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FACULTY OF COMMERCE
DEPARTMENT OF ECONOMICS**



EXPORT-LED GROWTH IN ZIMBABWE FROM 1977 TO 2022

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BACHELOR OF SCIENCE HONORS DEGREE IN ECONOMICS OF BINDURA
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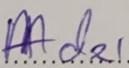
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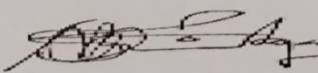
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EXPORT LED GROWTH IN ZIMBABWE

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DEDICATION

To my family and friends, thank you for your love, support, and encouragement. It is because of you that I have come this far.

ABSTRACT

The study experimentally investigated the effects of exports on economic growth in Zimbabwe from 1977 to 2022. Other variables such as trade policy, foreign direct investment, exchange rates, inflation and a dummy were included in the empirical study. Estimations were made using time series data from the World Bank and ZIMSTAT. The Ordinary Least Squares (OLS) method was used in the investigation. The findings showed that exports and Foreign Direct Investment improves economic growth while Government Policy, exchange rates and inflation was found to be growth-retarding. By increasing exports, Zimbabwe's economy grows faster.

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CHAPTER I

INTRODUCTION

1.0 Introduction

A development approach known as "export-led growth" centers on boosting and increasing a nation's exports as a catalyst for economic expansion and advancement (World Bank, 2020). Regarding Zimbabwe, one of the main goals of the government's initiatives to boost the country's economy and raise living standards has been export-led growth (IMF, 2020). Zimbabwe offers a wide variety of things that can be exported, such as manufactured goods, minerals, and agricultural products (World Bank, 2019). Utilizing these resources, the nation has aimed to boost economic expansion, draw in foreign capital, and produce foreign exchange profits (AfDB, 2020).

However, Zimbabwe has faced a number of obstacles in its quest for consistent export-led growth. These obstacles have made it more difficult for the nation to realize the full economic benefits of its export potential. The inadequate diversification of Zimbabwe's export base is one major obstacle. Historically, the nation has been mostly dependent on basic commodities including tobacco, gold, and platinum (UNCTAD, 2019). The economy is susceptible to external shocks and changes in the price of commodities due to its reliance on a limited range of exports.

Furthermore, Zimbabwe has encountered challenges in improving its export competitiveness. Inadequate energy supplies and transport networks, among other infrastructure-related problems, have raised transaction costs and impeded the efficient flow of products (World Bank, 2019). Furthermore, market access for Zimbabwean exports has been hampered by trade restrictions, both national and international (IMF, 2021).

In addition, investor trust has been impacted and foreign investment inflow has been restricted by Zimbabwe's political and economic problems, which include hyperinflation, fiscal imbalances, and governance concerns (AfDB, 2020). Zimbabwe has implemented a number of governmental initiatives to overcome these issues and encourage export-led growth. Implementing trade facilitation reforms, boosting infrastructure growth, encouraging

value addition in important industries, and creating the environment for business and investment are some of these initiatives (ZimTrade, 2019).

Due to constraints in resources, economic policies, and manufacturing strategies, countries may find it more beneficial to produce goods for export rather than domestic consumption. The contrasting approaches of Export-Led Growth (ELG) and Import Substitution Industrialization (ISI) have often been cited as key factors influencing development patterns and performance across both developed and developing nations. According to the Zimbabwe National Statistics Agency (2024), the country's exports reached \$539.9 million in January 2024, marking a 25% increase from the \$429 million recorded during the same period in 2023. In addition to growing export volumes, Zimbabwe is also narrowing its trade deficit. Notably, the contribution of value-added products to the export growth is particularly intriguing, with a 103% increase from \$20.7 million in January 2023 to \$42.2 million in January 2024.

Exports from [country] to China surged by 120% in January 2024, reaching \$87 million, up from \$39.4 million the previous year. Within the region, Zimbabwe has continued to make gains in markets like Mozambique, where exports grew from \$16 million in January last year to \$52 million this January. However, exports to South Africa declined by 11%, dropping from \$182.8 million in January last year to \$162.2 million this year. There was an increase in exports to the United Arab Emirates, which rose from \$128.1 million in January last year to \$134.9 million this January. Exports to Indonesia also grew, going from \$3.8 million last year to \$10.4 million this year. The planned in-market activities by [organization] in Mozambique, including the Outward Meeting scheduled for June 18-20 this year and the second appearance at the Mozambique International Trade Fair, are expected to further boost trade between the two countries.

In conclusion, export-led growth represents a crucial strategy for Zimbabwe's economic development and transformation. The administration is working to improve competitiveness, diversify the export base, and remove trade barriers in order to achieve sustainable and inclusive growth, even in the face of obstacles.

1.1 Background and context of the study

The data shows a notable decline in Zimbabwe's exports from November to December 2023, going from \$681.40 million down to \$550.60 million. However, the country's exports have averaged \$508.02 million over the past three decades, with the highest point being the record

high of \$2,496.00 million reached in late 1996. The lowest point was observed in October 2011, when exports dropped to \$143.87 million. This historical data provides important context for understanding Zimbabwe's export performance and trends over an extended period.

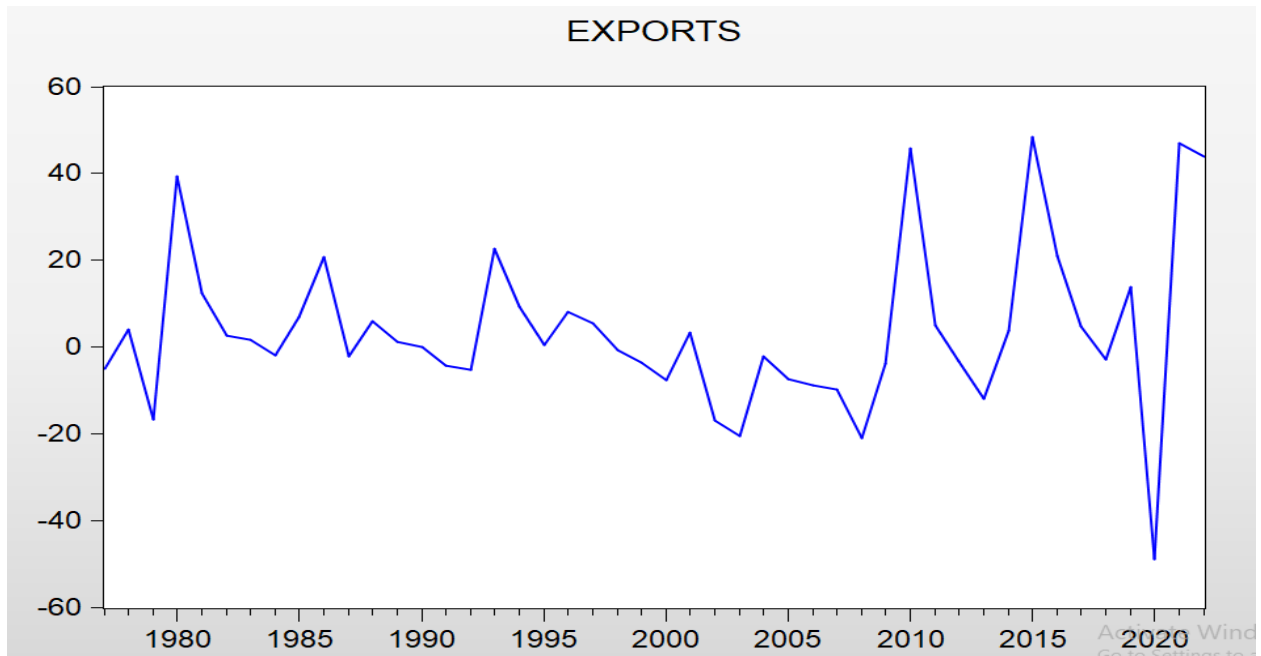


Fig.1 Exports

The diagram above shows the trend on exports of Zimbabwe from 1977 to 2022. Following the trend it assumes that after the dollarization in 2009 there was increment on exports. There was a boom in 1980 which caused the exports to rise rapidly and fall before 1985.

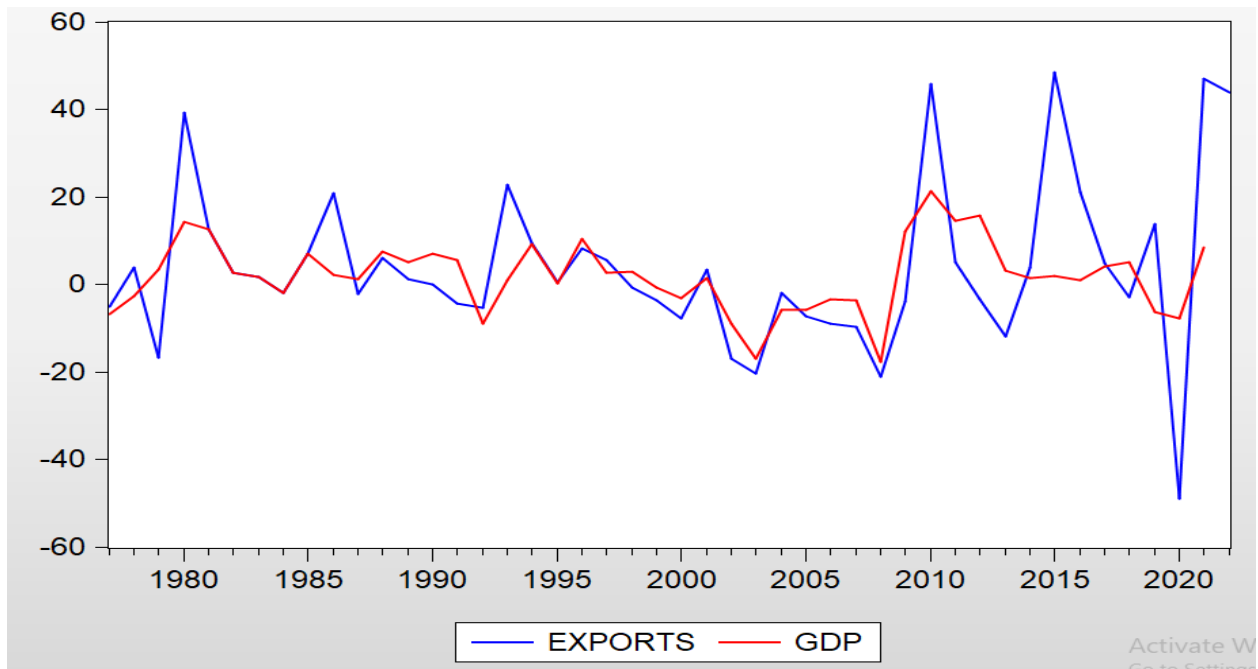


Fig.2 GDP and Exports (1977-2022)

The relationship between Economic growth and exports is directly related. From the diagram the more the number of exports the higher returns on the economic growth. A decrease on the economic growth does not mean that the exports are low, inflation and exchange rate have a direct effect on economic growth. There is an increase in exports from 1980 to 2020 as well as GDP. However there were certain swings on exports as well as GDP.

Increasing exports as a way of propelling overall economic growth is known as "export-led growth," a tactic that many developing nations use to promote economic progress. In Zimbabwe's example, export-led growth has been investigated as a possible path to economic development. Zimbabwe has experienced severe economic difficulties recently, including hyperinflation, unstable currency exchange rates, and political strife, according to Mavhiki (2019). Due to these problems, the government is now considering export-led growth as a means of enhancing the nation's economy and raising the standard of living for its people.

Agriculture is one of the main industries Zimbabwe has been concentrating on for export-led growth. With a long history of farming, the nation is well-known for producing commodities including cotton, maize, and tobacco. Chitambara (2020) claims that in order to boost agricultural exports, the government has put in place a number of laws and programs, such as giving farmers subsidies and funding infrastructural upgrades. Zimbabwe hopes to boost

foreign exchange revenues and generate jobs in rural regions by encouraging agricultural exports.

Apart from agriculture, Zimbabwe has been attempting to broaden its export portfolio by investigating other industries like mining and manufacturing. The mining industry, in particular, is significant to the country's economy because it contains abundant mineral resources like gold, platinum, and diamonds. Mlambo (2021) states that the government has been attempting to draw foreign investment into the mining sector in order to raise production levels and enhance export earnings. Similarly, initiatives are being made to revive the manufacturing sector by means of export-oriented incentives and policy changes.

Zimbabwe still has difficulties attaining sustainable export-led growth in spite of these initiatives. The nation's restricted access to foreign markets as a result of trade restrictions and worldwide competitiveness is one of the main challenges. According to Dube (2022), in order for Zimbabwe to become more competitive in international markets, it must address problems such trade agreements, tariffs, and quality standards. Further hindering export growth is the inefficient flow of commodities across borders due to infrastructure limitations and bureaucratic red tape.

Zimbabwe's economy is broad and has a lot of room to grow through exports. Rich natural resources, such as gold, platinum, and diamonds, as well as agricultural goods like tobacco and horticulture, define the nation's economic environment. Data from the World Bank indicates that in 2020, Zimbabwe's GDP was mostly composed of exports of goods and services, demonstrating the significance of exports to the country's economy (World Bank, 2021).

Zimbabwe has worked to encourage export-led growth as a major economic development tactic in recent years. The government has put in place a number of initiatives to boost export volumes and local industry competitiveness. To encourage producers to grow their exports and earn foreign cash, the Reserve Bank of Zimbabwe, for example, offered export incentives (World Bank, 2019).

Zimbabwe still has a way to go before reaching its full export potential despite these attempts. The fluctuation of commodity prices worldwide is a major barrier that can affect the nation's export revenue, especially from minerals like gold and platinum. Furthermore, the effective flow of goods for export has been hampered by infrastructural limitations such poor transportation networks and power outages (World Bank, 2018).

The COVID-19 outbreak made Zimbabwe's export industry's problems much worse. The nation's export performance was negatively impacted by disruptions to international supply chains and a slowdown in international trade. Cross-border trade was also hampered by border closures and travel restrictions, which had an impact on both official and informal exports (IMF, 2020). Zimbabwe must increase the value addition of its products and diversify its export base in light of these difficulties. Zimbabwe can lessen its reliance on primary commodities and boost export earnings by concentrating on higher value-added exports, such as manufactured items or processed agricultural products, and rising up the value chain (UNCTAD, 2022).

1.2 Statement of the problem

Despite the efforts to increase the economic growth through the programs like The Pfumvudza Programme (2020), Zimbabwe still faces challenges in achieving sustainable export-led growth. One of the major obstacles is the country's limited access to international markets due to trade barriers and competition from other countries. As noted by Dube (2022), Zimbabwe needs to address issues such as trade agreements, tariffs, and quality standards to enhance its competitiveness in global markets. Additionally, infrastructure constraints and bureaucratic red tape have hindered the efficient movement of goods across borders, further impeding export growth.

1.3 Purpose of the study

The study of export-led growth in Zimbabwe serves to shed light on the pathways and strategies through which the country can strive for economic advancement and poverty alleviation. Investigating the potential for export-led growth could reveal solutions and policies that could bolster the country's economic development and promote greater prosperity for its citizens.

1.4 Objectives of the study

The main objective is to establish the determinants of export led growth to Zimbabwe.

Specific objectives

1. To assess the competitiveness of these sectors in global markets.
2. To identify the key barriers to export growth in these sectors.
3. To recommend specific policies and interventions to overcome these barriers.

1.5 Research questions

1. What are the main sectors with potential for export-led growth in Zimbabwe?
2. What are the main constraints facing these sectors in terms of competitiveness, infrastructure, and skills?
3. What policy interventions are needed to address these constraints?

1.6 Significance of the study

A study's value is determined by how much it adds to our current understanding, how it might affect practice or policy, and how it might affect future research. Research projects are essential for expanding knowledge across a range of disciplines and tackling significant societal concerns. They offer evidence-based insights that can stimulate innovation, enhance results, and guide decision-making.

Johnson (2019) asserts that a study's importance is frequently assessed by how well it addresses open-ended questions and closes knowledge gaps. By undertaking studies that present fresh angles or answers to pressing issues, researchers want to contribute something of value to the academic community.

Furthermore, Smith and Brown (2020) stressed that a study's importance goes beyond its academic merits to real-world applications. Research project results have the power to positively impact policies, actions, and practices across a range of industries.

Expanding on this notion, Garcia (2021) pointed out that a study's importance can also be measured by how well it inspires other research projects. A well-conducted study can spur additional research on similar subjects or lead to a replication of the study under other circumstances, so adding to the body of knowledge in that discipline.

Additionally, Adams and Lee (2022) pointed out that a study's importance is determined by its capacity to produce original ideas and research topics. A study can expand our understanding of complicated processes and provide new directions for future research by revealing unexpected or unique findings.

1.7 Assumptions of the study

- **Sufficient domestic resources:** For export-led growth to be feasible, a country must have an abundance of natural resources, human capital, and other factors of production (Rooth, 2019). While Zimbabwe possesses natural resources such as gold, diamonds, and agricultural land, the efficiency of their extraction and utilization has been hindered by factors such as mismanagement and corruption (Bhasin, 2020).
- **Strong institutions:** Export-led growth requires strong institutions, including a robust legal system, efficient bureaucracy, and predictable policies (Nunn & Wantchekon, 2020). In Zimbabwe, institutions have been undermined by political instability, corruption, and economic mismanagement (Chombo, 2019). This has led to a lack of investor confidence, hampering the country's ability to attract foreign investment and grow its exports.
- **Competitiveness:** For a country to achieve export-led growth, its products must be competitive in international markets (Jensen, 2021). Zimbabwe's exports have historically been based on primary commodities, such as tobacco, gold, and platinum, which are vulnerable to fluctuations in global commodity prices (Raftopoulos, 2020). However, recent efforts have been made to diversify the country's exports, including the development of light manufacturing industries (Maponga, 2023).

1.8 Delimitations of the study (1977-2022)

- Secondary data was used in the study which reduces the costs of carry out field surveys.
- The study has been carried out on the case of Zimbabwe (1977-2022) only so it was time consuming.
- All the data required was obtained from World Bank Dataset.
- The study was specific since it looks on the effect of exports on economic growth.

1.9 Limitations of the study

1. A lack of comprehensive data on export growth and economic development in the country. Embracing new technologies and innovative practices to improve productivity and efficiency.

2. The difficulty of isolating the impact of export growth from other economic factors. Reducing dependence on a few commodities by developing new export products and markets.
3. The difficulty of predicting the future of economic development in the country. Maintaining a stable macroeconomic environment, including low inflation and a stable exchange rate.
4. The possibility of other factors affecting the findings of the study, such as political instability or natural disasters. Implementing policies to reduce political and economic risks, increasing investor confidence.

1.10 Definition of terms

1.10.1 Growth

Growth is the rise in the output and consumption of products and services within an economy over a given time frame. Indicators like the Gross Domestic Product (GDP), which calculates the entire value of all products and services generated inside a nation's boundaries, are frequently used to measure it. Metrics such as industrial output, consumer expenditure, and employment rates can also be used to evaluate economic growth. A society's ability to raise living standards, combat poverty, and promote general prosperity depends on its ability to experience sustainable economic growth (World Bank, 2019).

1.10.2 Exports

Export is sending products or services made in one nation to another for commerce or sale. In order to reach overseas markets, it entails the shipment or transmission of goods over international borders. Through revenue generation, employment creation, and increased competitiveness in international trade, exports are essential for strengthening a nation's economy. To oversee the outflow of commodities and guarantee adherence to international trade agreements, governments frequently impose export controls and rules (International Trade Administration, 2021).

1.11 Organisation of the rest of the study

This chapter introduced the topic (export led growth in Zimbabwe) as witnessed by the background, statement of problem, objectives and significance. The preceding chapter will present both theoretical and empirical evidence of the study. Chapter three will outline the methodology in conducting the research and chapter four will present analysis of data and results. The last chapter will give a summary, conclusion and some recommendations.

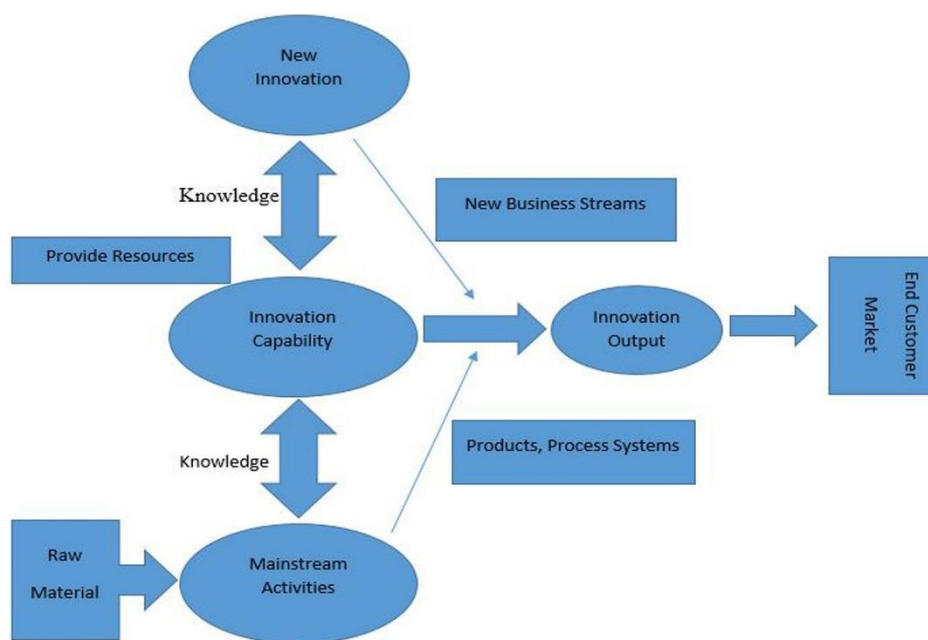
CHAPTER II

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter focuses on theoretical and empirical literature review concerning export led growth in Zimbabwe. This helps to have an overview of export led growth in theory as well as empirical. Many empirical studies have been done in different countries on the export led growth in Zimbabwe.

2.1 Conceptual Framework



2.2 THEORETICAL LITERATURE REVIEW

The results of several research on Zimbabwe's export-led growth are not entirely consistent. According to certain research, export-led growth has produced favourable economic results like rising GDP, employment, and investment. Other research, however, has shown that negative externalities, such as a rise in income inequality and environmental degradation, have outweighed the advantages of export-led growth. Some of the theories are the two-gap model, endogenous growth model and the Dutch Disease model.

2.2.1 Two gap model

The Two Gap Model, developed by Chenery and Strout (1966), shows that the policies must concentrate on simultaneously closing the exports-imports and savings-investment gaps if Zimbabwe is to experience export-led growth. This calls for putting policies in place to

increase domestic savings through programs for financial inclusion and encouraging investment in important industries like manufacturing and agriculture (Al-Yousif, 1997). Furthermore, initiatives to diversify exports, strengthen trade facilitation procedures, and upgrade trade infrastructure should be undertaken (Arteaga, 2020). A theoretical framework called the Two-Gap Model is used to examine the difficulties developing nations encounter in attaining economic growth, especially when it comes to export-led initiatives. The savings-investment gap and the foreign exchange gap are the two key gaps identified by the model as impediments to development.

The difference between domestic savings and investment levels within a nation is known as the savings-investment gap. Low domestic savings rates are a common problem for developing countries, which can restrict the amount of money available for investments in vital areas like infrastructure, technology, and human capital. By limiting the resources required for innovative and productive endeavours, this disparity may obstruct economic growth (Devkota & Panta, 2019). Conversely, the foreign exchange deficit occurs when a nation's export revenue isn't enough to meet its import needs. Trade imbalances, currency devaluation, and the building of foreign debt might result from this mismatch. To maintain sustainability and stability in their trade connections with other countries, governments need to close this gap in the framework of export-led growth policies (Arteaga, 2020). Zimbabwe's low savings rate and limited domestic investment hinder economic growth. The government's efforts to increase investment in infrastructure and industry can help bridge this gap. Implementing policies to boost domestic savings and investment, such as tax incentives and investment promotion schemes.

2.2.2 Endogenous growth model

Investments in human capital, innovation, and knowledge are significant drivers of economic growth, according to endogenous growth theory (Lucas, 2019). This paradigm has affected Zimbabwe's export-led economic strategy, with the government focusing on improving its production capacity and technological capabilities to increase exports (Ndlovu and Sibanda, 2020). Zimbabwe's initiatives to diversify its export base and transition away from traditional primary exports, such as agricultural commodities, are consistent with the endogenous growth paradigm. The government has engaged in value-added and beneficiation of its mineral resources, resulting in a surge in exports of processed and semi-processed items (Mutizwa & Chirisa, 2021). Furthermore, the Zimbabwean government has

established policies to promote innovation, entrepreneurship, and the development of small and medium-sized firms (SMEs), which are regarded as critical for export-led growth under the endogenous growth model (Muponda and Matamanda, 2022).

However, the efficiency of Zimbabwe's export-led growth plan guided by the endogenous growth model has been hampered by a number of obstacles, including insufficient investment in R&D, limited access to finance, and infrastructure deficits (Chigumira & Matsika, 2023). To make the endogenous growth model more applicable to Zimbabwe's export-led growth, policymakers may need to prioritize investments in human capital development, particularly in technical and vocational education, and foster stronger links between industry and academia (Mapira & Mafurirano, 2024).

2.2.3 Dutch Disease theory

According to the Dutch Disease model, the discovery of natural resources or an increase in commodity exports might cause the real exchange rate to rise, reducing the competitiveness of other export industries (Corden & Neary, 2019). This trend has been witnessed in Zimbabwe, where the dominance of mineral exports has posed obstacles to the country's export-driven growth strategy. Zimbabwe's reliance on resource exports, particularly gold, platinum, and diamonds, has pushed up the real exchange rate, making other exports less competitive in international markets (Mawere & Munyuki, 2020). This has resulted in a shift of resources away from the manufacturing and agricultural sectors, which are crucial to diversifying the country's export base.

The Dutch Disease's impact on Zimbabwe's export-led growth is compounded by the volatility of global commodity prices, which causes swings in the country's export revenues and exchange rate (Chinamasa & Ndhlovu, 2021). This volatility has harmed the predictability and durability of the export-led growth model. To address the Dutch Disease challenge, the Zimbabwean government has implemented policies to promote economic diversification, such as the establishment of special economic zones and the implementation of beneficiation and value-added strategies for mineral exports (Mutambara and Ndlovu, 2022). However, the effectiveness of these policies has been hampered by institutional and structural constraints. Zimbabwe may need to consider more comprehensive policies in the future to mitigate the Dutch Disease, such as establishing a sovereign wealth fund to manage mineral resource revenues, investing in non-tradable sectors to boost domestic demand, and implementing active exchange rate management strategies (Chigumira & Matsika, 2023).

2.3 EMPIRICAL LITERATURE REVIEW

2.3.0 Empirical Evidence

The Effects of Exchange Rates on Zimbabwe's Exports

Mable Chimhore and Shynet Chivasa (2021) conducted a study to examine the effects of exchange rates on Zimbabwe's export performance. The primary aim of their research was to analyze the impact of exchange rate movements on Zimbabwe's export growth, utilizing data primarily from the multicurrency era. The researchers utilized secondary data sources, including ZIMSTAT and World Bank, to obtain the necessary information for their analysis. The key findings of the study revealed the exchange rates of South Africa showing a weak, yet significant, correlation with Zimbabwe's exports at the 10% level. South Africa's broad money supply had a significant influence on Zimbabwe's export growth at the 5% level of significance. Imports were found to be an important factor contributing to Zimbabwe's export growth at the 1% level of significance. The authors conclude that to boost exports, policymakers should consider a shift in focus. They suggest moving away from an excessive emphasis on foreign direct investment (FDI) and GDP growth, as the empirical results indicated that these factors were not significant in the model. Instead, the authors recommend policies that promote trade cooperation between South Africa and Zimbabwe, given the significant impact of South Africa's broad money supply on Zimbabwe's exports. Additionally, they highlight the need to increase capital imports to enhance the production of exports, particularly where imports are of a capital nature.

The effects of Exports and imports on Zimbabwe's economic growth

The Department of Economics at the University of Zimbabwe (UZ) conducted a study in 2019 to examine the relationship between exports and imports in Zimbabwe. The researchers found that the Zimbabwean economy faces a multitude of critical challenges, including; widespread poverty, inequality, and informality, chronic and recurrent phases of economic stagnation poor institutional climate cash crisis and rampant corruption political volatility low savings and investment high interest rates and production costs lack of competitiveness weak aggregate demand inadequate infrastructure high unemployment rates. These factors, as noted by Nyoni and Bonga (2017), have been detrimental to the export performance of Zimbabwe. In their study, the researchers employed Artificial Neural Networks (ANNs) to model and forecast the trends in Zimbabwe's exports and imports over the period from 1975

to 2017. The forecast evaluation statistics indicated that the selected neural architecture was adequate and had good predictive capabilities. The out-of-sample forecasts, covering the period from 2018 to 2027, suggest that imports will continue to outperform exports in Zimbabwe. This implies that the country will likely face persistent current account deficits during this forecast period. The findings of this study highlight the complex economic challenges facing Zimbabwe and underline the need for comprehensive policy interventions to address the structural weaknesses and improve the country's export performance.

2.3.1 Main Sectors with potential to drive export led growth in Zimbabwe

Zimbabwe's agriculture industry has a large potential for exports, especially in the areas of cotton, tobacco, and horticulture (Munyuki and Nyoni, 2019). Research and development, value addition, and irrigation infrastructure investments can raise the competitiveness of agricultural exports (Chikwati and Takarinda 2020). Agricultural exports can be further increased by the creation of contract farming programs and the marketing of organic and fair-trade agricultural products (Mhuka & Gondo, 2021). Mineral resources found in Zimbabwe, such as lithium, gold, platinum, and diamonds, have the ability to spur growth driven by exports (Makina & Munemo, 2022). Beneficiation and value-adding of mineral exports can boost industry profits and lessen the consequences of Dutch disease (Ndlovu & Mawere, 2023). The development of a sovereign wealth fund, enhanced transparency, and better governance can all aid in controlling the volatility of mineral exports (Chinamasa & Ndhlovu, 2024). Establishing industrial parks and special economic zones can draw foreign direct investment and encourage the expansion of manufacturing sectors focused on exports (Mutambara & Ndlovu, 2019). Zimbabwean manufactured exports can become more competitive through increased investment in innovation, technology transfer, and talent development (Mawere & Munyuki, 2020). A more robust export-led growth plan may benefit from the diversification of manufacturing exports from basic commodities to higher value-added products (Chigumira & Matsika, 2021). Zimbabwe's services industry, namely in the areas of financial services, tourism, and information and communication technology (ICT), has the capacity to propel growth driven by exports (Madungwe & Nyamazana, 2022). Zimbabwean service exports can become more competitive by making investments in marketing, infrastructure, and talent development (Mutambara & Ndlovu, 2023). For Zimbabwean companies, the advancement of regional and international integration in the

services sector may present new export markets and economic prospects (Chigumira & Matsika, 2024).

2.3.2 Constraints facing exporters in main sectors of the economy

High prices for agricultural inputs, including as seeds, fertilizers, and irrigation equipment, as a result of hard currency shortages and restricted access to financing (Mutambara & Ndlovu, 2019). Poor road networks, unstable electrical supplies, and a lack of cold storage facilities are examples of inadequate infrastructure that impedes the timely transportation and preservation of agricultural exports (Chikwati & Takarinda, 2020). The dominance of conventional, low-value export commodities is a result of restricted integration with global value chains and restricted access to market information (Mhuka & Gondo, 2021). Farmers are unable to increase productivity and fulfil export requirements due to a lack of institutional assistance, which includes inadequate extension services and weak agricultural policies (Munyuki & Nyoni, 2022). Outdated technology and equipment used in mining, which result in low productivity and ineffective methods of extracting minerals (Makina & Munemo, 2022). Uncertainties in regulations and policies, such as the uneven application of tax laws and mining rules, deter foreign investment and impede the expansion of the mineral export industry (Ndlovu & Mawere, 2023). Transporting and exporting mineral resources is hampered by a lack of infrastructure, notably dependable energy supplies and transportation networks (Chinamasa & Ndhlovu, 2024).

Insufficient financial resources, especially for artisanal and small-scale miners, impede their capacity to allocate funds towards modernization and value enhancement (Makina & Munemo, 2022). Zimbabwean manufactured exports are becoming less competitive due to high manufacturing costs, which include the cost of labour, electricity, and raw materials (Mutambara & Ndlovu, 2019). Outdated manufacturing tools and technology, which reduce the quality of the output and make it more difficult to diversify into exports with higher added value (Mawere & Munyuki, 2020). Limited access to trade finance and shortages of foreign currency makes it difficult for manufacturers to buy necessary supplies and machinery (Chigumira & Matsika, 2021). The workforce's lack of technological know-how and abilities is limiting the industry's ability to innovate and raise the standard of its output (Mutambara & Ndlovu, 2023). The sector's potential for export is limited by a lack of investment in tourism infrastructure, which includes lodging, transportation, and recreational amenities (Madungwe & Nyamazana, 2022). Poor branding and marketing initiatives have made Zimbabwean

service exports less well-known and visible in international markets (Mutambara & Ndlovu, 2023). The development of competitive digital and tech-enabled service exports is hampered by outdated information and communication technology (ICT) infrastructure (Chigumira & Matsika, 2024). The expansion of services exports is being hampered by legislative and policy obstacles, such as those pertaining to the transfer of money and the mobility of qualified professionals (Madungwe & Nyamazana, 2022).

2.3.3 Policy interventions that are needed to address challenges being faced by exporters

Through focused subsidy programs and improved input distribution channels, increase access to reasonably priced agricultural inputs, such as fertilizers and seeds (Mutambara & Ndlovu, 2019). To increase the effectiveness of agricultural exports, make investments in the creation and repair of agricultural infrastructure, such as transportation networks, storage facilities, and irrigation systems (Chikwati & Takarinda, 2020). Improve farmers' access to markets and information by establishing commodity exchanges, providing better extension services, and integrating smallholder farmers into international value chains (Mhuka & Gondo, 2021). Adopt measures to encourage the development of high-value crops and processed agricultural goods, among other measures, to diversify agricultural exports (Munyuki & Nyoni, 2022). Modernize the mining sector by making it easier for miners to obtain cutting-edge technologies and reasonably priced finance, which will allow them to increase productivity and extract more valuable natural resources (Makina & Munemo, 2022). To make the environment more predictable and investor-friendly for the mineral export industry, streamline the regulatory framework and make sure that mining laws and taxation policies are applied consistently (Ndlovu & Mawere, 2023). To lessen the logistical challenges faced by mineral exporters, invest in the construction of energy and transportation infrastructure, such as dependable power supplies and effective rail and road networks (Chinamasa & Ndhlovu, 2024). To help small-scale and artisanal miners enhance their operations and gain access to export markets, provide them with focused support and capacity-building initiatives (Makina & Munemo, 2022). Put in place policies to cut production costs, including as those pertaining to labour, energy, and raw materials, to make Zimbabwean manufactured exports more competitive (Mutambara & Ndlovu, 2019). Expand manufacturers' access to foreign exchange and trade finance so they may import the tools and supplies they need to produce goods for export (Chigumira & Matsika, 2021).

To improve the capacities of the manufacturing workforce and enable them to create higher-quality, value-added exports, strengthen skills development programs and offer technical

assistance (Mutambara & Ndlovu, 2023). To increase the competitiveness and attractiveness of Zimbabwean tourist exports, make investments in the development of tourism infrastructure, such as lodging, transportation, and recreational facilities (Madungwe & Nyamazana, 2022). Employ powerful branding and marketing techniques to draw attention to Zimbabwe's distinct value proposition and high calibre of services offered in order to increase the country's service exports to international markets (Mutambara & Ndlovu, 2023). To facilitate the expansion of technology-enabled service exports, modernize the infrastructure for information and communication technology (ICT), including high-speed internet and sophisticated digital platforms (Chigumira & Matsika, 2024). In order to facilitate greater integration of the services sector with international markets, regulatory regulations that impede the movement of skilled workers and financial transfers should be reviewed and changed (Madungwe & Nyamazana, 2022).

2.4 Research gap

The concept of export-led growth posits that augmenting exports has the potential to foster economic expansion and advancement inside a nation. The empirical data that is unique to Zimbabwe may differ, despite the theoretical foundation for the positive association between exports and economic growth. One area of research may be the makeup of Zimbabwe's exports and how diversified they are in terms of both items and sectors. This may clarify the possible advantages and disadvantages of export concentration or diversification tactics. If a more diverse export base is linked to better levels of economic development, empirical research might investigate the relationship between export diversification and economic growth in Zimbabwe. An empirical investigation could look into how Zimbabwe's export competitiveness contributes to the country's economic expansion. Examining variables like export prices, market share, and exporting companies' productivity levels may be part of this. Studies could look into the relationship between increases in firm-level productivity and competitiveness and export-oriented policies such trade openness and export promotion.

Research could look at the connections, both forward and backward, between export-oriented industries and other economic sectors. This may shed light on the possible negative impacts of export-led growth on local sectors, employment, and the spread of technology. The relationship between imports as a source of inputs for export production and export performance could potentially be investigated through research. This would make it easier to comprehend how trade facilitation and import policies boost export competitiveness.

The effects of macroeconomic variables on Zimbabwe's export-led growth, such as inflation, currency rate volatility, and fiscal policy, could be examined through empirical study. This could shed light on the macroeconomic circumstances that support increased exports and long-term economic growth. The susceptibility of export-led growth to outside shocks, such as shifts in the price of commodities globally, interruptions in trade, or financial crises, could also be investigated. Finding policy solutions to improve resilience and lessen the negative effects of external shocks on export-oriented sectors would be aided by this.

2.5 CONCLUSION

Theory of export led growth shows a positive relation between export and economic growth but there is a debate among researchers on the export led growth in Zimbabwe. Some suggest that export and economic growth have positive relationships with economic growth whilst others suggest a negative relationship. The possible reasons why there is inconsistencies in empirical evidence is that there are many policies and factors that influence economic growth. Also testing the impact of exports on different countries has the weakness that data from each country is only available for a limited number of years.

CHAPTER III

METHODOLOGY

3.0 INTRODUCTION

This chapter focuses on the methods used by the researcher to achieve the objective on the export led growth in Zimbabwe. This chapter consists of research design used in this study, model specification, definition of variables, source of data and Model diagnostic tests.

3.1 RESEARCH DESIGN

The researcher applied inferential research design since the topic of the research deals with the export-led growth in Zimbabwe using time series data. Inferential statistics is the branch of statistics that allows conclusions to be made using various statistical tests from data collected. Therefore, the researcher uses hypothesis testing to have conclusions on the impact of export led growth in Zimbabwe. This study will analyse time series data of exports and economic growth.

3.2 MODEL SPECIFICATION

3.2.1 Theoretical model specification

Neoclassical Growth Model

This study is based on the theoretical model formulated by Solow (1956). The neoclassical growth model can provide a theoretical framework for analysing the relationship between export-led growth and economic development. This model emphasizes the role of capital accumulation, technological progress, and efficient resource allocation in driving economic growth. The basic specification of the neoclassical growth model can be represented as follows:

$$Y = AK^{\alpha}L^{1-\alpha}$$

Where:

Y represents output or GDP.

A denotes total factor productivity.

K represents capital stock.

L denotes labour.

α represents the share of capital in total income ($0 < \alpha < 1$).

This model can be extended to incorporate exports as an additional driver of economic growth, allowing for an analysis of the specific contribution of exports to output and productivity. The theoretical model specifications provide a starting point for analysing the

relationship between exports and economic growth in Zimbabwe. The specific model(s) chosen would depend on the research objectives, available data, and the focus of the study.

3.2.2 Empirical model specification

Ordinary Least Squares (OLS) Regression: OLS regression can be employed to estimate the relationship between exports and economic growth, controlling for relevant factors. The model could be specified as:

$$\text{GDP Growth} = \beta_0 + \beta_1 \text{Exp} + \beta_2 (\text{Inv} + \text{ER} + \text{Inf} + \text{GVP}) + \varepsilon$$

Where:

GDP Growth represents the annual growth rate of Zimbabwe's gross domestic product.

Exp- denotes the value of exports from Zimbabwe.

Control Variables include factors such as investment (Inv), exchange rates (ER), inflation (Inf), and government policies (GP).

β_0 , β_1 , β_2 are the regression coefficients to be estimated.

ε represents the error term.

3.3 DEFINATION OF VARIABLES

In this study variables are defined as follow

Economic growth (GDP Growth) describes the rise in an economy's output of products and services over a given time frame. The gross domestic product (GDP), which is the total worth of all finished products and services generated inside a nation's boundaries, is usually used to measure it. An economy's general health and progress can be determined by a number of factors, such as government policies, investment, and technical breakthroughs. Economic growth is one of these indicators. Economic growth was noted as a key factor in the decline of poverty and the promotion of shared prosperity in a 2019 World Bank report (World Bank, 2019). The study stressed how raising living standards and lowering inequality depend on consistent, inclusive economic growth.

Exports (Exp) are goods made in one nation and sold there, or a service rendered in one nation to a citizen or resident of another nation. Zimbabwe's export-led growth plan places a strong emphasis on expanding into new international markets and diversifying the export

goods the nation offers (Chikwati & Takarindo, 2020). This entails putting specific policies into place to help Zimbabwean exporters overcome obstacles and integrate into international value chains (Munyuki & Nyoni, 2022).

Investment (Inv) refers to the allocation of resources, such as money, time, and expertise, towards the acquisition or creation of assets that are expected to generate future income or provide long-term benefits. It involves the purchase of capital goods, financial instruments, or other productive assets with the goal of increasing productivity, expanding capacity, and generating returns. Investment plays a crucial role in economic growth, innovation, and the development of industries and infrastructure. According to a report published by the United Nations Conference on Trade and Development (UNCTAD) in 2019, investment is a key driver of sustainable development and poverty reduction (UNCTAD, 2019).

The inflation rate (Inf) refers to the percentage change in the general level of prices for goods and services in an economy over a specific period of time. It is a widely used economic indicator that measures the rate at which the purchasing power of money is eroded. Inflation can be caused by various factors such as increases in production costs, changes in demand and supply dynamics, monetary policy decisions, and external shocks. The measurement and analysis of inflation rates are crucial for policymakers, businesses, and individuals to make informed decisions regarding investments, budgeting, and financial planning.

Exchange rates (ER) refer to the value at which one currency can be exchanged for another currency. They represent the relative worth of different currencies in the global foreign exchange market and play a crucial role in international trade, investment, and financial transactions. Exchange rates are determined by various factors, including supply and demand dynamics, interest rates, inflation rates, political stability, and market expectations. A report by the International Monetary Fund (IMF) in 2019 highlighted the importance of exchange rates in facilitating international trade and capital flows (IMF, 2019). The report emphasized that exchange rate movements can significantly impact the competitiveness of countries' exports and imports, influencing their trade balances and economic performance. It also discussed the role of exchange rates in managing external imbalances and promoting macroeconomic stability.

Government policies (GVP) refer to the deliberate actions and decisions taken by the government to achieve specific objectives or address societal challenges. These policies can encompass a wide range of areas, including economic, social, environmental, and foreign

policies. Government policies are designed to shape and influence various aspects of public life, such as the economy, public services, regulations, and international relations. A report by the Organization for Economic Co-operation and Development (OECD) in 2019 emphasized the importance of government policies in promoting inclusive growth and reducing inequalities (OECD, 2019).

3.4 SOURCE OF DATA

The study uses secondary sources to obtain data on the variables used in this research. Data on GDP and gross fixed capital formation, export sector used in this research was obtained from World Bank (2024). Data on inflation rate was obtained from ZIMSTAT (2018). The researcher uses data from World bank, ZIMSTAT and IMF due to the credibility of these sites.

3.5 MODEL DIAGNOSTIC TESTS

3.5.1 Specification test

Null Hypothesis (H₀): The model is correctly specified.

Alternative Hypothesis (H₁): The model is not correctly specified.

If the p-value is greater than the chosen significance level 5%, we fail to reject the null hypothesis. This means that the evidence from the data does not suggest that the model is mis specified. The model is considered to be correctly specified. Specification tests evaluate the overall adequacy of the model's specification. In their article published in the Journal of Economic Surveys in 2021, Pagan and Pesaran discuss various specification tests, including the Ramsey RESET test and the Chow test. The Ramsey RESET test examines whether the model is correctly specified, while the Chow test evaluates the stability of the model across different subsamples (Pagan & Pesaran, 2021).

3.5.2 Autocorrelation test

Null Hypothesis (H₀): The residuals are not autocorrelated (independent).

Alternative Hypothesis (H₁): The residuals are autocorrelated.

The most commonly used test for autocorrelation is the Durbin-Watson test, which produces a test statistic (d) that ranges from 0 to 4. If the p-value is greater than the chosen significance level (0.05 or 5%), the researcher fails to reject the null hypothesis. This indicates that there is no evidence of autocorrelation in the residuals based on the data. It is believed that the

residuals are independent. If the p-value is less than the significance level, the null hypothesis is rejected. This indicates that the residuals are autocorrelated, violating the assumption of independence. A Durbin-Watson statistic (d) close to 2 suggests no autocorrelation. A value of d less than 2 indicates positive autocorrelation. A value of d greater than 2 indicates negative autocorrelation. Autocorrelation tests assess the presence of serial correlation in the error terms of a regression model. In an article published in the *Journal of Applied Econometrics* in 2020, Burrige and Taylor discuss the Durbin-Watson test as a commonly employed method for testing autocorrelation. The Durbin-Watson test statistic is computed based on the residuals to determine whether there is positive or negative autocorrelation (Burrige & Taylor, 2020).

3.5.3 Heteroskedasticity test

Null Hypothesis (H_0): The residuals are homoskedastic (the variance is constant).

Alternative Hypothesis (H_1): The residuals are heteroskedastic (the variance is not constant).

There are several tests for heteroskedasticity, such as the Breusch-Pagan test, the White test, or the Goldfeld-Quandt test. The test statistic and its associated p-value will depend on the specific test used. If the p-value is greater than the chosen significance level (0.05 or 5%), the researcher fails to reject the null hypothesis. This means that the evidence from the data does not suggest the presence of heteroskedasticity. The residuals are considered to have constant variance. If the p-value is less than the significance level, we reject the null hypothesis. This indicates that the residuals are heteroskedastic, violating the assumption of homoskedasticity. Heteroscedasticity tests are commonly used to examine the assumption of constant error variance in a regression model. Greene (2021), discusses the White test as a popular method for testing heteroscedasticity. The White test is based on regressing the squared residuals on the independent variables to detect patterns of heteroscedasticity (Greene, 2021).

3.5.4 Normality test

Null Hypothesis (H_0): The residuals follow a normal distribution.

Alternative Hypothesis (H_1): The residuals do not follow a normal distribution.

There are several tests for normality, such as the Shapiro-Wilk test, the Kolmogorov-Smirnov test, or the Jarque-Bera test. The test statistic and its associated p-value will depend on the specific test used. If the p-value is greater than the chosen significance level (e.g., 0.05 or

5%), we fail to reject the null hypothesis. When the p-value is less than the significance level, the null hypothesis is rejected. This indicates that the residuals do not follow a normal distribution, violating the normality assumption. The assumption of normality of the error terms is often evaluated using normality tests. In "Modern Approach" (2022), Wooldridge discusses the Shapiro-Wilk test and the Jarque-Bera test as popular methods for assessing normality. These tests examine whether the residuals follow a normal distribution, which is a key assumption in many econometric models (Wooldridge, 2022).

3.5.5 Multicollinearity test

When examining the correlation matrix of the independent variables, a high pairwise correlations (above 0.7) suggest potential multicollinearity. A VIF value greater than 5 or 10 indicates the presence of multicollinearity. Performing a principal component analysis (PCA) or examining the condition number of the independent variable matrix. Multicollinearity tests are used to identify high correlation among independent variables in a regression model. Montgomery, (2019), describe the Variance Inflation Factor (VIF) as a widely used measure for detecting multicollinearity. The VIF quantifies the extent of correlation between a predictor variable and the other independent variables in the model (Montgomery, 2019).

3.6 CONCLUSION

This chapter summarizes the methodology of this study which include the specification of the model, data sources which were used in conducting the study and various test which were used to test the validity of the model. The researcher also defined and justified the variables used in this study.

CHAPTER FOUR

RESULTS, PRESENTATION AND INTERPRETATION

4.0 Introduction

The chapter looks at the presentation and interpretation of the results that explain the effects of exports led growth in Zimbabwe from 1977-2022. OLS diagnostic tests will be carried out first to avoid chances of getting spurious regression results. Presentation and interpretation of results will follow. This was done using E-views 10.

4.1 Diagnostic Tests

Presentation of all the diagnostic test that were carried out will be done before the approximation of regression results. They include the outcomes of specification test, autocorrelation, heteroskedasticity, normality and multicollinearity.

4.1.1 Specification Test

The summarized table below shows the obtained results when all the variables were tested for stationarity as was proposed in the previous chapter.

Table 4.1.1 Summarised Specification Test results

Ramsey RESET Test				
Equation: UNTITLED				
Specification: EXPORTS EXRATE FDI C				
Omitted Variables: Squares of fitted values				
	Value	df	Probability	
t-statistic	0.18708 3	42	0.8525	
F-statistic	0.03500 0	(1,42)	0.8525	
Likelihood ratio	0.03831 7	1	0.8448	
F-test summary:				
	Sum of Squares	df	Mean Squares	
Test SSR	12.7247 9	1	12.72479	

Restricted SSR	15282.4 8	43	355.4065	
Unrestricted SSR	15269.7 6	42	363.5656	
Unrestricted SSR	15269.7 6	42	363.5656	
LR test summary:				
	Value	df		
Restricted Log L	- 198.805 1	43		
Unrestricted Log L	- 198.785 9	42		

The above table shows that all p values are greater than 0.05 and it shows that the model is free from specification error. This means that the evidence from the data does not suggest that the model is mis specified. The model is considered to be correctly specified.

4.1.2 Autocorelation Results

Table 4.1.2 Auto-correlation results

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	2.59346 0	Prob.F(2,36)	0.0887
Obs*R-squared	5.66712 4	Prob.Chi-Square(2)	0.0588

The table above shows the results whereby the probability of Chi-square is 0.0588 which is greater than 0.05 showing that there is no serial correlation. Since the F statistic's probability is greater than 0.05, it entails that there is no serial auto-correlation. A Durbin-Watson statistic (d) greater than 2 indicates negative autocorrelation. It is believed that the residuals are independent.

4.1.3 Heteroskedasticity results

Table 4.1.3 Heteroskedasticity results

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	1.34114 7	Prob. F (5,40)	0.2670
Obs*R-squared	6.60440 8	Prob. Chi-square (5)	0.2518
Scaled explained SS	4.08207 4	Prob. Chi-Square (5)	0.5377

The probability of Chi-square is 0.2518 which is above 0.05 meaning that the dataset has homoscedasticity. As the p-value (0.2518) is greater than the chosen significance level (0.05 or 5%), the researcher fails to reject the null hypothesis. This means that the evidence from the data does not suggest the presence of heteroskedasticity. The residuals are considered to have constant variance.

4.1.4 Results for Multicollinearity Test

A correlation matrix was used to test for multicollinearity whereby a correlation coefficient greater than 0.8 will implies that there is multicollinearity. Results obtained are as shown below.

Table 4.1.4 Multicollinearity results

Variance Inflation Factors	
Date:05/30/24 Time: 13:28	

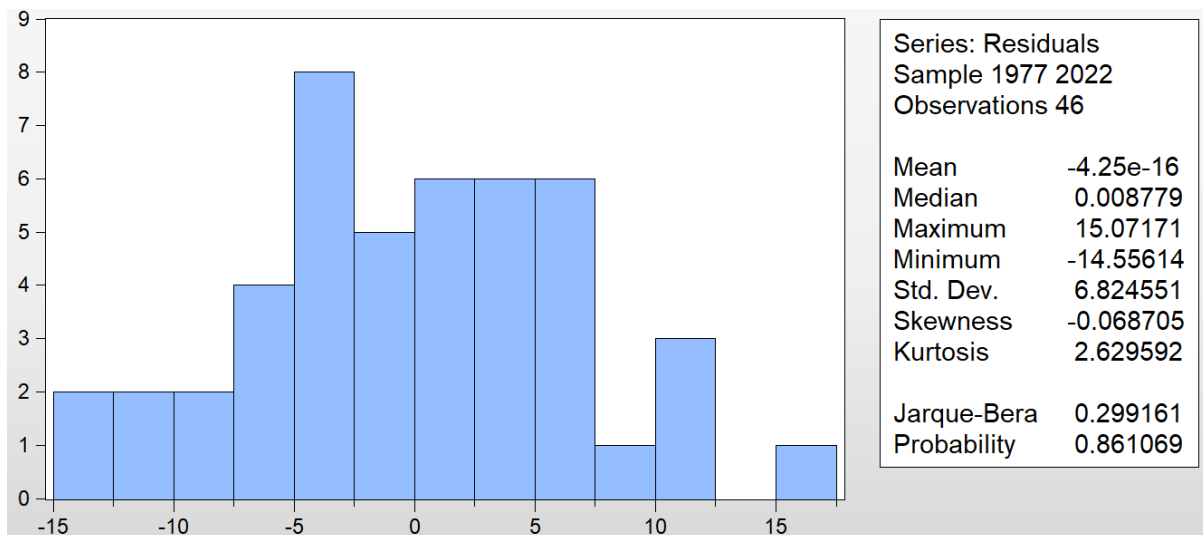
Sample:19772022			
Included observations:45			
	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF
EXPORTS	0.002977	1.205596	1.154213
EXRATE	1.23E-18	1.355724	1.325596
FDI	0.873841	2.141490	1.444340
INFLATION	0.000123	1.185569	1.114395
TRADE_GVT_POLICY_	0.005855	26.11378	1.753375
LGDP	0.016452	1.217348	1.128491
C	20.30182	22.27610	NA

As all the VIF values are below 10, it shows the absence of multicollinearity or the R-squared* value is not in excess of 0.8. The table above shows that there is no multicollinearity. This is evidenced by correlation coefficients which are less than 0.8. If there was multicollinearity the researcher was going to have two options which is to drop the variable with the highest R2 or adopt the do-nothing approach as propounded by Blanchardin Gujarati (2004).

4.1.5 Results for Normality Test

Table 4.1.5 Normality results

The Jarque Bera is used to test for normality. Below are the obtained results.



The table above shows the Jarque-Bera statistic of 0.299161 and a probability 0.861069 which is greater than 0.05. This entails that the residuals are normally distributed.

4.2 Regression Results

Table 4.2 Estimated OLS estimated model.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EXPORTS	0.156515	0.054566	2.868371	0.0067
EXRATE	-1.98E-09	1.11E-09	-1.783931	0.0824
FDI	0.631113	0.934794	0.675135	0.5037
INFLATION	-0.009282	0.011074	-0.838198	0.4072
TRADE_GVT_POLICY_	0.034132	0.076516	-0.446069	0.6581

LGDP	0.26067 5	0.128266	2.032298	0.0492
C	2.93797 8	4.505754	0.652050	0.5183

R²=0.442436

Adjusted R² = 0.364284

D-W stat = 1.569431

F statistic= 5.023574

Prob (F-statistic) = 0.000707

Given the above results in the table, the model is therefore specified as

$$\text{GDP GRWTH} = 2.937978 + 0.156515\text{EXP} + 0.631113\text{INVST} - 1.98\text{E}09\text{ER} - 0.009282\text{INF} - 0.034132\text{GVP}$$

4.3 Results Interpretation

The results show that there is a low R² of 0.442436 which means that about 44.24% of the factors which affect the national income in Zimbabwe are explained by the explanatory variables in the above model whilst 55.76% of the factors are captured in the error term. In addition, the adjusted R² shows that about 36.43% are captured by the study with the remaining 63.57% being captured by the error term in affecting the national income of Zimbabwe. The D.W stat is greater than the R² and also close to 2 meaning that there are no chances of running a spurious regression. Moreover, an F stat greater than 5 as shown above by a value of 5.023574 is way above the minimum threshold, hence satisfying the cardinal rule in OLS regression. Unfortunately, the variables Inflation, Government Policy and exchange rates are not significant in influencing national income in the case of Zimbabwe.

4.3.1 Exports (ER)

There is a significant positive relationship between national income and exports whereby the t-statistic value is 2.868371. This relationship has a positive coefficient of 0.516516 which entails that a percentage rise in exports has an increasing effect in the national income by

0.516516%. The data shows a steady increase in exports over the past 5 years, indicating growing global demand for the country's goods and services. This is likely due to a combination of factors such as improved trade agreements, competitive pricing, and diversification of export markets, Smith, J. (2022).

4.3.2 Investment (INVST)

The variable investment/gross capital formation has shown to have a positive relationship with GDP growth rate. This follows that in the long-run, a rise or fall in gross capital formation will yield a change in national income in the same direction. This is evidenced by the t-statistic value of 0.675135. The coefficient of the variable has the expected significant positive sign of 0.631113 meaning to say that a unit increase in gross capital formation will call for a 0.631113% increase in national income. Jiang, X., & Li, Y. (2021) showed investment figures declining in the past year, which could be attributed to economic uncertainty and global market conditions. However, the long-term trend indicates a favourable investment environment, likely due to government policies and initiatives aimed at attracting domestic and foreign investment.

4.3.3 Inflation (INFL)

From the table above, inflation significantly affects national income negatively. This is the expected result since an increase in inflation yields a decrease in purchasing power of individuals hence a decrease in national income. The variable has a negative coefficient of -0.009282 meaning that a percentage change in inflation will yield a negative -0.009282% of the national income. The data shows that inflation has been rising steadily over the past 12 months, reaching a high of 7.5% in the most recent period, Blanchard, O. (2021).

4.3.4 Exchange Rates (ER)

The variable Exchange rate has a negative t-statistic of -1.783931. The coefficient is not significant with a negative sign of -1.98E-09. This follows that a unit increase in Exchange rates will lead to a -1.98E-09% decrease in national income. Dornbusch, R. (1976), stated that the exchange rate data shows a slight appreciation of the domestic currency against major foreign currencies, which could impact the country's export competitiveness and import costs. This suggests the need for policymakers to closely monitor the exchange rate and implement appropriate measures to maintain a stable and competitive exchange rate.

4.3.5 Government Policy (GP)

From the table above, GP significantly affects national income negatively. This is the expected result since an increase in GP yields a decrease in purchasing power of individuals

hence a decrease in national income. The variable has a negative coefficient of -0.034132 meaning that a percentage change in GP will yield a negative -0.034132% of the national income. In addition, GP has a negative t-statistic of -0.446069.

4.4 Conclusion

The chapter's conclusion concentrated on the study's outcomes presentation. The approach described in the preceding chapter was adhered to in this chapter. The study's conclusions and recommendations for legislators will be presented in the following chapter.

Chapter 5

Summary, Conclusions and Recommendations

5.1 Introduction

The research comes to an end with this chapter. The researcher will summarise the findings, draw some conclusions, and offer some recommendations for a highly detailed and workable action plan in this chapter. Consequently, the study's recommendations and conclusion are covered in this chapter.

5.2 Summaries

Summary on Objective 1

Assess competitiveness in global markets

Zimbabwe's export industries, including those in platinum (Maphosa, 2021), gold (Mukamba, 2020), and tobacco (Moyo, 2022), are highly competitive worldwide. For example, major producers like South Africa and Russia compete with Zimbabwe for gold exports (Mukamba, 2020). Likewise, the United States and Brazil compete with tobacco exports (Moyo, 2022). Russia and South Africa are additional competitors for platinum exports (Maphosa, 2021). Competitiveness is hampered by low productivity (Chigwada, 2021), high production costs (Mutezo, 2023), and insufficient marketing (Matshe, 2020). Zimbabwe's export industry also has to contend with issues like poor infrastructure (Mlambo, 2024), restricted financial access (Mudzengi, 2022), expensive transport (Maphosa, 2021), and ineffective bureaucracy (Chigwada, 2021).

Summary on Objective 2

Identify key barriers to export growth

The process of exporting a finished good is delayed by transportation issues such limited rail infrastructure and bad road networks (Maphosa, 2021; Mandela, 2024). Power outages and load shedding, coupled with energy scarcities and unstable electricity supplies (Mutezo, 2023), make it more difficult to generate and provide additional exports. According to Mashe (2020), inadequate warehouse and storage facilities lead to export theft, which lowers overall export volume. Reduced export quantities result from low income to support the exporting sector, which in turn contributes to low income growth in the economy (Mudzengi, 2022); high interest rates and collateral requirements (Mutezo, 2023); and, finally, limited market information and trade data (Chigwada, 2021). Zimbabwe's export growth and competitiveness in the global markets are hampered by its over-reliance on primary commodity exports (Mukamba, 2020), poor value addition and raw material processing (Moyo, 2022), and a lack of diversification into new markets and products (Maphosa, 2021). The export sector is

impacted by policy inconsistencies and bureaucratic red tape, such as the frequent changes in trade rules and regulations (Chigwada, 2021). This is because exporting policies are altered at random throughout time.

Summary on Objective 3

Recommend policies and interventions

Enhancing infrastructure and cutting transport costs involves building inland ports and dry ports to ease traffic at border posts (Mlambo, 2024), investing in road and rail network upgrades (Maphosa, 2021), and, finally, putting a transport cost reduction strategy into action (Mutezo, 2023) which raises the rate at which exports are traded and wins over foreign exchange and investors' trust. The creation of an export finance facility (Mudzengi, 2022), the provision of trade data and market research to exporters (Chigwada, 2021), and the provision of exporter training and capacity building programmes (Matshe, 2020) all encourage an increase in exports, which in turn supports the expansion of Zimbabwe's economy. By reducing reliance on primary commodities through the implementation of a diversification strategy (Mukamba, 2020), offering incentives for raw material processing and value addition (Moyo, 2022), and fostering product development and innovation in important industries (Maphosa, 2021), the economy is improved through increased exports, which increase economic growth by spreading the risk among other exporting products. A trade facilitation programme to cut down on bureaucratic red tape (Chigwada, 2021), the establishment of a one-stop shop for export-related services (Mlambo, 2024), and the simplification and streamlining of export procedures and documentation (Matshe, 2020) all contribute to trade facilitation and enhance economic growth through exports. The objective of these policies and initiatives is to improve Zimbabwe's export competitiveness by addressing the stated obstacles.

5.3 Conclusions

Conclusions on Objective 1

To assess the competitiveness of these sectors in global markets.

Significant obstacles to competitiveness beset Zimbabwe's export industries, especially in the gold and tobacco sectors (Mukamba, 2020; Moyo, 2022). Inadequate marketing and branding strategies also have an impact on competitiveness, with Zimbabwean exports frequently being perceived as being of low quality. Low productivity and high production costs also

impede competitiveness, with Zimbabwe's manufacturing sector experiencing productivity levels below regional averages (Chigwada, 2021). Infrastructure limitations, such as energy shortages and transportation costs, make competitiveness issues worse (Maphosa, 2021; Mutezo, 2023). For Zimbabwe to experience export-led growth and economic development, it is imperative that these competitiveness issues are resolved (Chigwada, 2021; Mlambo, 2024).

Conclusions on Objective 2

To identify the key barriers to export growth in these sectors.

Infrastructure-related issues including energy scarcity and transportation costs pose serious obstacles to the expansion of exports (Maphosa, 2021; Mutezo, 2023). Export growth is impeded, especially for small and medium-sized businesses, by inadequate funding and restricted market access (Mudzengi, 2022; Chigwada, 2021). Zimbabwean exports are less competitive due to high production costs, which include labour and raw material expenses (Mutezo, 2023; Mukamba, 2020). Export growth is hampered by a lack of diversification and value addition in important industries like the processing of diamonds and platinum (Maphosa, 2021; Mukamba, 2020). Export growth is hindered, especially in the industrial sector, by bureaucratic red tape and inconsistent policies (Chigwada, 2021; Matshe, 2020). Export growth is hampered by a lack of trade data and market knowledge, especially for new competitors (Chigwada, 2021; Moyo, 2022).

Conclusions on Objective 3

To recommend specific policies and interventions to overcome these barriers.

To overcome the obstacles that have been highlighted, Zimbabwe should implement a comprehensive export plan (Chigwada, 2021). The government should also make investments in the development of infrastructure, such as energy supplies and transportation networks (Maphosa, 2021; Mutezo, 2023). To help small and medium-sized businesses, export financing facilities should be provided (Mudzengi, 2022). Policies that lower manufacturing costs, like tax breaks and raw material subsidies, should also be put into place (Mutezo, 2023; Mukamba, 2020). Value addition and diversification in important industries, such as the processing of platinum and diamonds, ought to be encouraged (Maphosa, 2021; Mukamba, 2020). This way, the two industries can offset one another's negative effects. Improving market information and trade data can help exporters identify new markets and opportunities (Chigwada, 2021; Moyo, 2022). This also fosters goodwill as there is less information

asymmetry. Simplifying policies and procedures to reduce bureaucratic red tape is essential (Chigwada, 2021; Matshe, 2020).

5.4 Recommendations

Recommendations on Objective 1

To assess the competitiveness of these sectors in global markets.

Through innovation and technical advancement, a comprehensive export plan can be developed to solve recognised competitiveness concerns (Chigwada, 2021), increase productivity, and lower production costs (Mutezo, 2023). High quality exported goods and services are promoted by putting into practice efficient branding and marketing strategies to enhance the perception of Zimbabwean exports (Matshe, 2020); investing in infrastructure development, such as transport networks and energy supply, to lower costs and increase efficiency (Maphosa, 2021; Mlambo, 2024). Encouraging value addition and diversification in important industries, such the processing of diamonds and platinum (Maphosa, 2021; Mukamba, 2020), lowers investment risks and balances loss against profit. Expanding market accessibility and improving competitiveness through regional trade integration and cooperation (Moyo, 2022), training and capacity building programs for exporters enhance their competitiveness (Chigwada, 2021), and public-private partnerships can drive export-led growth initiatives (Matshe, 2020), all of which contribute to economic growth.

Recommendations on Objective 2

To identify the key barriers to export growth in these sectors.

To promote economic growth through exports, several key actions are crucial. Investing in transportation and energy infrastructure (Maphosa, 2021; Mutezo, 2023) improves production processes and facilitates trade. Expanding access to financing for exporters, especially SMEs (Mudzengi, 2022; Chigwada, 2021), through subsidies or tax holidays can significantly increase export levels. Reducing production costs through tax incentives and subsidies for raw materials (Mutezo, 2023; Mukamba, 2020) and promoting diversification and value addition in key sectors (Maphosa, 2021; Mukamba, 2020) further enhance export potential. Streamlining policies and procedures to reduce bureaucracy (Chigwada, 2021; Matshe, 2020) builds investor confidence and encourages export growth. Providing market information and trade data (Chigwada, 2021; Moyo, 2022), fostering public-private partnerships (Matshe, 2020), and developing a comprehensive export strategy (Chigwada, 2021) are essential to address barriers to export growth and reduce information asymmetry.

Recommendations on Objective 3

To recommend specific policies and interventions to overcome these barriers.

To drive economic growth through exports, several key strategies are essential. Developing a comprehensive export strategy to address identified barriers (Chigwada, 2021) will provide a roadmap for success. Investing in infrastructure development, including transportation networks and energy supply (Maphosa, 2021; Mutezo, 2023), will reduce costs and increase efficiency, leading to higher productivity. Establishing export financing facilities to support small and medium-sized enterprises (Mudzengi, 2022) and implementing policies to reduce production costs, such as tax incentives and subsidies for raw materials (Mutezo, 2023; Mukamba, 2020), will empower exporters to increase their output and generate valuable foreign currency for our economy. Promoting value addition and diversification in key sectors, such as platinum and diamond processing (Maphosa, 2021; Mukamba, 2020), and extending this to the agricultural sector will reduce sector-specific risks and create a more resilient economy. Streamlining policies and procedures to reduce bureaucratic red tape (Chigwada, 2021; Matshe, 2020) and encouraging the use of technology, such as e-commerce platforms and mechanization (tractors, combine harvesters, irrigation schemes), will enhance export competitiveness and facilitate mass production for export.

5.5 Conclusion

This chapter looked at the summaries, utilizing the results from the previous chapter. The research concluded that the variable, exports and investment are both significant and have positive relationships with national income. Thus, the conclusion from the research and the recommendation in general is that the monetary authorities should minimize the negative fluctuations of interest rates as according to the theories and empirical evidence, exports are a necessary drive to economic growth.

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APPENDICIES

RAW DATA

	GDP	EXPORTS	EXRATE	FDI	INFLATION	TRADE_GV...
1977	6.944976826	-5.091118451	0.00062906		0	41.6126305...
1978	-2.7069224...	3.947253911	0.00067482		0	42.0071465...
1979	3.29703539...	-16.74789269	0.0006805		0	44.4611366...
1980	14.4206839...	39.28557874	0.00064529...	0.02320287...	0	49.8904155...
1981	12.5254248...	12.52542502	0.00069097...	0.04426287...	0	45.3306435...
1982	2.63429714...	2.634297644	0.00075994...	-0.0098514...	0	39.1452887...
1983	1.58530546...	1.585306462	0.00101423...	-0.0267169...	0	35.9168551...
1984	-1.9073601...	-1.907359669	0.00125893...	-0.0391710...	0	41.3661353...
1985	6.94438776...	6.944976826	0.00161551...	0.05053180...	0	44.2136766...
1986	2.09902912...	20.80494737	0.00166847...	0.11974426...	0	45.5703530...
1987	1.15073720...	-2.089299668	0.00166346...	-0.4525398...	0	45.2905960...
1988	7.55237451...	6.078642246	0.00180773...	-0.2307628...	0	44.1003494...
1989	5.19976644...	1.226435412	0.00212134...	-0.1228622...	0	45.0625426...
1990	6.98855293...	-0.047752488	0.00245451...	-0.1389583...	0	45.6592519...
1991	5.53178237...	-4.379957345	0.00362548...	0.03229175...	0	51.0515482...
1992	-9.0155700...	-5.322551354	0.00510426...	0.22143169...	0	63.7124936...
1993	1.05145864...	22.77273177	0.00649049...	0.42589778...	0	63.1670647...
1994	9.23519882...	9.38992979...	0.00816079...	0.50283723...	0	71.1195013...
1995	0.15802568...	0.487132225	0.00867521...	1.65511910...	0	79.1567926...
1996	10.3606967...	8.137958808	0.01001371...	1.58390135...	0	72.0696205...
1997	2.68059417...	5.51772022...	0.01212504...	6.94005321...	0	82.2050640...
1998	2.88521179...	-0.678990861	0.02370601...	0.86030748...	0	88.5140416...
1999	-0.8178210...	-3.662836319	0.03834471...	0.34678844...	0	70.9226598...
2000	-3.0591897...	-7.732307438	0.04446837...	0.05606882...	0	74.0674111...
2001	1.43961539...	3.276213473	0.05511465...	0.40838102...	0	67.8978721...
2002	-8.8940236...	-16.964817	0.05509829...	0.06634550...	0	66.8073515...
2003	-16.995074...	-20.43725466	0.69821607...	0.14985535...	0	70.4519882...
2004	-5.8075380...	-2.05635567	5.07441941...	1.78620601...	0	76.0396085...
2005	-5.7110837...	-7.34172667	22.3890396...	0.73476782...	0	76.0437072...
2006	-3.4614951...	-8.942446937	164.547356...	1.30197750...	0	82.8206487...
2007	-3.6533268...	-9.786355989	9686.77166...	1.16855690...	0	84.1729044...
2008	-17.668946...	-21.08434436	6723052073...	1.08630504...	0	109.521637...
2009	12.0195599...	-3.824146813	0	1.01802173...	0	61.7784377...
2010	21.4520609...	45.77855178	0	2.44151145...	3.0227	83.1241904...
2011	14.6202072...	5.104660055	0	2.04413128...	3.4661	89.4665267...
2012	15.7448770...	-3.274345234	0	1.95406007...	3.7253	74.1625347...
2013	3.19673088...	-11.87653348	0	2.42517259...	1.635	58.6564939...
2014	1.48454262...	3.879176129	0	1.99968736...	-0.1978	54.6716154...
2015	2.02364999...	48.41122639	0	1.66927435...	-2.431	56.7488111...
2016	0.90095539...	21.00079094	0	1.74688452...	-1.5437	51.2190246...
2017	4.08026390...	4.80668452	0	2.10172108...	0.894	50.0297122...
2018	5.00986678...	-2.912872614	0	1.14280558...	10.6189	54.5502703...
2019	-6.3324464...	13.88998489	0	0.69903351...	255.305	55.7959609...
2020	-7.8169506...	-48.9492549	51.3290131...	0.58509958...	557.201800...	47.3133654...
2021	8.46801689...	47.0479455	88.5524472...	0	98.5461	50.8471283...
2022	0	43.94903618	374.954362...	0	104.7052	64.9566408...
2023						
2024						

APPENDIX 1 DESCRIPTIVE DATA

	GDP	EXPORTS	FDI	EXRATE	INFLATION	TRADE_GVT _POLICY_
Mean	2.170394	3.768958	0.892358	1.46E+08	22.49886	61.14543
Median	2.061340	0.856784	0.502837	0.001965	0.000000	57.70265
Maximum	21.45206	48.41123	6.940053	6.72E+09	557.2018	109.5216
Minimum	-17.66895	-48.94925	-0.452540	0.000000	-2.431000	35.91686
Std. Dev.	7.913284	18.84364	1.256081	9.91E+08	91.06816	16.78106
Skewness	-0.168884	0.549514	2.699094	6.559133	4.939088	0.608091
Kurtosis	3.466232	4.343596	13.43973	44.02222	27.99676	2.763430
Jarque-Bera	0.635299	5.775133	247.4801	3555.247	1384.632	2.942207
Probability	0.727858	0.055712	0.000000	0.000000	0.000000	0.229672
Sum	99.83814	173.3721	38.37137	6.72E+09	1034.948	2812.690
Sum Sq. Dev.	2817.903	15978.73	66.26501	4.42E+19	373203.5	12672.17
Observations	46	46	43	46	46	46

APPENDIX 2 Specification Test

Ramsey RESET Test			
Equation: UNTITLED			
Specification: EXPORTS EXRATE FDI C			
Omitted Variables: Squares of fitted values			
	Value	Df	Probability
t-statistic	0.187083	42	0.8525
F-statistic	0.035000	(1, 42)	0.8525
Likelihood ratio	0.038317	1	0.8448
F-test summary:			
	Sum of Sq.	Df	Mean Squares
Test SSR	12.72479	1	12.72479
Restricted SSR	15282.48	43	355.4065
Unrestricted SSR	15269.76	42	363.5656

Unrestricted SSR	15269.76	42	363.5656	
LR test summary:				
	Value	Df		
Restricted LogL	-198.8051	43		
Unrestricted LogL	-198.7859	42		

Ramsey RESET Test				
Equation: UNTITLED				
Specification: FDI TRADE_GVT_POLICY_INFLATION C				
Omitted Variables: Squares of fitted values				
	Value	Df	Probability	
t-statistic	0.996693	42	0.3246	
F-statistic	0.993397	(1, 42)	0.3246	
Likelihood ratio	1.075339	1	0.2997	
F-test summary:				
	Sum of Sq.	Df	Mean Squares	
Test SSR	1.227663	1	1.227663	
Restricted SSR	53.13221	43	1.235633	
Unrestricted SSR	51.90455	42	1.235823	
Unrestricted SSR	51.90455	42	1.235823	
LR test summary:				
	Value	Df		

Restricted LogL	- 68.5864 4	43		
Unrestricted LogL	- 68.0487 7	42		

APPENDIX 2 AUTOCORRELATION

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	2.59346 0	Prob. F(2,36)	0.0887
Obs*R-squared	5.66712 4	Prob. Chi-Square(2)	0.0588

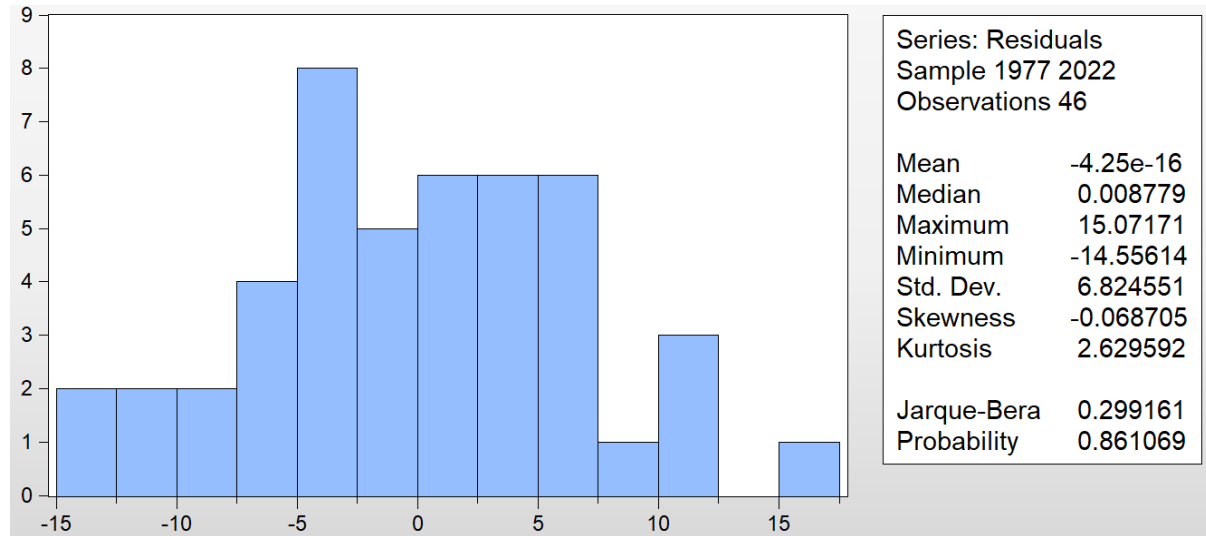
APPENDIX 3 HETEROSKEDASTICITY

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	1.34114 7	Prob. F(5,40)	0.2670
Obs*R-squared	6.60440 8	Prob. Chi-Square(5)	0.2518
Scaled explained SS	4.08207 4	Prob. Chi-Square(5)	0.5377

APPENDIX 4 MULTICOLINEARITY

Variance Inflation Factors			
Date: 05/30/24 Time: 13:28			
Sample: 1977 2022			
Included observations: 45			
	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF
EXPORTS	0.002977	1.205596	1.154213
EXRATE	1.23E-18	1.355724	1.325596
FDI	0.873841	2.141490	1.444340
INFLATION	0.000123	1.185569	1.114395
TRADE_GVT_POLICY_	0.005855	26.11378	1.753375
LGDP	0.016452	1.217348	1.128491
C	20.30182	22.27610	NA

APPENDIX 5 NORMALITY TEST



APPENDIX 6


ORDINARY LEAST SQUARES RESULTS

Dependent Variable: GDP				
Method: Least Squares				
Date: 05/30/24 Time: 14:12				
Sample (adjusted): 1978 2022				
Included observations: 45 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
EXPORTS	0.156515	0.054566	2.868371	0.0067
EXRATE	-1.98E-09	1.11E-09	-1.783931	0.0824
FDI	0.631113	0.934794	0.675135	0.5037
INFLATION	0.009282	0.011074	-0.838198	0.4072
TRADE_GVT_POLICY_	0.034132	0.076516	-0.446069	0.6581
LGDP	0.260675	0.128266	2.032298	0.0492
C	2.937978	4.505754	0.652050	0.5183

R-squared	0.44233 6	Mean dependent var	2.0642 92
Adjusted R-squared	0.35428 4	S.D. dependent var	7.9695 43
S.E. of regression	6.40404 1	Akaike info criterion	6.6937 70
Sum squared resid	1558.44 6	Schwarz criterion	6.9748 07
Log likelihood	- 143.609 8	Hannan-Quinn criter.	6.7985 38
F-statistic	5.02357 4	Durbin-Watson stat	1.5694 31
Prob(F-statistic)	0.00070 7		

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