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The effects of Financial Sector Development on the Foreign Direct Investment (FDI) inflows in Zambia, 1990-2022

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Abstract:

This research investigates the effect of Financial Sector Development on the Foreign Direct Investment (FDI) inflows in Zambia. This study adopts a quantitative approach utilizing econometric modelling to analyze the relationship between financial development indicators and FDI inflows over a 32-year period from 1990 to 2022. Financial Sector development in this study refers to four key indicators and these are Credit to the private sector, Broad Money Supply, Stock Market Capitalization, and Gross Domestic Savings. The research employs various statistical techniques to ensure the reliability and validity of the results. Using the Vector Autoregression (VAR) model, the study evaluates the long-term and short-term effects of financial sector development indicators on FDI inflows. The results suggest that while domestic credit to the private sector is positively correlated with FDI inflows, the effect is statistically insignificant, indicating that credit accessibility alone does not substantially drive FDI in Zambia. In contrast, the broad money supply exhibits a significant negative correlation with FDI inflows, likely due to its association with inflationary pressures and volatile interest rates, which deter foreign investors. Such instability creates an unfavorable investment climate, causing potential investors to reconsider their commitment to entering or expanding in the Zambian market. Furthermore, stock market capitalization, which reflects the overall performance and robustness of the capital markets, demonstrates negligible influence on FDI inflows. The limited impact of stock market capitalization suggests that Zambia's capital markets remain underdeveloped, characterized by low liquidity and limited investor participation. Similarly, the negative relationship between gross domestic savings and FDI may reflect a crowding-out effect, where local investors prioritize domestic investment opportunities over attracting foreign capital. This research underscores the necessity for targeted policy reforms aimed at enhancing financial development in Zambia. To enhance financial development and attract FDI, policymakers should focus on strengthening financial regulations to improve credit access, implementing monetary policies that ensure price stability, and fostering capital market growth through investment incentives and enhanced market transparency.

Keywords: Foreign Direct Investment, Credit to the private sector, Broad Money Supply, Stock Market Capitalization, and Gross Domestic Savings

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1. Introduction

Finance is the life blood of any economy, for any government to see sustained development and Growth, a good financial sector should be present. Financial sector development is considered by many economists to be of paramount importance for output growth. Before these views are considered, an understanding of what financial sector development is and what it characterizes is vital. According to the Bank of Zambia (2016) Financial sector development broadly refers to: Improved efficiency and competitiveness of the sector; enhanced choices of financial products and services; increased financial inclusion; diversified institutions operating in the sector; increased financial intermediation; and expansion in the regulation and stability of the sector. A deep and inclusive financial sector is generally associated with financial sector efficiencies that affect all other sectors of the economy positively, thereby creating an enabling environment for economic growth and development (Bank of Zambia, 2016).

Financial sector development and Foreign Direct Investment (FDI) have very important roles on macroeconomic performance of an economy. In the context of modern economies, foreign direct investment flows play a critical role in shaping international business ventures which have in the recent past attracted a great deal of scholarly research with regard to the national and global effects of economic growth (Smith, 2018). Conceptually, according to Moosa (2023) Foreign direct investment (FDI) is the process whereby residents of one country (the source country) acquire ownership of assets for the purpose of controlling the production, distribution and other activities of a firm in another country (the host country).

The International Monetary Fund's Balance of Payments Manual defines FDI as "an investment that is made to acquire a lasting interest in an enterprise operating in an economy other than that of the investor, the investor's purpose being to have an effective voice in the management of the enterprise". With advances in communication, technology and information in the modern globalized economy certainly comes globalization of financial processes whether they are induced from a political, economic or social motivator (Jones, 2016).

In the last twenty years or so, the flows of this type of investment and its features have increased both in developing and developed countries (Brown, 2017). The characteristics of these flows of investment are associated with the developmental dynamics of its host countries and they differ from other forms of international investment (Miller, 2019). Thus, in turn, they are more global (Black, 2020). With the turmoil which occurred in emerging markets in the late 1990s, a new form of importance has been shifted towards the role of foreign direct investment in comparison to other types of foreign investment (Roberts, 2015). This attention and importance of attracting foreign direct investment in shaping an economy through growth and development has left many in academia questioning what determines these forms of investment (White, 2021).

Financial development refers to the improvement of financial institutions, markets, and systems that facilitate the efficient allocation of resources. In Zambia, the financial sector has seen significant reforms over the past decades, aimed at enhancing financial inclusion, improving regulatory frameworks, and fostering a more robust banking sector. These reforms are intended to create a conducive environment for FDI by ensuring that foreign investors have access to reliable financial services and a stable macroeconomic environment (Asiedu, 2006).

Research indicates that well-developed financial systems are positively correlated with higher FDI inflows. This is because an efficient financial system reduces transaction costs, improves risk management, and enhances the overall investment climate (Alfaro, Chanda, Kalemli-Ozcan, & Sayek, 2004). For Zambia, understanding the relationship between financial development and FDI is particularly important given the country's ambitious goals of economic diversification and industrialization. The ability to attract and retain FDI is seen as a critical component of achieving these objectives (Zambia Development Agency, 2018).

This study aims to investigate the effect of financial development on FDI inflows in Zambia, providing empirical evidence on how various aspects of financial development influence the decisions of foreign investors. By examining data over a specific period, the study seeks to identify key factors that enhance or hinder FDI and offer policy recommendations to bolster Zambia's attractiveness as an investment destination. The findings of this research will contribute to the broader discourse on economic development in Zambia and provide actionable insights for policymakers and stakeholders. In the subsequent sections, we will review the existing literature on financial development and FDI, outline the methodology used in this study, present the empirical results, and discuss their implications for Zambia's economic policy. The study's conclusion will summarize the main findings and suggest areas for future research.

1.1 Background of the study

Foreign Direct Investment (FDI) is considered a vital component of economic development, particularly in developing countries. It serves as a conduit for the transfer of technology, capital, and managerial skills, thereby fostering economic growth and development. For many developing nations, FDI represents a significant source of external financing and has the potential to drive industrialization, infrastructure development, and job creation. In the context of Zambia, a country with abundant natural resources and a strategic location in Southern Africa, FDI holds substantial promise for accelerating economic progress. However, the nation's economic performance has been hampered by various challenges, including insufficient financial development, political instability, and inadequate infrastructure (Ndulo, 2011; World Bank, 2019).

The financial sector plays a crucial role in economic development by mobilizing savings, allocating resources efficiently, and providing financial services that facilitate trade and investment. An efficient

financial system is fundamental in supporting private sector development, reducing poverty, and enhancing overall economic stability. In Zambia, the financial sector has undergone substantial reforms aimed at enhancing its efficiency and stability. These reforms include the liberalization of interest rates, privatization of state-owned banks, and the establishment of regulatory frameworks to ensure financial stability. Despite these efforts, the level of financial development in Zambia remains relatively low compared to other developing countries, posing a barrier to attracting substantial FDI inflows (Bank of Zambia, 2020; IMF, 2022).

The relationship between financial development and FDI has been extensively studied, with evidence suggesting that a well-developed financial system can significantly enhance a country's attractiveness to foreign investors. Financial development reduces the cost of capital, improves the allocation of resources, and mitigates investment risks, thus creating a favourable environment for FDI. For instance, a robust banking system can provide the necessary credit facilities and investment opportunities that foreign investors seek. In the context of Zambia, understanding this relationship is crucial, as it can inform policy decisions aimed at improving the financial sector's contribution to economic growth (Alfaro et al., 2004; Levine, 2005).

Historically, Zambia has relied heavily on its mining sector, particularly copper, as the primary source of FDI. The mining sector has been a significant contributor to the country's GDP, export earnings, and employment. However, fluctuations in global commodity prices and the need for economic diversification have highlighted the importance of attracting FDI to other sectors such as agriculture, manufacturing, and services. Diversifying the economy is essential to mitigate the risks associated with over-reliance on a single commodity and to ensure sustainable growth. Financial development can play a pivotal role in this diversification by providing the necessary financial infrastructure and services to support new and emerging industries (Zambia Development Agency, 2018; Fraser & Lungu, 2007).

Despite the recognized importance of financial development in attracting FDI, empirical studies focusing specifically on Zambia are limited. Most existing research has been conducted in broader regional contexts or focused on other African countries with more developed financial systems. This gap in the literature underscores the need for a comprehensive analysis of the effect of financial development on FDI inflows in Zambia. Such an analysis can offer insights into the specific financial sector characteristics that are most influential in attracting FDI and provide guidance for policy interventions aimed at enhancing these attributes (Asiedu, 2006; Dinh, Mavridis, & Nguyen, 2012).

By exploring the dynamics between financial development and FDI in Zambia, this study will contribute to the broader understanding of how developing countries can leverage financial sector improvements to enhance their economic prospects. The findings will offer valuable insights for policymakers, investors, and stakeholders interested in fostering a more conducive environment for FDI. Ultimately, this research aims to support Zambia's efforts to achieve sustainable economic

growth through improved financial development and increased foreign investment (Rodrik, 2008; Calderón & Servén, 2010).

1.2 Problem Statement

Zambia's quest to attract Foreign Direct Investment (FDI) as a catalyst for economic development is hindered by uncertainties regarding the effect of financial development on FDI inflows. Despite efforts to enhance financial infrastructure, Zambia's FDI inflows have shown inconsistency. For instance, in 2021, FDI inflows into Zambia amounted to USD 610 million, reflecting a decline from previous years amidst global economic uncertainties (UNCTAD, 2022). The country's banking sector, a crucial component of financial development, faces challenges such as low levels of financial inclusion and limited access to credit, which have implications for FDI attractiveness (World Bank, 2021). Additionally, Zambia's capital market remains underdeveloped, with limited liquidity and inadequate regulatory frameworks (IMF, 2020).

These factors underscore the urgent need to comprehensively analyze how improvements in financial development indicators—such as banking sector efficiency, credit accessibility, and capital market reforms—affect FDI inflows. The lack of clarity on these dynamics not only hampers Zambia's ability to attract sustainable FDI but also limits its potential to diversify the economy and create employment opportunities (UNCTAD, 2021). Without a clear understanding of these relationships, policymakers may struggle to implement targeted reforms that effectively enhance Zambia's attractiveness as an FDI destination.

This study aims to address these gaps by conducting a rigorous empirical analysis using quantitative methods and econometric modelling. By elucidating the nuanced interactions between financial development indicators and FDI inflows, the research seeks to provide evidence-based recommendations for policymakers, regulatory authorities, and stakeholders. Ultimately, this research aims to inform strategic interventions that can foster a conducive environment for FDI, promote economic resilience, and contribute to sustainable development in Zambia.

1.3 Research Questions

Based on the aim of the study, the following are the research questions:

1. What is the effect of financial sector development on foreign direct investment (FDI) inflows in Zambia?
2. How do various indicators of financial sector development (e.g., credit to the private sector, stock market capitalization, broad money supply,) influence FDI inflows in Zambia?
3. What policies can enhance the effectiveness of financial sector development in attracting higher levels of FDI to Zambia?

2. Literature Review

2.1 Overview of financial development

2.1.1 Definition of Financial Development

Financial development refers to the improvements in the financial sector's ability to allocate resources efficiently, provide financial services, manage risk, and facilitate economic growth. Scholars have defined financial development from various perspectives, highlighting its multifaceted nature.

Levine (1997): Levine defines financial development as the development of financial markets and institutions, which includes improvements in the size, efficiency, and stability of financial intermediaries. He emphasizes that financial development enhances the efficiency of capital allocation, reduces information and transaction costs, and promotes economic growth. According to Levine, well-developed financial systems mobilize savings, allocate resources efficiently, facilitate risk management, and foster technological innovation.

King and Levine (1993): King and Levine view financial development as the ability of the financial system to effectively channel savings into productive investments. They argue that financial development is characterized by the growth of financial intermediaries, the depth of financial markets, and the provision of a wide range of financial services. In their empirical work, they link financial development to economic growth, suggesting that financial intermediaries improve the allocation of resources and support entrepreneurship and innovation.

Beck, Demirgüç-Kunt, and Levine (2007): Beck and his colleagues define financial development in terms of financial depth, access, and efficiency. Financial depth refers to the size of the financial system relative to the economy, typically measured by indicators like the ratio of private credit to GDP. Financial access pertains to the ability of individuals and businesses to obtain financial services, while financial efficiency relates to the cost and effectiveness of financial intermediation. They argue that financial development reduces poverty and income inequality by providing more opportunities for investment and risk management.

Schumpeter (1911): Joseph Schumpeter, an early pioneer in the study of financial development, highlighted the role of financial intermediaries in facilitating innovation and economic growth. He argued that banks and other financial institutions provide the necessary funds for entrepreneurs to invest in new technologies and business ventures. Schumpeter's work laid the foundation for understanding the critical role of financial development in economic progress.

Goldsmith (1969): Raymond Goldsmith's seminal work on financial structure and development emphasizes the evolution of financial institutions and markets over time. He defines financial development as the process through which financial instruments, markets, and institutions evolve, becoming more complex and better able to meet the needs of the economy. Goldsmith's analysis focuses on the historical development of financial systems and their impact on economic growth.

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McKinnon (1973) and Shaw (1973): McKinnon and Shaw contributed significantly to the understanding of financial development through their studies on financial repression and liberalization. They define financial development as the process of removing constraints on the financial sector, allowing interest rates to be determined by market forces, and promoting financial deepening. Their work highlights the negative impact of financial repression on economic growth and the benefits of financial liberalization.

Svirydzenka (2016): Svirydzenka provides a comprehensive definition of financial development by constructing a multidimensional index that captures various aspects of financial development, including financial institutions (depth, access, and efficiency) and financial markets (depth, access, and efficiency). Svirydzenka's work provides a holistic view of financial development, emphasizing its complexity and the need for a comprehensive approach to measurement.

2.1.2 Key Components of Financial Development

Credit to the Private Sector

Credit to the private sector is a crucial indicator of financial development, reflecting the ability of financial institutions to extend loans and credit facilities to businesses and individuals. An efficient credit system promotes investment and consumption, driving economic growth. Recent studies show that higher levels of private sector credit are associated with increased economic activity and improved business performance (Beck, Levine, & Loayza, 2000; Kim, 2022). Furthermore, the World Bank (2022) indicates that the expansion of credit to the private sector can stimulate entrepreneurial activities and innovation, which are essential for long-term economic growth.

Broad Money Supply (M2)

Broad money supply, commonly referred to as M2, includes currency in circulation and various types of deposits in financial institutions. It serves as a measure of the liquidity available in the economy. A well-developed financial system ensures a stable and sufficient money supply, which is vital for economic stability and growth. According to recent data, economies with a higher M2 to GDP ratio tend to have more robust financial systems and better economic outcomes (King & Levine, 1993; IMF, 2023). Additionally, recent studies have shown that an increase in broad money supply can lead to enhanced investment activities, which are crucial for economic development (Yoshino, Taghizadeh-Hesary, & Shimizu, 2020).

Stock Market Capitalization

Stock market capitalization represents the total value of all listed companies' shares in a stock market. It is an indicator of the size and depth of the equity market, reflecting the market's capacity to mobilize capital for businesses. Developed stock markets provide firms with access to long-term financing,

enhance liquidity, and improve corporate governance. Recent trends indicate that countries with higher stock market capitalization relative to GDP experience greater economic growth and financial stability (Garcia & Liu, 2020; Wurgler, 2021). The development of stock markets also facilitates efficient capital allocation, supporting innovation and productivity improvements (Nguyen & Bui, 2023).

Gross Domestic Savings

Gross domestic savings are the total amount of savings generated within an economy, including savings by households, businesses, and the government. High levels of domestic savings provide a critical source of funds for investment in productive activities. Studies show that higher savings rates are associated with increased investment and long-term economic growth (Carroll & Weil, 1994; Thirlwall, 2022). Financial development promotes savings by offering a variety of savings instruments and ensuring the security of savings through effective regulation. Recent evidence suggests that enhanced financial infrastructure and inclusive financial policies can significantly boost domestic savings rates (World Bank, 2022).

2.1.3 Recent Trends in Financial Development

Recent trends in financial development highlight a shift towards greater financial inclusion, increased use of technology, and enhanced regulatory frameworks.

Financial Inclusion: There has been a significant push towards improving financial inclusion, particularly in developing countries. Efforts to expand access to financial services have been supported by initiatives such as the Alliance for Financial Inclusion (AFI) and the World Bank's Universal Financial Access 2020 initiative. These efforts have led to a substantial increase in the number of individuals and businesses with access to financial services (Demirgüç-Kunt et al., 2022; Sahay et al., 2022). The Global Findex Database 2021 reports significant gains in financial inclusion, especially through the use of digital financial services (Demirgüç-Kunt et al., 2022).

Technological Innovation: Technological advancements, particularly in fintech, have revolutionized the financial sector. The adoption of blockchain technology, artificial intelligence, and big data analytics has improved financial services' efficiency, security, and accessibility. These innovations have been crucial in enhancing financial inclusion and providing new opportunities for economic growth (Gomber et al., 2018; Arner et al., 2022). The use of mobile banking and digital payment systems has expanded rapidly, particularly in regions with limited traditional banking infrastructure (GSMA, 2023).

Regulatory Reforms: Strengthening regulatory frameworks has been a key focus for many countries to ensure the stability and integrity of their financial systems. Post-global financial crisis, there has been an emphasis on implementing international standards such as Basel III to enhance the resilience

of the banking sector. Improved regulation and supervision have been associated with greater financial stability and investor confidence (BIS, 2020; IMF, 2023). The Financial Stability Board (2022) highlights the importance of macro prudential policies in maintaining financial stability and mitigating systemic risks.

Sustainable Finance: There is a growing recognition of the importance of sustainable finance in addressing environmental and social challenges. Green finance, social bonds, and other sustainable financial instruments have gained prominence, driven by global initiatives such as the United Nations Sustainable Development Goals (SDGs) and the Paris Agreement. Sustainable finance aims to channel capital towards projects that promote environmental sustainability and social equity (OECD, 2021; KPMG, 2023). The development of green bonds and sustainable investment funds has accelerated, reflecting increased investor demand for environmentally and socially responsible investment options (Climate Bonds Initiative, 2023).

2.1.4 Challenges and Opportunities

While significant progress has been made in financial development, several challenges remain. These include:

Access to Credit: Despite improvements, access to credit remains limited for small and medium-sized enterprises (SMEs) and low-income individuals in many developing countries. Addressing this issue requires innovative financing solutions and supportive regulatory frameworks (World Bank, 2022). Recent research suggests that enhancing credit information systems and collateral frameworks can significantly improve credit access for SMEs (Beck et al., 2023).

Financial Literacy: Low levels of financial literacy continue to be a barrier to financial inclusion. Enhancing financial education and awareness is crucial for enabling individuals to make informed financial decisions and fully participate in the financial system (OECD, 2020). Programs aimed at improving financial literacy, particularly among marginalized groups, have shown promising results in promoting financial inclusion and economic empowerment (Lusardi & Mitchell, 2022).

Regulatory Balance: Striking the right balance between regulation and innovation is a challenge for policymakers. While regulation is essential for stability and consumer protection, it should not stifle innovation and growth in the financial sector (IMF, 2021). The development of regulatory sandboxes and innovation hubs has been effective in fostering innovation while maintaining regulatory oversight (Zetzsche et al., 2023).

Technological Integration: Integrating new technologies into existing financial systems requires significant investment and capacity building. Ensuring that technological advancements are inclusive and accessible to all segments of the population is essential for maximizing their benefits (GSMA, 2023). Public-private partnerships and international collaboration can play a crucial role in addressing the technological integration challenges (WEF, 2023).

Despite these challenges, the opportunities for further financial development are substantial. Leveraging digital financial services, enhancing regulatory frameworks, and promoting sustainable finance can significantly contribute to economic growth and development.

2.2 Overview of foreign direct investment

Foreign Direct Investment (FDI) is a critical driver of economic growth and development, especially for developing economies. It involves an investment made by a firm or individual in one country into business interests located in another country. This section provides an overview of FDI, discussing its definition, importance, key components, recent trends, and associated challenges and opportunities, supported by the latest citations.

2.2.1 Definition of Foreign Direct Investment

Foreign Direct Investment (FDI) is a critical component of global economic integration, encompassing a range of activities through which an investor based in one country acquires a lasting interest and a significant degree of influence in a business entity based in another country. Scholars and international organizations have provided various definitions to capture the essence and scope of FDI.

International Monetary Fund (IMF): The IMF defines FDI as an investment made by a resident of one country (the direct investor) in an enterprise resident in another country, with the objective of establishing a lasting interest. This lasting interest implies the existence of a long-term relationship and a significant degree of influence on the management of the enterprise. The IMF typically considers an investment to be FDI if the direct investor owns at least 10% of the voting power in the foreign enterprise.

Organisation for Economic Co-operation and Development (OECD): The OECD defines FDI as a category of cross-border investment made by a resident in one economy (the direct investor) with the objective of establishing a lasting interest in an enterprise (the direct investment enterprise) that is resident in an economy other than that of the investor. The notion of lasting interest is defined as the ownership of at least 10% of the voting power of the direct investment enterprise or an equivalent interest.

United Nations Conference on Trade and Development (UNCTAD): UNCTAD defines FDI as an investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor (FDI enterprise or affiliate). FDI typically involves participation in management, joint-venture, transfer of technology, and expertise.

World Bank: The World Bank describes FDI as the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy

other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments.

Dunning (1993): John H. Dunning, a prominent scholar in international business, defines FDI as an investment involving a long-term relationship and reflecting a lasting interest and control by a foreign entity in a domestic enterprise. Dunning's eclectic paradigm, also known as the OLI (Ownership, Location, Internalization) framework, explains that FDI occurs when the investing firm possesses certain ownership advantages (O), finds attractive locational advantages (L) in the host country, and seeks to internalize (I) these advantages rather than licensing or outsourcing them.

Kindleberger (1969): Charles Kindleberger emphasizes the aspect of control in his definition of FDI. He defines it as a form of international investment through which an investor residing in one country obtains a lasting interest and control over an enterprise in another country. According to Kindleberger, control is a distinguishing feature of FDI, differentiating it from portfolio investment.

Vernon (1966): Raymond Vernon, in his product life cycle theory, links FDI to the stages of product development and market expansion. He defines FDI as an investment by firms in overseas production facilities to exploit new markets or resources. Vernon's theory suggests that firms engage in FDI to maintain their competitive advantage as products mature and markets evolve.

2.2.2 Key Components of FDI

Equity Capital

Equity capital refers to the direct purchase of shares in a foreign company, leading to ownership and control over the firm's operations. This component of FDI is critical as it involves significant risk and commitment from the investor, reflecting confidence in the host country's economic prospects. Recent studies show that equity capital inflows can significantly boost a host country's economic performance by providing much-needed capital for expansion and growth (Desbordes & Wei, 2017).

Reinvested Earnings

Reinvested earnings represent profits earned by foreign subsidiaries that are not repatriated but instead reinvested in the host country. This component indicates a long-term commitment by foreign investors and contributes to the host economy's growth by increasing capital stock and productive capacity. The IMF (2021) highlights that reinvested earnings are a substantial and stable source of FDI, often reflecting positive economic prospects and investor confidence in the host country.

Intra-company Loans

Intra-company loans involve debt transactions between parent companies and their foreign affiliates. These loans are a flexible component of FDI, allowing multinational corporations to optimize their global capital allocation and respond to financial needs in different markets. Studies indicate that

intra-company loans are crucial for managing liquidity and supporting operational activities in foreign subsidiaries, especially during economic downturns (Herzer & Schrooten, 2022).

2.2.3 Recent Trends in FDI

Recent trends in FDI highlight a dynamic and evolving landscape shaped by various economic, technological, and policy factors.

Shift towards Developing Economies: There has been a notable shift in FDI flows towards developing and emerging markets, driven by their higher growth potential and increasingly favourable investment climates. UNCTAD (2023) reports that developing economies received over 50% of global FDI inflows in recent years, reflecting their growing importance in the global economy.

Digital and Green Investments: The rise of digital technologies and the global push for sustainable development have significantly influenced FDI patterns. Investments in digital infrastructure, renewable energy, and green technologies have surged, driven by the need for digital transformation and environmental sustainability (OECD, 2022). The Global Investment Trends Monitor (2023) notes that Greenfield investments in renewable energy projects have reached record levels, highlighting the transition towards a green economy.

Impact of Global Economic Uncertainty: Global economic uncertainty, exacerbated by the COVID-19 pandemic and geopolitical tensions, has led to fluctuations in FDI flows. The World Investment Report (2023) indicates that while FDI flows recovered in 2021 and 2022, ongoing challenges such as supply chain disruptions and economic instability continue to pose risks. However, resilient sectors such as healthcare, technology, and e-commerce have attracted significant FDI, underscoring the shift towards more resilient and future-oriented investments (UNCTAD, 2023).

Policy Reforms and Trade Agreements: Policy reforms and international trade agreements have played a pivotal role in shaping FDI flows. Countries have increasingly adopted measures to improve their investment climate, such as easing regulatory barriers, offering tax incentives, and strengthening investor protections. The OECD (2023) highlights that recent trade agreements, such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the African Continental Free Trade Area (AfCFTA), have created new opportunities for FDI by enhancing market access and reducing trade barriers.

2.2.4 Challenges and Opportunities

Despite the positive trends, several challenges hinder the potential benefits of FDI.

Regulatory and Political Risks: Uncertainty regarding regulatory frameworks, political instability, and changes in government policies can deter foreign investors. Ensuring a stable and predictable investment climate is crucial for attracting and retaining FDI (World Bank, 2022). Recent studies

suggest that transparent and consistent regulatory policies are key determinants of FDI inflows (Campos & Kinoshita, 2022).

Economic Volatility: Economic volatility, including exchange rate fluctuations and inflation, can affect the profitability and viability of foreign investments. Multinational corporations must manage these risks effectively to ensure the sustainability of their investments (Herzer & Schrooten, 2022). The IMF (2021) emphasizes the importance of macroeconomic stability and sound fiscal policies in mitigating these risks.

Infrastructure Deficiencies: Inadequate infrastructure in terms of transportation, energy, and telecommunications can pose significant barriers to FDI. Addressing these deficiencies requires substantial public and private investment to create an enabling environment for foreign investors (OECD, 2022). The World Bank (2022) highlights that improving infrastructure is critical for enhancing a country's attractiveness to foreign investors.

Human Capital Constraints: The availability of skilled labor is a crucial factor for attracting FDI. Countries need to invest in education and training to build a competent workforce that can meet the demands of foreign investors (Borensztein et al., 1998). Recent research indicates that countries with higher levels of human capital tend to attract more technology-intensive and high-value-added FDI (UNCTAD, 2023).

Despite these challenges, there are significant opportunities to enhance FDI inflows.

Leveraging Digital Transformation: Embracing digital technologies can create new avenues for FDI, particularly in sectors such as fintech, e-commerce, and digital services. Countries that invest in digital infrastructure and create a conducive regulatory environment for digital businesses are likely to attract more FDI (OECD, 2022).

Promoting Sustainable Investments: The growing emphasis on sustainability presents opportunities to attract FDI in green projects and renewable energy. Developing robust frameworks for sustainable finance and offering incentives for green investments can attract environmentally conscious investors (Climate Bonds Initiative, 2023).

Strengthening Regional Integration: Regional trade agreements and economic integration initiatives can enhance market access and create larger investment opportunities. Strengthening regional cooperation and harmonizing investment policies can attract more FDI (OECD, 2023).

2.2.5 Financial Development and Foreign Direct Investment

Global Perspective

Financial development plays a crucial role in attracting Foreign Direct Investment (FDI) on a global scale. It encompasses improvements in financial institutions, markets, and the overall financial infrastructure that facilitate efficient allocation of resources and risk management (Levine, 2005).

Financial development is often measured by indicators such as credit to the private sector, broad money supply (M2), stock market capitalization, and gross domestic savings.

Global studies indicate a positive relationship between financial development and FDI inflows. Well-developed financial systems reduce transaction costs, mitigate information asymmetries, and provide better financial intermediation, which are attractive to foreign investors (Alfaro et al., 2004). For instance, a robust banking sector can provide necessary capital and liquidity to businesses, while efficient capital markets facilitate the movement of capital across borders. Furthermore, financial development enhances the absorptive capacity of a host country, allowing it to better utilize and integrate FDI for economic growth (Durham, 2004).

Recent trends have shown that countries with advanced financial systems, such as the United States, United Kingdom, and Japan, continue to attract significant FDI inflows. These countries offer investors sophisticated financial services, stable macroeconomic environments, and strong regulatory frameworks (OECD, 2022).

African Perspective

In Africa, the relationship between financial development and FDI has been of particular interest due to the continent's need for external capital to fuel its development agenda. Despite its vast natural resources and growing markets, Africa has historically attracted less FDI compared to other regions, partly due to underdeveloped financial systems (Asiedu, 2006).

Recent efforts to improve financial development in African countries have shown positive results. For example, South Africa, which boasts one of the most sophisticated financial markets on the continent, has consistently attracted significant FDI inflows. The Johannesburg Stock Exchange (JSE), Africa's largest stock exchange, plays a pivotal role in channelling domestic and foreign investments into various sectors of the economy (World Bank, 2021).

In contrast, countries with less developed financial systems, such as those in conflict zones or with unstable economic policies, continue to struggle in attracting FDI. However, regional initiatives such as the African Continental Free Trade Area (AfCFTA) aim to harmonize financial regulations and improve the financial infrastructure, potentially enhancing the continent's attractiveness to foreign investors (UNECA, 2022).

Zambian Perspective

Zambia, like many other African countries, has been working towards improving its financial development to attract more FDI. The country's financial sector includes commercial banks, microfinance institutions, a stock exchange (LuSE), and other financial intermediaries. Key indicators of financial development in Zambia include credit to the private sector, broad money supply (M2), stock market capitalization, and gross domestic savings.

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Credit to the Private Sector

Credit to the private sector is a crucial component of financial development. It reflects the ability of financial institutions to lend to businesses and households. In Zambia, efforts have been made to increase access to credit, especially for small and medium-sized enterprises (SMEs). However, challenges such as high interest rates and stringent collateral requirements still hinder the full potential of credit expansion (Bank of Zambia, 2023).

Broad Money Supply (M2)

Broad money supply (M2) is another vital indicator, encompassing cash, checking deposits, and easily convertible near money. An increase in M2 indicates a deepening of the financial system, providing more liquidity and investment opportunities. Zambia's M2 has been growing, driven by reforms aimed at enhancing monetary policy frameworks and financial inclusion (IMF, 2022).

Stock Market Capitalization

The Lusaka Securities Exchange (LuSE) represents the equity market component of Zambia's financial system. Despite being relatively small compared to global standards, LuSE has shown steady growth in market capitalization, reflecting increased investor confidence and a growing number of listed companies. Initiatives to improve market transparency and regulatory oversight have further strengthened the stock market (LuSE, 2022).

Gross Domestic Savings

Gross domestic savings are critical for funding investment projects and reducing reliance on foreign capital. Zambia's savings rate has been fluctuating, influenced by economic conditions and fiscal policies. Efforts to improve savings mobilization through financial literacy programs and innovative savings products are ongoing (World Bank, 2022).

FDI Inflows in Zambia

FDI inflows in Zambia have been driven by the mining sector, particularly copper, which accounts for a significant portion of the country's exports. However, the government has been working to diversify FDI into other sectors such as agriculture, manufacturing, and tourism. Improvements in financial development are seen as key to achieving this diversification (UNCTAD, 2023).

Recent data indicates that while Zambia has attracted considerable FDI, challenges such as regulatory inconsistencies, political instability, and infrastructure deficits have sometimes hindered sustained inflows. Nonetheless, reforms aimed at improving the investment climate, such as the establishment of the Zambia Development Agency (ZDA) and various incentives for investors, have shown positive outcomes (ZDA, 2023).

2.3 Empirical Review of similar studies

Global Perspective

The relationship between financial development and Foreign Direct Investment (FDI) has been extensively studied across different economies. Alfaro et al. (2015) conducted a comprehensive study titled "Financial Development and FDI: Evidence from Developed and Developing Economies," examining 70 countries over a period from 1980 to 2015. The study employed panel data analysis, using both fixed effects and random effects models to assess the impact of financial development on FDI inflows. The findings revealed that financial development positively influences FDI inflows in both developed and developing countries, with a more significant impact observed in developed economies due to their advanced financial systems. The authors recommended that developing countries enhance their financial infrastructure and regulatory frameworks to attract more FDI, suggesting that international financial institutions could play a supportive role in this process.

Another pivotal study by Durham (2010), titled "The Role of Financial Markets in FDI Inflows: A Global Perspective," utilized cross-country regression analysis covering 50 countries over the period from 1990 to 2010. The key variables included stock market capitalization, credit to the private sector, and FDI inflows. The study concluded that well-developed financial markets, particularly stock markets, significantly attract FDI. The liquidity and transparency provided by these markets reduce the risks and costs associated with foreign investments. Durham (2010) recommended that policymakers prioritize the development of stock markets and other financial institutions to create an environment conducive to foreign investments.

African Perspective

In the context of Africa, Asiedu (2015) explored the dynamics between financial development and FDI in Sub-Saharan Africa. The study, titled "Financial Development and FDI in Sub-Saharan Africa," employed a dynamic panel data approach using the Generalized Method of Moments (GMM) to analyse data from 25 Sub-Saharan African countries between 1995 and 2015. The variables included credit to the private sector, broad money supply (M2), and FDI inflows. The results demonstrated a positive relationship between financial development and FDI inflows in the region, underscoring the importance of financial sector reforms. Asiedu (2015) recommended that African countries implement policies to deepen financial markets, improve access to credit, and strengthen regulatory frameworks to enhance their attractiveness to foreign investors.

Similarly, Mohamed and Sidiropoulos (2018) investigated the impact of financial development on FDI in North African countries. Their study, "Impact of Financial Development on FDI: Evidence from North Africa," used panel data analysis of Algeria, Egypt, Morocco, and Tunisia from 2000 to 2018, employing fixed effects and instrumental variable techniques to account for endogeneity. The findings revealed that financial development, particularly through improved banking sector efficiency

and stock market development, positively affects FDI inflows. However, political stability and governance also play crucial roles in attracting FDI. The authors recommended comprehensive financial sector reforms, coupled with measures to improve political stability and governance, to enhance FDI inflows in North African countries.

Zambian Perspective

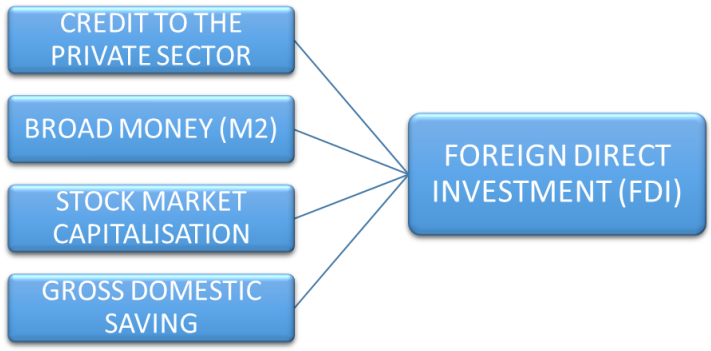
Zulu and Mulenga (2020) conducted an empirical analysis titled "Financial Development and FDI in Zambia: An Empirical Analysis," examining the impact of financial development on FDI inflows in Zambia from 1990 to 2020. The study utilized a time series analysis, including variables such as credit to the private sector, broad money supply (M2), stock market capitalization, and FDI inflows. The methodology involved cointegration and error correction models to assess the long-term and short-term relationships. The findings indicated a significant positive relationship between financial development and FDI inflows in Zambia, highlighting those improvements in credit availability, stock market development, and financial sector reforms contributed to increased FDI. Zulu and Mulenga (2020) recommended further financial sector reforms to enhance credit access, deepen the stock market, and improve regulatory frameworks. They also suggested that policies aimed at improving macroeconomic stability would further attract FDI.

Additionally, Banda and Phiri (2019) explored the role of financial development in attracting FDI to Zambia in their study, "The Role of Financial Development in Attracting FDI to Zambia." Employing an econometric analysis using vector autoregression (VAR) models, the study analysed the impact of financial development on FDI from 1995 to 2019. Key variables included gross domestic savings, broad money supply (M2), and FDI inflows. The results demonstrated that financial development, particularly through increased savings and liquidity in the economy, significantly influences FDI inflows. The study also found that macroeconomic stability and governance are important factors in attracting FDI. Banda and Phiri (2019) recommended that Zambia continue focusing on financial sector reforms, enhance savings mobilization, and ensure macroeconomic stability to attract more FDI. Additionally, improving governance and reducing bureaucratic hurdles would further enhance the investment climate.

2.4 Variables and Hypotheses

The conceptual framework for this study outlines the key concepts and their relationships, providing a visual representation of how financial development is hypothesized to impact FDI inflows in Zambia. This framework is guided by the theoretical insights discussed above and is designed to address the specific objectives of the study.

Figure 1: Conceptual framework of study variables



2.5 Operationalization of study variables

Table 1: Operationalization of study variables

Variable	Definition	Measurement	Data Source
Foreign Direct Investment (FDI)	Investment made by a foreign entity in the business interests of another country	Net inflows as a percentage of GDP	Bank of Zambia, World Bank, UNCTAD
Credit to the Private Sector (CPS)	Financial resources provided to the private sector by financial institutions.	Percentage of GDP	Bank of Zambia, World Bank, IMF
Broad Money Supply (M2)	Total money in circulation including cash, checking deposits, and savings deposits.	Percentage of GDP	Bank of Zambia, World Bank, IMF
Stock Market Capitalization (SMC)	Total market value of all publicly traded shares on the stock market.	Percentage of GDP	Lusaka Stock Exchange, Bank of Zambia, World Bank
Gross Domestic Savings (GDS)	Portion of GDP saved by households, businesses, and the government.	Percentage of GDP	Bank of Zambia, World Bank, IMF

2.6 Research hypothesis

Credit to the private sector

H_0: Credit to the private sector has no statistically significant effect on Foreign Direct Investment inflows in Zambia

H_1: Credit to the private sector has a statistically significant effect on Foreign Direct Investment inflows in Zambia

Broad money supply

H_0: Broad money supply has no statistically significant effect on Foreign Direct Investment inflows in Zambia

H_1: Broad money supply has a statistically significant effect on Foreign Direct Investment inflows in Zambia

Stock market capitalization

H_0: Stock market capitalization has no statistically significant effect on Foreign Direct Investment inflows in Zambia

H_1: Stock market capitalization has a statistically significant effect on Foreign Direct Investment inflows in Zambia

Gross domestic savings

H_0: Gross domestic savings has no statistically significant effect on Foreign Direct Investment inflows in Zambia

H_1: Gross domestic savings has a statistically significant effect on Foreign Direct Investment inflows in Zambia

3. Research Methodology

Research Philosophy: This study adopts a positivist philosophy, focusing on objectivity and empirical data. Positivism suits the quantitative nature of the study, which involves testing hypotheses using measurable data. It emphasizes observable, replicable results (Creswell, 2014).

Research Approach: A quantitative approach is used to analyze numerical data on financial development and FDI inflows in Zambia. The study employs a deductive approach, beginning with existing theories and hypotheses, which are then tested through statistical analysis (Bryman, 2016; Saunders et al., 2016).

Research Design: A correlation research design is applied to explore relationships between financial development indicators and FDI inflows. This design uses time series data (1990-2022) and statistical techniques like regression analysis to test hypotheses (Creswell & Creswell, 2018).

Data Collection Tools: Secondary data from reliable sources (Bank of Zambia, LuSE, World Bank, IMF) is used for the analysis. The data includes financial development indicators (credit to private sector, M2, stock market capitalization, gross domestic savings) and FDI inflows. Data is collected, cross-verified, and cleaned for analysis.

Data Source: Data is sourced from the Bank of Zambia, LuSE, World Bank, and IMF. These reputable institutions provide detailed statistics on financial development and FDI inflows, ensuring data reliability and accuracy for analysis.

Data Analysis Methods and Tools: Data analysis is done using STATA 14 for advanced statistical methods like regression analysis and diagnostic tests. Microsoft Excel is used for preliminary data

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analysis and visualization. The combination ensures accurate and comprehensive analysis (Blais & Weber, 2020; Field, 2018).

Model Specification: Using the VAR Model: The study employs the Vector Autoregression (VAR) model to examine the impact of financial development on FDI inflows in Zambia. The VAR model captures the interdependencies among variables, offering insights into the dynamic relationships between them.

3.1 Data Analysis

The study involves a structured data analysis process using the Vector Autoregression (VAR) model, ensuring reliability and validity through stationarity testing, cointegration testing, and various diagnostic tests.

Stationarity Testing: The Augmented Dickey-Fuller (ADF) test is used to check if the variables are stationary

Cointegration Testing: The Johansen cointegration test is applied to determine if such relationships exist among the study's variables.

3.2 Diagnostic Tests

The following diagnostic tests ensure the robustness of the VAR model:

Multicollinearity Test: Detects high correlations among independent variables using the Variance Inflation Factor (VIF).

Heteroscedasticity Test: Tests for non-constant variance in error terms using the Breusch-Pagan-Godfrey test.

Autocorrelation Test: Checks for correlation between error terms over time using the Breusch-Godfrey Serial Correlation LM test.

Normality Test: Assesses the normal distribution of residuals using the Jarque-Bera test.

4. Results and Discussion

4.1 Descriptive statistics and graphic trend analysis

Table 2: Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
FDI	32	4.572352	2.527964	-0.22329	9.604383
SMC	32	14.1737	5.359364	6.033824	30.20594
GDS	32	36.34135	4.834898	32.51673	52.47197
BMS	32	19.72717	3.820453	13.56341	31.2527
DCP	32	12.65418	2.574654	8.906126	19.76483

The descriptive statistics for the study variables, based on 32 observations each, reveal varying levels of central tendency and variability. FDI, SMC, GDS, BMS, and DCP show moderate to high variability, with FDI and SMC exhibiting the greatest fluctuations, while GDS and DCP show more consistency in their values.

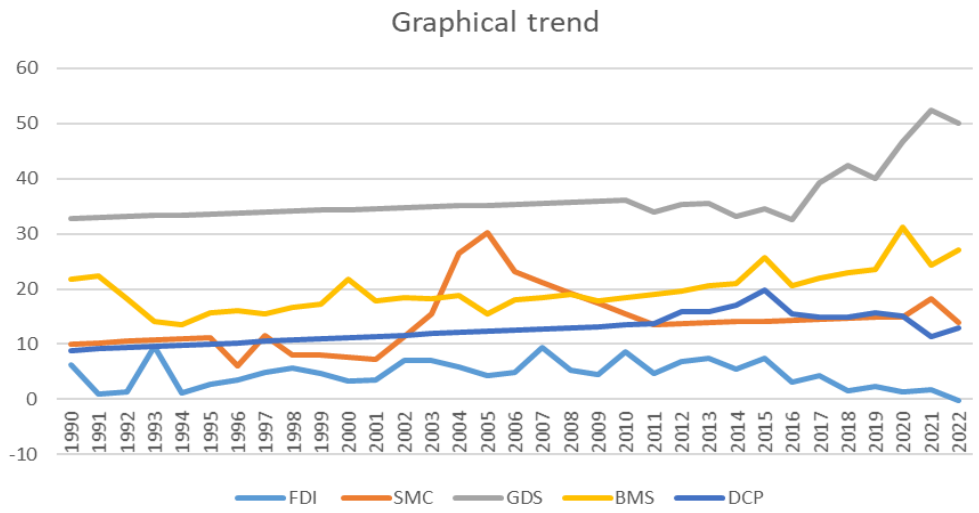

Figure 2: Graphical trend analysis

The graph shows an overall upward trend in Gross Domestic Savings (GDS), while Stock Market Capitalization (SMC) peaked in the mid-2000s and fluctuated thereafter. Broad Money Supply (BMS) gradually increased, and both Foreign Direct Investment (FDI) and Domestic Credit to Private Sector (DCP) exhibited variability, with FDI experiencing small peaks and DCP showing a slight upward trend.

4.2 Analysis tests

4.2.1 Unit root test of the study variables

Table 3: Unit root test

Variable	ADF at Level			ADF at 1st Difference		
	t-statistic	p-value	Conclusion	t-statistic	p-value	Conclusion
FDI	-2.980	0.0008	Stationary	-2.983	0.0000	Stationary
SMC	-2.980	0.3568	Non-stationary	-2.983	0.0001	Stationary
GDS	-2.980	0.9762	Non-stationary	-2.983	0.0000	Stationary
BMS	-2.980	0.3461	Non-stationary	-2.983	0.0000	Stationary
DCP	-2.980	0.3741	Non-stationary	-2.983	0.0000	Stationary
At 5% Critical level						

The Augmented Dickey-Fuller (ADF) test results show that Foreign Direct Investment (FDI) is stationary at level, while Stock Market Capitalization (SMC), Gross Domestic Savings (GDS), Broad Money Supply (BMS), and Domestic Credit to Private Sector (DCP) are non-stationary at level but become stationary after first differencing. This indicates that FDI is stationary at level, while the other variables are integrated of order one (I(1)), which is crucial for accurate regression and cointegration analysis.

4.2.2 Cointegration test results

Table 4: Cointegration test

Trend: constant				Number of obs	= 31
Sample: 3 - 33				Lags =	2
maximum rank	parms	LL	eigenvalue	trace statistic	5% critical value
0	30	-325.49687	.	75.2963	68.52
1	39	-308.36306	0.66892	41.0286*	47.21
2	46	-292.29062	0.64546	8.8838	29.68
3	51	-289.47133	0.16631	3.2452	15.41
4	54	-287.85468	0.09904	0.0119	3.76
5	55	-287.84874	0.00038		
maximum rank	parms	LL	eigenvalue	max statistic	5% critical value
0	30	-325.49687	.	34.2676	33.46
1	39	-308.36306	0.66892	32.1449	27.07
2	46	-292.29062	0.64546	5.6386	20.97
3	51	-289.47133	0.16631	3.2333	14.07
4	54	-287.85468	0.09904	0.0119	3.76
5	55	-287.84874	0.00038		

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The Johansen Cointegration test results indicate the presence of a long-term equilibrium relationship among the variables, with both the trace and maximum eigenvalue statistics supporting one cointegrating vector. These findings validate the use of cointegration techniques in further analysis, confirming a stable, long-run relationship between the variables.

4.3 Correlation analysis

The correlation analysis reveals a significant negative relationship between FDI and Gross Domestic Savings (GDS), suggesting that higher savings may crowd out foreign investment, while Broad Money Supply (BMS) also has a significant negative effect on FDI. Other relationships, such as between FDI and Stock Market Capitalization (SMC) and Domestic Credit to the Private Sector (DCP), show weak or no statistically significant associations.

4.4 Diagnostic tests results

Table 5: Diagnostic test

Diagnostic tests results			
Specification error	F (3, 25) = 1.18	Prob > F = 0.3363	Satisfied
Autocorrelation	Chi2 = 0.3228	0.56990	Satisfied
Heteroscedasticity	Chi2 = 0.62	0.4295	Satisfied
Normality test	Chi2 = 0.023	0.98860	Satisfied

The diagnostic tests for specification error, autocorrelation, heteroscedasticity, and normality all indicate that the model satisfies the required assumptions, with p-values of 0.3363, 0.5699, 0.4295, and 0.9886, respectively. These results suggest that the model is free from specification errors, autocorrelation, and heteroscedasticity, and normality is also satisfied.

To evaluate the presence of multicollinearity among the predictors, the Variance Inflation Factor (VIF) is calculated for each variable. The VIF values for Broad Money Supply (BMS), Gross Domestic Saving (GDS), Domestic Credit to the Private Sector (DCP), and Stock Market Capitalization (SMC) are all below the thresholds indicating significant multicollinearity, with a mean VIF of 2.00. These results suggest that multicollinearity is not a major concern in the model, supporting the reliability of the regression estimates.

4.5 Regression analysis

Table 6: Model summary results

Equation	Parms	RMSE	R-sq	chi2	P>chi2
FDI	15	2.50366	0.6300	39.16019	0.0003

The FDI model shows a moderate prediction error with an RMSE of 2.50366 and explains 63% of the variability in the dependent variable, as indicated by an R-squared of 0.6300. The model is statistically significant, with a chi-squared statistic of 39.16019 and a p-value of 0.0003, suggesting good explanatory power, though further refinement may improve predictive accuracy.

Table 7: Regression results

	Coef.	Std. Err.	Z	P>z	[95% Conf.	Interval]
FDI						
L1.	-0.0835565	0.2818681	-0.30	0.767	-0.636008	0.4688949
L2.	-0.3667084	0.3895636	-0.94	0.347	-1.130239	0.3968223
L3.	0.1647669	0.3078423	0.54	0.592	-0.438593	0.7681267
L4.	-0.0382893	0.3144182	-0.12	0.903	-0.6545377	0.5779591
L5.	0.4345284	0.3436985	1.26	0.206	-0.2391084	1.108165
L6.	-0.1922343	0.2579123	-0.75	0.456	-0.6977331	0.3132646
L7.	-0.0974489	0.390247	-0.25	0.803	-0.862319	0.6674212
L8.	-0.3658352	0.3864166	-0.95	0.344	-1.123198	0.3915274
L9.	-0.201008	0.2462175	-0.82	0.414	-0.6835854	0.2815694
L10.	-0.1066745	0.2425372	-0.44	0.660	-0.5820387	0.3686897
SMC	0.0195385	0.0863239	0.23	0.821	-0.1496532	0.1887303
GDS	-0.0241793	0.3045236	-0.08	0.037	-0.6210347	0.572676
BMS	-0.5184882	0.295831	-1.75	0.040	-1.098306	0.0613298
DCP	0.6847863	0.4851055	1.41	0.158	-0.266003	1.635576
_cons	11.07371	13.13534	0.84	0.399	-14.67108	36.8185

The coefficients from the foreign direct investment (FDI) model in the table above provide insights into the effects of various economic factors on investment patterns. The lagged values of FDI (L1 to L10) display mixed signs, with most coefficients not being statistically significant, suggesting limited predictive power over time. Notably, L5 has a positive coefficient of 0.4345, indicating a potential positive effect on FDI, although it does not reach statistical significance ($P > z = 0.206$). Among the other independent variables, Stock Market Capitalization (SMC) shows a negligible positive coefficient of 0.0195 ($P > z = 0.821$), suggesting no significant effect on FDI.

Conversely, Gross Domestic Saving (GDS) presents a small negative coefficient of -0.0242, which is statistically significant ($P > z = 0.037$), implying that higher savings may be associated with lower FDI. The Broad Money Supply (BMS) exhibits a significant negative coefficient of -0.5185 ($P > z = 0.040$), indicating that increases in broad money supply could correlate with decreases in FDI, thus highlighting potential crowding-out effects.

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Domestic Credit to the Private Sector (DCP) has a positive coefficient of 0.6848 but lacks significance ($P > z = 0.158$), suggesting a potential but uncertain positive effect on FDI. The constant term (_cons) has a coefficient of 11.0737, but its significance is also absent ($P > z = 0.399$). Overall, these findings suggest that while certain variables like BMS and GDS have significant effects, most of the lagged FDI values and other factors do not exhibit strong statistical effects, necessitating further investigation to clarify their impacts on FDI.

4.4 Discussion of Results

The Effect of Stock Market Capitalization on Foreign Direct Investment

- Stock market capitalization (SMC) had a negligible positive effect (0.0195, $P = 0.821$) on FDI. Low liquidity and few listed companies hinder Zambia's stock market's ability to attract FDI (Kapunda & Zulu, 2023; Menkhoff et al., 2019). Strengthening the market could boost FDI (Rojas-Suarez, 2022).

The Effect of Gross Domestic Savings on Foreign Direct Investment

- Gross domestic savings (GDS) had a significant negative effect on FDI (-0.0242, $P > z = 0.037$), suggesting a crowding-out effect. High domestic savings often do not lead to increased investment due to inefficiencies in the financial sector (Nkhata et al., 2022; Chikoko et al., 2023), and savings are often directed to low-return assets. Improving financial system efficiency could enhance FDI attraction (Geda & Mesfin, 2021).

The Effect of Broad Money Supply on Foreign Direct Investment

- Broad money supply (BMS) had a significant negative coefficient of -0.5185 ($P = 0.040$), indicating that higher money supply may reduce FDI inflows. Excessive money supply can lead to inflation and currency depreciation, which deters foreign investors (Ng'andu & Manda, 2020; Mwanza & Chikanda, 2021). Maintaining monetary stability is essential for fostering a conducive environment for FDI (Manda et al., 2023).

The Effect of Credit to the Private Sector on Foreign Direct Investment

- Domestic credit to the private sector (DCP) had a positive coefficient (0.6848, $P > z = 0.158$), but it was statistically insignificant. While credit access is important for local business expansion and could attract FDI, it alone is not enough to increase FDI without addressing broader factors such as infrastructure and governance (Musonda & Kasoma, 2022; Chanda & Chanda, 2023).

5. Conclusions and Recommendations

The following were the conclusions made from the research findings;

The Effect of Stock Market Capitalization on Foreign Direct Investment

- Stock market capitalization (SMC) has a limited impact on FDI in Zambia due to low liquidity and few listed companies.

The Effect of Gross Domestic Savings on Foreign Direct Investment

- Higher domestic savings may crowd out FDI, so improving the financial system to direct savings into productive investments is crucial for aligning them with growth sectors.

The Effect of Broad Money Supply on Foreign Direct Investment

- A significant negative relationship between broad money supply (BMS) and FDI suggests that excessive money expansion deters foreign investment.

The Effect of Credit to the Private Sector on Foreign Direct Investment

- While domestic credit to the private sector (DCP) shows a potential positive effect on FDI, its impact is not statistically significant.

Policies to Improve Financial Sector's Role in FDI Attraction

- To enhance FDI, Zambia must strengthen financial infrastructure, expand financial inclusion, and ensure macroeconomic stability.
- Policies should focus on regulatory transparency, capital market development, technology adoption, and investor confidence through anti-corruption measures.
- Tax incentives, public-private partnerships, and integration with regional financial systems can further improve Zambia's attractiveness to foreign investors.

Recommendations

- Enhancing Stock Market Capitalization (SMC): Implement regulatory reforms to improve corporate governance and increase listed companies by 20% in five years. Launch awareness campaigns in two years and monitor progress.
- Optimizing Gross Domestic Savings (GDS): Channel 15% of domestic savings into productive investments within three years, developing a platform to match savers with growth sectors and assessing its impact quarterly.
- Maintaining Broad Money Supply Stability (BMS): Implement a monetary policy to maintain inflation as a single digit over five years. Monitor inflation quarterly and review policies annually for effectiveness.
- Improving Domestic Credit Access for the Private Sector (DCP): Increase SME access to credit by 25% in three years, offering tailored financial products through bank partnerships and evaluating their impact bi-annually.

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