2014, p.3). Developing African countries are amongst the economies seeking to use SWFs as a vehicle to decrease exposure since most of these countries have a heavy reliance on natural resources exports. According to Chatham House (2014), the discovery of oil and gas in West and East Africa served as a major reason for the trend towards SWF usage. Since 2012, Angola, Nigeria, Senegal and Ghana have established SWFs with an initial seed capital of $5 billion, $1 billion, $1 billion and $100 million respectively. Mozambique and Tanzania are set to become large exporters of natural gas by 2020 and both are expected to set up SWFs, while Sierra Leone has suggested it could launch its own fund. Although SWFs have been touted as amazing tools, commentators have warned that SWFs are not a cure to Africa's infrastructure and development challenges and "that African countries are specifically vulnerable to problems associated with the funds, i.e. weak institutions, political instability and a lack of transparency and accountability. This, in turn, can turn SWFs into avenues of corruption and financial abuse" (Chatham, 2014).

2.4. TRANSITION FINANCE AND DEVELOPMENT

The literature on Transition finance is limited because it is a recent introduction into the conversation on development and the SDGs. Piemonte et al. (2019), the authors of the concept, sought to examine all available flows for "financing the sustainable development agendas of all economies at different stages of the development continuum". The study defined transition -in simple terms - as "the journey to sustainable development, and transition finance – the financing of that journey" (Piemonte et al., 2019). The development continuum suggests that development is not a simplistic journey. It suggests that development is more complex and gradual, requiring different approaches to financing and strategy at varying stages on the continuum. The OECD study was to inform DAC members about the role of development finance in transition financing and to design strategies of optimising the use and impact of official development finance (Piemonte et al., 2019). Transition finance suggests that as economies transition along the continuum, they lose access to certain types of finance options but gain access to a larger ecosystem of tools, actors, and instruments, e.g. capital markets. The study by the OECD attempts to "analyse the substitution, interactions and trade-offs among available types of financing" (Piemonte et al., 2019, p.10).

Piemonte et al. (2019) also explored what happened to sustainable development finance as economies transitioned. The study analyzed the following:

- Major trends like the progressive replacement of external finance with domestic finance, as well as public finance with private finance.
- A breakdown of transition finance challenges economies faced at different levels of transition by income groups

The OECD study, in a bid to understand the transition of economies and how the transition is financed, crafted a series of questions to be able to enable the OECD to fully understand the concept. It further went on to answer these questions through the Addis Ababa Action Agenda (AAAA) that provided the financial development framework in 2015 to support the journey to the SDGs

- How does financing for sustainable development evolve as countries transition?
- What are the financing challenges faced by countries as they move through the development continuum and towards the SDGs?
- How can the international community ensure that supply for financing meets the demands of SDGs?

How does financing for sustainable development evolve as countries transition

According to the AAAA framework sustainable development financing is made up of domestic and external financial resources both public and private. Figure 2.1 illustrates this, focusing on the distribution of external resources while including the relative importance of domestic resources, and showing the evolution of the mix as income per capita increases (Piemonte et al., 2019). Financing for sustainable development is a varying mix of resources that expand as economies transition and, according to Piemonte et al. (2019), upon observation, two major trends are noticed. First, there is a substitution of external finance with domestic resources thus placing emphasis on domestic resource mobilization (DRM) as an important player in an economy's development, and that DRM should remain a core part of the development process. Data collected further highlighted the truth of this assertion when it was discovered that tax revenues to external flows increased significantly from an initial ratio of 4 to 1 to a new ratio of 12 to 1. The second trend observed was

the substitution of public resources (official development assistance and other official flows) with private resources (foreign direct investment (FDI) and remittances); that is, economies begin to rely more on private financing and less on multilateral development finance and ODA. This emphasises the need for private sector development, an improvement in the domestic investment climate and business environment, as well as trade and investment promotion to help facilitate substitution.

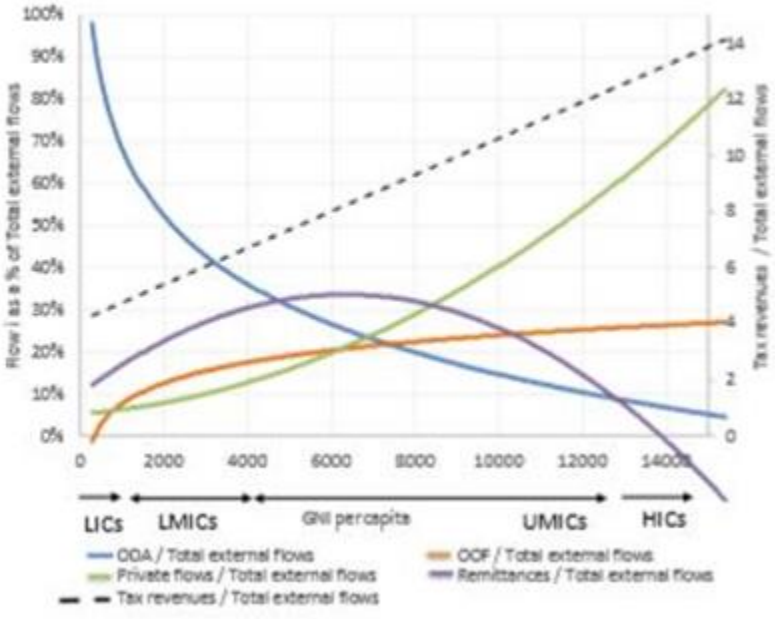

Figure 2.1: DAC, non-DAC OECD members and multilateral agencies' outflows, 2012–16 net disbursements,

Source: Transition Finance: Introducing A New Concept by the Organization for Economic Cooperation and Development

What are the financing challenges faced by countries as they move through the development continuum and towards the SDGs?

An analysis using levels of income showed that for LICs the main challenge faced at varying stages of transition was a sharp decline in ODA by 25 percentage points which was replaced by remittances and to an extent OOF though FDI did not increase. For LMICs and UMICs the major challenge is the widening gap between domestic and external resources.

2.5. BENCHMARKING TRANSITION IN DEVELOPING COUNTRIES

It is important to notice that each country and each sector within the country follows its own transition path; thus, a study can only assess general trends and compare countries as a whole. Benchmarking is key in allowing lessons to be drawn from such comparisons on the way forward for development in economies. Benchmarking among countries in the same income group suggests that income levels should not be the only factor considered after analysis. The analysis revealed that other factors such as population size and resource endowments impacted transition paths and should be taken into consideration. It was also necessary to benchmark countries around specific shared features such as small island developing states (SIDS), land-locked developing countries (LLDCs), and least developed countries (LDCs) (Piemonte et al., 2019).

An important disruption to the process of benchmarking which needs to be considered is the outlier factor. The study on transition finance chose level of income as the main criterion for country classification because every country aspired to rise to a higher income level in order to improve the standard of living and increase chances of getting finance to fund the transition. Outliers, however, can have a positive or negative effect on attracting certain types of financing for some countries than others in the same income category. Piemonte et al. (2019) analysed examples of OOF and private sector flows and identified several outliers and in the process revealed the limits

of using benchmarking based on just levels of income. The analysis showed that natural resources (commodities) endowments and market size were important in attracting OOF and private finance.

Resource endowment and transition finance mix

According to Piemonte et al., (2019) "Comparing transition finance trends in resource-rich countries to other countries confirms that resource endowment is a major factor of attractiveness for the private sector and OOF (see Figure 2.2)" (p. 35). Applying transition finance benchmarking to country contexts, the study noted that a few biases existed and affected the transition finance mix of countries and the use of income as the ground for benchmarking

DAC, non-DAC OECD members and multilateral agencies' outflows, 2012–16 net disbursements, 2016 prices.

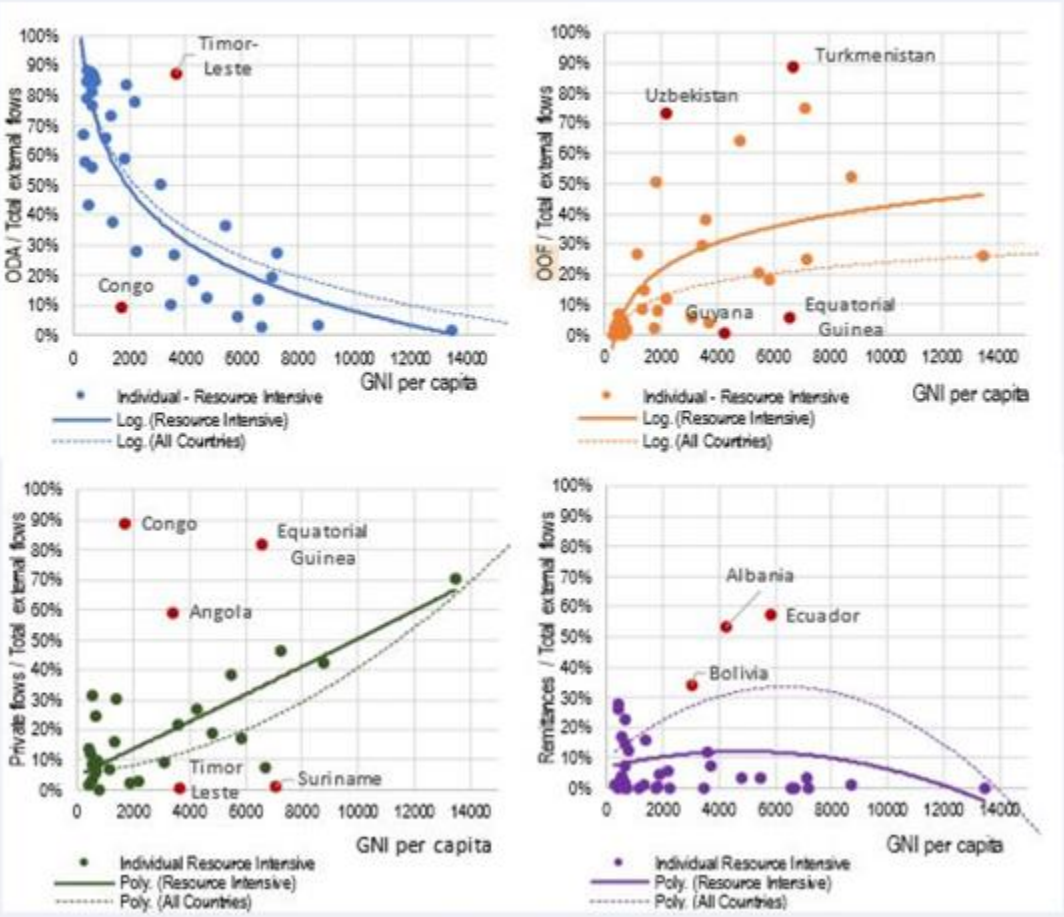

Figure 2.2 Outliers by type of financial flows

Source:

Transition Finance: Introducing A New Concept by the Organization for Economic Cooperation and Development. Authors' calculations based on (OECD, 2018[8])'Creditor Reporting System database (ODA, OOF flows, and private flows), (World Bank, 2018[9]), "migration and remittances data', and (IMF, 2017[11]) 'Balance of Payments' database (FDI, portfolio investments, and long-term and short-term debt). (Piemonte et al., 2019)

Note:

The four charts illustrate the external finance mix at each stage of development. The solid line corresponds to the trend line of the resource-rich countries, dotted line corresponds to the trend line of all countries, data points correspond to each resource-rich country individual share of external flow. Flows are split between ODA, OOF, private, and remittances (Piemonte et al., 2019)

Piemonte et al. (2019) concluded that "looking forward it would be important for the DAC to focus on understanding the financial portfolio positioning in developing countries as against development actors". A holistic approach to financing the transition of developing countries would be to incentivize the private sector and encourage the sector to invest in sustainable development activities.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 INTRODUCTION

The research examines the impact SWFs have as a transition finance tool by asking the research question, "*Does the presence and size of an active SWF investment necessarily lead to the development of a country? If so how?*" This question would help us further explore the nuances and conditions necessary for SWFs to be harnessed effectively as a tool for domestic resource mobilization. The research would also determine minutely if developing countries like Ghana can become targets for OOF investments from already established SWFs in other countries. This chapter explores the methods used in collecting data related to this research. The areas of discussion include the research design, sources of data, the sample size and sampling methods, the population being studied, and the data analysis tools.

3.2 RESEARCH DESIGN

The research design used for this study primarily employed a quantitative approach since the aim was to determine the relationship between two variables, the development of a country (GDP) and the size of the SWFs present in the selected country. The quantitative method used in this research is a correlational study because it allows the researcher to examine the relationship between two or more variables. A similar design was used by Ficova (2015) in determining the impact of SWF asset allocations on the growth of SWFs. The research design also employed to a limited extent a qualitative approach, the case study method, to understand how factors not captured in the quantitative analysis could influence the role an SWF plays in the development of a country. A similar design was used by Juergen Braunstein in his research on sovereign wealth fund variation and the role domestic politics played in small open economies. Braunstein (2015) used the case

study method to understand the decisions behind the creation of the Hong Kong and Singapore SWFs and examined whether domestic policy networks affected these decisions on a national level. Using the case study qualitative design approach, he found "four major themes: policy choices with respect to SWF types came with struggles; the presence of links between types of SWFs and policies; exclusion and inclusion of actors that influenced financial institution policies; and the creation of winners and losers from the actors included and excluded" (Braunstein, 2015). Overall, a mixed-method approach was used by the researcher.

3.3 DATA

Data for the quantitative part of the study focused on the information provided by the Focus-Economics website on the Gross Domestic Product performance of specific countries and the growth of the SWF in the respective countries over a three-year period. The qualitative analysis considered the information provided from the SWFs on governance standards, mandates and investment strategies, withdrawal and deposit rules, location of funds, transparency and type of funds, among other factors, to provide a more holistic view of factors that influence the active use of SWFs in countries.

3.3.1 Sources

The empirical analysis used purely secondary data for the entirety of the study's analysis. The secondary data was obtained from the Focus-Economics website for GDP per capita, and the annual rankings of SWFs with respect to Assets under management (AuM), would be gleaned from credible sources like the SWFI and the Global Finance, and websites of the SWFs selected for the study. The information on Transition Finance possibilities were gleaned from the Organization for Economic Cooperation and Development. The secondary data for the GDP per capita and sizes of the selected SWFs cover a period of three years i.e. 2014 till 2016.

3.4 STUDY POPULATION

A population is a well-defined group of persons or objects with a common binding trait or characteristic. The study population for this research would be the 60 largest SWFs currently operating globally. The choice is justifiable since there are quite a few countries actively operating SWFs with more than a billion dollars' worth of assets under management. A list of the sixty largest sovereign wealth funds can be found in Appendix 2.

3.5 SAMPLE AND SAMPLING TECHNIQUES

For the quantitative aspect of the study, a sample size of thirty-four SWFs was selected from the list of sixty active sovereign wealth funds operating globally (Appendix 4). The sampling technique used in this research is quota sampling where after the stratums are identified, the sample is selected based on the researcher's judgement. For the qualitative approach, the same sample size was selected. This choice in methods was to enable the researcher to select a sample that reflects and enables the realization of the objectives of the research.

3.6 DATA ANALYSIS

The data obtained from the research was analyzed to obtain the necessary information needed for both quantitative and qualitative analysis. The data collected using the quantitative method was analysed using a bivariate correlational model and focused on factors like the GDP per capita, and the size of the SWF. A similar approach was carried out and published by Ficova (2015), in analysing the growth of SWFs based on asset allocations of selected SWFs and their investment strategies. The analysis found that SWFs would play an important role in the future with regards to investment decisions related to assets under management by seventy-four funds.

The data collected for the qualitative analysis used the case study analysis to draw out themes and patterns in understanding SWFs and how these factors influenced the development process (the transition) of the selected countries. A similar thematic analysis was carried out and published by Braunstein (2015) in his PhD dissertation which examined the relationship between domestic policies and the types of SWFs created in a small open economy using Hong Kong and Singapore as cases in point.

3.7 CONCLUSION

This chapter on the research methodology details how the study adopts the correlational study and case study approaches to explore the impact SWFs, as a transition finance tool, have on a country's development continuum. Secondary data is collected as data sources.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION OF RESULTS

4.1 INTRODUCTION

This chapter details the insights generated from the data collected from selected secondary sources. It gives the opportunity to outline the key findings and points noted from the information gathered and how that ties into the research questions and objectives set at the beginning of the research. This chapter analyses and discusses the information gathered and seeks to determine if the answer generated truly answers the research questions set. The researcher selected her sample using the quota sampling method to enable her to select a sample that enabled the realization of the objectives of the research. The researcher analysed the data using SPSS and Excel.

4.2 ANALYSIS OF QUALITATIVE DATA

Data on thirty-four sampled SWFs from specific secondary sources were collected and analysed to understand the basics or foundation of what an SWF was and the reasons why countries set up SWFs. The results of the analysis are as follows.

4.2.1 Summary of SWFs Profile

An analysis of the background of the sampled SWFs showed that out of the 34 sampled SWFs, 20 were established in the year 2000 and after, representing 58.8% of the sampled SWFs; the remaining SWFs created before 2000 numbered 14 representing 41.2% of the sampled SWFs as depicted in Figure 4.2.1. A further analysis of the data gleaned on the backgrounds of the SWFs showed that with the exception of China's National Social Security Fund and Investment Corporation, both offshoots of the China State Administration of Foreign Exchange created in

2000 and 2007 respectively, and Qatar's Investment Authority created in 2005, the ten largest funds globally were all created prior to 2000.

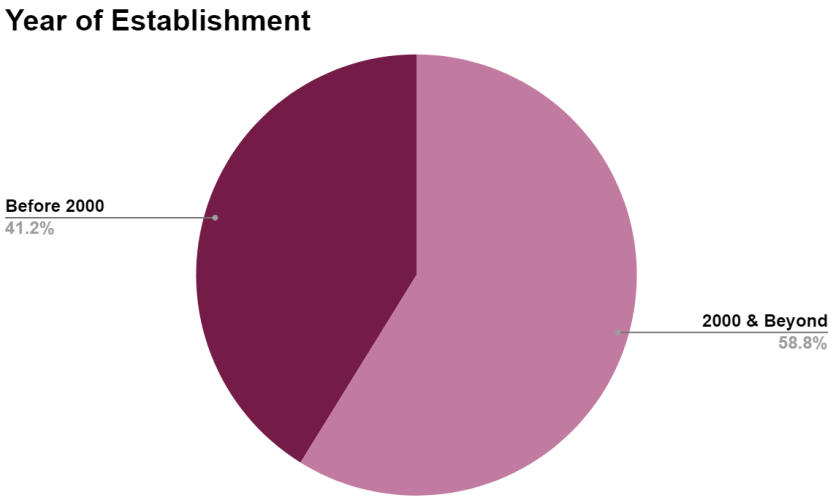

Figure 4.2.1 Year of Establishment of Sampled SWFs

Analysis also revealed that 35.29% of the thirty largest funds sampled were located in Asian countries, 23.53% of the funds were located in Middle Eastern countries, 14.71% were located in Africa, the remaining percentages were in Europe (8.82%), Oceania (5.88%), Eurasia (5.88%), and North America (5.88%) The top ten largest funds is also dominated by Middle Eastern (three funds), and Asian countries (six funds), who have remained constant over the three year period analysed, though a more thorough analysis revealed that countries like China and UAE had more than three established SWFs. A more detailed breakdown of the number of funds located in regions across the world can be viewed in Figure 4.2.2.

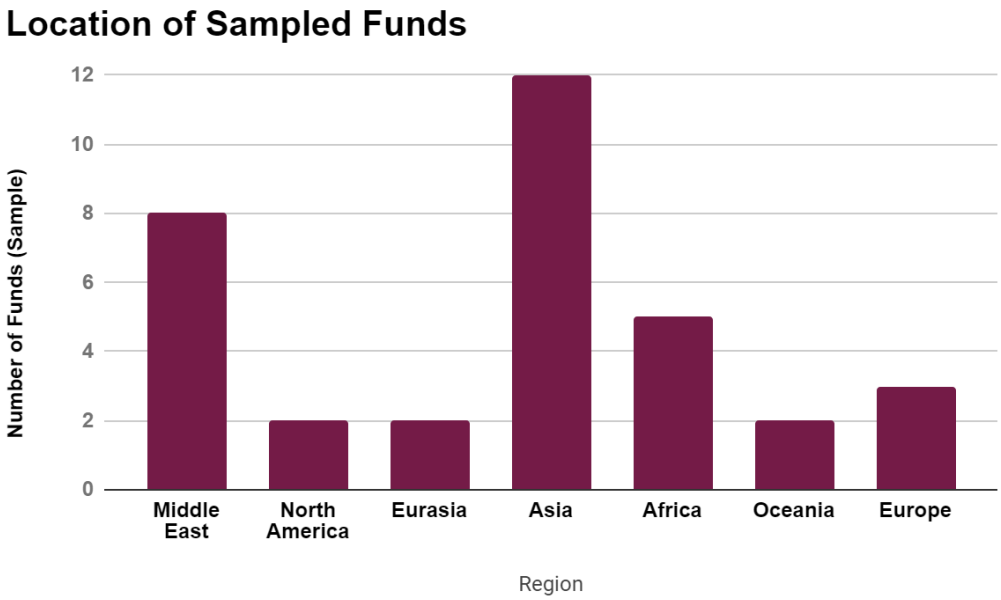

Figure 4.2.2 Location of Sampled Funds (Region)

As discussed in Chapter Two of this study, SWFs are set up either as a Savings Fund, Development Fund, or Stabilization Fund, though funds like Nigeria's Sovereign Investment Authority and Libya's Investment Authority were set up to fulfil more than one of the mentioned mandates. 12 of the sampled funds were set up with a Development mandate making up 35.3% of the sampled funds. Funds with either a Saving Mandate, or Stabilization Fund equalled 10 each, making up 29.4% each of the sampled SWFs, leaving Nigeria and Libya as the only outliers with multiple mandates (5.9%). A percentage breakdown is seen in Figure 4.2.3.

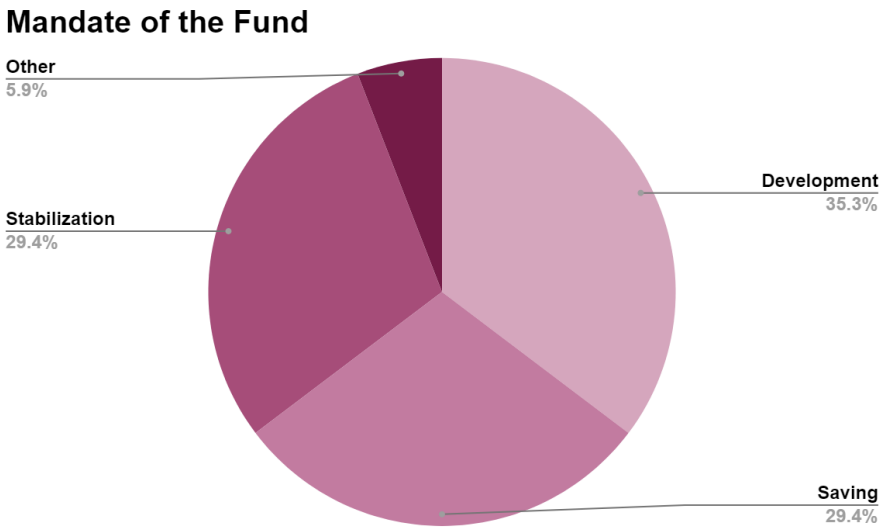

Figure 4.2.3 Mandate of the Fund

Finally, the funding source (Type of fund) of the SWFs was also analysed. The funds were categorised into two groups – the commodity funded SWFs and the non-commodity funded SWFs. Based on the analysis conducted, 20 out of the sampled SWFs were funded from commodities (natural resources like oil, minerals etc), making 58.8% of all sampled SWFs, and 14 sampled SWFs were funded through non-commodities like excess budget surpluses and earnings from official transfers of assets. The non-commodity funded SWFs made up 14.2% of sampled SWFs and include all of China's three sampled SWFs. Norway, the largest SWF in the world currently, is funded by its oil reserves, a commodity. A percentage breakdown is given in Figure 4.2.4.

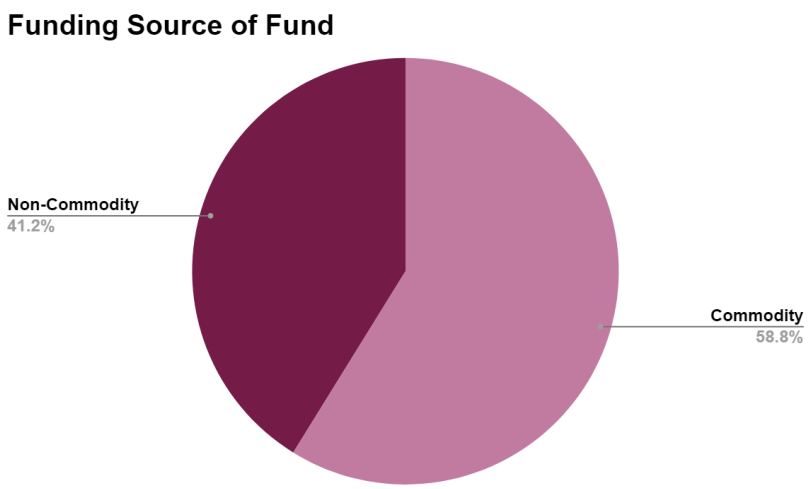

Figure 4.2.4 Funding Source of Funds

4.3 ANALYSIS OF QUANTITATIVE DATA

For the quantitative analysis, the GDP Indicators for the countries operating the SWF and AuM of the respective funds were analysed for a three-year period 2014-2016. The GDP per capita per country was collected from FocusEconomics, TradingEconomics, and The World Bank datasheet. The AuM per SWF was collected from Global Finance, SWFI, and IE Foundation (IE Business School) to aid in the analysis of the correlation between Development (GDP) and Sovereign Wealth Funds (Financing tool for DRM)

4.3.1 Correlation Analysis

Using SPSS, a bivariate correlational study was conducted to determine if there was a relationship between development (using GDP per capita as the variable) and the use of a SWF (using the size of the AuM of the SWF as the variable). The study was conducted for a period of three years, 2014-2016, and the results are displayed in Tables 4.3.1 (2014), 4.3.2 (2015), 4.3.3 (2016) below. The results for the Pearson correlation (r) for all three years, 2014 (0.305), 2015 (0.199), 2016 (0.163) was closer to 0 than it was to 1 indicating correlation albeit a very weak one. The p-values

for 2014, 2015, 2016 were 0.080, 0.259, 0.358 respectively. This result indicates that the relationship between development (GDP per capita) and the use of a SWF (the size of the AuM of the SWF) is insignificant although there is a positive correlation between the two variables.

		Asset Under Management 2014	Development Indicator (GDP per capita 2014)
Asset Under Management 2014	Pearson Correlation	1	.305
	Sig. (2-tailed)		.080
	N	34	34
Development Indicator (GDP per capita 2014)	Pearson Correlation	.305	1
	Sig. (2-tailed)	.080	
	N	34	34

Table 4.3.1 Correlation between GDP per capita and SWF AuM 2014

		Asset Under Management 2015	Development Indicator (GDP per capita 2015)
Asset Under Management 2015	Pearson Correlation	1	.199
	Sig. (2-tailed)		.259
	N	34	34
Development Indicator (GDP per capita 2015)	Pearson Correlation	.199	1
	Sig. (2-tailed)	.259	
	N	34	34

Table 4.3.2 Correlation between GDP per capita and SWF AuM 2015

		Asset Under Management 2016	Development Indicator (GDP per capita 2016)
Asset Under Management 2016	Pearson Correlation	1	.163
	Sig. (2-tailed)		.358
	N	34	34
Development Indicator (GDP per capita 2016)	Pearson Correlation	.163	1
	Sig. (2-tailed)	.358	
	N	34	34

Table 4.3.3 Correlation between GDP per capita and SWF AuM 201

4.3.2. GDP Per Capita Analysis

TREND ANALYSIS FOR GDP PER CAPITA (2014 - 2016)						
Country	2014	2015	2015 (%) Change	2016	2016 (%) Change	2015,2016 (%change)
Norway	$99,455.00	$76,144.00	76.56	$70,977.00	71.37	-6.79
Saudi Arabia	$24,577.00	$21,095.00	85.83	$20,313.00	82.65	-3.71
UAE	$43,335.00	$37,375.00	86.25	$36,220.00	83.58	-3.09
China	$7,650.00	$7,912.00	103.42	$8,065.00	105.42	1.93
Kuwait	$40,694.00	$27,261.00	66.99	$25,301.00	62.17	-7.19
Singapore	$57,669.00	$55,617.00	96.44	$56,670.00	98.27	1.89
Qatar	$93,030.00	$66,323.00	71.29	$57,940.00	62.28	-12.64
Karzakhstan	$12,481.00	$6,793.00	54.43	$7,852.00	62.91	15.59
Australia	$61,618.00	$51,486.00	83.56	$52,023.00	84.43	1.04
Russia	$14,315.00	$9,459.00	66.08	$8,911.00	62.25	-5.79
Algeria	$5,465.00	$4,163.00	76.18	$3,896.00	71.29	-6.41
Libya	$6,530.90	$5,899.90	90.34	$5,669.70	86.81	-3.90
Hong Kong	$40,190.00	$42,316.00	105.29	$43,478.00	108.18	2.75
Iran	$5,642.00	$4,931.00	87.40	$5,272.00	93.44	6.92
South Korea	$29,254.00	$28,723.00	98.18	$29,273.00	100.06	1.91
USA	$54,993.00	$56,770.00	103.23	$57,877.00	105.24	1.95
Malaysia	$11,062.00	$9,724.00	87.90	$9,578.00	86.58	-1.50
Brunei	$41,905.00	$31,383.00	74.89	$27,346.00	65.26	-12.86
Azerbaijan	$7,926.00	$5,525.00	69.71	$3,901.00	49.22	-29.39
France	$44,732.00	$38,189.00	85.37	$38,415.00	85.88	0.59
New Zealand	$43,841.00	$37,739.00	86.08	$39,020.00	89.00	3.39
Ireland	$55,496.00	$62,155.00	112.00	$63,089.00	113.68	1.50
Bahrain	$25,321.00	$22,700.00	89.65	$22,610.00	89.29	-0.40
Botswana	$7,643.00	$6,702.00	87.69	$6,986.00	91.40	4.24
Angola	$5,624.00	$4,354.00	77.42	$3,677.00	65.38	-15.55
Nigeria	$3,271.00	$2,736.00	83.64	$2,183.00	66.74	-20.21

Table 4.3.4 Trend Analysis for GDP per capita 2014-2016

Using Excel, a trend analysis was conducted on the GDP per capita of all the sampled countries to have a clear picture of how the respective countries performed as displayed in Table 4.3.4. The base year trend percentage is always 100.0%. A trend percentage of less than 100.0% means the balance has decreased below the base year level in that particular year. A trend percentage greater than 100.0% means the balance in that year has increased over the base year. A negative trend percentage represents a negative number (CliffsNotes, 2016). A total sample of 26 countries were analysed, noting that some countries have more than one SWF, and using 2014 as the base year the results were as follows; in 2015 only four countries (China, Hong Kong, USA, and Ireland) performed better than their base year., and 22 countries saw a decline in their GDP per capita. In

2016, South Korea joined the original four in increasing GDP per capita above the base year GDP per capita and scoring above 100. The analysis was conducted to further investigate the percentage change between the years 2015 and 2016, and the results showed that excluding the five countries that scored above a 100, 7 other countries saw increases in their GDP per capita from 2015 to 2016. 14 countries however experienced a further decline in their GDP per capita.

4.3.3. SWF Asset Under Management Analysis

TREND ANALYSIS FOR SOVEREIGN WEALTH FUND ASSETS UNDER MANAGEMENT 2014 - 2016							
Country	Fund	2014	2015	2015 (%) Change	2016	2016 (%) Change	2015,2016 % Change
Norway	Government Pension Fund Global	$897,600,000,000.00	$824,900,000,000.00	91.90	$860,870,000,00	95.91	4.36
Saudi Arabia	Saudi Arabian Monetary Authority Foreign Holdings	$741,800,000,000.00	$668,600,000,000.00	90.13	$668,370,000,00	90.10	-0.03
UAE	Abu Dhabi Investment Authority	$589,000,000,000.00	$773,000,000,000.00	131.24	$773,000,000,00	131.24	0.00
China	China Investment Corporation	$575,100,000,000.00	$746,700,000,000.00	129.84	$813,760,000,00	141.50	8.98
Kuwait	Kuwait Investment Authority	$355,000,000,000.00	$592,000,000,000.00	166.76	$592,000,000,00	166.76	0.00
Singapore	Government Investment corporation	$315,000,000,000.00	$344,000,000,000.00	109.21	$344,000,000,00	109.21	0.00
China	China State Administration of Foreign Exchange	$300,000,000,000.00	$547,000,000,000.00	182.33	$599,510,000,00	199.84	9.60
Singapore	Temasek	$215,000,000,000.00	$193,600,000,000.00	90.05	$170,360,000,00	79.24	-12.00
China	National Social Securities Fund	$179,600,000,000.00	$236,000,000,000.00	131.40	$294,850,000,00	164.17	24.94
Qatar	Qatar Investment Authority	$175,000,000,000.00	$256,000,000,000.00	146.29	$256,000,000,00	146.29	0.00
UAE	Investment Corporation of Dubai	$160,000,000,000.00	$183,000,000,000.00	114.38	$196,000,000,00	122.50	7.10
Karzakhstan	Samruk-Kazyna	$103,000,000,000.00	$77,500,000,000.00	75.24	$62,800,000,000	60.97	-18.97
Australia	Australia Future Fund	$97,570,000,000.00	$95,000,000,000.00	97.37	$95,600,000,000	97.98	0.63
Russia	National Wealth Fund	$87,620,000,000.00	$73,500,000,000.00	83.88	$71,260,000,000	81.33	-3.05
Algeria	Revenue Regulation Fund	$77,000,000,000.00	$50,000,000,000.00	64.94	$19,250,000,000	25.00	-61.50
Karzakhstan	National Oil Fund	$72,700,000,000.00	$77,000,000,000.00	105.91	$61,030,000,000	83.95	-20.74
Libya	Libyan Investment Authority	$66,000,000,000.00	$66,000,000,000.00	100.00	$60,000,000,000	90.91	-9.09

Table 4.3.5 Trend Analysis of SWF AuM 2014-2016

TREND ANALYSIS FOR SOVEREIGN WEALTH FUND ASSETS UNDER MANAGEMENT 2014 - 2016							
Country	Fund	2014	2015	2015 (%) Change	2016	2016 (%) Change	2015,2016 % Change
Hong Kong	Hong Kong Monetary Authority Investment	$65,100,000,000.00	$417,900,000,000.00	641.94	$401,630,000,00	616.94	-3.89
UAE	International Petroleum Investment Corporation	$63,400,000,000.00	$66,300,000,000.00	104.57	$58,040,000,000	91.55	-12.46
UAE	Mubadala Development Company	$60,900,000,000.00	$66,300,000,000.00	108.87	$63,500,000,000	104.27	-4.22
Iran	National Development Fund	$58,600,000,000.00	$62,000,000,000.00	105.80	$64,800,000,000	110.58	4.52
South Korea	Korea Investment Corporation	$56,600,000,000.00	$84,700,000,000.00	149.65	$91,800,000,000	162.19	8.38
USA	Alaska Permanent Fund	$51,100,000,000.00	$53,900,000,000.00	105.48	$56,280,000,000	110.14	4.42
Malaysia	Khazanah Nasional Berhard	$40,900,000,000.00	$41,600,000,000.00	101.71	$34,890,000,000	85.31	-16.13
Brunei	Brunei Investment Agency	$39,000,000,000.00	$40,000,000,000.00	102.56	$39,300,000,000	100.77	-1.75
Azerbaijan	State Oil Fund of Azerbaijan	$36,600,000,000.00	$37,300,000,000.00	101.91	$35,820,000,000	97.87	-3.97
France	Banque Publique d'Investissement	$33,600,000,000.00	$25,500,000,000.00	75.89	$48,607,700,000	144.67	90.62
USA	Texas Permanent School Fund	$30,600,000,000.00	$37,700,000,000.00	123.20	$34,530,000,000	112.84	-8.41
New Zealand	New Zealand Superannuation Fund	$25,510,000,000.00	$20,200,000,000.00	79.18	$22,620,000,000	88.67	11.98
Ireland	National Pensions Reserve Fund	$20,200,000,000.00	$23,000,000,000.00	113.86	$8,100,000,000.(	40.10	-64.78
Bahrain	Bahrain Mumtalakat Holding Company	$6,800,000,000.00	$11,100,000,000.00	163.24	$10,430,000,000	153.38	-6.04
Botswana	Pula Fund	$5,100,000,000.00	$5,700,000,000.00	111.76	$5,660,000,000.(	110.98	-0.70
Angola	Fundo Soberano de Angola	$5,000,000,000.00	$5,000,000,000.00	100.00	$4,750,000,000.(	95.00	-5.00
Nigeria	Nigerian Sovereign Investment Authority	$1,000,000,000.00	$1,400,000,000.00	140.00	$1,250,000,000.(	125.00	-10.71

Table 4.3.5 (cont.) Trend Analysis of SWF AuM 2014-2016

Using Excel, a similar trend analysis was conducted on the SWF AuM of all the sampled funds to have a clear picture of how the respective funds performed as displayed in Table 4.3.5. A total

sample of 34 SWFs was analysed, noting that some countries have multiple SWFs, and using 2014 as the base year the results were as follows; in 2015 25 funds performed better than in the base year, and 9 countries saw a decline in their value of their AuM. In 2016, the numbers dropped from 25 funds to 19 funds performing better than in the base year. The analysis was conducted to further investigate the percentage change between the years 2015 and 2016, and the results showed that 15 countries saw increases in the value of their AuM from 2015 to 2016. 19 countries, however, experienced a further decline in the value of their AuM.

4.4 CONCLUSION

The analysis of the data shows that despite the weak and insignificant relationship between the presence and size of an SWF and the development of a country there is potential for more research and analysis to better understand the role SWFs can play in facilitating development in a country.

CHAPTER 5

SUMMARIES, CONCLUSION, AND RECOMMENDATIONS

5.1 INTRODUCTION

This research was conducted to investigate the possibility of SWFs serving as tools for facilitating development in countries. A study population of 60 SWFs out of which a sample size of 34 SWFs was selected for further analysis. This final chapter covers the summarised findings of the research, the conclusion drawn from the findings with potential recommendations of areas for more detailed research and analysis in order to better understand the role SWFs play in facilitating development, as well as the new concept of Transition Finance.

5.2 SUMMARY OF FINDINGS

Find below summarised points of all the major findings of the analysis conducted;

Qualitative Analysis: Findings

- From the 34 sampled SWFs, 14 of the funds were established before 2000, out of which 7 dominate the top ten largest SWFs in the world. The same list of top 10 largest SWFs is also dominated by Middle Eastern (three funds), and Asian countries (six funds).
- The analysis also revealed that from the 34 sampled SWFs, 12 were located in Asia, 8 in the Middle East, 5 in Africa, 3 in Europe, and 2 each in Oceania, North America, and Eurasia.
- The analysis of the funding source of the SWFs revealed that 58.8%, that is 20 SWFs, are funded through revenues gained from commodities like hydrocarbon exports, and minerals like diamonds. On the other hand, 41.2%, 14 SWFs are funded through non-commodities, for example, earnings on official transfers of assets.

- Finally, it was understood that SWFs were usually created for one of three reasons; Saving, Stabilization, and Development. From the analysis, 12 of the funds were created with a development mandate, 10 funds were created with a stabilization mandate, 10 funds were also created with a savings mandate, and 2 outliers were created with multiple mandates.

Quantitative Analysis: Findings

A bivariate correlation model was run, and the results are summarised in the table below

	AuM & GDP pc 2014	AuM & GDP pc 2015	AuM & GDP pc 2016
Pearson Correlation (r)	0.305	0.199	0.163
p-value	0.08	0.259	0.358
Sample	34	34	34

Table 5.1 Summary of Quantitative Analysis Results

From the analysis, the results showed that though there was a relationship between development (GDP per capita) and the size of the SWF in a country (value of AuM), the relationship was very weak and insignificant.

5.3 CONCLUSION

In conclusion, this thesis intended to assess the impact SWFs had on the development of a country taking into consideration the countries with active SWFs. The findings revealed that though there is an established positive correlation between the two variables, it is very weak and insignificant and so we cannot link the increase or decrease in the value of a SWF's assets to the development of a country. Other factors like the mandate of the SWF, the deposit and withdrawal rules, and the value of the AuM would most likely be a much more useful combination in determining if SWFs can indeed influence development.

5.4 RECOMMENDATIONS

Based on the findings listed above, the following are potential areas of research that can and should be fully explored:

1. Transition Finance: The essential financial portfolio to suit Ghana at her current development stage.
2. The impact SWFs have on the development of a country, using HDI as the development indicator, and considering other factors including the AuM of the SWF.

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APPENDICES

Appendix 1: Sustainable Development Goals and Targets

Source: www.mfwa.org

Appendix 2: List of the World's 60 largest Sovereign Wealth Funds

	Sovereign Wealth Fund	Estab.	Funding source	Country	Mandate/ Objective	AuM in (US$ bn)*
1	Government Pension Fund Global	1990	Commodity	Norway	Saving	897.6
2	Saudi Arabian Monetary Authority Foreign Holdings	1952	Commodity	Saudi Arabia	Stabilization	741.8
3	Abu Dhabi Investment Authority	1976	Commodity	UAE	Saving	589.0
4	China Investment Corp.	2007	Non-commodity	China	Development	575.1
5	Kuwait Investment Authority	1980s	Commodity	Kuwait	Saving	355
6	Government Investment corporation	1981	Non-commodity	Singapore	Saving	315
7	State Administration of Foreign Exchange	1990	Non-commodity	China	Stabilization	300
8	Temasek	1974	Non-commodity	Singapore	Development	215
9	National Social Sec. Fund	2000	Non-commodity	China	Saving	179.6
10	Qatar Investment Authority	2005	Commodity	Qatar	Development	175
11	Investment Corp of Dubai	2006	Commodity	UAE	Development	160
12	Samruk-Kazyna	2008	Commodity	Kazakhstan	Development	103.3
13	Australia Future Fund	2004	Non-commodity	Australia	Saving	97.57
14	National Wealth Fund	2008	Commodity	Russia	Stabilization	87.62
15	Revenue Regulation Fund	2000	Commodity	Algeria	Stabilization	77
16	National Oil Fund	2000	Commodity	Khazakhstan	Stabilization	72.7
17	Libyan Investment Authority	2006	Commodity	Libya	n/a	66
18	Hong Kong Monetary Authority Inv	1993	Non-commodity	Hong Kong	Stabilization	65.1
19	International Petroleum Investment Corporation	2000	Commodity	UAE	Development	63.4
20	Mubadala	2002	Commodity	UAE	Development	60.9
21	National Development	2011	Commodity	Iran	Development	58.6
22	Korea Investment Corporation	2005	Non-commodity	South Korea	Stabilization	56.6
23	Alaska Permanent Fund	1976	Commodity	US	Saving	51.1
24	Khazanah Nasional Berhard	1993	Non-commodity	Malaysia	Development	40.9
25	Brunei Investment Agency	1983	Commodity	Brunei	Saving	39
26	State Oil Fund of Azerbaijan	1999	Commodity	Azerbaijan	Stabilization	36.6
27	Banque Publique d'Investissement	2008	Non-commodity	France	Development	33.6
28	Texas Permanent School Fund	1854	Non-commodity	US	Stabilization	30.6
29	New Zealand Superannuation Fund	2001	Non-commodity	New Zealand	Saving	25.51
30	National Pensions Reserve Fund	2001	Non-commodity	Ireland	Saving	20.2

Sources: Information compiled from SWF websites and SWF databases (e.g. ESADEgeo, 2014, p. 102; SWF Institute, 2014).
*AuM refers to estimates.

	Sovereign Wealth Fund	Estab.	Funding source	Country	Mandate/ Objective	AuM in (US$ bn)
31	New Mexico State Investment council	1958	Non-commodity	US	Saving	19.1
32	Alberta Heritage Savings Trust Fund	1976	Commodity	Canada	Saving	17.3
33	Timor-Leste Petroleum Fund	2005	Commodity	Timor-Leste	Stabilisation	15.7
34	Fondo de Estabilidad Economica y Social	2007	Commodity	Chile	Stabilisation	15.2
35	State General Reserve Fund	1980	Commodity	Oman	Stabilisation	13
36	Russia Direct Investment Fund	2011	Commodity	Russia	Development	10
37	Fondo de Estabilization Fiscal	2011	Commodity	Peru	Stabilisation	8.5
38	Fondo de Reserva de Pensions	2006	Commodity	Chile	Saving	7.5
39	Sovereign Fund of Brazil	2008	Commodity	Brazil	n/a	7
40	Mumtalakat	2006	Non-commodity	Bahrain	Development	6.8
41	Permanent Wyoming Mineral Trust Fund	1974	Commodity	US	Stabilisation	6.7
42	Fondo Strategico Italiano	2011	Non-commodity	Italy	Development	6
43	Oman Investment Fund	2006	Commodity	Oman	Development	6
44	Public Investment Fund	2008	Commodity	Saudi Arabia	Development	5.8
45	Quebec's Generations Fund	2006	Non-Commodity	Canada	Saving	5.2
46	Pula Fund	1994	Commodity	Botswana	Stabilisation	5.1
47	Heritage and Stabilization Fund	2000	Commodity	Trinidad and Tobago	Stabilisation	5.1
48	Fundo Soberano de Angola	2012	Commodity	Angola	Development	5
49	Alabama Trust Fund	1985	Commodity	US	Stabilisation	2.2
50	Oil Revenues Stabilization Fund of Mexico	2000	Commodity	Mexico	Stabilisation	1.9
51	Fonds de Stabilisation des Recettes Budgetaires	2005	Commodity	Dem Rep Congo	Stabilisation	1.7
52	Idaho Endowment Fund	1969	Non-commodity	US	Stabilisation	1.7
53	North Dakota Legacy Fund	2011	Commodity	US	Saving	1.7
54	Fondo de Ahorro de Panama	2011	Non-commodity	Panama	Stabilisation	1.4
55	Nigerian Sovereign Investment Authority	2011	Commodity	Nigeria	Multiple	1
56	Western Australia Future Fund	2012	Commodity	Australia	Saving	1
57	Fonds souverain d'investissement strategiques	2012	Non-commodity	Senegal	Development	1
58	Fondo para la Estabilizacion Macroeconomica	1998	Commodity	Venezuela	Stabilisation	0.7
59	Palestine Investment Fund	2003	Non-commodity	Palestine	Development	0.7
60	State Capital Investment Corporation	2006	Non-commodity	Vietnam	Development	0.7

Source: *Explaining Sovereign Wealth Fund Variation: The Role of Domestic Politics in Small Open Economies (Juergen Braunstein, 2015)*

Appendix 3: List of the 34 Sovereign Wealth Funds Sampled

Country	Fund
Norway	Government Pension Fund Global
Saudi Arabia	Saudi Arabian Monetary Authority Foreign Holdings
UAE	Abu Dhabi Investment Authority
China	China Investment Corporation
Kuwait	Kuwait Investment Authority
Singapore	Government Investment corporation
China	China State Administration of Foreign Exchange
Singapore	Temasek
China	National Social Securities Fund
Qatar	Qatar Investment Authority
UAE	Investment Corporation of Dubai
Kazakhstan	Samruk-Kazyna
Australia	Australia Future Fund
Russia	National Wealth Fund
Algeria	Revenue Regulation Fund
Kazakhstan	National Oil Fund
Libya	Libyan Investment Authority
Hong Kong	Hong Kong Monetary Authority Investment
UAE	International Petroleum Investment Corporation
UAE	Mubadala Development Company
Iran	National Development Fund
South Korea	Korea Investment Corporation
USA	Alaska Permanent Fund
Malaysia	Khazanah Nasional Berhard
Brunei	Brunei Investment Agency
Azerbaijan	State Oil Fund of Azerbaijan
France	Banque Publique d'Investissement

USA	Texas Permanent School Fund
New Zealand	New Zealand Superannuation Fund
Ireland	National Pensions Reserve Fund
Bahrain	Bahrain Mumtalakat Holding Company
Botswana	Pula Fund
Angola	Fundo Soberano de Angola
Nigeria	Nigerian Sovereign Investment Authority

Appendix 4: Sovereign Wealth Funds Mandate

Mandate				
		Stabilisation	**Savings**	**Development**
Investment Characteristics	Allocation	International Bond oriented	International Primarily Equity, Alternative Investments	International & Domestic, Direct Investments, Equity, Alternatives
	Risks	Low	Medium–high	Medium–high
	Horizon	Short-term	Medium–long-term	Medium–long-term
Empirical Instances		SWFs with **stabilisation** mandates	SWFs with **savings** mandates	SWFs with **development** mandates
Funding Sources	Commodity	*Revenue Equalization Fund (Kiribati), Trust Fund (Tonga) Trust Fund (Tuvalu) Stabilisation Fund (Papua New Guinea) Compact Trust Fund (Marshall Islands) Compact Trust Fund (Micronesia) Compact Trust Fund (Palau)*	*The Future Generation Fund (Bahrain), Qatar Investment Authority, Brunei Investment Agency, Government National Oil Account (Sao Tome and Principe), Abu Dhabi Investment Authority, Heritage Fund (Trinidad), Kuwait Investment Authority Timor-Leste Petroleum Fund Phosphate Royalties Trust Fund (Nauru)*	*Investment Corporation of Dubai, Qatar Holding Qatari Diar Mubadala (Abu Dhabi) ADIC (Abu Dhabi)*
	Reserves	*Hong Kong Monetary Authority Ex. Fund Monetary Authority of Singapore Currency Fund*		
	Fiscal others		*Government Investment Corporation (Singapore)*	*Temasek (Singapore), Mumtalakat (Bahrain) IPIC (Abu Dhabi)*