

---

# The Sovereign Wealth Fund and Nigerian Economic Development

**Endurance Gabriel Udo, PhD**

*Department of Economics, School of Arts and Social Sciences  
College of Education, Afaha Nsit, Akwa Ibom State, Nigeria.*

[Udoendurance715@gmail.com](mailto:Udoendurance715@gmail.com)

**Friday Eyo Uko, PhD**

*Department of Economics, University of Uyo, Uyo*

[Togoly70@gmail.com](mailto:Togoly70@gmail.com)

**Ofonime Moses Akpan, PhD (in view)**

*Department of Economics, School of Arts and Social sciences  
College of Education, Afaha Nsit, Akwa Ibom State, Nigeria.*

[ofonadolf@gmail.com](mailto:ofonadolf@gmail.com)

**Article DOI:** [10.59413/eafj/v3.i1.3](https://doi.org/10.59413/eafj/v3.i1.3)

---

## Abstract:

The study specifically investigated the impact of sub-national government sovereign wealth funds on the economic development of Nigeria. An ex-post research design was used for the study. Economic development was proxied by per capita income, while sovereign wealth funds were proxied by their three components: stabilization funds, future generation funds, and infrastructure funds. Data for the variables were obtained from the Central Bank of Nigeria for the period 2012–2022. An econometric approach was used to analyze the data. Findings showed that of the three components of SWFs, only future generation funds impact positively and significantly on economic development. In view of the findings, it is recommended that the government ensure effective and efficient management of the various funds by putting in place proper regulatory measures so as to attain the goals for which the funds were established.

**Keywords:** sovereign wealth, infrastructural fund, new generation fund, stabilization funds, Nigeria development

---

## 1. Introduction

John Maynard Keynes in his liquidity preference theory stipulated that individuals hold money for three key reasons: transactional purpose, precautionary purpose and

speculative purpose. It seems from the perspective of Keynes' theory that nations like individuals need money or financial resources for the purpose of providing the needs of citizens on regular basis (transactional), cushion the effect of shocks on earning capacity of government (precautionary) and investing in the future of the nation (Speculative). Like individuals too, a nation ability to save resources for each of the reasons highlighted above is a function of how much accrues to the government and the global economic climate at a given point in time.

The doctrine or principle of sovereign wealth fund emanated out of necessity to save for the future Generations, to ensure stability in economic operation in the case of cyclical change and to provide for Infrastructural and development needs of citizens. Nations thus strive to muzzle resources for these purposes through the establishment of sovereign wealth fund.

According to the research conducted by [Olekan, Ugwuanyi, and Ewah \(2014\)](#), the concept of a sovereign wealth fund (SWF) can be understood as a comprehensive financial reform strategy in the form of an instrument owned by a sovereign state. This particular instrument serves as a mechanism through which a nation's savings are accumulated for the purposes of foreign direct investment and overall development. Additionally, it is worth noting that the SWF can also be viewed as a reform initiated by the federal government, which acts as a significant source of revenue for the development and economic growth of a country through foreign direct investment. The establishment of a sovereign wealth fund is driven by the objective of developing a foreign portfolio of investments for a sovereign state. This fund is essentially created utilizing foreign exchange reserves earned by the state, with the intention of meeting specific goals and purposes.

The establishment of a sovereign wealth fund in Nigeria has been a topic of intense debate, with three main arguments at the forefront: the economic perspective, the political perspective, and the legal perspective, as discussed by [Olika \(2019\)](#). From an economic standpoint, proponents argue that a sovereign wealth fund is crucial as it contributes to the diversification and stabilization of the economy, particularly in times of revenue shortfalls. Moreover, the fund has played a significant role in facilitating infrastructural investments in critical sectors of the economy, such as healthcare and agriculture. It is strongly believed by some that continuous investment from the fund in various sectors will ultimately spur economic growth and lead to the generation of employment opportunities.

---

In addition, the sovereign wealth fund has the potential to sustain and enhance the value of the national currency, the naira. This can be achieved by strategically investing the funds in various asset classes in the international market, thereby increasing the government's access to foreign currency. As a result, the monetary policy of the country would receive a substantial boost, as the need to borrow funds externally would be minimized. This, in turn, would help prevent inflationary pressures and the crowding out of investment due to high borrowing costs. Instead, the situation would enable better management of foreign exchange reserves, making government debt more attractive to international investors, and ultimately improving transparency in the overall management of state resources, as highlighted by Olika (2019).

From a political perspective, the use of the excess crude account (ECA) to fund the sovereign wealth fund has been a contentious issue, primarily due to the fact that certain oil-producing states demand a share of oil revenues that they believe is rightfully theirs. This demand stems from intense political interests within these oil-producing states. Given the decentralized structure of a federal state like Nigeria, state governments argue that allocating excess revenue to the sovereign wealth fund significantly reduces the amount of revenue that ends up in the federation account, and consequently, the amount that the states receive within a given fiscal period. This argument is further supported by the fact that the federal government unilaterally controls the sovereign wealth fund, and the availability of "excess revenue" to finance the fund is entirely dependent on the "oil price benchmark," which is solely determined by the federal government.

In conclusion, the establishment and operation of a sovereign wealth fund have been subject to extensive analysis and debate in Nigeria, with various perspectives weighing in on its economic, political, and legal implications. While the economic advantages of diversifying the economy, providing infrastructural investments, and boosting economic growth are evident, there are also political challenges related to the allocation of oil revenues and the centralized control of the fund. Furthermore, legal considerations surrounding the utilization of excess revenue from the ECA and the discretion of the federal government in determining the oil price benchmark also come into play. These multifaceted dynamics highlight the complexity and significance of the sovereign wealth fund as an instrument for economic development and state resource management in Nigeria. The control exerted by the federal government over the benchmark allows them to effectively manipulate the sharing formula in their favor whenever they so choose. This particular arrangement is further exacerbated by the fact that the underlying structure of

---

the sovereign wealth fund, which was established by the federal government without any consultation with the states, adds to the issue at hand.

From a legal standpoint, the management of the sovereign wealth fund is rooted in the constitution, which has given rise to two opposing schools of thought. The first school argues that the establishment of the sovereign wealth fund is unconstitutional because Section 162 of the Constitution did not anticipate the disbursement of funds that should rightfully go to the federation account. Supporters of this school contend that if the Constitution did not explicitly mention such an instrument when outlining revenue allocation, then the sovereign wealth fund is in violation of the Constitution. This conclusion draws inspiration from the Supreme Court's ruling in the onshore/offshore dichotomy debate in the case of *AG Federation v AG Abia, (No. 2) (2002)*.

On the other hand, the second school believes that Section 162 of the Constitution does not explicitly forbid the disbursement of funds to the Nigerian sovereign wealth fund. They argue that the logical inference is that since the creation of the sovereign wealth fund was not expressly excluded, it cannot be deemed unconstitutional. This argument is further reinforced by the fact that Section 162 of the Constitution presumably establishes a trusteeship over the government's revenue, and the objectives of the sovereign wealth fund align with the management of funds accruing to all levels of government in the federation, as envisioned by the Constitution.

Furthermore, this school of thought asserts that Section 162 of the Constitution directs the state to harness the nation's resources in order to create a prosperous and self-reliant economy. In light of this provision, and considering that the National Assembly is empowered to legislate on this section, legal scholars argue that the establishment of the Nigerian sovereign wealth fund under the NSIA Act is indeed constitutional. This viewpoint aligns with the Supreme Court's ruling in *AG Ondo v AG Federation (2002)*.

Despite the controversy surrounding the legal perspective on sovereign wealth fund management, it is worth noting that the Nigerian sovereign wealth fund serves a crucial objective in addressing critical issues related to the Nigerian economy. In fact, it can be argued that it is the most significant fiscal initiative undertaken by the Nigerian federal government in the past decade. The consistent growth and profitability of the sovereign wealth fund, starting from its initial fund of \$1 billion in 2011 and now valued at approximately \$2.15 billion in 2019, as well as its consistent positive ranking on the index of the Sovereign Wealth Fund Institute, are indicative of its effective management.

---

Thus, it can be concluded that despite the ongoing legal debate, the Nigerian sovereign wealth fund plays a crucial role in addressing economic challenges and has proven to be well-managed based on its notable growth and performance.

The establishment of the Nigerian sovereign wealth fund can be traced back to the Nigerian Sovereign Investment Authority Act of 2011, a significant piece of legislation that played a crucial role in the formation of this fund. This act not only brought about the establishment of the Nigerian Sovereign Investment Authority, but it also bestowed upon it the authority and power to effectively manage the sovereign wealth fund by means of three distinct funds. These funds, namely the Future Generations Fund, the Stabilization Fund, and the Infrastructure Fund, serve as integral components of the overall structure of the sovereign wealth fund. The rationale behind structuring the fund in this manner primarily revolves around the desire to safeguard the Nigerian economy from the adverse effects of volatile oil prices in the international market, commonly referred to as the 'boom and bust' phenomenon. Furthermore, the establishment of these three funds also seeks to address the substantial infrastructural deficit that exists within the country, while simultaneously ensuring the creation of a fund that will cater to the future generations of Nigerians. Although the sovereign wealth fund does face similar legal and political challenges as the ECA (Excess Crude Account) in terms of its economic outcomes, it has proven to be more successful in achieving its objectives thus far. The positive impact of the fund on the Nigerian economy is evident, and there are valid reasons to believe that these benefits will continue to accrue in the future.

Over the past two years alone, the Nigerian Sovereign Investment Authority (NSIA) has made significant investments in critical sectors of the economy, ranging from healthcare to agriculture. The noteworthy infrastructural investments made by the NSIA in these areas undoubtedly contribute to the overall economic growth of the country. Moreover, these investments have the potential to generate employment opportunities, thereby making a positive contribution to the labor market. It is evident that the continued investment by the NSIA in various other sectors of the economy has the capacity to further boost economic growth and potentially lead to the provision of even more employment opportunities.

On a global scale, sovereign wealth funds fall into five distinct categories, namely stabilization funds, development funds, pension reserve funds, reserve investment funds, and infrastructure funds. However, Nigeria has chosen to adopt three specific types of

sovereign wealth funds, namely the stabilization fund, the future generation fund, and the infrastructure fund, as identified by [Inim et al. \(2023\)](#). These three funds will serve as the focus of the upcoming study.

Sovereign wealth funds are widely regarded as highly effective and advantageous tools for managing public sector resources and ensuring economic sustainability. Prior to the establishment of the sovereign wealth fund in Nigeria, the country had been grappling with noticeable weaknesses and a fragmented system for managing and utilizing cash, public assets, and reserves within the public sector. This lack of an organized and efficient system had adverse consequences for the overall management of government resources and hindered economic growth and stability.

Nigeria has long been categorized as an economy with minimal savings and even lower levels of investment, as highlighted by [Marcus and Vale \(2022\)](#). In an effort to break free from this cycle of low savings and low investment, the government has implemented a range of policies and reform initiatives. These measures include the National Economic Empowerment and Development Strategy (NEEDS), privatization, and the commercialization of both federal and state-owned enterprises. The intention behind these policies and reforms is to stimulate savings and investment within the country, thereby promoting economic growth and development.

In order to address the aforementioned shortcomings and challenges, the federal government recognized the pressing need for a sovereign wealth fund in Nigeria as a means of effectively managing government resources and fostering economic growth and stability. Consequently, after consulting with relevant stakeholders and experts in the field, Nigeria took the step of establishing the Nigerian Sovereign Wealth in 2010. This decision was driven by the realization that a sovereign wealth fund would play a vital role in promoting the prudent management of government resources and ensuring economic growth and stability. Subsequently, the Nigerian Sovereign Investment Authority Act (NSIA) of 2011 was enacted, with its effective implementation date set for 2012.

The Nigerian Investment Authority Act (NIAA), which served as the legislative framework for the establishment of the sovereign wealth fund, delineated three distinct funds, commonly referred to as windows, that collectively constitute Nigeria's sovereign wealth fund. Each of these funds possesses unique investment and development objectives, thereby contributing to the overall diversification and effectiveness of the fund. The three funds in question are the infrastructural fund, the new generation fund, and the stabilization fund. Over the years, there has been a noticeable increase in the size and

scope of these funds, reflecting their growing importance and impact within the Nigerian economy. However, the extent to which these funds have contributed to the development of Nigeria by the sub-national governments in Nigeria has not been given wider coverage in the literature.

Understanding how SWFs trickle down to impact individual states and contribute to their economic development is crucial for formulating effective policies that address regional disparities and promote inclusive growth. The utilization of SWFs by sub-national governments could potentially serve as a catalyst for infrastructure development, job creation, and overall economic growth at the state level. However, the effectiveness of these funds in addressing the specific needs and priorities of each state remains an open question. While existing literature offers insights into SWFs' global impact and Nigeria's national-level fund management, there's a research gap in comprehensively evaluating the role and effectiveness of SWFs in promoting economic development at the sub-national level in Nigeria. This study seeks to address this gap by examining the utilization and impact of SWFs on individual states' economic development, shedding light on their significance in fostering inclusive growth, and addressing regional disparities within the country.

On the basis of this, the current study seeks to investigate the effect of sovereign wealth funds (SWFs) of sub-national governments on Nigerian economic development, with a specific concentration on the impact of sub-national governments stabilization funds on economic development in Nigeria, the effect of sub-national governments infrastructural funds on economic development in Nigeria, and the effect of sub-national governments new generation funds on economic development in Nigeria.

This research holds significant importance as it aims to provide empirical evidence on the role of SWFs in sub-national economic development in Nigeria. Findings from this study will contribute to the existing body of knowledge on SWFs, offering insights that can guide policymakers, government officials, and stakeholders in optimizing the utilization of these funds for regional development.

Understanding the dynamics of SWF utilization within the Nigerian federal structure can offer valuable insights for policymakers, investors, and stakeholders seeking to optimize these funds' contributions to sub-national economic development while mitigating challenges associated with resource dependency and regional inequalities.

This paper is arranged in five sections. Following the introduction, section two is the literature review. Section three considers the methodology, while Section four is the

presentation and analysis of results. Finally, section five is the summary and recommendations.

## 2. Literature Review

### 2.1 Sovereign Wealth Funds (SWFs)

There is a lack of consensus among scholars and institutions when it comes to defining "Sovereign Wealth Funds". However, there are certain characteristics that most experts and researchers agree upon regarding these funds. According to Jost (2009), Sovereign Wealth Funds are considered as special investment funds owned by the state. These funds invest in foreign currencies and are managed separately from the central bank's foreign exchange reserves. Moreover, they have either no liabilities or limited liabilities, which sets them apart from sovereign pension funds.

Inim et al (2023) view Sovereign Wealth Funds (SWFs) as government investment entities that are financed by foreign currency assets. These funds are managed independently of official reserves. In comparison to traditional reserves, SWFs have the flexibility to invest in a wider range of asset types and aim to achieve higher rates of return. The establishment of SWFs originated from the realization of central banks that it is advantageous to hold a substantial amount of money in foreign exchange accounts. This understanding stemmed from the belief that having sufficient funds in easily accessible foreign accounts would be beneficial to the government during times of fiscal crisis, currency devaluation, natural economic disasters, and even political turmoil.

The International Monetary Fund (IMF) (2008a) classifies SWFs into five distinct types based on their objectives. Firstly, stabilization funds primarily aim to stabilize government and export revenues against fluctuations in oil and other commodity prices. Secondly, savings funds focus on accumulating savings for future generations or other long-term objectives by diversifying non-renewable assets into a broader portfolio of assets, thus avoiding the adverse effects of a Dutch disease. Thirdly, reserve investment corporations are established to enhance the returns on currency reserves that are separated from official reserves. Fourthly, development funds promote industrial policies or socioeconomic projects to increase the potential output of the domestic economy. Lastly, contingent pension reserve funds cater to unspecified pension liabilities of the government.

An alternative approach to categorizing SWFs is based on their investment objectives. Megginson et al. (2021) and Megginson et al. (2023) propose a classification method known as the Global SWF method. This method identifies three types of SWFs. Firstly, stabilization funds, also known as rainy-day funds, aim to provide capital in the



event of market shocks. These funds prioritize liquidity, with 90% of their portfolios allocated to public stocks and bonds. Secondly, savings funds, also referred to as future generations funds, focus on saving for the benefit of future generations. They have the flexibility to invest for the long term, and approximately 22% of their portfolios are allocated to private markets. Lastly, development funds, also known as strategic funds, invest with the objective of contributing to the development of their domestic economies. These SWFs share similarities with development banks but rely primarily on equity investments, while development banks offer loans to projects or companies.

Carney (2021) presents an alternative classification scheme for SWFs, which is also based on observed investment purpose. According to Carney, SWFs can be categorized as foreign exchange reserve funds, stabilization funds, pension reserve funds, and savings funds. Overall, the understanding and classification of Sovereign Wealth Funds vary among scholars and institutions. The lack of a widely accepted definition highlights the complexity and diverse nature of these funds. However, through various perspectives and categorization methods, a clearer picture emerges regarding their characteristics, objectives, and investment strategies.

One can also categorize SWFs based on whether they are driven by commodities or not. SWFs that are commodity-based receive funding from the surplus generated by commodity exports, particularly from oil and gas. On the other hand, non-commodity-based SWFs are funded by foreign exchange reserves. As of 2008, the three largest oil funds accounted for 52% of the total assets of SWFs (Gintschel & Scherer, 2008). Oil-based funds continue to dominate the majority of SWFs, with 57% of the largest SWFs by AUM being oil-based (Gangi, Meles, Mustilli, Graziano, & Varrone, 2019).

According to Boubakri et al. (2023), the Sovereign Wealth Fund Institute defines a sovereign wealth fund (SWF) as a state-owned investment fund or entity that is typically established using balance of payments surpluses, official foreign currency operations, proceeds from privatizations, governmental transfer payments, fiscal surpluses, and/or receipts from resource exports. These funds are invested globally in various asset classes such as stocks and Treasury bonds, as well as in sectors including financial, real estate and infrastructure, power generation, sports, commodities, airlines, manufacturing, and more.

The number of SWFs and the assets they manage, both foreign and domestic, have witnessed steady growth in developed and developing countries, as well as in rich and poor countries across all continents. As of July 2022, SWFs worldwide had accumulated \$11.5 trillion in assets under management (AuM) (Megginson, Malik, and Zhou, 2023), compared to \$3.1 trillion in 2007. Boubaker et al. (2018) estimate an average annual growth rate of approximately 11% over the past two decades. The significant size and

growth rate of SWFs have sparked debates on transparency, corporate governance, and regulation. Additionally, corruption scandals involving SWFs, such as those related to Korea Investment Corporation (KIC) and Malaysia's state-owned fund, 1MBD, have raised concerns about disclosure levels and conflicting objectives as state-owned investors. Equally important, the volatility of oil prices (for funds dependent on natural resources) and global currency imbalances (for currency reserves-based funds) have presented ongoing challenges for SWFs worldwide.

James et al. (2022) note that a natural resource-based SWF (NR-SWF) serves three primary purposes: (a) as savings funds to address intergenerational equity arising from the depletion of non-renewable resources; (b) as stabilization funds for current generations; and (c) as reserve investment and strategic development funds to be utilized for human, natural, social, and physical capital. Numerous examples exist. Norway, for instance, has established a \$1.2 trillion SWF from the sale of its oil reserves. Oil-rich countries such as Kuwait, Abu Dhabi, Qatar, and Saudi Arabia have also created multibillion-dollar SWFs. In the United States, Alaska has a \$81 billion SWF from oil sales, Wyoming has a \$25 billion SWF from coal, oil, and natural gas sales, and New Mexico has a \$34 billion fund primarily derived from oil.

In Nigeria, The Nigeria Investment Authority Act (NIAA), established the SWF which became effective in October 2011. The money saved from the discrepancy between budgeted and actual market oil prices would be invested to produce returns that will benefit Nigerians in the future (Kanu et al.2022). A \$1 billion USD first founding investment was made in the fund. Accordingly, the federal, state, and local governments in Nigeria, as well as the municipal council were to contribute to the initial fund that the Nigerian Sovereign Investment Authority will manage, which is the equivalent of \$11 billion USD. The Act further stipulates that any additional money must be generated from leftover monies in the federation account, provided that the financing does not contain the derivation component of the revenue allocation formula. Under the Act, The Nigerian Sovereign Investment Authority (NSIA) is mandated under legislation to create and manage the Nigerian Sovereign Wealth Fund (NSWF) with the following sub-funds: Future Generations' Fund (FGF): The objective of this Fund is to invest in a diversified portfolio of appropriate growth investments in order to provide future generations of Nigerians a solid savings base for such a time as the hydrocarbon reserves in Nigeria are exhausted. FGF will start off fully outsourced according to an asset allocation model determined by the management of the NSIA As the NSIA grows, management of this fund would then be brought in-house.

Nigeria Infrastructure Fund (NIF): This Fund aims to invest in infrastructure projects in Nigeria that meet our targeted financial returns and contribute to the

development of essential infrastructure in Nigeria. Potential areas for investment include transportation, energy and power, water resources, agriculture, among others, in order to stimulate growth and diversification of the Nigerian economy, attract foreign investment, and create jobs for Nigerians. The NIF will be mostly managed in-house, with a plan to out-source it in future to external managers whose objectives and investment philosophy meet the NSIA criteria.

Stabilization Fund (SF): The objective of the Stabilization Fund is to provide stabilization support to the Federation revenue in times of economic stress. The Stabilization Fund will be mainly managed in-house in a diversified portfolio of liquid, low risk products such as Treasury bills and liquid short term investment grade bonds. The withdrawal triggers from the SF will be at the direction of the Minister of Finance, upon proper demonstration of urgency and satisfaction of the criteria set out in section 48 of the NSIA Act, the NSIA shall have the right to utilize capital and assets in the SF to supplement resources available to stabilize the national economy (Mijap, 2014). The Funds are expected to be funded from the excess revenue collected over budgetary projections by the federal government.

The necessity for Nigeria to have a sovereign wealth fund surpasses mere importance due to its function as a safety net for preserving and utilizing surplus liquidity derived from the exploitation of natural resources. When the revenue generated from the sales of crude oil exceeds the budgetary projections, the surplus revenue represents an abundance of liquidity. Reinjecting this excess liquidity into the national economy through spending has the potential to disrupt planned economic fundamentals, especially in situations where the inflation rate is high. Consequently, the value of money is impacted, economic plans are disrupted, and economic targets remain unattainable. Thus, it becomes imperative to save the surplus liquidity and make long-term investments to ensure that a nation maximizes its advantages.

The sovereign wealth fund of Nigeria comprises three distinct funds, commonly referred to as windows, each possessing unique objectives for investment and development. From the initial sum of \$1 billion, 85% of the funds would be allocated to each of the three windows, leaving the remaining 15% of the initial \$150 million unassigned for future distribution among the three funds as required. The funds would be invested in a diverse range of cross-border securities. The stabilization fund would receive an initial allocation of 20%, while both the future generation and the Nigeria infrastructure funds would each obtain 40% (Inim et al., 2023).

## 2.2 SWFs and Growth trajectory

The rate of economic growth serves as a significant indicator of a nation's level of development within its economy. By achieving sustained and robust economic growth, various macroeconomic concerns, including income inequality, poverty, and unemployment, can be effectively addressed and resolved. In order to attain the desired level of economic growth, which is crucial for the achievement of the Sustainable Development Goals (SDGs) and the reduction of poverty, the Nigerian government must devise strategies to promote both domestic and foreign investment (Abdulkarim, 2023).

The mandates of Sovereign Wealth Funds (SWFs) exhibit heterogeneity, with most funds operating under a set of overlapping and occasionally conflicting objectives. However, they generally share a mandate, whether explicitly stated or implicitly understood, of supporting the domestic economy (Scheda et al., 2018). Initially, the literature on SWFs primarily focused on their impact on foreign firms, markets, and economies. However, in light of recent extensive government interventions on a global scale, there has been a renewed scholarly interest in examining the developmental role of governments in general, and SWFs in particular. SWFs can contribute to domestic economies in two ways: firstly, by serving as a source of diversification and stability, and secondly, by directly stimulating growth as 'government-backed venture capital funds' (Alswilem & Rietveld, 2018).

The role of stabilization primarily arises from the imperative to mitigate government revenue volatility in economies heavily reliant on the export of a single commodity, typically oil or natural gas. However, given the increasing volatility in energy markets, the current rationale is for SWFs to transform energy assets into financial assets, thereby reducing the impact of commodity price shocks on the domestic economy (Alswilem & Rietveld, 2018). Empirical findings on the stabilization role of SWFs present a mixed picture (Frynas, 2017 and Mami, 2023). Notably, Rasaki and Malikane (2018) ascertain that SWFs contribute to a reduction in the volatility of fiscal expenditures in African countries. Similarly, Mohaddes and Raissi (2017) find that SWFs in developing nations mitigate the adverse effects of commodity price volatility on economic growth and can assist in overcoming the 'natural resource curse'.

The 'growth engine' role of SWFs involves providing funding and support to nascent firms and industries. In an earlier study, Triki and Faye (2011) evaluate African SWFs and highlight that the positive impact of budget stabilization and the control of commodity revenue volatility on economic growth is impeded by inadequate governance at the country level. These findings are further supported by Dixon and Monk (2011), who document that poor governance and ambiguous mandates hinder African SWFs from fully facilitating

economic development. However, on the opposing side of this debate, Adonu (2021) argues that both domestic and foreign SWFs can play a leading role in the developmental process in Africa. Additionally, Megginson, Malik, and Zhou (2023) argue in this context that partnerships between countries in the 'global South' can indeed assist in the development of developing nations, although further research into their outcomes is warranted.

After examining recent literature on commodity-funded SWFs in resource-rich countries, Mami (2023) concludes that such SWFs play an increasingly fundamental role. They serve as crucial instruments for diversifying revenues based on resources and supporting economic growth. Furthermore, they contribute to industrial development through effective governance and by fostering strategic innovation and entrepreneurship.

### 3. Theoretical Framework

The theoretical basis for this study is predicated on foreign business management portfolio theories. Among them are modern portfolio theory and stewardship theory (Veljko & Barnard 2008).

#### 3.1 The modern portfolio theory

This theory posits that when a government amasses foreign exchange reserves that exceed the threshold for future import bills and liquidity concerns, it seeks to enhance its wealth by investing these surplus reserves in various ways in foreign environments, thereby creating a collection of foreign investment portfolios. Supporting this notion, Rozanor (2010) explains that this theory has led countries to establish sovereign wealth funds in order to increase returns through portfolio diversification. In terms of general investment returns, it has been observed that as the expected rate of returns increases, so does the level of risk (Oleka et al., 2014). This implies that a low level of uncertainty or risk is associated with a low rate of return, while a high level of uncertainty or risk is linked to high expected returns. Daniel and Brickman (2001) contribute to this discussion by asserting that the modern portfolio theory assumes that all investment strategies can be categorized into two types: those that maximize return for a given risk and those that minimize risk for an expected return. According to the theory, an increase in return or a reduction in risk can be achieved by allocating investments across different types of assets to create a balanced portfolio, known as portfolio diversification equilibrium (Das and Vander, 2010).

This holds true for investments made by sovereign wealth funds, where a diversified portfolio of assets as a whole carries less risk compared to individual assets. The study by Bernstein et al. (2009) reveals that the decision-making structure, availability of

investment capital, and target returns from the portfolio lead to variations in risk in sovereign wealth fund investments. For instance, investment decisions made by political leaders, domestic equity holders, or professional external managers can impact the returns on sovereign wealth fund investments. [Balin \(2010\)](#) further explains that the high-risk approach adopted by sovereign wealth funds in pursuit of higher returns can facilitate access to capital for high-risk businesses and create unfavorable conditions for low-return businesses. Therefore, the risk and return approach of sovereign wealth funds can disrupt the balance within the money supply system in markets or economies if these investments are substantial enough ([Grieve, 2008](#)). As a result, sovereign wealth fund investments can be influenced by financial and economic factors, which in turn can impact the money supply and economic conditions of the nations involved.

### *3.2 The Stewardship Theory*

This particular theory is a viable alternative to the theory of agency, positing that managers, when afforded the freedom to act independently and without supervision, will exercise their responsibilities diligently, functioning as stewards or custodians of the assets under their purview. The notion of stewardship theory assumes that the principal will be content with the individual accomplishments of the agents or the collective achievements of the agents, which will ultimately be reflected in the overall success of the organization. Consequently, the stewardship theory proposes that managers are intrinsically motivated and devoid of any self-interests such as bribery, corruption, or personal enrichment, thereby prioritizing outcome-driven actions. Consequently, this implies a close alignment and congruence of goals between principals and agents. The only instance of conflict arises when the decisions made by stewards on behalf of their principals prove to be unprofitable in reality.

[Barney and Hesterly \(2008\)](#) explicate that this theory serves as the fundamental principle underlying the operations of hedge funds, wherein investors rely on the performance of stewards entrusted with their wealth with utmost confidence. In the case of sovereign wealth funds (SWFs), the citizens initially rely on the government as the custodians of national wealth. Subsequently, top management, central banks, or ministries depend on the recruited employees or externally hired wealth managers and investment banks as their trusted stewards for the administration of sovereign wealth or public finances. This is analogous to a president who is expected to govern and manage the national administration within the confines of the constitution established by the country's legal framework. In most countries, the central bank and government officials serve as the stewards of sovereign wealth for the management of SWFs, yielding effective outcomes.

Extensive literature and global practices have widely advocated this approach as the optimal strategy for SWF management (Bernstein et al., 2009). Consequently, the success of stewardship theories hinges on the willingness of managers to assume accountability and the decentralization of power and control by top management, as they collaborate to yield outcomes for organizations. By adhering to the principles of stewardship theory in the context of SWFs, one can comprehend that citizens of the sponsoring nation anticipate the government and central bank to work in unison in the national interest, thereby enhancing the well-being of the populace

#### 4. Empirical Review

Cumming, Filatotchev, Reinecke, and Wood (2020) presented a literature review with the aim of synthesizing research on the different channels through which SWFs can influence the industrial relations of target firms and the labor dynamics of the early economy. Different SWFs value employees differently and will therefore convey different incentives to target companies. The article considers three national investment funds as typical cases. Norway's government pension fund views employees as important stakeholders and is willing to divest from companies with poor human rights records. CIC (China Investment Corporation) shows hostility towards unions. For investments in developing economies, CIC is known to favor Chinese nationals, even unskilled workers. For developed economies, CIC may seek specialized labor or pursue "knowledge-seeking" activities, potentially disseminating learned skills to organizations in China. ADIA (Abu Dhabi Investment Authority) has an ambiguous relationship with labor dynamics in its portfolio companies. The authors conclude that Gulf SWFs may enhance the target firm's management performance and do not yield significant host country effects.

Liu et al. (2020) compare the real estate investments of sovereign funds with those of public pension funds. They found that sovereign wealth funds are more likely to invest across borders, mainly in the West but also in China, India, the Middle East, and Africa.

Ouoba (2020) analyzed a sample of 23 countries and found that countries without natural resources grew faster between 2000 and 2014 than countries with savings or stable funds. However, countries with stabilization funds and savings funds still had greater physical and human capital accumulation during this period, which could indirectly promote economic growth. Although it does not focus on the role of resource funds.

Carney (2021) examined empirically how sovereign wealth fund classifications correlate with the investment impact of different types of funds. It used 10,488 observations from 2013 to 2016, as opposed to 1,018 observations previously used by Bortolotti et al. (2015), and found that thrifts managed by authoritarian regimes are more

likely than other types of sovereign wealth funds to promote changes in corporate and business strategies. participate in activities to achieve their goals. Finally, the author finds that investing in a dictatorship's savings fund is associated with a 20% reduction in the revenue growth of the company in which they invest over the following three years compared to investing in a dictatorship. other sovereign funds.

Osirim et al. (2021) studied the effectiveness of sovereign wealth funds as a tool for public financial management and economic sustainability in Nigeria. Exploratory and descriptive research methods were applied for the study. The results show that sovereign wealth funds can be useful to a country, especially in times of economic crisis, as they can be used to minimize the rate of government revenue deficit as well as increase savings for future generations. To achieve the expected results, it is proposed that this fund should be part of the host country's policy. In addition, regulators should strengthen the accountability framework around funds, promoting financial discipline, probity, and transparency in the reporting and management of fund investments.

Wurster and Schlosser (2021) question whether sovereign wealth funds function as sustainable investment vehicles. The authors studied the sustainability profile of 68 sovereign wealth funds, which collectively manage more than 90% of total sovereign wealth fund assets. The authors built a dataset called the Sustainability Disclosure Index, which describes the information provided by these 68 sovereign funds for 19 selected sustainability criteria in 2020. They divided the criteria for sustainability into "social aspects," "environmental aspects," and "government." Aspects" and "Economic Aspects". They found that only 27% of the criteria were met by funding sources in their sample. Ranking according to the highest proportion of criteria met yields: governance (37%), social (30%), economic (21%), and ecological (18%). 13 funds did not meet any of the criteria.

No fund met all 19 criteria, and the best-performing funds, the New Zealand Super Fund and the Irish Strategic Investment Fund, scored 16. Pension funds Norway's global government position meets 15 of the 19 criteria. In addition, the study also conducted multiple linear regression analyses to identify factors affecting the sustainability scores of national investment funds. IFSWF membership, proportion of youth in the population, and commodity-based funds are positively and significantly correlated with sustainability scores, while natural resource wealth is significantly negatively associated with all scores. Interestingly, the authors do not find that (host country) electoral democracy is significantly associated with sustainability scores, even though state capacity, a proxy for state capacity, is host government in policy adoption and is positively correlated with sustainability information.



Ghouma and Ouni (2022) analyzed the impact of investments in sovereign wealth funds on valuing target companies from the perspective of bond holders and found the “sovereign fund bond risk premium.” The authors built a data set of 2,762 bonds issued between 1996 and 2020 by 369 sovereign wealth fund beneficiary companies. The authors present the cost of debt financing using bond credit spreads. They find that spreads between bonds issued by firms with stakes in sovereign wealth funds are higher than spreads between bonds issued by firms without stakes in sovereign wealth funds, with an average of 111.83 basis points. By running a regression model in which, the dependent variable is partitioned, the authors find that owning sovereign wealth funds is associated with 110.92 basis points higher debt financing costs. They also noted a larger impact on sovereign wealth funds from Arctic countries. Quantitatively, a 1% increase in the participation of a non-democratic country's sovereign funds is associated with an increase in bond spreads of 28.53 basis points, while an increase in the bond spread is just 0.594 basis points for companies targeted by the sovereign funds. of democratic countries. The authors argue that “democratic” sovereign wealth funds increase transparency and thereby minimize this bond risk premium.

Ward, Brill, and Raco (2022) studied these decisions. investment decision of the Qatari Investment Authority at the Olympic Village in London. Using a case study approach, the article explores the geopolitics of real estate in a global city, London. The authors emphasize the soft power that countries can exercise over international investments made by their citizens.

Bortolotti et al. (2023) conducted a study on The Times. Are they Changin’? Tracking SWFs' sustainable investment performance, research shows that SWFs have been slow to adopt socially responsible investing, but this is changing. In recent years, sovereign wealth funds have taken into account ESG criteria in their investments. However, the ESG performance of sovereign wealth fund targets tend to deteriorate post-investment. Sovereign wealth funds are well-placed, as long-term, good-standing investors with fiduciary duties to the entire population, to lead the transition to institutionalization. Investment is driven by stakeholders. For this to happen, clear ESG policies and mandates must be in place.

Cuervo-Cazurra, Grosman, and Wood (2023) explore the causes of differences in sovereign wealth fund (SWF) transparency across countries. The study integrated agency theory with different structures of capitalism to propose that the governance characteristics of the country determine the extent of the multi-level agency problem of sovereign wealth funds, i.e., the conflict arises from the fact that politicians act as intermediaries between the nominal owners, citizens, and fund managers. The type and quality of government in

the host country, as well as the source of wealth, have been found to lead to differences in the transparency of sovereign wealth funds across countries. It has been suggested that government officials should consider how the characteristics of the host country's political system largely determine the strategic behavior of SWFs, especially their transparency. Therefore, overall improvements in governance in SWFs may depend on better governance at the national level.

Cumming and Monteiro (2023), in a study of SWF investments in venture capital insurance, equity funds, and real asset funds, found that wealth funds are increasingly investing in alternative asset classes, achieving lower returns than private sector investors. kernels of the same type. This is especially true for SWF investments in venture capital and is consistent with strategic investment and policy mandates. It is therefore recommended that regulators improve reporting requirements and oversight of alternative asset markets, which tend to be much more opaque than public equities. This is especially important when it comes to investments in foreign state vehicles. Inim, Udoh, and Lungu (2023) examined the impact of Nigeria's sovereign wealth fund on the country's ability to support economic development. The study uses ARDL analysis techniques. To avoid erroneous regression results, unit root testing was performed on each variable. The cointegration test shows that there is a long-run (or equilibrium) relationship between Nigeria's sovereign wealth fund and the sustainability of economic growth. It has been revealed that Nigeria's gross domestic product has been significantly impacted by the Nigeria Infrastructure Fund. Last but not least, it was revealed that the Stabilization Fund has a huge impact on Nigeria's GDP. The Future Generations Fund has also been shown to have a significant impact. Overall, sovereign wealth funds have a significant impact on sustainable economic growth in Nigeria. If the government wishes to sustain economic growth and improve the lives of Nigerians, it must demand and pursue effective control and monitoring of infrastructure, future funds, and stability.

Lopez (2023) studied how sovereign wealth funds weathered COVID-19 and changed forever. The results show that sovereign wealth funds responded inconsistently to the recent COVID-induced crisis. Some have refocused on providing internal support; others act as opportunists, buying assets at bargain prices. The Survivor Fund develops with a focus on sustainability, collaboration, and long-term survival. It is recommended that governments benefit greatly from the organization of sovereign wealth funds, but they must also plan clear mandates tailored to their specific macroeconomic needs. A strong governance framework is essential for the long-term survival of funds.

Mami (2023) conducted a study on the role of sovereign wealth funds in countries rich in natural resources: a systematic review. The results show that commodity-linked

sovereign wealth funds play an important role in income diversification. In some cases, they can promote industrial development, especially by stimulating innovation and entrepreneurship. The study recommends that resource-rich countries could benefit from sovereign wealth funds, but that institutional design is important. Robust frameworks must be developed for sovereign wealth funds to maintain their independence in decision-making.

Megginson et al. (2023) discussed the documented importance of SWF funding sources and summarized the empirical literature examining how SWFs allocate their capital geographically and across asset classes. The study further summarized the empirical evidence on the impact of SWF equity investments on the financial and operating performance of target firms and examined evidence suggesting that SWF investment announcements lead to higher prices. Shares of target companies are higher in the short term, but the positive impact is significantly less. Positive returns are the result of large stock purchases by private investors, and the long-term impact of sovereign wealth fund investments on target companies is generally negative.

Global sovereign wealth funds are considered a fund formed from surpluses arising from foreign transactions of the government, whether commodity exports or non-commodity exports. Globally, this fund is on the rise. While the existing literature provides insights into the global impact of SWFs and country-level fund management in Nigeria, there are still research gaps to comprehensively assess the role and effectiveness of SWFs in promoting economic development at the local level in Nigeria. This study aims to fill this gap by examining the use and impact of sovereign wealth funds on each country's economic development, highlighting their importance in promoting inclusive growth and addressing disparities between regions in the country.

## 5. Methodology

An ex-post facto design was used as the research method for this study. Ex-post facto research design is a statistical correlation between dependent and independent variables with the goal of establishing a causal relationship between them. In addition, the design made use of historical data, which the researcher had no control over manipulating. The variables of the study were economic development as a dependent variable and sovereign wealth funds as an independent variable. The independent variable consisted of three sub-variables: stabilization fund, future generation fund, and infrastructural fund.

The sample size for the study is based on when the sovereign wealth fund was established in Nigeria. Thus, the sample size consisted of data on the selected variables from 2012–2022. Since historical data was used for the study, the purposive sampling

technique was used to draw up the sample, and this is based on the condition that the information drawn and selected adequately serves the purpose of the study.

The data for this study were collected from the published information on the selected variables from the Central Bank of Nigeria (CBN) statistical bulletin 2022 edition. The data range was 2012–2022. The collected data were analyzed using the ordinary least squares (OLS) estimation technique in multiple regression form with the help of the Eview statistical package. Every decision was taken with a 95% confidence interval.

### 5.1 Model specification

The study adopted the following models as described below:

$$\text{GDPPC} = f(\text{SWF}) \quad (1)$$

Where:

GDPPC = GDP per capita which is the proxy for economic development

SWF = sovereign wealth fund

If sovereign wealth fund is disaggregated into its three components, (1) can be re-written as;

$$\text{GDPPC} = f(\text{STF}, \text{NGF}, \text{INFU}) \quad (2)$$

Where:

STF, NGF, INFU- stabilization fund; new generation fund and infrastructural fund respectively.

Amending (2) for estimation and in line with the objectives of the study, we have;

$$\text{GDPPC} = a_0 + b_1\text{STF} + e_i \quad (3)$$

$$\text{GDPPC} = a_0 + b_2\text{NGF} + e_i \quad (4)$$

$$\text{GDPPC} = a_0 + b_3\text{INFU} + e_i \quad (5)$$

$a_0$  is the constant term

$b_1 - b_3$  are parameters

$e_i$  = error term

taking (3)- (5) collectively, we have;

$$\text{GDPPC} = a_0 + b_1\text{STF} + b_2\text{NGF} + b_3\text{INFU} + e_i \quad (6)$$

5.2 Operational measurement of variables

Table 1: Measurement of variables

Variable	Description	measure
Economic development	Dependent variable	As per capita income
Sovereign wealth fund	Independent variable	Stabilization fund (STF); Future generation fund (FGF); Infrastructural fund (INFU)
Economic development	Dependent variable	Calculated as ratio of population to real GDP
STF	Independent variable	Rainy day fund from excess commodity and non-commodity proceeds
FGF	Independent variable	Saved from excess foreign exchange dealings
INFU	Independent variable	extracted as development fund

Source: Researchers compilation, 2024

Table 1 above shows the measurements of the variables for the study. Economic development is the dependent variable and is measured as per capita income, i.e., the ratio of population to real GDP. Sovereign wealth funds comprise three windows: the stabilization fund, the future generation fund, and the infrastructural fund, which are statutorily determined by the constitution.

6. Research findings

6.1 Impact of SWFs on Economic Development

The analysis of the Impact of SWFs on Economic Development is as shown in Table 2 below.

Table 2: Impact of SWFs on Economic Development

Variable	Coefficient	Std. Error	t-statistics	Prob.
C	8.856495	0.868944	10.19224	0.0000
STF	-0.049131	0.054625	-0.899415	0.3983
FGF	0.035557	0.006589	5.396817	0.0010
INFU	-0.024611	0.014388	-1.710534	0.1309
<b>R<sup>2</sup> = 0.82</b>	<b>Adj, R<sup>2</sup> = 0.74</b>	<b>DW = 1.43</b>		

Dependent variable: GDPPC

Table 2 above shows the impact of sub-national government sovereign welfare funds on the economic development of Nigeria. Based on the results above, the following research questions and hypotheses are considered:

**Research question and hypothesis one:** Research question one sought to investigate the impact of sub-national government stabilization funds on economic development in Nigeria.

From the result above, it can be said that the stabilization fund has a negative, non-significant impact on economic development. This is because its coefficient is negative and has a p-value of 0.3983, which is far higher than the significant value of 0.05. Based on this finding, the null hypothesis of no significant impact of the stabilization fund on economic development is also accepted.

**Research question two and hypothesis two:** The research question sought to determine the effect of sub-national government infrastructural funds on economic development in Nigeria.

The results in Table 2 above indicate that there is a negative and non-significant effect of sub-national government funds on the economic development of Nigeria. In view of this finding, the null hypothesis of no significant effect of the infrastructural fund on economic development is accepted.

**Research question three and hypothesis three:** Research question three sought to examine the effect of sub-national governments new generation funds on economic development in Nigeria.

From the results presented in Table 2, it can be said that the future generation fund has a positive and significant effect on economic development in Nigeria. On the basis of this, the null hypothesis is rejected.

### *5.2 Discussion of Findings*

The study was particularly about the effect of sub-national government sovereign wealth funds on the economic development of Nigeria. Though it was difficult to establish SWFs of individual states in Nigeria, collective sovereign wealth funds of the 36 states of Nigeria were used against Nigeria's economic development. From the result, it is established that of the three components of Nigerian sovereign wealth funds, only one (the

future generation fund) was found to positively and significantly affect economic development in Nigeria. From the result, it is obvious that as future generation funds increase, economic development also increases. This finding is not far from obvious, given the fact that the development of any nation is dependent on the strength of its youthful population. Furthermore, sustainable development requires that while the present needs are satisfied, the future needs are not compromised.

The result further indicates that a reduction in either stabilization or infrastructural funds would result in a reduction in economic development. These too are not far from the truth in view of the fact that the development of infrastructure would attract investment into the economy and eventually increase developmental space.

The fact that the stabilization fund is negative and non-significant clearly indicates that Nigeria is not significantly saving for rainy days. However, it should be admitted that, since an aspect of SWFs significantly affects economic development, it implies that, when properly managed, SWFs can significantly contribute to economic development.

This can be ascertained by the fact that 82% of the variation in economic development is caused by sub-national governments sovereign wealth funds. There is a need for government at the center to ensure effective and efficient management of SWFs so as to ensure that what is due to sub-national governments from the SWFs is made available to them, in addition to setting up a proper regulatory framework to guide its operations.

## 7. Conclusion and Recommendations

The study investigated the effect of SWFs of sub-national governments on the economic development of Nigeria. SWFs have been found to contribute significantly to the development of resource-rich economies in both the developed and developing worlds. Nigeria SWFs were set up to ensure that excess proceeds from commodity and non-commodity trade are preserved with the central bank for rainy days. Nigerian SWFs consist of three funds: the stabilization fund, the future generation fund, and the infrastructural fund. It has been found from the study that of the three funds, only the future generation fund impacts positively and significantly on the economic development of Nigeria.

Sovereign Wealth Funds (SWFs) have gained prominence as strategic investment vehicles for countries endowed with significant natural resources, particularly oil-producing nations like Nigeria. These funds are established to manage and invest surplus revenues, primarily derived from commodity exports, to secure future generations' prosperity and stabilize the economy during periods of volatility.

Nigeria, as the largest oil producer in Africa, recognized the need to prudently manage its oil revenues, which were historically vulnerable to price fluctuations and mismanagement. The establishment of the Nigerian Sovereign Investment Authority (NSIA) in 2011 marked a pivotal step towards responsible management of the country's oil wealth. The NSIA manages three distinct funds: the Nigeria Infrastructure Fund, the Future Generations Fund, and the Stabilization Fund. Each fund serves a specific purpose, ranging from infrastructure development to securing future generations' wealth and stabilizing the economy against commodity price shocks.

However, while SWFs like the NSIA aim to mitigate the resource curse often associated with oil-dependent economies, their impact on sub-national governments within Nigeria remains an area warranting deeper exploration. Nigeria's federal system delegates considerable autonomy and fiscal responsibilities to its 36 states, yet the extent to which SWFs influence economic development at this sub-national level remains unclear.

The Nigerian states face diverse economic challenges, including inadequate infrastructure, limited access to capital, and dependency on federal allocations, which often fluctuate due to oil revenue volatility. Understanding how SWFs trickle down to impact individual states and contribute to their economic development is crucial for formulating effective policies that address regional disparities and promote inclusive growth.

The government should ensure improvement in the stabilization funds by ensuring that those states that deserve them should not be played politics with.

There is a need for the government to invest the stabilization funds and the infrastructural funds with blue-chip companies so as to ensure an adequate return on investment with a view to transferring the proceeds to improve the main fund. The future generation fund should continue to be given a boost, as the future of the economy is dependent on the quality of the future generation.

## References

- Abdulkarim, Y., (2023). A systematic review of investment indicators and economic growth in Nigeria. *Humanities and Social Sciences communication*, 1-13.
- Adonu, G. (2021). Catalyzing digital economy in Africa: The role of sovereign wealth funds. *Unilag Law Review*, 4(2). [https:// unilaglawreview.org/2021/02/08/catalysing-digital economyin- africa-the-role-of-sovereign-wealth-funds/](https://unilaglawreview.org/2021/02/08/catalysing-digital-economyin-africa-the-role-of-sovereign-wealth-funds/)
- Alsweilem, K. A., & Rietveld, M. (2018). *Sovereign wealth funds in resource economies*. Columbia University Press.



- Balin, B.J. (2010), *The Impact of Global Economic Crisis on Sovereign Wealth Funds, Asia – Pacific Economic Literature*, the Australia National University and Blackwell Publishing Asia
- Barney, J.B. and Hesterly, W.S. (2008), *Strategy Management and Competitive Manager*. New York: Reason Prentice Hall
- Bernstein, S. Scholar, A. and Lerner, J. (2009). “The investment strategies of sovereign wealth funds”, working paper 14.861, National Bureau of Economic Research, Ambridge, Available at <http://www.nber.org/paper/w14861>
- Bertoni, F. and Lugo, S. (2013) ‘Testing the strategic asset allocation of stabilization sovereign wealth funds’, *International Finance*, 16, 95-119.
- Bertoni, F. and Lugo, S. (2014) ‘The effect of sovereign wealth funds on the credit risk of their portfolio companies’, *Journal of Corporate Finance*, 27, 21-35.
- Borisova, G., Fotak, V., Holland, K. and Megginson, W. L. (2015) ‘Government ownership and the cost of debt: Evidence from government investments in publicly traded firms’, *Journal of Financial Economics*, 118, 168-191.
- Bortolotti, B., Fotak, V., & Megginson, W. L. (2015). The sovereign wealth fund discount: Evidence from public equity investments. *The Review of Financial Studies*, 28(11): 2993– 3035.
- Bortolotti, B., Loss, G., & van Zwieten, R. (2023). The times are they a-changin’? Tracking sovereign wealth funds’ sustainable investing. *Journal of International Business Policy*, 6; 220-240..
- Boubaker, S., Boubakri, N., Grira, J., & Guizani, A. (2018). Sovereign wealth funds and equity pricing: Evidence from implied cost of equity of publicly traded targets. *Journal of Corporate Finance*, 53: 202–224.
- Boubakri, N., Fotak, V., Guedhami O. and Yasuda Y., (2023). The heterogeneous and evolving roles of sovereign wealth funds: Issues, challenges, and research agenda. *Journal of International Business Policy*, 6, 241–252
- Carney, R. W. (2021). Sovereign wealth funds’ investment purpose and the investment implications. Available at SSRN 3902962.
- Carpantier, J. F, Vermeulen, W. (2018). Emergence of sovereign wealth funds. *Journal of Commodity Market*, 11:1–21

- Cuervo-Cazurra, A., Grosman, A., & Wood, G.T., (2023). Cross-country variations in sovereign wealth funds' transparency. *Journal of International Business Policy*.  
<https://doi.org/10.1057/s42214-023-00149-0>
- Cumming, D. J., & Monteiro, P. (2023). Sovereign wealth fund investment in venture capital, private equity, and real asset funds. *Journal of International Business Policy*, forthcoming.
- Cumming, D., Filatotchev, I., Reinecke, J., & Wood, G. (2020). New investor categories, agility and HRM: The case of sovereign wealth funds. *Human Resource Management Review*, 30(1): 100694.
- Daniel, D. and Brickman, P. (2001). "Block Ownership of Sovereign Wealth Fund and Firm-Specific Information" *Journal of Banking and Finance*, 12(33).
- Das, U. Miserere, A. and Vander Horal, H. (2010). *Economics of Sovereign Wealth Funds: Issues for Policymakers*, Washington: International Monetary Fund.
- Del Giudice, A., Marinelli, N. and Vitali, S. (2014) 'Sovereign Wealth Funds and Target Firms: Does' Networking' Matter?', *Journal of Financial Management, Markets and Institutions*, 2, 185-206.
- Fernandes, N. (2014) 'The impact of sovereign wealth funds on corporate value and performance', *Journal of Applied Corporate Finance*, 26, 76-84.
- Frynas, J. G. (2017). Sovereign wealth funds and the resource curse: Resource funds and governance in resource-rich countries. In D. Cumming, G. Wood, I. Filatotchev, & J. Reinecke (Eds.), *The Oxford handbook of sovereign wealth funds*. Oxford University Press: 123–142.
- Gagliardi, T., Gianfrate, G. and Vincenzi, R. (2014) Sovereign wealth funds' investments: The bondholders' perspective, Working paper.
- Gangi, F., Meles, A., Mustilli, M., Graziano, D., & Varrone, N. (2019). Do investment determinants and effects vary across sovereign wealth fund categories? A firm-level analysis. *Emerging Markets Review*, 38: 438–457.
- Ghouma, H., & Ouni, Z. (2022). The sovereign wealth funds risk premium: Evidence from the cost of debt financing. *Journal of Corporate Finance*, 76: 102255.
- Gianfrate, G., & Merlin, E. 2016. Who is the sovereign among sovereign wealth funds? A network analysis of co-investments. *The Journal of Private Equity*, 19(4): 7–18.

- Gintschel, A., & Scherer, B. (2008). Optimal asset allocation for sovereign wealth funds. *Journal of Asset Management*, 9(3): 215–238.
- Grieve, M.T. (2008). “Hedge Financial Activism, Corporate Governance, and Firm Performance” *Journal of finance*, 12, 63.
- IMF (International Monetary Fund) (2008), *Sovereign Wealth Funds – A Work Agenda*, February 2008.
- Inim, V.E., Udoh, F.S and Lungus, T.D., (2023). Sovereign wealth fund on sustainable economic growth in Nigeria. *Asian Journal of Social Sciences and Management Studies*, 10(2): 58- 64, DOI: 10.20448/ajssms.v10i2.4704.
- James, A., Retting, T., Shogren, J.F., Watson, B., and Wills, S., (2022). *Sovereign Wealth Funds in Theory and Practice*. *Annual Review of Resource Economics*, 14:621–46
- Jost, T., (2009). *Sovereign Wealth Funds – Size, Economic Effects and Policy Reactions*. HAW im Dialog - Weidener Diskussionspapiere, No. 13, ISBN 978-3-937804-15-6
- Liu, P., Mauck, N., & Price, S. M. (2020). Are government-owned investment funds created equal? Evidence from sovereign wealth fund real estate acquisitions. *The Journal of Real Estate Finance and Economics*, 61: 698–729.
- Lopez, D. (2023). *SWF 3.0: How sovereign wealth funds navigated COVID-19 and changed forever*. *Journal of International Business Policy*,
- Malan, S. (2013). *The investment strategies of sovereign wealth funds*, working paper 14.861, National Bureau of Economics Research, Ambridge.
- Mami, E. (2023). *The role of sovereign wealth funds in natural resource-rich countries: A systematic meta-narrative review*. *Journal of International Business Policy*, forthcoming.
- Marcus, S.S., & Vale, S. (2022). Is there a nonlinear relationship between public investment and private investment? evidence from 21 Organization for Economic Cooperation and Development countries. *International Journal of Finance and Economics*, 7(3):1–16
- Meggison, W. L., Lopez, D., & Malik, A. I. (2021). *The rise of state-owned investors: Sovereign wealth funds and public pension funds*. *Annual Review of Financial Economics*, 13: 247– 270.

- Megginson, W.L., Malik, A. & Zhou, X.Y., (2023). Sovereign wealth funds in the post-pandemic era. *Journal of International Business Policy*.  
<https://doi.org/10.1057/s42214-023-00155-2>
- Mohaddes, K., & Raissi, M. (2017). Do sovereign wealth funds dampen the negative effects of commodity price volatility? *Journal of Commodity Markets*, 8: 18–27.
- Murtinu, S. and Scalera, V. G. (2015) ‘Sovereign wealth fund investments and stock prices: The effect of target industry and location’, *Rivista Internazionale di Scienze Sociali*, 4, 447-462
- Murtinu, S., Scalera, V.G., (2016). Sovereign Wealth Funds' Internationalization Strategies: The Use of Investment Vehicles
- Oleka, D. C., Ugwuanyi, B. U., & Ewah, E. B. (2014). Sovereign Wealth Fund and Economic Growth in Nigeria: An Empirical Analysis. *IOSR Journal of Economics and Finance (IOSR-JEF)*, 4(5): 03-20.
- Olika, D., (2019). Who's Afraid of Saving Money? The Political Economy of Nigeria's Sovereign Wealth Fund
- Osirim, M., Wadike, C. G., & Davies, S. D., (2021). Sovereign Wealth Fund Model: A Tool for Economic Stability and Public Financial Management: Evidence from a Developing Country. *Current Journal of Applied Science and Technology*, 40(32): 10-20
- Ouoba Y. (2020). Natural resources fund types and capital accumulation: a comparative analysis. *Resource Policy*, 66:101635
- Rasaki, M. G., & Malikane, C. 2018. Sovereign wealth funds and macroeconomic stability in oil-exporting African countries. *OPEC Energy Review*, 42(2): 151–169.
- Roazanor, T. (2006) *A Blueprint for Sovereign Wealth Fund Best Practices*, London: Peterson Institute.
- Schena, P. J., Braunstein, J., & Ali, A. (2018). The case for economic development through sovereign investment: A paradox of scarcity? *Global Policy*, 9(3): 365–376.
- Triki, T., & Faye, I. (2011). Africa's quest for development: Can sovereign wealth funds help? In *Institutional investors in global capital markets*, 12: 263–290. Bingley, UK: Emerald Group Publishing.
- Tsani, S. (2013). Natural resources, governance and institutional quality: the role of resource funds. *Resource Policy*, 38(2):181–95.

- 
- Veljko, F., Bernard, B. and Merganser, W. (2008). The Financial Impact of Sovereign Wealth Fund Investments in listed companies. <http://faculty.staff.eu.edu/m/william.l.megginson.i>
- Ward, C., Brill, F., & Raco, M. (2022). State capitalism, capitalist statism: Sovereign wealth funds and the geopolitics of London's real estate market. *Environment and Planning A: Economy and Space*. <https://doi.org/10.1177/0308518X221102157>.
- Wurster, S., & Schlosser, S. J. (2021). Sovereign wealth funds as sustainability instruments? Disclosure of sustainability criteria in worldwide comparison. *Sustainability*, 13(10): 5565.