BINDURA UNIVERSITY OF SCIENCE EDUCATION FACULTY OF COMMERCE DEPARTMENT OF ECONOMICS



THE IMPACT OF STATUTORY INSTRUMENT (64) OF 2016 ON EXPORTS GROWTH IN ZIMBABWE: PRE AND POST 2016 (1985 -2018).

SUBMITTED BY

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A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF THE BACHELOR OF SCIENCE HONOURS DEGREE IN ECONOMICS, FACULTY OF COMMERCE OF BINDURA UNIVERSITY OF SCIENCE EDUCATION.

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| DEGREE TITLE | BACHELORS OF SCIENCE (HONOURS) |
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DEDICATIONS

I dedicate this dissertation to the Holy Trinity, God the Father, God the Son and God the Holy Spirit. Dedications also go to my mother and family for their unwavering support.

ABSTRACT

The main aim of this study is to empirically examine the impacts of Statutory Instrument 64 on exports growth in Zimbabwe from the period 1985 to 2018. The research has been carried out since there has been a decline in exports and an increase in imports since the late 1990s which is attributed to different government policies. To find out the relationship between Statutory Instrument 64 and exports growth, OLS (ordinary least squares) method was used and other explanatory variable like imports, foreign direct investment, gross domestic product, exchange rates and interest rates were also included. The study uses time series data which was collected from ZIMSTATS, WORLD BANK and the researcher used E-views 7 software for data analysis. The results obtained from the analysis shows that the restrictions by the SI64/2016 on imports has a significant and positive contribution to exports growth. The findings from the study also show that gross domestic product has a significant and positive relationship to exports. Interest rates have a negative relationship with exports while exchange rates do not have a significant relationship with exports. The researcher goes on further to recommend the possible resolutions which can be done to improve the performance of the exports. These resolutions include improving the government taxes which will increase government revenue and offer subsidies to local producers and exporters, trade policies which will improve government revenue through increased exports and monetary policy which will reduce the interest rates leading to increased credit assistance to manufacturers."

ACKNOWLEDGEMENTS

I wish to express my gratitude to my supervisor Mr Chigusiwa for his unceasing advice and guidance throughout the course of the research. His contributions, invaluable knowledge, ideas, encouragements, and constructive criticisms he made to this study are sincerely appreciated. He also read my numerous revisions as his greatest assistance and contributions in data validation and analysis.

Let me also thank all my fellow Bsc Economics students for their unwavering support and encouragement. Indeed what a fantastic and amazing group of students who worked harmoniously. My sincere gratitude for their inspiration, affection and friendly interactions they gave me throughout the study. May the good Lord continue shining in their lives ahead.

Finally I would like to thank the almighty God for being with me through out this study.

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ABREVIATIONS/ ACRONYMS

ADF Augmented Dickey Fuller

BOP Balance of Payments

CSO Central Statistics Office

ECM Error Correction Model

FDI Foreign Direct Investment

GDP Gross Domestic Product

GOZ Government of Zimbabwe

IMF International Monetary Fund

MOFED Ministry of Finance and Economic Development

OLS Ordinary Least Squares

SI64/2016 Statutory Instrument 64 of 2016

WB World Bank

ZIDA Zimbabwe Investments Development Agency

ZIMSTATS Zimbabwe National Statistics Agency



CHAPTER I

INTRODUCTION

1.0 Introduction

The Government of Zimbabwe established Statutory Instrument 64 of 2016, whose motive was to enhance domestic production by shielding local industries from unfair rivalry from foreign firms through enlisting various basic commodities on the ban list and removing these commodities on the open general import licence. The ways to improve local production is to invest in the local industries as well as shield the infant firms from foreign completion as that will reduce the chances of their collapse. This project will give an analysis of the impact of statutory instrument 64 on exports in Zimbabwe, pre and post its gazetting in 2016. The analysis runs from 1985 to 2018. Bearing this notion, foreign Direct Investments are also imperative in the uplift of the local industries to improve the rate of export growth. It is vital for a country to have more exports than imports when it aims to achieve a positive Balance of Payment. In Zimbabwe we are net importers, that is, we import more than we export. In 2018, the Reserve Bank of Zimbabwe recommended that the Government of Zimbabwe should set up an Export Revolving Fund which is meant to subsidize the exporters in their production process so as to boost the production capacity (RBZ, 2018).

In 2019 Zimbabwe initiated the Zimbabwe Investment and Development Agency bill. This bill provides for entry, protection and facilitation of inflow of investments in Zimbabwe. ZIDA is regarded as the one stop for foreign investment in Zimbabwe. The policy applauds that while the outline of the Statutory Instrument is an honourable notion, it requires to be accompanied by amplified indigenous manufacture through addressing the supply side restraints and other key manufacture enablers (SI 64; 2016). Nevertheless, Zimbabwe's neighbours raise the fact that the instrument undesirably affected their economies and debased the SADC Protocol on Trade which pursues to endorse free trade amongst member states.

1.1 Background

After the introduction of the US dollar in 2008, the Zimbabwean Government established many economic policies to attract foreign investment. Henceforth, in 2017, to further promote the notion, as the motive is to increase local production in Zimbabwe, the second Republic led by his Excellence President E.D. Mnangagwa has made a mantra out of the call for external investors that "Zimbabwe is open for business". This call is to attract foreign direct investment so as to cement the works of the SI 64 in protecting the infant industries in Zimbabwe. 95% of the infant firms collapse before they reach five years of existence in business, thus the SI 64 is an important tool in improving key production and improving exports in conjunction with other forms of investment. The reformation brought about by the SI 64 pursued to encourage higher production growth and to diminish poverty and unemployment by; tumbling fiscal and establishing cautious monetary policy and liberating trade instruments and the foreign exchange system to progress the level exports (Mandeya, 2017).

In 2019 there was sharp devaluation of the Zimbabwe dollar as a result of the black market activities and influx of the mobile money which led to rise in inflation and reduction in production capacity and in turn the exports reflected a positive result to the fall of the local currency. The country also went through an unbalanced macroeconomic atmosphere, categorized by high inflation rates, high interest rates when borrowing and a devalued currency which adversely affected performance in most areas of the economy mostly the production sector which made the foreign direct investments levels to drop drastically (Kanyenze 2017).

In July 2020, as a measure to resolve the devaluation of the local currency and work in hand with the SI64, RBZ initiated a Foreign Currency Exchange Auction System so as to shield the domestic local firms from falling into the inflationary trap and lose assets in the process as well as to battle inflation. Companies are more afraid to produce more goods in the unstable environment which drastically reduces the supply of goods to be exported hence the fall of exports in Nigeria during 1990 (Janine Aron and

Ibrahim A. Elbadawi; 1992). Such was the case for Zimbabwe during the time when the local currency was devalued. The SI 64 was intended to encounter two precise national intentions, namely: Restraining consumer expenditure on luxury imports, since Zimbabwe is fronting a negative B.O.P, which is stroking burden on foreign currency equilibriums; and Mechanize by import replacement, and endorse "buy local" which was meant to improve the supply side and boost exports and reduce imports. This element structures highly in the state's Industrial Development Policy.

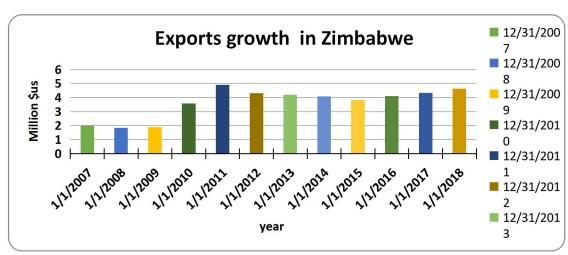


Fig. 1: Zimbabwe exports growth (US\$ millions) from 2007 to 2018

Source: Data from World Bank

Above is a chart with the analysis and data show of exports from 2007 to 2018 which is part of the research period. Zimbabwe produced and managed to export \$4.08 billion in 2014, however it imported \$6.58 billion, which resulted in a balance of payment deficit of \$2.50 billion (World Bank, 2018). The golden leaf of the nation (tobacco) and gold where the major exports of Zimbabwe. However, on the other hand, this was not enough to overthrow the level of imports in Zimbabwe. Which meant that at that point, local production had not been able to meet the exporting capacity and also that the local infant firms where not yet protected. This occurrence of the negative BOP pointed out to the development of the SI64. Zimbabwe has met adverse trade equilibrium as a consequence of failing to draw foreign investors to make use of their expertise to transform raw materials into finished and semi-finished goods so as to export them at a higher price thus improving the balance of payment (World Bank, 2016). The balance of payment was US\$-3.68 billion in 2015 and US\$ -2.32 billion in

2016. Zimbabwe grew in exports from 4.09 million, 4.33 million and 4.61 million in 2016, 2017 and, 2018 respectively (ZIMSTAT, 2018). The rise in the statistics is given by the implementation of the SI 64 by the government.

1.2 Statement of the problem

Zimbabwe has been a major net importer since 2006 and beyond. This echoes that the outcome of trade is not being balanced. The local production is low and that the manufacturing processes are not adding value to the raw materials in Zimbabwe, hence the low value of the exports even though we export precious minerals (Saungweme 2015). As an outcome of the current account balance growing adversely, it indicates that, the government is failing to device operational trade policies in place. Below is a chat that shows the scale of the trade balance from 2007 till 2018.

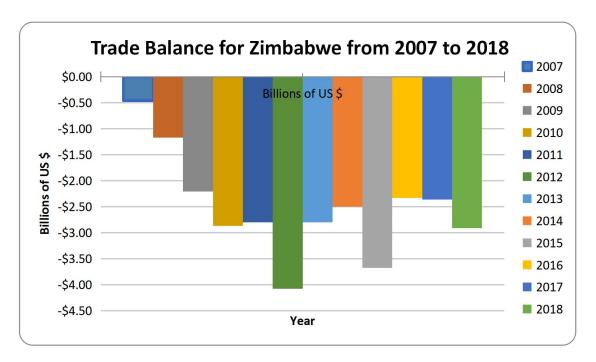


Table 1: Zimbabwe Trade Balance (US\$billion)

source: ZIMSTATS, 2019

The bar chat above displays adverse scales which need to be addressed. The government needs to launch strong policy to advance its trade effectiveness hence enhancing exports to a more attractive and beneficial level to the economy. Policies

that add value to exports are recommended, as major exports are from mining and agriculture in developing nations (Sawyer C. W and Sprinkle R.L; 2003). Zimbabwe is one of developing nations that has been undergoing a massive public debt build-up, since it attained its independence. For that reason, this research pursues to deliver and identify the contents of Statutory Instrument 64 which aims at improving growth of exports by way of shielding the local infant industries; and also to evaluate the association between SI64 and exports in the Zimbabwean economy.

1.3 Objectives

Objectives of this research are to examine the impact of Statutory Instrument 64 towards growth and expansion of exports in Zimbabwe.

- 1. To examine effects of Statutory Instrument 64 on exports in Zimbabwe.
- 2. To examine policies that the Zimbabwean administration can work with to shield the local industries.
- 3. To investigate the relationship between statutory instrument 64 contents and exports.

1.4 Research Questions

- 1. What are the effects of the statutory instrument 64 on the output growth in Zimbabwe?
- 2. Can the Statutory instrument 64 be successful in improving the exports level in Zimbabwe?
- 3. To what extend does foreign direct investment influence export growth through boosting local production?
- 4. What are the effects of increase in gross domestic product and economic growth on exports growth in Zimbabwe?

1.5 Hypothesis

The null hypothesis;

 H_0 : $\beta_1 = 0$ which is, Statutory Instrument 64 has a direct relationship with exports

growth,

The alternative hypothesis states that;

 H_1 : $\beta_1 \neq 0$ which is, Statutory Instrument 64 has no direct relationship with exports growth,

1.6 Significance of the study.

Zimbabwe has been lacking production or manufacturing capacity since 2000, and this has resulted in the further tumbling of our exports and the skyrocketing of the imports of Zimbabwe (ZIMSTATS, 2018). This study has the motive to shade some light on the areas in which the government can focus on improving and attracting investors and improve exports so that Zimbabwe becomes the middle class economy by 2030. The researcher will also analyse the relationship between the contents of the statutory instrument 64 and the rate of exports growth in Zimbabwe. The analysis will aid the local and external companies with market niches to explore and have comparative advantage and absolute advantage.

1.7 Assumptions of the study

The data that the researcher made use of in this study is from diverse sources such as ZIMSTAT, IMF, RBZ and World Bank imitates a true standing of the Zimbabwean economy. The researcher assumes that all secondary data collected from these various sources reflect the true standing of the relationship between the SI64 and the exports in Zimbabwe.

1.8 Delimitations of the study.

This study evaluates the impact of Statutory Instrument 64 (SI64) on export growth in Zimbabwe. Statistics and facts required in this study will be gathered from diverse reliable, and consistent sources such as Reserve Bank of Zimbabwe (RBZ), World Bank, Confederation of Zimbabwe Industries (CZI), International Monetary Fund (IMF) and Zimbabwe National Statistics Agency (ZIMSTAT).

1.9 Limitations.

The use of secondary data in this study makes the study prune to other human error in

recording and is subject to bias. Due to lack of primary data, the analysis is subject to manipulation without clarification. The researcher made use of data from reputable sources so as to limit error and bias.

1.10 Definition of terms:

Statutory Instrument 64: this is government policy developed to reduce imports as a way to protect the local infant industry and boost production thereby improving exports through value addition to the locally produced goods and services. Although, Government has modified indeterminately **Statutory Instrument (SI) 122 of 2017** to permit companies and persons with offshore and free reserves to import stated basic supplies that are in short supply due to the hypothetical conduct of local merchants and panic-buying by customers, the SI64 stands in firm as the motives remain intact, (RBZ, 2018)

Exports: exports are goods produced in the local industries and sold in the foreign economies. These goods and services will add up to the nation's production output and close the gap between of the balance of payment (Salvatore, 2013)

Imports: these are goods and services produced by the foreign market and sold in the domestic economy. The goods worsen the level of B.O.P. (Salvatore, 2013)

Foreign Direct Investment: Is an inflow of foreign funds to boost the local business economy through investment by persons or businesses separate from their home countries and it is movement of long-term principal capital based on extended run proceeds forecast that occur in international manufacture (Berker G.S 1967).

Gross Domestic Product: This refers to the total output of an economy which is equal to the aggregate demand. GDP measures the output and economic growth of the economy (Sawyer C. W and Sprinkle R.L; 2003).

Balance of payments: this is a summarised account of all the exports and imports that a nation does. A balance of payment can be negative or positive depending on how the country is trading and manufacturing its products and in what capacity. (Salvatore, 2013).

1.11 Summary

Chapter one gave the insight of the whole study as to the path it follows giving the background of the study, statement of the problem, objectives, definition of terms, limitations and delimitations. This study aims at analysing the impact of Statutory Instrument 64 on the level and rate of exports growth in Zimbabwe. The 2nd chapter will focus on the literature review of this study, that is, the theoretical literature and the empirical literature of the study.

CHAPTER II

LITERATURE REVIEW

2.0 Introduction

Literature review explains the theoretical and empirical literature that was previous done by other researchers to show and explain the relationship between statutory instruments which regulate imports so as to pave way for local production and the exports emanating from that environment. In this chapter, section 2.1 will explain the theoretical literature constituting and section 2.2 will explain the empirical literature relative to this study which was done by Donga G, Ngirande H and Shumba K in 2018, Banker's Association of Zimbabwe in 2017 and, Stanley Idanai Murangwa and Tavonga Njaya in 2018 et cetra.

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2.1 Theoretical review.

The theoretical literature to be reviewed in this study is in theoretical notion of the relationship between the statutory instrument 64 of 2016 and the export growth in Zimbabwe. An escalation in exports will also advance the balance of payment of the country in relation to other countries. Balance of payment is a summarised account of all the exports and imports that a nation does (Salvatore, 2013). The theoretical indications that import regulation and protection of local firms bring an increase to production locally and increase in exports will be shown below and include Mercantilist Theory of Trade, Hecsher-Ohlin Theory, Absolute Advantage Theory,

Comparative Advantage Theory, Dutch Disease Theory, Resource theory and the Prebisch-Singer Thesis.

Mercantilist Theory of Trade

The theory of trade gives an emphasis on exportation of goods and services to the foreign economy and also restricts the importation of the same goods into the local economy so as to boost the balance of trade of the local economy. Mercantilism is an economic philosophy that promotes government parameters of international trade to produce wealth and reinforce national power (Saungweme, 2015). The private sector and, the government put effort together to diminish the trade deficit and generate a surplus. The basis of this theory was to give wealth to the local economy by means of advantageous trade, (Salvatore, 2004). The theory strongly discouraged the importation of finished goods or goods and services with added value. The idea behind this theory is the same as borrowed by the Statutory Instrument 64 to regulate importation of basic commodities and protect local production so as to create self-sufficiency and boost exports of the basic products. This in turn is favourable to the local economy as it realises more inflow of wealth from trade.

Hecscher-Ohlin Theory.

The motive of the SI64 is to regulate imports to pave way for economic growth. The Hecscher-Ohlin Theory is an aiding theory to economic growth. According to Sawyer and Sprinkle (2003), production capacity between nations differs because there is also difference in supply and abundance of production factors. The patterns of international or regional trade are determined by differences in factor endowments rather than productivity. In the case of Zimbabwe, there is a lack of highly skilled labour in the innovations, research and manufacturing sector.

Prebisch-Singer Thesis

In the world of trade, it is known that no country can exist in autarky, therefore that's the main reason why countries trade. However, no country can trade when it has nothing to trade with. According to Prebisch (1959) the developing nations that focus on exportation of raw materials suffer from negative B.O.Ps even if the exports are larger in quantities but they will always be lower in value thus the origin of negative trade balances. Zimbabwe does not manufacture most of the finished products it uses therefore there is need to regulate imports to push the domestic industry to manufacture such goods and improve exports level and growth in Zimbabwe.

Resource Scarce Theory

The availability of natural resources makes developing nations focus or specialise on non-productive sectors (Ricardo ad Rigobon, 2002). Industrial policy initiatives which aim at improving the nation's production capacity are very well on the programme in both countrywide and regional altitudes in Africa. The argument on the resource scarce theory, however, about what an industrial programme is and what it should be is often ideologically and governmentally charged. The natural resource wealth makes an economy less entrepreneur driven. However, the SI64, has provisions to provide for the industrialization and pave way for manufacture and valid use of the resources available to the Zimbabwean economy.

Absolute Advantage Theory.

The Absolute Theory was developed by Adam Smith. The theory states that a nation gains absolute advantage when it can produce a good or service in greater quantities for the same cost or less cost than other nations. This can be achieved by way of specialisation, division of labour and so forth. However, through specialisation of one product, the nation also gains a disadvantage when producing the second good. Therefore, as a solution, in cooperation countries can gain more by each concentrating in the manufacture of the product of its absolute advantage and, trading part of its output or excess output with the other nation for the product of its absolute disadvantage (Solvatore, 2013). This only means that both nations will gain through improved exports in commodities that they both have absolute advantage.

Comparative Advantage Theory.

The comparative advantage theory was developed by David Ricardo in the 19th century and it stated that the causes and benefits of trade are brought about by the differences in the opportunity cost of producing that particular good. David Ricardo was motivated by political economics and taxation of trade. In this day, Zimbabwe makes use of such taxes to protect the infant industries and motivate exports to reduce the trade gap and reduce the negative balance of payments. Rendering to this decree of comparative advantage, when a country has an absolute disadvantage with veneration to the other country in the manufacture of two produces, it states that, there is still a foundation for reciprocally beneficial trade (Salvatore, 2013). One nation should focus on specialisation and direction of the scarce resources into production of the goods in which they have comparative advantage the cases are rare when there is no absolute or comparative trading advantage between due to the fact that the resources between countries will always vary according to their availability in this economies Sachs, 2003). For an economy to achieve comparative advantage it will have to incentivise its private sector so as to direct its focus to the production of the goods in which they have comparative advantage. This notion builds up the idea of development and reinforcing of the Statutory Instrument 64 of 2016. When imports of the goods in which a country has comparative advantage in are regulated, then the producers will have no option but to focus the manufacture of that product so as to retain the existing market share and also export the excess to the foreign markets.

2.2. Empirical review

The Minister of commerce made an analysis of SI64 in 2017 to track the progress of the policy and its relationships with other policies such as the ZIMASSET. This strategy of reviving the local manufacturing industry is the key element of achieving the set economic targets in the long term economic blue print stated under ZIMASSET (2013 – 2018). Such policy motives were highlighted under the value addition and beneficiation pillar. The importation of goods and services noted under the SI64 of 2016 is controlled through issuance of import licences. The Ministry of Commerce issued the SI 64 with the notion that import licences will only be issued in cases where there was a supply gap. However, as time went by, the government

realised that the supply gaps where in most areas of valid importance which required importation of the products to fill the supply gap (Minister of Industry and Commerce, 2017). The company called Datlabs increased its capacity utilisation from 30% to 50% on the Camphor cream line and it is envisaged to reach 70%. In the same era, Prochem then recorded an increase in both the capacity utilisation and employment levels from 30% to 48% to 101 workers respectively (Minister of Industry and Commerce, 2017).

Donga G, Ngirande H and Shumba K (2018): The Zimbabwean government in June 2016 enforced the Statutory Instrument 64 (SI 64/2016) which is import parameters on a list of merchandises mainly from South Africa because it supposed informal imports as bestowing unfair rivalry to domestic industries. This research thus discovered the impact of the SI 64/2016 on informal cross-borders traders in South Africa which was not an issue pre-gazetting of the statutory instrument of 2016. The SI64/2016 antagonised the exports level of South Africa since Zimbabwe was the major importer of South African products. The study also delivers an impression of the informal cross-border trader's locations, the informal trader's trading account and the procedure responses to be implemented to aid these cross-border traders

Banker's Association of Zimbabwe (2017) postulated that, some of the accomplishments of SI64 contain slashes on the import bill, upsurge in revenue assortment, a surge in capability exploitation of up to 100 percent and new FDI.

"To address the challenge of the threat of retaliation from our trading partners, Government will replace the import management programme with a local content policy," said Minister Bimha.

SI64 regulated the importation of assured goods that were being manufactured domestically, as a way of progressing consideration on cumulative production in domestic industries to generate employment.

Stanley Idanai Murangwa and Tavonga Njaya (2018) homologated that import limitations or regulations reduce the general welfare of the general population of Zimbabwe. The general level of prices of local goods is higher than if the same goods where to be imported, which means the local populace will be worse off. In Zimbabwe the average trader seems to dodge the restriction through the illegal smuggling of the

goods or services on the restriction list. Pre-gazetting of the SI64/2016 the informal traders always smuggled goods, but the rate now increased due to the import restriction. The goods of those with permits will be charged at exorbitant prices and the permit owners will reap a lot of profit at the expense of the general population. The SI64 regulated that a lot of the produce made in Zimbabwe was not to be imported, however, the average trader the smuggled goods such as Hello snacks and cooking oils in the economy and stood to gain a huge profit from it and such still exist up to this day. Brooks (2016) made a suggestion that the African countries should be involved in improving their terms of trade other than on restrictions which made other countries worse off.

2.3 Gap Analysis

This study focuses on the impact that the Statutory Instrument 64 of 2016 has on exports development and growth in Zimbabwe. An extensive analysis will be made in the quest to examine the relationship of SI64 and exports in both the short run and long run. Other researchers focused on the relevance of the SI64 on shortening or reducing the imports level, whereas this research has its focus on the capacity and abilities of Statutory Instrument 64 of 2016 to improve the exports level indirectly through limiting imports and protecting the infant industries of Zimbabwe which may aid to expand Zimbabwe's export growth. The researcher is therefore giving limelight to the policy makers to also render focus to the development of policies that will also improve domestic manufacture, value addition of the raw materials and production of finished and semi-finished goods for the purpose of exporting and improving the trade balance.

2.4 SUMMARY

This chapter of the study has focused on theoretical and empirical literature review of previous studies done on similar studies as this one picked by the researcher. This chapter also consist of the research knowledge gap, which highlights the explanation of differences and the significance of this particular study in contradiction of other prior studies on this particular subject.

CHAPTER III

RESEARCH METHODOLOGY

3.0 Introduction

This chapter outlines the development of the model that can be used to test the relationship between the Statutory Instrument 64 of 2016 contents and the exports levels in Zimbabwe pre and post the gazetting of SI64/2016. The author adopts the Gravity model of trade. In this chapter variables will be outlines and justified as well as incorporated in the research design to fully show the relationship modelled.

3.1 Research Design

The research design provides the theoretical, mathematical and statistical framework for analysis of data as propounded by Bryman (2003). Leedy p (1974) homologates that a research design is a framework for data analysis to answer the set of hypothetical questions. Henceforth, the research design can be defined as a systematic way of data analysis and data collection to answer hypothetical questions. The results obtained by this research design are seen to be true and credible as well as highly reasonable. Using the gravity model of trade as the model ensures that mathematical and statistical results are obtained to ensure credibility of the data obtained to validate the impact of the statutory instrument 64 of 2016 on exports level in Zimbabwe.

3.2 Theoretical Model

The methodological approach and model used in this research is based on the gravity model of trade. Zimbabwe trades most with its surrounding neighbouring countries, with this notion, the gravity model of trade states that a country tends to trade most with the countries which are in close proximity to its borders. The model was introduced by Walter Isard in 1954. The basic model for trade between two countries (i and j) takes the form of

$$Fij = G. \frac{MiMj}{Dij}$$

In this formula G is a constant, F stands for trade flow, D stands for the distance and M stands for the economic dimensions of the countries that are being measured. The equation can be changed into a linear form for the purpose of econometric analyses by employing logarithms. The model has been used by economists to analyse the determinants of effectiveness of trade agreements and organizations such as the North American Free Trade Agreement (NAFTA) and the World Trade Organisation (WTO) (Head and Mayer 2014). The model has also been used in international relations to evaluate the impact of treaties and alliances on trade (Head and Mayer). In this study, this model will be used to test the impact of the gazetted Statutory Instrument 64 of 2016 on the level of exports. The model has also been applied to other bilateral flow data (data showing relationship between exports and imports of an economy) such as migration, traffic, remittances and foreign direct investment.

3.3 Model Specification

Model specification is the determination of which independent variables should be included in or excluded from a regression equation (Gujarati and Porter, 2009). A simple log -log linear regression model was adopted form Shumba K (2019) for this study because he researched on the impact of Statutory Instrument 64 of 2016 on imports and they used time series data which is also used in the current study. The researcher adopted the log-log linear model to obtain the study goals with exports (EXP) as dependent variable, imports (IMP) and other control variables such as

Foreign Direct Investment (FDI), exchange rate (EXR), Interest Rate (IR), Gross Domestic Product (GDP) and statutory instrument 64 (SI64) as a dummy variable.

The model is shown statistically below:

EXP = f (IMP, FDI, GDP, EXR, IR, SI64)

$EXP = \beta_0 + \beta_1 IMP + \beta_2 FDI + \beta_3 GDP + \beta_4 EXR + \beta_5 IR + \beta_6 SI64 + \varepsilon$

Where,

 β_0 = intercept

EXP= exports

IMP = imports

FDI = foreign direct investment.

GDP = gross domestic product

EXR = exchange rate

IR = interest rates

SI64 = statutory instrument 64

 ε = error term which captures all relevant variables not included in the model

3.4 Justification of variables

3.4.1 Exports

Exports are determined by the level of local production and the extent to which the local industry in protected by the government through relevant policies such as the Statutory Instrument 64 of 2016. The SI64/2016 was put in place to regulate the imports through issuing of import licenses on listed goods and services. Exports also depend on export incentives and foreign direct investment. This is because the foreign investors invest in the local production so as to export the goods to their own economy, for example, the Chinese have major investments in the mining industry as they are in dire need of the raw minerals which they add value in their own economy. This notion supports the idea that exports are influenced by foreign direct investments as well. The exports (EXP) at constant prices are the dependent variable whilst imports is the independent variable.

3.4.2 Imports

The Import variable (IMP) is the major of interest in this study and is included to ascertain the relationship between it and exports (EXP) .Schltz (1978) found a positive relationship between exports and imports suggesting that higher imports implies lower exports in the host economy. The reason behind this notion is that an economy imports more of the goods it does not produce in the domestic economy hence the lesser quantities of exports. Michael Todaro (2005) wrote that increase aggregate total demand through direct increase in government expenditures encourage more private investment. Bear in mind that aggregate expenditure also incorporates exports less imports hence the level of exports is vital to the contribution of the aggregate demand.

3.4.3 Foreign Direct Investments

This study indicate that FDI is related to exports growth. The findings by Kutan and Vuksic (2007 indicate that for all their sampled countries, FDI has increased domestic supply capacity and exports. Thus, FDI can lead to higher exports growth by increasing production and supply capacity and/or FDI-specific effects.

FDI promotes exports by facilitating Zimbabwe's access to new and larger markets. This involves foreign affiliates' privileged access to not only MNCs' international production systems, but also MNCs' intra-firm markets and access at arm's length to MNCs' customers in global, regional and home-country markets. Developed countries perefer to export FDI rather than exporting goods and services. Export limits include transport costs and trade barriers also restrict the feasibility of an exporting approach. If freight costs are applied to manufacturing costs, transporting such goods over a long distance becomes unprofitable. Instead of exorting goods, a company will export investments in terms of money or capital inputs and skill. The firms believe in the power of FDI, it is a better option than exporting.

3.4.4 Exchange Rates

The exchange rate has an effect on the trade surplus or deficit, which in turn affects the exchange rate. In general, a weaker domestic currency stimulates exports and makes imports more expensive. Conversely, a strong domestic currency hampers exports and makes imports cheaper. All countries gain and that with a lower exchange rate gain more by exporting more. So, if Zimbabwe is not the one with the lowest exchange rate, it may now consider devaluing its currency to retain market share. If the dollar depreciates (the exchange rate falls), the relative price of domestic goods and services falls while the relative price of foreign goods and services increases. The change in relative prices will decrease Zimbabwe exports and increase its imports.

3.4.5 Interest Rates

Interest rates in Zimbabwe decrease, which tends to increase durable goods spending and stimulate the Zimbabwean economy. Against that, the higher value of the dollar leads to fewer exports from Zimbabwe and more imports into Zimbabwe, so Zimbabwean net exports will decrease. Whether Zimbabwe interest rates are low or high will affect Zimbabwe trade accounts along with the domestic economy. A

cheaper dollar makes imports more expensive and less attractive in the African market while stimulating demand for Zimbabwean exports, thus moving the current account balance in a "positive" direction.

3.4.6 Gross Domestic Product

Gross Domestic Product: This refers to the total output of an economy which is equal to the aggregate demand. GDP measures the output and economic growth of the economy (Sawyer C. W and Sprinkle R.L; 2003). It is a given that an increase in GDP brings about the capacity to export the excess output. Thus GDP is a variable that is a contributor to the level of exports in an economy as indicated by a study done by (Dercon, 2009)

3.4.7 Statutory Instrument 64

Level of exports depend heavily on the level of imports in the country. These two variables have an adverse relationship. SI64 is a variable which accounts for the manipulation of imports to give a rise to exports growth, that is, SI64 reduces imports so as to make way or give provisions for the rise of exports.

3.4.7 The stochastic term (ε)

The stochastic term was used to take into custody all the errors in the relationship. The stochastic term is justified on omissions of the influence of innumerable chance events and measurable errors.

3.4.8 The intercept (β_0)

This is included since it ensures that the model will be unbiased, that is, the mean of the residuals will be equal to zero (Gujarati, 2005).

3.5 Estimation Method

The author makes use of the ordinary least squares method (OLS) as the method of data analysis. In order to confirm the model, the study will tests to validate the presence of autocorrelation, multicollinearity and heteroskedasticity errors .The OLS regression analysis require that there should be no autocorrelation regarding time

series data .The breusch-pegan-godfrey test is used to decide whether there is autocorrelation amongst variables. E-views 7 econometric software package is used because it can do unit root test and co-integration tests. To use the OLS estimation method the data has to be stationary. The Augmented Dickey Fuller (ADF) test is used to test for stationary and it assumes that the data generating procedure is autoregressive. According to *Caruso*, *R* (2003) data found not to be stationary in levels differenced.

3.5.1 R-squared

Gujarati (2008) postulates that R-squared measures the proportion of the variation in the dependent variable, explained by the independent variables. The value of R-squared lies between 0 and 1, when the value is closer to 0 it will be indicating complete lack of fit and when the R-squared value is closer to 1 it will be indicating perfect fit. R-squared has one major drawback which is that it turns to increase when the number of regressors is increased. The R-squared will be used to find out goodness of fit of the model.

3.5.2 The F-statistic

The overall significance of the estimated regression model is measured using the F-statistic and it provides a test of the null hypothesis that the true slope coefficients are simultaneously equal to zero. If the F-value computed is greater than the F-value from the tables at a certain percentage of level of significance the null hypothesis will be rejected.

3.6 Diagnostic checking

3.6.1 Goodness of fit

The research will look at the "Goodness of Fit" that is the coefficient of determinant R 2 and the adjusted R2 in order to find how well sample regression fits the data .There will be some positive μt and negatives.

3.6.2 Breusch-Godfrey test

Breusch-Godfrey test is used to find out if time series data are co integrated. The Breusch-Godfrey test which is the ratio of the sum of squared differences in successive residuals (TSS) to the residual sum of squares (RSS) is used in this research to determine is there is no autocorrelation.

3.6.3 Autocorrelation

Serial correlation refers to a situation where the error terms from different time period are correlated and it occurs in time series studies where the errors are associated with observations in given time period carried over into the future time periods, (Gujarati, 2003). To detect the presence of multicollinearity the researcher computes Breush Godfrey test of serial correlation LM between the individual variables.

3.6.4 Multicollinearity test

The presence of multicollinearity is expected among variables as in real life we cannot have orthogonal variables because most economic magnitudes are mutually dependent. Problems exist when the degree of multicollinearity is high. Gujarati (2008) postulates that multicollinearity is the presence of a perfect or exact linear relationship among the explanatory variables of the regression model. If multicollinearity is present and it has the effect of high 31 standards errors, it also affects the individual regression coefficients. Coefficients may also have wrong sings or implausible magnitudes when multicollinearity is present. To detect the presence of multicollinearity the researcher computes matrix of correlation between the individual variables. This is done to discern those variables with a correlation of 0.8 and above.

3.6.5 Heteroskedasticity

Heteroskedasticity implies that the error variance is non constant, error variance is spread haphazardly and this is in contrast to homoskedastic error variance which has equal variance.

"Heteroskedasticity can be due to error learning models and existence of outliers among many reasons. If we persist in using the usual testing procedures despite heteroskedasticity, whatever conclusions we make may be misleading" (Gujarati, 2004).

Just like under conditions of autocorrelation heteroskedasticity can result in large standard errors, incorrect t-calculated and F-calculated values. In order to yield constant estimates heteroscedasticity test is going to be carried out.

3.7 Data source and problem

The reason of the study is to examine the impact SI64/2016 on exports levels in Zimbabwe pre and post its gazetting in 2016 (1985 to 2018). Secondary time series data will be used drawn from ZIMSTATS and online data obtained from the World Bank (WB) in view of the fact that Secondary data reduces bias and will be using qualitative data. Annual data on Zimbabwe from 1985 to 2018 has been used covering 33 years. The problem is that the data was affected by multicurrency use and extorted exchange rates in 2018 and in 2008 and 2009, and some of the data was in Zimbabwean dollars and it needed the exchange rate for that year for it to be converted to US\$.

3.8 Summary

This chapter presented the OLS technique that will be used to estimate the economic growth functions. The chapter also outlined sources of data. This information led to the construction of exports model with different explanatory variables that influence exports in Zimbabwe. The next chapter will present, analyse and discus the data obtained.

CHAPTER IV

DATA PRESENTATION AND ANALYSIS

4.0 Introduction

This chapter focuses on data presentation, analysis and discussion so as to determine the significance of factors that influence exports growth level in Zimbabwe. Descriptive statistics, results of related tests, and other data manipulation processes will also be presented. Findings were analyzed to come up with conclusions of Zimbabwe's exports growth and related factors which affects the performance of the statutory instrument 64 in trading.

4.1Descriptive statistics

Table 4.1: Summary statistics

| | EXP01 | IMP | FDI | GDP | EXR | IR | SI64 |
|-----------|----------|----------|-----------|----------|----------|----------|----------|
| Mean | 2.681253 | 3.650185 | 0.137854 | 1.451072 | 1.988908 | 103.1412 | 0.088235 |
| Median | 2.216593 | 2.489866 | 0.055300 | 1.333695 | 0.055106 | 30.50500 | 0.000000 |
| Maximu | | | | | | | |
| m | 4.907581 | 8.386153 | 0.744637 | 2.575000 | 6.727809 | 1158.030 | 1.000000 |
| Minimum | 1.251797 | 1.240643 | -0.030507 | 0.696861 | 0.001616 | 0.340000 | 0.000000 |
| Std. Dev. | 1.035926 | 2.228491 | 0.185895 | 0.616693 | 1.152309 | 227.9942 | 0.287902 |

| Skewness | 0.744934 | 0.934374 | 1.483014 | 0.579790 | 5.570485 | 3.460867 | 2.903465 |
|-----------------|----------|----------|----------|----------|----------|----------|----------|
| Kurtosis | 2.184131 | 2.268094 | 4.594606 | 1.925621 | 32.03030 | 15.20756 | 9.430108 |
| | | | | | | | |
| Jarque- | | | | | | | |
| Bera | 4.087578 | 5.706201 | 16.06513 | 3.540131 | 1369.746 | 278.9911 | 106.3445 |
| Probabilit y | 0.129537 | 0.057665 | 0.000325 | 0.170322 | 0.000000 | 0.000000 | 0.000000 |
| | | | | | | | |
| Sum | 91.16261 | 124.1063 | 4.687037 | 49.33645 | 6.72E+09 | 3506.800 | 3.000000 |
| Sum Sq. | | | | | | | |
| Dev. | 35.41370 | 163.8837 | 1.140385 | 12.55023 | 4.39E+19 | 1715385. | 2.735294 |
| | | | | | | | |
| Observati | | | | | | | |
| ons | 34 | 34 | 34 | 34 | 34 | 34 | 34 |

Source: Own estimation using Eviews version 7

Table 4.1 shows that there is no variability in all the variables since the standard deviation values are low except for interest rates which has got a higher standard deviation of 227.9942. Normality test has been done using the Jaque-bera null hypothesis which states that variables are not normally distributed and the alternative hypothesis which states that the variables are normally distributed. From the table above we can conclude that imports, foreign direct investment, exchange rate and interest rate is not normally distributed since its P value is less than 0.1. Exports and gross domestic product are normally distributed since their P values are greater than 0.1.

4.2Diagnostic test

4.2.0 Stationary test

The stationarity of data has been tested using the unit root test at levels Stationarity of time series was tested using Augmented Dickey-Fuller Test (ADF). If absolute value of the ADF is less than the absolute value of the critical value, the test accepts the null hypothesis that the variable is non-stationary. If the calculated ADF test statistics is greater that the critical t-values reject the null hypothesis.

Table 4. 2: Unit root test: Augmented Dickey-Fuller Test (ADF)

| Null Hypothesis: | | | | | |
|--|--------------|-------------|-------------|--------|--|
| Exogenous: Const | | | | | |
| Lag Length: 1 (Automatic - based on SIC, maxlag=8) | | | | | |
| | | | t-Statistic | Prob.* | |
| Augmented Dickey | -Fuller test | t statistic | -4.617160 | 0.0009 | |
| Test critical | | | | | |
| values: | 1% level | | -3.661661 | | |
| | 5% level | | -2.960411 | | |
| | 10% level | | -2.619160 | | |

4.4 Heteroskedasticity test

Heteroskedasticity was done and results obtained are as below;

Table 4: Heteroskedasticity test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

| Heteroskedasticity Test: Breusch-Pagan-Godfrey | | | | | |
|--|--|--|--|--|--|
| | | | | | |
| | | | | | |

| F-statistic | 1.000765 | Prob. F(6,27) | 0.4451 |
|---------------------|----------|---------------------|--------|
| Obs*R-squared | 6.185687 | Prob. Chi-Square(6) | 0.4027 |
| Scaled explained SS | 6.801468 | Prob. Chi-Square(6) | 0.3396 |

Source: Own estimation using E-views version 7

The Breusch-Pagan-Godfrey test was used to test for heteroskedasticity under the null hypothesis test of the probability value of F static which is 0.4451. The F-static at 1.000756 is greater than 0.04451 which is the critical value, leading to the conclusion that there is no heteroskedasticity.

4.5Multicollinearity test

Multicollinearity is where there is correlation between explanatory variables and it can be tested using correlation matrix as shown on the table below:

Table 4.5: Multicollinearity test: Correlation Matrix

| | IMP | FDI | GDP | EXR | IR | SI64 |
|-----|-----------|-----------|-----------|-----------|-----------|-----------|
| IMP | 1.000000 | 0.828683 | 0.658211 | -0.051149 | -0.178265 | 0.458511 |
| FDI | 0.828683 | 1.000000 | 0.610706 | -0.081985 | -0.162760 | 0.521630 |
| GDP | 0.658211 | 0.610706 | 1.000000 | -0.209100 | -0.406090 | 0.517636 |
| EXR | -0.051149 | -0.081985 | -0.209100 | 1.000000 | 0.817539 | -0.054153 |

| IR | -0.178265 | -0.162760 | -0.406090 | 0.817539 | 1.000000 | -0.108887 |
|------|-----------|-----------|-----------|-----------|-----------|-----------|
| SI64 | 0.458511 | 0.521630 | 0.517636 | -0.054153 | -0.108887 | 1.000000 |

Source: Own estimation using E-views version 7

The results from the table above shows that there is no multicollinearity between interest rates, exchange rates, gross domestic product, exchange rates and SI64 since all variables have values which are less than 0.8 meaning that there is a weak relationship between the variables. There is multicollinearity between foreign direct investments and imports since the variables have values greater than 0.8 meaning there is a strong relationship between variables.

4.6 Autocorrelation test

Gujarati (2004) asserts that auto-correlation or serial correlation is a situation of correlation between members of series of observations ordered in time and it was tested using the serial correlation LM test. The results are as shown in the table below.

Table 6: Auto-correlation test

Breusch-Godfrey Serial Correlation LM Test:

| Breusch-Godfrey S | | | | | |
|-------------------|----------|--------------------------|--------|--|--|
| F-statistic | 1.485042 | Prob. F(2, | 0.2458 | | |
| Obs*R-squared | 3.610387 | Prob. Chi-Square(2) 0.16 | | | |

Source: Own estimation

The null hypothesis which is used when we are testing auto-correlation is that there is no auto-correlation while the alternative hypothesis is that there is autocorrelation. From the results which are shown above the p-value is greater than 10% at 0.2458 and we do not reject the null hypothesis and conclude that there is no auto-correlation.

4.7 Regression results

The obtained results after the estimation of the model are summarized below and estimation was done using E-view 7.

Table 7: Regression results

| Dependent Vari | able: EXP0 | 1 | | |
|-------------------|-----------------|------------|-------------|---------|
| Method: Least Sq | uares | | | |
| Date: 06/29/21 T | ime: 05:48 | | | |
| Sample: 1985 201 | 8 | | | |
| Included observat | ions: 34 | | | |
| Variable | Coefficien t | Std. Error | t-Statistic | Prob. |
| С | 1.415385 | 0.223774 | 6.325053 | 0.0000 |
| IMP | 0.366121 | 0.052605 | 6.959788 | 0.0000 |
| FDI | 0.866873 | 0.617402 | 1.404066 | 0.1717 |
| GDP | -0.107223 | 0.155046 | -0.691555 | 0.4951 |
| EXR | 8.646712 | 9.55E-11 | 0.090479 | 0.9286 |
| IR | -0.000613 | 0.000519 | -1.180645 | 0.2480 |
| SI64 | 0.306870 | 0.262519 | 1.168943 | 0.2526 |
| | | Mean de | nendent | 2.68125 |
| R-squared | 0.905978 | | P 3114 3111 | 3 |
| Adjusted R- | 0.885085 | S.D. dep | endent var | 1.03592 |

| squared | | | | 6 |
|--------------------|-----------|--------------------|--------------|---------|
| | | | | 0.92615 |
| S.E. of regression | 0.351170 | Akaike in | fo criterion | 0 |
| Sum squared | | | | 1.24040 |
| resid | 3.329656 | Schwarz | criterion | 1 |
| | | Hannan- | Quinn | 1.03331 |
| Log likelihood | -8.744552 | criter. | | 9 |
| | | | | 1.36108 |
| F-statistic | 43.36130 | Durbin-Watson stat | | 0 |
| Prob(F-statistic) | 0.000000 | | | |
| | | | · | |

Source: Own estimation using Eviews version 7

EXP=1.415385+ 0.366121IMP + 0.866873FDI -0.107223GDP + 8.646712EXR - - 0.000613IR + 0.306870SI64

R-squared 0.905978 Adjusted R-squared 0.885085

F-statistic 43.36130 Prob(F-statistic) 0.000000

Durbin-Watson stat 1.361080

4.8 Model significance

 R^2 and adjusted R^2 gives information about the goodness of fit of a model, a model is not useful unless its R^2 is at 0.5 (Gujarati 2005). Diagnostic test examine correlation, normality and functional form of the data and in this study this test were carried out. The model was correctly fitted since it is close to 1. From the estimation model, $R^2 = 0.905978$ this means that about 90% of the changes in Exports are explained by the model and 10% is explained outside the model. On the other hand R^2 adjusted for degrees of freedom shows that the model explains about 88% (R2 adjusted=0.885085) of the variation of exports taking into account the degrees of freedom and the remaining 12% is explained by other variable outside the mode

4.9 Interpretation of the results

4.9.1 Imports

A 1% change in Imports will result in a 1% change in exports. Imports to the Zimbabwean economy is significant in explaining the variations in exports at 5%. What the results shows a positive relationship between imports and exports since a percentage increase in the change in Imports will lead to an decrease in exports. Exports to the Zimbabwean economy will also lead to a increase in the overall output of the Zimbabwe since producers will be provided with enough equipment, inputs, and subsidies to stimulate demand. Imports has a negative relationship as expected in the methodology is what we have obtained as b₂<1 at 0.366121. Studies carried out by Khan (2007) examined the relationship between Imports, and FDI on growth rate of exports in Pakistan and they find out that imports has a positive relationship on exports.

4.9.2 Foreign Direct Investment

Foreign Direct Investment is significant in explaining variations in exports at 1%. The results are also showing positive relationship between Foreign Direct Investment and exports since a percentage increase in the change of Foreign Direct Investment will cause exports to increase by 1.042%. This means that there is a positive relationship between these two variables mainly caused by the firm's ability to turn the investments into incomes and improved output as expected in the study that b5>0 (positive at 0.866873). Also FDI as a long-run measure to challenges which will be faced by the economy. Credit facilities provided by the foreign economy will act as precautionary to the domestic economy in case of emergency like reduced manufacturing capacity which will then minimize their losses thereby maximizing overall exports. Studies done by Iganiga and Unemhilin (2011) in Nigeria have also lead to the conclusion that FDI has a significant and positive contribution to exports.

4.9.3 Gross Domestic Product

GDP was found to be insignificant in explaining variations in exports since it have a p-value of 0.4951 which is greater than 10%. This means that there is no relationship between GDP and exports in Zimbabwe. The results are not in line with what we expected as we expected the sign to be positive (b₄>0 with the negative coefficient at -0.107223). Also findings of other researcher like Yan (2016) when he studied the economic effects of growth in output on exports in Mekong. The researcher recommended that policies which facilitate expansion of manufacturing in Mekong may contribute positively to exports since it encourages use of frameworks which provide greater output.

4.9.4 Exchange rates

Exchange rate is insignificant in explaining variations in exports at 0.9286 which is above 10%. A percentage increase in exchange rate will cause exports to decrease by 8.64 %. This means that an overall increase in the exchange rate will cause a significant decrease in overall exports of the whole economy. The negative relationship between these two variables is mainly caused by other side effects of exchange rates. In most cases emergence of black markets given by failure to stabilize the exchange rates will reduced the potential exports. However other studies which were done showed that there is no relationship between exchange rates and exports. Researchers like Ibitoye (2014) when they assessed the effects of exchange rates and stability of domestic currencies on exports. From their study they concluded that a variation in exchange rates does not directly affect variations in exports.

4.9.5 Interest Rates

A 1% Change in interest rates is insignificant in explaining variations in a change in exports at 1% level of significance. This means that there is a negative relationship between interest rates and exports since there is a negative coefficient of -0.000613. This means that percentage change in exports will cause exports to decrease by 0.000552%. A negative relationship between these two variables means that the more the domestic exchange rate

tumble into the ground the less the exports or the less value is exports. The results are in line with the findings by Iganiga (2011) studied the relationship between rise in interest rates and exports using the cob Douglas model. His findings show that interest rates have negative and regressive effects on the exports. As supported by Michael Todaro (2005) that decreased aggregate total demand through direct decrease in government expenditures encourage more Imports and discourage exports.

4.9.6 Statutory Instrument 64 (dummy variable) SI64

SI64 is significant in explaining variations in exports at 1%. The results are also showing positive relationship between SI64 and exports since a percentage increase in the change of SI64 will cause exports to increase by 0.31%. This means that there is a positive relationship between these two variables mainly caused by the nation's ability to turn the restrictions and protection from foreign competition into incomes and improved output as expected in the study that β_6 >0 (positive). A study by Olopade, B. B., Olopade, D. and Bursar, L. (2018) in South Africa have also lead to the conclusion that implementation of the SI64 has a significant and negative contribution to exports of South Africa which means that there is reduced importation by the Zimbabwean economy hence the increase of exports in Zimbabwe.

4.10 Summary

In this chapter diagnostic tests and interpretation of results was done and the results found shows that exports is affected positively by Imports, FDI and GDP. Exchange rates and interest rates are found not to be significant. The next chapter discuss the summary, conclusion and recommendations which can be implemented to increase exports. Statutory instrument 64 was found to be very significant in explaining the growth in exports.

CHAPTER V

S'UMMARY, CONCLUSSION AND RECOMMENDATION

5.0 Introduction

This chapter outlines a detailed conclusion and summary of the study, stating possible policies which should be implemented to improve the exports using the results which were obtained from the study. The chapter will as well highlight possible areas of future research.

5.1 Summary

A positive relationship between SI64 of 2016(SI64/2016) and exports (EXP) was observed. Results from empirical analysis provide evidence indicating that restriction of imports, foreign direct investments increase in gross domestic product are the major key drivers for increasing exports level of Zimbabwe. However, due to manipulation of the SI64/2016 to suit the need of individual with private business interests reduced the magnitude of the impact of the SI64/64 on export level in Zimbabwe. Furthermore, other variable such as exchange rates and interest rates can determine whether government funding can impact the manufacturing level and increase GDP or not since there is also a positive relationship between these variables and exports.

The research was carried out to assess the factors affecting exports growth in Zimbabwe which include imports, foreign direct investments, gross domestic product, exchange rates and interest rates. In Zimbabwe we are an agro-based economy so there is need to improve the performance of the agricultural sector exports since it has a significant impact to the GDP of the country. To achieve

the objectives of the study OLS regression method was used using E-views 7 to ensure the accuracy of the results.

Results from the study show that restriction of imports through the provisions of SI64/2016 has a positive and significant effect on economic growth and exports growth in Zimbabwe. The results have also shown that foreign direct investment is also important in explaining variations in exports. Interest rates have a negative relationship with exports. From the findings we can reject the null hypothesis H_0 : $\beta_1 = 0$ which is, Statutory Instrument 64 has a direct relationship with exports growth. The findings from this study do not contradict with the theories of exports growth hence the theories like the Keynesians growth model holds in Zimbabwe.

The results from the study also showed that restriction of imports and financing of manufacturers through foreign direct investment are the main contributors to overall increase of exports in Zimbabwe. Therefore recommendations are done to provide ways which can be done by policy makers to improve the performance of exports growth by improving FDI, manufacturing and credit assistance to producers.

5.3 Conclusion

To conclude this study, there is indeed a significant positive impact of use of statutory instrument 64 in improving the growth of exports in Zimbabwe. In order to strengthen this relationship, there is need for disaggregation of contents of the SI64 data into specific classes of restrictions because not all restrictions on imports have a positive correlation with exports a result of this finding the government of Zimbabwe should come up with proper economic policies which increases restrictions of imports to boost exports in Zimbabwe.

The study also showed that foreign direct investment has a positive relationship with exports growth in Zimbabwe, as the FDI increases exports will also increase. The results from the study also showed that interest rates are not important in explaining variations in exports growth as most people do not borrow to finance their trading. Gross domestic product increase has however showed massive significance in contributing towards exports growth

5.4 Recommendations

Government budget support should be directed towards provision of infrastructure that promote production and manufacturing development such as opening of roads in rural and resettlement areas to allow easy transportation of inputs and produce to and from the market. In order to improve exports growth through statutory instruments implementation,, policy makers need to promote local manufacturing and value addition for its goods and services. Finance policies to improve agricultural production can also be put in place in order to stimulate exportation of agricultural produce.

Under these policies the government should ensure efficiency in financial markets since there are key for balanced development. The government should ensure that there is evenly access of funds to all traders in the country and there should be policies that improve proper functioning of financial markets. This will improve the investment in the manufacturing sector since there will be easy access to financial resources. Improved research and development caused by efficient policies will result in innovations which minimizes cost of production and it also leads to introduction of new and improved products from different sectors in the industry.

5.5 Further research

The study used secondary data from several sources which might be deep rooted with some errors, therefore might affect the results after running the OLS regression. This is because the Zimbabwean macroeconomic data is subjected to miscalculations since the data continues to suffer from incomplete coverage therefore the results obtained from this study should not be viewed as conclusive to other researchers, they should motivate further research on the impact of Statutory Instrument 64 on exports growth in Zimbabwe.

There are also other variables which were not included in this research that have a significant contribution in the variation of exports level in Zimbabwe. Other research methodologies can be used and further research can also be

done to review and compare changes over some time and effects of some policies

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List of Appendices

Appendix 1: Summary statistics

| | EXP01 | IMP | FDI | GDP | EXR | IR | SI64 |
|------------------|----------|----------|-----------|----------|----------|----------|----------|
| Mean | 2.681253 | 3.650185 | 0.137854 | 1.451072 | 1.987808 | 103.1412 | 0.088235 |
| Median | 2.216593 | 2.489866 | 0.055300 | 1.333695 | 0.055106 | 30.50500 | 0.000000 |
| Maximu m | 4.907581 | 8.386153 | 0.744637 | 2.575000 | 6.728909 | 1158.030 | 1.000000 |
| Minimu m | 1.251797 | 1.240643 | -0.030507 | 0.696861 | 0.001616 | 0.340000 | 0.000000 |
| Std. Dev. | 1.035926 | 2.228491 | 0.185895 | 0.616693 | 1.159609 | 227.9942 | 0.287902 |
| Skewne ss | 0.744934 | 0.934374 | 1.483014 | 0.579790 | 5.570485 | 3.460867 | 2.903465 |
| Kurtosis | 2.184131 | 2.268094 | 4.594606 | 1.925621 | 32.03030 | 15.20756 | 9.430108 |
| | | | | | | | |
| Jarque- Bera | 4.087578 | 5.706201 | 16.06513 | 3.540131 | 1369.746 | 278.9911 | 106.3445 |
| Probabili ty | 0.129537 | 0.057665 | 0.000325 | 0.170322 | 0.000000 | 0.000000 | 0.000000 |
| Sum | 91.16261 | 124.1063 | 4.687037 | 49.33645 | 6.726709 | 3506.800 | 3.000000 |
| Sum Sq. Dev. | 35.41370 | 163.8837 | 1.140385 | 12.55023 | 4.390919 | 1715385. | 2.735294 |
| | | | | | | | |
| Observa tions | 34 | 34 | 34 | 34 | 34 | 34 | 34 |

Appendix 2: Stationarity tests at levels

UNIT ROOT TESTS: ADF

| Null Hypothesis: | | TS) has a υ | ınit root | |
|--------------------|--------------|-------------|-------------|--------|
| Exogenous: Const | | | | |
| Lag Length: 1 (Aut | omatic - ba | sed on SIC | , maxlag=8) |) |
| | | | t-Statistic | Prob.* |
| Augmented Dickey | -Fuller test | statistic | -4.617160 | 0.0009 |
| Test critical | | | | |
| values: | 1% level | | -3.661661 | |
| | 5% level | | -2.960411 | |
| | 10% level | | -2.619160 | |
| *MacKinnon (1996 |) one-sided | l p-values. | | |
| | | | | |
| Augmented Dickey | Fuller Tes | t Equation | | |
| Augmented Dickey | -i uliei Tes | st Equation | | |
| Dependent Variabl | e: D(EXPC | RTS,2) | | |
| Method: Least Squ | ares | | | |
| Date: 06/13/21 Ti | me: 19:24 | | | |
| Sample (adjusted): | 1988 2018 | 8 | | |
| | Coefficien | | | |
| Variable | t | Std. Error | t-Statistic | Prob. |
| D(EXPORTS(-1)) | -0.944491 | 0.204561 | -4.617160 | 0.0001 |

| D(EXPORTS(- | | | | |
|--------------------|-----------|-----------|-----------|---------|
| 1),2) | 0.384974 | 0.174775 | 2.202678 | 0.0360 |
| С | 0.091815 | 0.075340 | 1.218677 | 0.2331 |
| | | Mean de | pendent | 0.00525 |
| R-squared | 0.436574 | | • | 4 |
| Adjusted R- | | | | 0.52290 |
| squared | 0.396329 | S.D. dep | 0 | |
| | | | | 1.12818 |
| S.E. of regression | 0.406274 | Akaike in | 7 | |
| Sum squared | | | | 1.26696 |
| resid | 4.621637 | Schwarz | criterion | 0 |
| | | Hannan- | Quinn | 1.17342 |
| Log likelihood | -14.48690 | criter. | | 4 |
| | | | | 1.86794 |
| F-statistic | 10.84798 | Durbin-W | 7 | |
| Prob(F-statistic) | 0.000325 | | | |
| | | | · | |

Appendix 3: Heteroskedasticity :Breusch-Pagan-Godfrey Test

| Heteroskedasticity Test: Breusch-Pagan-Godfrey | | | | | |
|--|----------|-----------------------|-------|--------|--|
| F-statistic | 1.000765 | Prob. F(6 | 5,27) | 0.4451 | |
| Obs*R-squared | 6.185687 | Prob. Ch Square(6) | i- | 0.4027 | |
| Scaled explained SS | 6.801468 | Prob. Ch Square(6) | i- | 0.3396 | |
| | | | | | |

| | T | | | | |
|------------------------|-----------------|--------------------|-------------------|-----------|--|
| | | | | | |
| Test Equation: | | | | | |
| Dependent Variabl | e: RESID^ | 2 | | | |
| Method: Least Squ | | | | | |
| Date: 06/29/21 Ti | me: 05:59 | | | | |
| Sample: 1985 2018 | 3 | | | | |
| Included observation | ons: 34 | | | | |
| Variable | Coefficien t | Std. Error | t-Statistic | Prob. | |
| С | 0.235446 | 0.118278 | 1.990621 | 0.0567 | |
| IMP | 0.036990 | 0.027805 | 1.330350 | 0.1945 | |
| FDI | -0.119255 | 0.326333 | -0.365439 | 0.7176 | |
| GDP | -0.149716 | 0.081951 | -1.826906 | 0.0788 | |
| EXR | 3.94E-11 | 5.05E-11 | 0.781113 | 0.4415 | |
| IR | -0.000430 | 0.000274 | -1.564872 | 0.1293 | |
| SI64 | -0.026489 | 0.138757 | -0.190900 | 0.8500 | |
| R-squared | 0.181932 | Mean de var | pendent | 0.097931 | |
| Adjusted R- squared | 0.000139 | S.D. dep | endent var | 0.185627 | |
| S.E. of regression | 0.185614 | Akaike in | fo criterion | -0.349056 | |
| Sum squared resid | 0.930217 | Schwarz | Schwarz criterion | | |
| Log likelihood | 12.93396 | Hannan- criter. | -0.241888 | | |
| F-statistic | 1.000765 | Durbin-W | /atson stat | 2.253211 | |
| Prob(F-statistic) | 0.445093 | | | | |

Appendix 4: Multicollinearity test: correlation matrix

| | IMP | FDI | GDP | EXR | IR | SI64 |
|------|-----------|-----------|-----------|-----------|-----------|-----------|
| IMP | 1.000000 | 0.828683 | 0.658211 | -0.051149 | -0.178265 | 0.458511 |
| FDI | 0.828683 | 1.000000 | 0.610706 | -0.081985 | -0.162760 | 0.521630 |
| GDP | 0.658211 | 0.610706 | 1.000000 | -0.209100 | -0.406090 | 0.517636 |
| EXR | -0.051149 | -0.081985 | -0.209100 | 1.000000 | 0.817539 | -0.054153 |
| IR | -0.178265 | -0.162760 | -0.406090 | 0.817539 | 1.000000 | -0.108887 |
| SI64 | 0.458511 | 0.521630 | 0.517636 | -0.054153 | -0.108887 | 1.000000 |

APPENDIX 5: AUTOCORRELATION: Breusch-Godfrey Serial Correlation LM Test

| Breusch-Godfrey | | | |
|-----------------|----------|---------------------|--------|
| F-statistic | 1.485042 | Prob. F(2,25) | 0.2458 |
| Obs*R-squared | 3.610387 | Prob. Chi-Square(2) | 0.1644 |

| Test Equation: | | | | | |
|----------------------|-------------|---------------|--------------------|----------|--|
| Dependent Variable: | RESID | | | | |
| Method: Least Squar | es | | | | |
| Date: 06/29/21 Tim | e: 06:41 | | | | |
| Sample: 1985 2018 | | | | | |
| - | a. 24 | | | | |
| Included observation | IS: 34 | | | | |
| Presample missing v | alue lagged | residuals set | to zero. | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. | |
| С | 0.007203 | 0.229122 | 0.031437 | 0.9752 | |
| IMP | 0.021385 | 0.056657 | 0.377450 | 0.7090 | |
| FDI | -0.329988 | 0.681100 | -0.484493 | 0.6323 | |
| GDP | -0.033572 | 0.153965 | -0.218046 | 0.8292 | |
| EXR | -1.01E-11 | 9.53E-11 | -0.106099 | 0.9164 | |
| IR | 8.80E-06 | 0.000521 | 0.016906 | 0.9866 | |
| SI64 | 0.087365 | 0.264724 | 0.330021 | 0.7441 | |
| RESID(-1) | 0.366231 | 0.214407 | 1.708110 | 0.1000 | |
| RESID(-2) | -0.119202 | 0.213835 | -0.557450 | 0.5822 | |
| R-squared | 0.106188 | Mean depo | Mean dependent var | | |
| Adjusted R-squared | S.D. deper | ndent var | 0.317645 | | |
| S.E. of regression | o criterion | 0.931538 | | | |
| Sum squared resid | Schwarz c | riterion | 1.335574 | | |
| Log likelihood | -6.836138 | Hannan-Q | uinn criter. | 1.069326 | |
| F-statistic | 0.371260 | Durbin-W | atson stat | 1.842357 | |

| Prob(F-statistic) | 0.925932 | | |
|-------------------|----------|--|--|
| | | | |

Appendix 6: Regression results

| Dependent Varia | able: EXP0 | 1 | | | |
|------------------------|----------------------------|----------------|--------------|--------------|--|
| Method: Least Squ | ares | | | | |
| Date: 06/29/21 Ti | Date: 06/29/21 Time: 05:48 | | | | |
| Sample: 1985 201 | 8 | | | | |
| Included observation | ons: 34 | | | | |
| | Coefficien | | | | |
| Variable | t | Std. Error | t-Statistic | Prob. | |
| С | 1.415385 | 0.223774 | 6.325053 | 0.0000 | |
| IMP | 0.366121 | 0.052605 | 6.959788 | 0.0000 | |
| FDI | 0.866873 | 0.617402 | 1.404066 | 0.1717 | |
| GDP | -0.107223 | 0.155046 | -0.691555 | 0.4951 | |
| EXR | 8.64E-12 | 9.55E-11 | 0.090479 | 0.9286 | |
| IR | -0.000613 | 0.000519 | -1.180645 | 0.2480 | |
| SI64 | 0.306870 | 0.262519 | 1.168943 | 0.2526 | |
| R-squared | 0.905978 | Mean de var | pendent | 2.68125 | |
| Adjusted R- squared | 0.885085 | S.D. dep | endent var | 1.03592 6 | |
| S.E. of regression | 0.351170 | Akaike in | 0.92615 0 | | |
| Sum squared resid | 3.329656 | Schwarz | 1.24040 1 | | |
| Log likelihood | -8.744552 | Hannan- | Quinn | 1.03331 | |

| | criter. | 9 | |
|----------|----------|-------------|-----------------------------|
| 43.36130 | Durbin-W | /atson stat | 1.36108 0 |
| 0.000000 | | | |
| | 43.36130 | | 43.36130 Durbin-Watson stat |

Appendix 7: Data series

The data provided below is time series data for the period of 1985 to 2018 representing the following variables used in the regression analysis in this study, exports(EXP), imports(IMP), foreign direct investment(FDI), gross domestic product(GDP), interest rates(IR), exchange rates(EXR) and a dummy variable of the statutory instrument 64(SI64).

| date | EXP | IMP | FDI | GDP | IR | EXR | SI64 |
|------|-----------|-----------|-------------|-----------|-------|-------------|------|
| 1985 | 1.2517971 | 1.2406425 | 0.002848609 | 1.0229065 | 41.19 | 0.001615516 | 0 |
| 1986 | 1.4952778 | 1.3380697 | 0.007445128 | 1.2114631 | 4.60 | 0.001668476 | 0 |
| 1987 | 1.6189507 | 1.4341858 | 0.030506684 | 1.3932607 | 5.42 | 0.001663462 | 0 |
| 1988 | 1.8552568 | 1.5910903 | 0.018033622 | 1.5213105 | 4.84 | 0.001807734 | 0 |
| 1989 | 1.9342169 | 1.7998108 | 0.010180763 | 1.9034549 | 12.11 | 0.00212134 | 0 |
| 1990 | 2.0085818 | 2.0020432 | 0.012205848 | 1.799346 | 12.75 | 0.002454518 | 0 |
| 1991 | 2.0638856 | 2.3477246 | 0.002790486 | 2.0822637 | 23.90 | 0.003625489 | 0 |
| 1992 | 1.8382411 | 2.4632902 | 0.0149499 | 1.8160582 | 39.48 | 0.005104267 | 0 |
| 1993 | 2.0163783 | 2.1297899 | 0.027955135 | 1.3797898 | 41.70 | 0.006490494 | 0 |

| 1994 | 2.3841719 | 2.5164418 | 0.03464888 | 1.3130062 | 40.33 | 0.008160799 | 0 |
|------|-----------|-----------|-------------|-----------|----------|-------------|---|
| 1995 | 2.7190899 | 2.9099639 | 0.1177 | 1.369931 | 30.76 | 0.008675219 | 0 |
| 1996 | 3.0902581 | 3.0739622 | 0.0809 | 1.4271575 | 23.17 | 0.010013713 | 0 |
| 1997 | 3.2067157 | 3.8050241 | 0.1351 | 1.3543831 | 36.48 | 0.012125047 | 0 |
| 1998 | 2.7780115 | 2.8886293 | 0.4443 | 0.9229138 | 94.73 | 0.023706013 | 0 |
| 1999 | 2.5654853 | 2.2984 | 0.059 | 0.9053507 | 43.87 | 0.03834471 | 0 |
| 2000 | 2.5528714 | 2.402207 | 0.0232 | 0.8956503 | 67.16 | 0.044468376 | 0 |
| 2001 | 2.3693 | 2.2324 | 0.0038 | 0.8909124 | 38.20 | 0.05511466 | 0 |
| 2002 | 2.019 | 2.218 | 0.0259 | 0.7529196 | 32.87 | 0.055098291 | 0 |
| 2003 | 1.8555713 | 2.179631 | 0.0038 | 0.6968612 | 81.33 | 0.698216071 | 0 |
| 2004 | 2.0011781 | 2.4133762 | 0.0087 | 0.8098511 | 252.12 | 5.074419415 | 0 |
| 2005 | 1.9307969 | 2.4456821 | 0.1028 | 0.8703525 | 219.28 | 22.3890396 | 0 |
| 2006 | 1.9574166 | 2.5512538 | 0.04 | 0.8717414 | 508.74 | 164.5473565 | 0 |
| 2007 | 1.9995831 | 2.454805 | 0.0689 | 0.8518676 | 572.94 | 9686.77167 | 0 |
| 2008 | 1.8310528 | 3.0050972 | 0.0516 | 0.7212837 | 1,158.03 | 6723052073 | 0 |
| 2009 | 1.8826547 | 4.0887214 | 0.105 | 1.0661866 | 7.28 | 1 | 0 |
| 2010 | 3.5692544 | 6.440274 | 0.122586667 | 1.1088092 | 0.34 | 1.2 | 0 |
| 2011 | 4.9075813 | 7.708917 | 0.3443 | 1.2934847 | 9.74 | 1.1 | 0 |
| 2012 | 4.3066531 | 8.3861534 | 0.34985 | 2.4035072 | 7.89 | 1.4 | 0 |
| 2013 | 4.1976874 | 7.0004356 | 0.37305 | 2.4663797 | 4.85 | 6.7 | 0 |
| 2014 | 4.0804407 | 6.5780748 | 0.4728 | 2.454635 | 0.83 | 7.8 | 0 |
| 2015 | 3.824969 | 7.5038646 | 0.3992 | 2.3733354 | 16.31 | 6.4 | 0 |
| 2016 | 4.0981321 | 6.4267004 | 0.343013813 | 2.3828288 | 18.79 | 8.9 | 1 |
| 2017 | 4.3328056 | 6.6938822 | 0.247187739 | 2.4282481 | 24.52 | 11.6 | 1 |
| 2018 | 4.6193446 | 7.5377391 | 0.744637199 | 2.575 | 30.25 | 14.16666667 | 1 |