

**BALANCE OF TRADE AND ECONOMIC GROWTH IN UGANDA
(1984-2014)**

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**A RESEARCH REPORT SUBMITTED TO THE COLLEGE OF ECONOMICS AND MA
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DECLARATION


I, hereby declare that this piece of work is my original and has never been presented to any institution for any award.

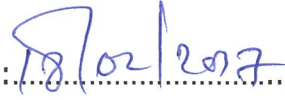
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APPROVAL

This is to certify that this research has been conducted under my guidance and has never been submitted elsewhere for any similar award.

Signature: 

Date: 

Dr. Abuga Mokona Isaac

Supervisor:

DEDICATION

I dedicate this work to my parents and family members for their moral support and the encouragement that they gave me during the study.

ACKNOWLEDGEMENTS

I wish to acknowledge and be grateful to Allah for enabling me to reach this point in my academic life and I am so thankful for His unconditional protection.

Many thanks to my supervisor **Dr.Abuga mokano Isaac** and advisor read my numerous revisions and helped me make some sense of the project.

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ABSTRACT

The study was set to investigate the relationship between trade balance and economic growth rate of Uganda from 1984-2014. The objective was to determine the level of balance of trade in Uganda from 1984-2014 (ii) to establish the level of economic growth of Uganda from 1984-2014 and to establish the relationship between balance of trade and economic growth of Uganda 1984-2014.

The study was a time series research that involved analysis of the historical data for the Uganda balance of trade and economic growth rates for the year, 1984 to 2014. The data was attained from the international monetary fund abstracts, World Bank reports and World economic outlook. The data adopted a correlation design based on quantitative research approach.

In conclusion, the study was successfully carried out and all the objectives fulfilled. The first objective was accomplished where it was found that the level of balance of trade was in deficit over the period of 31 years in Uganda though some improvements in deficits were cited in some years. The level of economic growth of Uganda was both in its highs and lows though some years experienced increases there is really a double digit economic growth indicate seen. The researcher on the third objective established that there was a closer relationship between the balance of trade and economic growth of Uganda from 1984-2014. The level of relationship was found on all parameters used for measurements

The researcher recommends that there is need to improve exports through establishing export substitution industries in order to produce more exports. The government should embark on industrialization, and modern technique of agricultural production since this area can employ large population resulting into high productivity. The relationship was found positive therefore there is need for supporting domestic investors that will be able to reinvest their profits for further development.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

In pursuit of the topic mentioned above, this chapter brings forth the introduction to the research paper as it tackles the background of the study, the statement of the problem, purpose of the study, study objectives, research questions, the scope of the study in terms of geography, content/variables and time, hypothesis, the significance of the study and eventually operational definitions of key terms.

1.1 Background of the Study

1.1.1 Historical Perspective

The concept of economic growth has been viewed as an increase in the capacity of an economy to produce goods and services, compared from one period of time to another. Economic growth can be measured in nominal terms, which include inflation, or in real terms, which are adjusted for inflation. For comparing one country's economic growth to another, GDP or GNP per capita should be used as these take into account population differences between countries. (Baltic, 2005).

On the global scale in the latest IMF World Economic Outlook 2010 (WEO), growth projections for the world economies in 2009 were revised down to 1½ percent. This projection is almost 5 percentage points lower than both the forecast a year ago and trend growth in 2004–2008. Although declining fuel and food prices have eased inflationary pressures in many countries, the global external current account deficit excluding grants is projected to widen to 8½ percent of GDP in 2009, significantly higher than the forecast a year ago (Bleaney and Kneller, 2001).

Bidani and Ravallion, (1997). contend that during 2004–2008, Sub Saharan African countries enjoyed high growth rates (averaging about 6½ percent), and a number of these countries achieved macroeconomic stability, as reflected in low inflation and sustainable debt. Improved economic policies, market-oriented reforms, and the reduction in the number of armed conflicts have contributed to strong performance. Rapid growth has been facilitated by improvements in terms of trade, growth of

exports, debt relief under different initiatives, and increasing aid flows and private inflows. Macroeconomic conditions in Sub Saharan African countries are now being adversely affected by the global financial crisis. The negative effects in Africa were felt first in emerging and frontier markets, where financial sector linkages are better established, but have now reached most countries in Africa.

The evolution of the current account position in the non-fuel-exporting-developing countries excluding China has been largely determined by the evolution of their trade and income accounts, while their balances on services and current transfers have not been subject to important changes over the past three decades. During the 1970s and the 1990s, high trade deficits were the main factor behind the rising current account deficit. By contrast, the rising burden of interest payments associated with developing countries' increased external indebtedness caused a strong deterioration in their incomes' account during the early-1980s. (Bloom and Jaypee, 2001).

World growth, and in particular growth in developed countries, experienced a marked and secular decline in the early 1970s. But while developed countries were still growing at an annual average rate of about three per cent during the 1970s and 1980s, their rate of growth slowed down to an average rate of below two per cent during the 1990s. One consequence of this has been a decline in the demand for exports from developing countries as many of the export items serve as inputs for production to the manufacturing industries in developed countries. This decline in the demand for their exports has been particularly harmful for developing countries over the past few years when many have adopted an export-led growth strategy (Dowrick and Golley, 2004).

Uganda is an agricultural country with leading traditional exports including coffee, cotton, tea and tobacco. However, some non-traditional exports such as fish and its products, beans, simsim, vanilla and flowers have become increasingly important in the recent period. This is largely attributed to the government's efforts to diversify the country's export base following a decline in the prices of coffee at the international

market. On the import side, all types of petroleum products, machinery: vehicles and accessories and processed foodstuffs are the country's major imports. The history of Uganda from the mid 1970s and the early 1980s is characterized by severe and permanent BoP deficits due to the poor economic conditions that prevailed at the time combined with a small export base. Total exports of goods and services mainly constituted of coffee, which accounted for more than of 50 per cent of the total share. With a fall in coffee receipts and the deterioration of the terms of trade, foreign exchange earnings were extremely affected and could not cover the country's foreign obligations. The overall balance was consistently in deficit, while the current account balance continued to widen from US\$ 82.67 million in 1980 to US\$ 451.97 million in 2000/01. As a result, the country resorted to loans, aid and grants from foreign sources to cover the Bop deficits (Hausmann and Rodrik, 2007).

1.1.2 Theoretical Perspective

The study was premised on the endogenous growth theory by Romer, (1994). The endogenous growth theory holds that economic growth is primarily the result of endogenous and not external forces. Endogenous growth theory holds that investment in human capital, innovation, and knowledge are significant contributors to economic growth. The theory also focuses on positive externalities and spillover effects of a knowledge-based economy which will lead to economic development.

Endogenous growth theory tries to overcome this shortcoming by building macroeconomic models out of microeconomic foundations. Households are assumed to maximize utility subject to budget constraints while firms maximize profits. Crucial importance is usually given to the production of new technologies and human capital. The engine for growth can be as simple as a constant return to scale production function (the AK model) or more complicated set ups with spillover effects (spillovers are positive externalities, benefits that are attributed to costs from other firms), increasing numbers of goods, increasing qualities, etc.

Endogenous growth models have found in Total Factor Productivity (TFP) and the accumulation of knowledge channels to relate trade (in the form of openness) and growth. Basically, participation in world markets and importation of technology can lead to faster growth in the long run. Grossman and Helpman (1990, 1991), on the one hand, highlight that in a theoretical framework the relationship between opening up to trade and long run growth is in fact ambiguous. Therefore, for them, trade does not necessarily lead to faster growing.

1.1.3 Conceptual Perspective

Balance of trade as the difference between the value of goods and services (exports) and the value of goods and services (imports). In this sense, it can be called as Merchandise balance or Goods balance.

Balance of trade is given by economist James Meade and is accepted by most of the modern economists. In the broader sense, balance of trade is the difference between the values of goods & services exported and imported by a country. Balance of trade in this sense is also known as Balance of Goods & Services (McCombie and Thirlwall, 2014).

Coricelli, (1997). defined Economic growth is the increase in the level on goods and services of a country within a fixed period of time, in this case economic growth will be measured in term of Gross Domestic Product. Therefore GDP is defined by coricelli (1997). as the total market value of all final goods and services produced annually within the boundaries of the country whether by national or foreigner-supplied resources. This study adopted Jeff Holt definition and the GDP growth will be measured in billion of US\$ dollars.

Economic growth is the increase in the level on goods and services of a country within a fixed period of time, in this case economic growth will be measured in term of Gross Domestic Product expressed in the percentage change (Hausmann Rodrik and Velasco, 2008).

1.1.4 Contextual Perspective

Uganda, the “pearl of Africa” is a country of contrasts. Its economy has expanded at an average rate of 7 percent per year in the last 20 years (UBOS, 2014). But its poverty rates remain significantly high and unimpressive in reflecting this growth rates. This reflects the low base from which the economy began to turn around in the 1990s. It had experienced 15 years of devastating political instability, social and economic collapse that reversed the optimistic situation inherited at the time of independence in 1962. Before this time Uganda, had a stable and growing economy and a promising physical and human capital development, superior that of its neighbouring countries. This optimism gave way to economic destruction, international isolation and emergence of uncompetitive subsistence production system with limited participation in both domestic and international markets. In 1986, the National Resistance Movement (NRM) after a five year protracted civil war, captured power and initiated a reign of relative political stability, economic reforms that laid a foundation for sustained economic growth and expansion seen to date (UBOS, 2012).

During the period under review, Uganda recorded substantial trade deficits with all the continents and the regional blocs especially in Africa and Asia. Specific export market penetration strategies should target continents and regional blocs that dominate the import sector but absorb less of Uganda’s export products to narrow trade deficit gap. Also value addition to transform raw materials into finished products could increase on foreign earnings and reduce the imbalance (Bank of Uganda report, 2014)

In the previous External Trade Statistics Bulletin publications (Volume1, 2 and 3), price and volume indices were published basing on the reference period of 1997/98 Financial Year (FY). In this issue, the reference period has been shifted to quarterly average of 2002 Calendar Year (CY). More details about the construction of the index are given in Vol. 1-2002 issue. The methods used for computing quarterly price and quantum/volume indices were the Laspeyres’ Price and Quantum Index, Paascher’s Price and Quantum Index and Fischer’s Price and Quantum Index. The unit value

indices (a unit value is the price paid for one unit, for example a kilogram) for selected items have also been computed (Grosman and Elhanan Helpman, 2001).

1.2 Statement of the problem

The economy of Uganda has grown steadily over the period of time with many arguing that the state of the economy is not so sufficient in the economic stabilization coupled with low levels of balance of trade World Bank, (2012). The state of trade in Uganda is poor and deteriorating balance of trade in Uganda. It appears that the liberalization of trade and the key markets, the diversification of exports and other adjustment policies have been over-shadowed by the persistent trade deficits IMF, (2014). The large trade deficit is adding to Uganda's net stock of external liabilities. The economic growth of Uganda with increasing but not sufficient GDPs that has made the economy to retard in terms of service deliveries, unemployment and low levels of exchange rates in the country that has affected Uganda from moving from low income countries. The trade deficits of Uganda with the most of the years experiencing the negative results are an issue that has put the economic growth of the country at stake. It is based on these that the researcher set to determine whether the problem of low economic growth is associated to the balance of trade by analysis the rates of economic growth against those of balance of trade in Uganda from 1984-2014.

1.3 Purpose of the study

The study was set to investigate the relationship between trade balance and economic growth rate of Uganda from 1984-2014.

1.4 Objectives of the study

- i. To determine the level of balance of trade in Uganda from 1984-2014
- ii. To establish the level of economic growth of Uganda from 1984-2014.
- iii. To establish the relationship between balance of trade and economic growth of Uganda 1984-2014.

1.5 Research Questions

- i. What is the level of balance of trade in Uganda from 1984 - 2014?
- ii. What is the level of economic growth of Uganda from 1984 -2014?

- iii. What is the relationship between balance of trade and economic growth of Uganda 1984-2014?

1.6 Hypothesis

- i. There is no significant relationship between balance of trade and economic growth from 1984-2014
- ii. There is significant relationship between balance of trade and economic growth Uganda from 1984-2014.

1.7 Scope of the study

1.7.1 Subject scope

The study was conducted on the Balance of trade volumes and its relationship with economic growth rate (GDP rate). The focused on the levels of balance of trade, level of economic growth and the relationship between balance of trade and economic growth.

1.7.2 Geographical Scope

The study was conducted in the Ugandan environment where the focus is on the statistical data for the period of 1984-2014 of balance of trade for Uganda and its relationship with economic growth in Uganda.

1.7.3 Time Scope

The study on secondary data for literature was limited to the years 1984-2014. This period is appropriately chosen as it is the period when the economy experienced both stability and instability in both the goods and money markets with the same economic structures and policies implying the two variables under study have been subjected to the same conditions.

1.7.4 Theoretical Scope

The study was premised on the endogenous growth theory by Romer, M.P. (1994). The endogenous growth theory holds that economic growth is primarily the result of endogenous and not external forces. Endogenous growth theory holds that investment in human capital, innovation, and knowledge are significant contributors to economic

growth. The theory also focuses on positive externalities and spillover effects of a knowledge-based economy which will lead to economic development.

1.8 Significance of the study

- 1) Basing on the content and literature review, the stakeholders such as government through the Uganda Revenue Authority (URA) Uganda bureau of statistics, among other policy makers will benefit from the findings through providing empirical evidence on the relationship between balance of trade and economic growth.
- 2) The study findings will have a direct effect on the efficiency and the effectiveness of the use of policy instrument in the stabilities of macroeconomic variable to stimulate production and growth.
- 3) The research findings will also provide an explanation for Uganda's stunted growth a ground that can be explored to arrive at development of Uganda.
- 4) The results of the study will aid policy makers to design appropriate policies to improve and sustain economic growth of Uganda.

1.8 Operational definitions of key terms

Balance of trade is the difference between the country's exports and imports for a given period usually a year from one country to another. In This study the Balance of trade will be measured and expressed in Dollars. (Landon-Lane and Robertson, 2002)

Hausmann and Velasco, (2008). defined economic growth is the increase in the level on goods and services of a country within a fixed period of time, in this case economic growth will be measured in term of Gross Domestic Product expressed in the percentage change.

Blecker and Ibra, (2013). argued that import. An import is a good brought into a jurisdiction, especially across a national border, from an external source. The party bringing in the good is called an *importer*. An import in the receiving country is an export from the sending country. Importation and exportation are the defining financial transactions of international trade.

Blecker and Ibra, (2013). also defined exports shipping in the goods and services out of the jurisdiction of a country. The seller of such goods and services is referred to as an "exporter" and is based in the country of export whereas the overseas based buyer is referred to as an "importer

Goods refer to commodities, or physical, tangible items that satisfy some human want or need, or something that people find useful or desirable and make an effort to acquire it. Goods that are scarce (are in limited supply in relation to demand) are called economic goods, whereas those whose supply is unlimited and that require neither payment nor effort to acquire, (such as air) are called free goods (Casin, 1995).

Betcherman and Carmen, (1997). defined services are economic activities where an immaterial exchange of value occurs. When a service such as labor is performed the buyer does not take exclusive ownership of that which is purchased, unless agreed upon by buyer and seller. The benefits of such a service, if priced, are held to be self-evident in the buyer's willingness to pay for it

GDP, Gross domestic product (GDP) is a monetary measure of the market value of all final goods and services produced in a period (quarterly or yearly). Nominal GDP estimates are commonly used to determine the economic performance of a whole country or region, and to make international comparisons (Gross and Elhanan, 1990).

Net GDP Net domestic product accounts for capital that has been consumed over the year in the form of housing, vehicle, or machinery deterioration. The depreciation accounted for is often referred to as "capital consumption allowance and represents the amount of capital that would be needed to replace those depreciated assets (Gross and Elhanan, 1990).

Real GDP is a macroeconomic measure of the value of economic output adjusted for price changes (i.e., inflation or deflation). This adjustment transforms the money-value measure, nominal GDP, into an index for quantity of total output (Betcherman and Carmen, 1997).

CHAPTER TWO

LITREATURE REVIEW

2.0 Introduction

This chapter is concerned with review of information that different authors have advanced on the topic in regard to study objectives, it therefore looks at the theoretical review, conceptual framework, related literature and related studies

2.1 Theoretical Review

The study will be premised on the endogenous growth theory by Romer, P. M. (1994). The endogenous growth theory holds that economic growth is primarily the result of endogenous and not external forces. Endogenous growth theory holds that investment in human capital, innovation, and knowledge are significant contributors to economic growth. The theory also focuses on positive externalities and spillover effects of a knowledge-based economy which will lead to economic development.

The long-run rate of growth is exogenously determined by either the savings rate (the Harrod–Domar model) or the rate of technical progress (Solow model). However, the savings rate and rate of technological progress remain unexplained. Endogenous growth theory tries to overcome this shortcoming by building macroeconomic models out of microeconomic foundations. Households are assumed to maximize utility subject to budget constraints while firms maximize profits. Crucial importance is usually given to the production of new technologies and human capital.

Keynesian models in Kaldorian lines, such as Thirlwall's Balance-of-Payments constrained growth (BOP) model, find the channel between trade and growth by means of demand-pull characteristic of exports³. Trade represents an important constraint to economic growth by means of balance of payments problems. Static trade models suggest that movements toward openness can temporarily increase the rate of growth due to short-run gains from the reallocation of resources, which would imply a positive relationship between changes in openness and GDP growth. The new growth literature also identifies a number of avenues through which openness might affect long run growth. Some of these channels are technological change and technological gaps. The

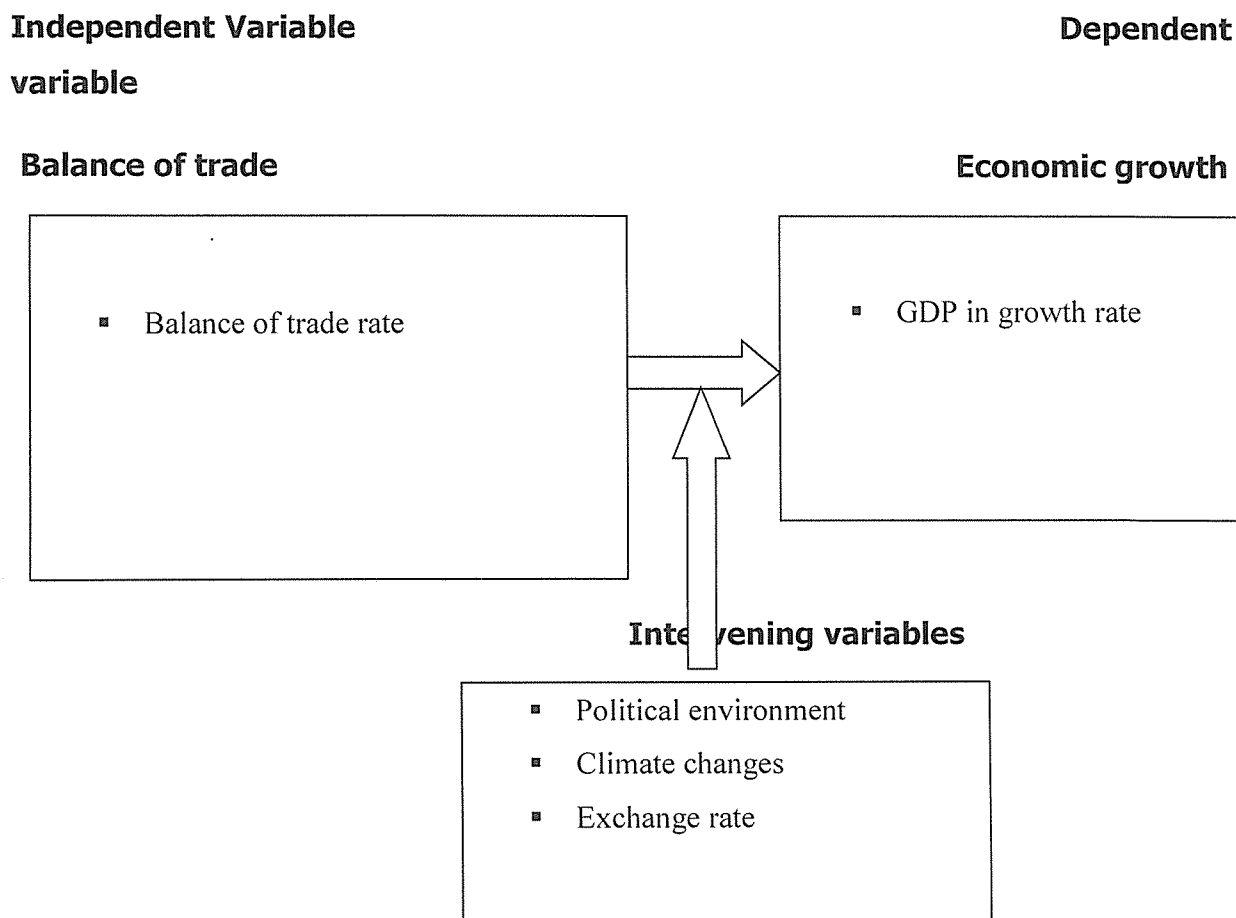
idea behind this statement is that countries, which are more backward and provide more opportunities to absorb new ideas, will converge faster to international norms, allowing them to benefit from technological change.(Harrison and Hanson, 1999).

Endogenous growth models have found in Total Factor Productivity (TFP) and the accumulation of knowledge channels to relate trade (in the form of openness) and growth. Basically, participation in world markets and importation of technology can lead to faster growth in the long run. Grossman and Helpman (1990, 1991), on the one hand, highlight that in a theoretical framework the relationship between opening up to trade and long run growth is in fact ambiguous. Therefore, for them, trade does not necessarily lead to faster growing. Empirically, on the other hand, these connections are far from conclusive. In contrast, some cross-section and time series/cross-section econometric studies presented different result and, in some cases, divergent results regarding these connections. (Hanson and Harrison, 1999).

2.2 Conceptual framework

The conceptual framework gives a researcher's conceptualization of variables of the study. The interaction between the independent variables and dependent variable. That is the researcher identifies mechanisms under which the Balance of trade and economic trends can be displayed and measured.

Figure 1: Conceptual framework showing the relationship between balance of trade and economic growth



Source: Adopted from Thilwall, 2013 and modified by the researcher.

The balance of trade the focus will be on the differences between the exports and imports of Uganda for the time of study. The focus will be on the rate of balance of trade in percentages. The efficient application of the fiscal policy improves the Level of Investment, infrastructural development financial intermediaries and improved Service delivery a key measure for economic growth. The intervening variables political

environment, climatic changes and exchange rate affect the mechanism of operation of the fiscal policy and therefore affect growth. The effect is either positive if positively affected or negative growth rate including reductions in GDP growth rate if negatively affected.

2.3 Review of related literature

2.3.1 Level of Balance of trade in Uganda

Balance of Trade is simply the difference between the value of exports and value of imports. Thus, the Balance of Trade denotes the differences of imports and exports of a merchandise of a country during the course of year. It indicates the value of exports and imports of the country in question. If the value of its exports over a period exceeds its value of imports, it is called favorable balance of trade and, conversely, if the value of total imports exceeds the total value of exports over a period, it is unfavorable balance of trade. The balance of trade forms part of the current account, which includes other transactions such as income from the net international investment position as well as international aid. If the current account is in surplus, the country's net international asset position increases correspondingly (BIS, 2010).

The trade balance is identical to the difference between a country's output and its domestic demand (the difference between what goods a country produces and how many goods it buys from abroad; this does not include money re-spent on foreign stock, nor does it factor in the concept of importing goods to produce for the domestic market). Measuring the balance of trade can be problematic because of problems with recording and collecting data. It appears the world is running a positive balance of trade with itself (Araujo and Lima, 2007).

Trade balance is likely to differ across the business cycle. In export-led growth (such as oil and early industrial goods), the balance of trade will improve during an economic expansion. However, with domestic demand led growth (as in the United States and Australia) the trade balance will worsen at the same stage in the business cycle. Monetary balance of trade is different from physical balance of trade (which is

expressed in amount of raw materials, known also as Total Material Consumption) Chow & Kellman, (2003). Developed countries usually import a lot of raw materials from developing countries (Chu, Ke-young, and Gerd Schwartz, 2004).

The current account balance (CAB) remained fragile, registering a deficit of USD 2,391.6 million, up from a deficit of USD 2,134.9 million in FY 2013/14. As a ratio of GDP, the current account deficit, excluding official grants, deteriorates to 11.0 per cent compared to a deficit of 8.8 per cent of GDP in FY 2013/14. The deterioration of the current account deficit was largely driven by the services deficit, which deteriorated to USD 730.8 million in FY 2014/15 from USD 329.6 million in FY 2013/14 mainly on account of higher payments of government services related to infrastructure projects, particularly Karuma and Isimba hydro power projects. Tourism receipts also remained subdued, declining to USD 671.2 million from USD 685.2 million during the same period of time. The deficit on the primary income account deteriorated by 27.4 per cent to US\$ 818.6 million in FY 2014/15 from USD 642.4 million in FY 2013/14 mainly on account of higher payments of dividends on foreign direct investment, (BOU, 2015).

The trade deficit improved by 4.9 per cent to USD 2,251.5 million from USD 2,367.2 million in FY 2013/14, largely on account of lower government and private sector oil imports. Exports remained subdued at about USD 2,714.0 million. Net current transfers are estimated at USD 1,409.3 million compared to USD 1,194.5 million in FY 2014/15, largely driven by higher private sector receipts by both households and non-government organizations (BOU, 2015).

The surplus on the financial account declined to USD 1,270.7 million from USD 1,911.8 million during FY 2013/14 mainly on account of the decline in FDI inflows, which fell from USD 1,224.8 million in FY 2013/14 to USD 1,028.4 million. Portfolio investment recorded a net outflow of USD 158.8 million compared to a net inflow of USD 4.8 million in FY 2013/14, mainly on account of increased acquisition of foreign portfolio assets by resident entities coupled with disinvestment in government securities by non-residents. The "other investment" inflows declined to USD 359.7 million from

USD 681.0 million in FY 2013/14 driven mainly by a build-up of foreign assets of resident deposit taking corporations. The overall balance of payments was a deficit of USD 377.3 million, leading to a drawdown in reserves of USD 379.5 million. The stock of reserves as at end June 2015 amounted to USD 2.89 billion, which is equivalent to 4.1 months of import cover (BOU, 2015).

In the quarter ended July 2015, current account balance deteriorated marginally by US\$0.2 million to a deficit of US\$567.5 million from a deficit of US\$567.7 million in the preceding quarter. The deterioration in the current account was largely as a result of a higher deficit in the services account during the three months period. In comparison with the same period a year ago, the current account deficit improved by US\$108.5 million from a deficit of US\$676.0 million registered in the quarter ended July 2014.(BOU, 2015).

Value of imports decreased by 2.7 per cent to US\$1,189.2 million during the quarter ended July 2015, from US\$1,222.1 million recorded in the previous quarter mainly on account of lower private sector imports. Private sector imports on goods decreased by US\$24.6 million to US\$1,152.9 million during the quarter ended July 2015, from US\$1,177.5 million in the previous quarter mainly due to a decline in non-oil import expenditure. Non-oil import expenditure declined by 4.5 per cent to US\$924.0 million from US\$967.3 million recorded in the preceding quarter, which could be a reflection of the impact of the exchange rate depreciation.

Overall balance of payments was deficit of US\$143.5 million during the quarter ended July 2015, with a net draw down in reserves assets of US\$140.6 million excluding valuation changes. In the short-term, the current account deficit is likely to widen due to the effect of low international prices for Uganda's export commodities. However, dampened private sector demand due to the depreciation of the currency, could moderate the increase in the deficit. (BOU, 2015).

2.3.2 Level of economic growth in Uganda

Coricelli, (1997). defined economic growth as the increase in the level on goods and services of a country within a fixed period of time, in this case economic growth will be measured in term of Gross Domestic Product therefore GDP is defined as Coricelli (1997) defined Gross domestic product as the total market value of all final goods and services produced annually within the boundaries of the country whether by national or foreigner-supplied resources. This study adopted Jeff Holt definition and the GDP growth will be measured in billion of US\$ dollars

In 2011, the Ugandan economy declined from gross domestic product (GDP) growth of over 6% the previous year to 4.1%. Over the course of the year, inflation averaged 18.8%, up from 4.1% in 2010, the exchange rate depreciated by 6.2% against the US dollar (USD), and the trade deficit increased from 9.6% to 10.8% of GDP.

Blecker and Ibarra, (2013). presented that the 2012 African Economic Outlook projects real GDP growth to improve to 4.5% and 4.9% in 2012 and 2013, respectively, mainly premised on good prospects in the oil sector. However, attaining these rates will depend on the ability of the authorities to address major infrastructural constraints, particularly in the energy sector, and to mitigate risk factors, including those linked to climate change. Inflationary pressures are forecast to subside in 2012 and to reach single digits in 2013, reflecting both global declines in food and fuel prices, as well as the impact of monetary tightening by the Bank of Uganda (BoU).

Uganda has one of the youngest and fastest growing populations on the African continent and, thus, faces the associated challenge of providing quality employment for these young people. In 2009/10, it was estimated that 5.9 million, or 19.3% of the population were between the ages of 15 and 24. Youth unemployment was estimated at 4.3%, higher than for the labour force as a whole, at 3.8%. Youth unemployment and underemployment trends in Uganda are driven by a variety of factors, including the lack of employable skills, limited access to financial and technical resources, the

insufficient emphasis on vocational training and a mismatch between skills and requirements in the job market (Bils and Peter, 2006)

During 2011 the Ugandan economy continued to perform strongly by regional and international standards, albeit with an important deceleration of GDP growth as of the third quarter of the year. This slowdown in economic activity has been particularly felt in the mining, manufacturing, construction and energy sectors, and is likely to bring real GDP growth for 2011 down to 4.1%, the lowest in over a decade (Bils and Peter, 2000)

The slowdown in the Ugandan economy is partly due to difficulties in the European and US economies, both important markets for Ugandan exports. The BoU considers that the sustained slowdown forecast for the advanced economies in the near term, together with financial instability in global markets, will continue to dampen demand for Uganda's exports and reduce foreign direct investment (FDI), remittances, and aid flows in the short to medium term. On a more optimistic note, the global economic downturn could cut Uganda's import.

Rodriguez and Rodrik, (1999). assess that the bill thus improving its external position, which deteriorated significantly, with the current account deficit (including grants) increasing from 9.6% of GDP in FY2009/10 to 12.6% in FY2011/12. Adding to the external pressures on the economy. Fiscal tightening has been implemented in response to a widening budget deficit, which rose to 7.4% of GDP, including grants, in FY2010/11. This deficit was largely driven by an increase in security-related spending equivalent to 2.5% of GDP, justified on the grounds of the growing security threats posed by international terrorism and the need to secure peaceful presidential and parliamentary elections in February 2011. The overall deficit (including grants) is projected to widen to 8% of GDP by the end of FY2011/12, mainly due to a decline in total revenues and grants of 1.5 percentage points of GDP. (Garcimartin and Rivas, 2012)

On the monetary front, the BoU increased the rate at which it lends to commercial banks from 11.97% in December 2010 to 29% at the end of 2011, in an attempt to

slow down money supply and credit growth, and thus cool aggregate demand. These efforts were aimed at bringing down inflation, which reached a peak of 30.5% in October 2011, driven by a combination of both domestic and external factors. These include the sharp increase in global commodity, fuel and food prices throughout 2010 and 2011, the impact of the 2011 East African drought on food production, as well as a sharp increase in credit growth since 2010. Inflation started to decline in November 2011 and is expected to continue falling to 16% by the end of December 2012 and to 14.1% by 2013. Despite this improved inflationary outlook, the BoU intends to maintain high interest rates for the foreseeable future until inflation is fully under control (Gracimartin and rivas, 2012)

Fölster and Henrekson, (2001). pointed out productive-sector activities in 2011 have continued to be dominated by developments in the power and oil industries, both of which are critical to Uganda's development prospects. With current national hydro generation levels at around 200-250 megawatts (MW) and electricity demand at 440MW in peak hours, energy poses one of the most important challenges to sustained economic development in Uganda. In 2011 the main power distribution company, Umeme, implemented a load-shedding (rationing) program that has led to nationwide power cuts of up to 12 hours per day, disrupting production activities and causing considerable social unrest. The commissioning of the Bujagali hydropower dam, which is planned to start operating in 2012 and which will increase generation capacity by 170 250MW, is expected to ease power shortages in the short term.

Uganda is planning to start large-scale oil production and expects to reach a peak of 200 000 barrels per day in 2015/16. It could yield revenue of up to USD 2 billion annually to the government. Whilst this revenue windfall presents a unique opportunity to address the various investment bottlenecks in areas such as infrastructure, agriculture and social development, the materialization of these benefits will require important investments in oil production, refinery and distribution, and will ultimately rest on having a strong legal and regulatory framework that ensures the transparent and prudent use of oil resources.

Gallagher, 1993 argued that in order to access to credit' ranking, the country's position declined from 45th to 48th, in spite of the establishment of a private credit reference bureau which presently covers about 500 000 individuals. A notable decline was also registered in paying taxes, reflecting the fact that no new reforms have been undertaken in recent years, and implying that gains from previous reforms in tax administration could have leveled out. Furthermore, no improvements were registered in the enforcement of contracts, with the number of days required to enforce a contract remaining unchanged at 490. In addition, entrepreneurs in Uganda continued to face significant barriers in establishing and closing businesses. The number of days to start a business increased to 34, up from 25 in 2010, with this process requiring up to 16 steps (although these are two fewer from the 18 steps reported the previous year). The increase in the number of days reflected the introduction of changes that increased the time required for obtaining a business license while the number of steps declined due to the adoption of an online tax registration system. The most time-consuming procedures include obtaining a trade license (10 days) and obtaining a corporate tax identification number from the Uganda Revenue Authority (5 days) (Landon-Lane and Robertson, 2002).

On the other hand, according to the 2011 Index of Economic Freedom prepared by the Heritage Foundation, Uganda's labour regulations are flexible, with a score of 87.8 out of a possible maximum value of 100, although this represented a decline of 0.3 from 2010. According to this study, the non-salary cost of employing a worker in Uganda is low, whilst dismissal costs and associated procedures are reasonable. Moreover, regulations on working hours remain relatively flexible. However, this same study finds that the enforcement of labour standards and regulations In Uganda is often compromised by a chronic lack of supervisory resources, Rodriguez, Rodrik. (1999).

The Ugandan financial sector is relatively well developed, consisting of a range of formal, semiformal and informal institutions. However, access to financial services remains problematic, especially in rural areas. Thus, formal institutions, including commercial banks, microfinance deposit-taking institutions, credit institutions, insurance

companies, development banks, pension funds and capital markets serve only 14% of the rural population, while informal institutions, such as village savings and loans associations serve approximately another 12%. In this sense, the financial system is still quite shallow, with up to 62% of the population having no access to financial services and only 4 million people holding bank accounts, representing as little as 33% of the 12 million people who are potentially bank clients. (sachs and warner, 1995)

The government is implementing a two-faceted approach to financial-sector reform, aimed at consolidating banking stability and facilitating financial deepening. The major policies include deregulation of financial services, strengthening of regulatory and supervisory frameworks, and the development of money and capital markets. The sector remained buoyant and healthy in FY 2010/11 with commercial banks' continuing to be dominant. Due to enhanced prudential regulation, the system-wide risk-weighted capital ratio remained high and has stabilized at more than 20% since 2008, providing a large buffer to absorb unexpected losses. At the same time, the ratio of non-performing loans to gross loans improved from 3.3% in 2009/10 to 1.6% in 2010/11, under scoring commercial banks' asset quality. Nevertheless, the Ugandan authorities recognize that the tighter monetary policy stance adopted by the BoU together with a slowdown in economic activity could lead to the deterioration in the quality of bank assets in the medium term.

2.4 Relationship between balance of trade and economic growth of Uganda

There exists a large literature on the relationship between economic growth and external balance. The literature on two gap models, three gap models and World Bank and IMF models all adopt the constraints on balance of trade, savings-investment and budget balances. In the two-gap models (solow R, 1956). the first gap relates to the resources needed for investment as external capital flows permit developing countries to invest more than their domestic savings. This alone is sometimes not sufficient to accelerate capital accumulation and economic growth because the foreign exchange gap becomes dominant. Both investment and growth in developing countries are dependent on imported intermediate and capital goods. It is probable that even if

domestic savings are sufficient to finance all the investment, a developing country may not be able to carry out investment projects if the foreign exchange available to run the projects is not adequate. Investment in this instance would be lower than could be financed by savings generated at full employment. Hence, the production capacity would be underutilized and income and savings would be reduced. Capital inflows can reduce the foreign exchange gap, allowing imports, investment and savings to be raised above the levels constrained by export earnings. Bacha (1990) introduced the third gap, namely fiscal gap, and analysed the consequences of foreign resource transfers on the GDP growth rate of developing countries. The utilisation of excess.

Capacity was not considered in the original two-gap models until Taylor, (1991). brought the capacity utilization explicitly into the analysis of foreign capital requirements for developing countries. In the three gap models, the constrained growth rate corresponding to each gap can be derived; and with respect to foreign exchange gap, one can show how a decline in foreign transfers affects the economies' growth rate in short and medium run. Basically, the model is static and does not go far enough to analyze the complex process of dynamics of capital accumulation, trade balance and economic growth (McCombie and Thirlwall, 2014).

Ranaweera, (2003). provides a summary of the three gap model of the World Bank and a critique of the single constraint model of Thirlwall, (2014). and Thirlwall and Hussain (1982). Thirlwall (1979). proposed a balance of payments constrained growth model where the dynamic foreign trade multiplier of Harrod became the law for providing the sustainable growth¹¹. According to this law, the growth rate for a developing economy is the rate of growth in real exports divided by the income elasticity of demand for imports. Earlier versions, (1979). did not introduce capital flows until Thirlwall and Hussain (1982) augmented the model with the capital flows. The model was still incomplete as debt service was not included in the derivation of growth or capital requirements. Grosman and Helpman, (1999). incorporated the debt servicing in Thirlwall-Hussain's model. Despite some of these modifications, various criticisms can be levied against the model as the model is still not a complete model; the model

leaves out the savings-investment gap, the fiscal gap and the monetary implication of the balance of payments. The Thirlwall-Hussain model does not show foreign exchange requirements relating to the maintenance of a desired or target level of reserves. However, in the absence of any other model which can be easily applied to study liberalization, we cast the basic Thirlwall-Hussain model in behavioral equations and estimate the reduced form to study the impact of liberalization, terms of trade and oil prices on GDP growth. McCombie and Soro, (2002). provide a simple rule (45 degree rule) that the relative rates of growth in a domestic economy against the foreign economy are equivalent to the relative income elasticity of exports and imports. The fundamental logic in this rule is that if countries are basically alike, then the prices of their typical traded outputs should be the same, and apparent income elasticities will be such as to make continued price equality possible. As this study is with a view to examine the impact of trade liberalization we intend to incorporate liberalization (LIBER), oil prices (GROIL), long term debt (GDEBT), debt servicing (DEBTSIMP) and world interest rate (CINTEREST) in their influence on growth. Similarly, we examine the impact of liberalization, terms of trade and oil prices on economic growth, separately. In the basic equation (4) we introduce liberalization and oil price rise as exogenous variables to study the trade balance over time.

2.5 Research Gap

In the study by scully, (1962). there exists a large literature on the relationship between economic growth and external balance. This alone is sometimes not sufficient to accelerate capital accumulation and economic growth because the foreign exchange gap becomes dominant. The study proposes the idea of relationships and the study does not adopt time series data for a long period of time but rather attains simple yearly data: this study intends to address this by adopting a wide time series data.

In the study of Ranaweera, (2003). provides a summary of the three gap model of the World Bank and a critique of the single constraint model of Thirlwall, (1979). and Thirlwall and Hussain, (1982). Thirlwall, (1979). proposed a balance of payments constrained growth model where the dynamic foreign trade multiplier of Harrod became

the law for providing the sustainable growth¹¹ this study intended to only handle the balance of trade and not the balance of trade indicating that the focus by the researcher will be on assessing the balance of trade one economic growth.

The findings from McCombie and Soro, (2002). provide a simple rule (45 degree rule) that the relative rates of growth in a domestic economy against the foreign economy are equivalent to the relative income elasticity of exports and imports. The study here intend to address the issues concerning the state of the affairs for the economy in terms of the development mix for BOT and GDP rates over the study period.

The studies conducted are from an environment that is purely far from the sub-Saharan Africa, these study statistics will be drawn from Uganda, A sub Saharan country that employees the state of the economic requirements for the deficits and also provide a representation of the countries that are affiliated with deficits.

The studies conducted address the situation in the country on balance of trade and economic growth, less focus is paid on the balance of trade, the studies conducted in Ugandan environment are in the time before 2010, the focus of many studies are also in Non Ugandan environments. Therefore this study intend to establish the geographic gaps in the literature, the time gaps and subject focus as this particular study intend to be conducted on BOT and Economic growth.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter explains and describes how the research was carried out. It focused on the research design, sources of data, research instruments, data analysis, limitations and ethical consideration.

3.1 Research Design

The study will be adopted a correlation design and the use of quantitative techniques to analyze secondary data scientifically to critically conclude the research objectives, secondary data will be collected from World Bank reports, international monetary fund data sheets among others. Also inferences were drawn by fitting the regression model and testing for its significance using the t-statistic statistic, correlation of the two variables and test for significance of the Pearson's correlation coefficient of determination and finally time series analysis was done using ANOVA table to test between trade balance and economic growth in Uganda.

3.2 Data Collection Instruments

The Record sheet was used to enter the yearly data on Balance of Trade rate and economic growth rate in Uganda for 31 years that is from 1984 to 2014.

3.3 Sources of Data

Secondary data was attained from data sets on the balance of trade rate and economic growth for a period of 30 years that is to say from 1984 to 2014. Data was attained from published resources such as World Bank report, International monetary finance and bank of Uganda reports among others.

3.4 Data Analysis

On the first and second objectives, the data was presented in tables were used to show the trend of balance of trade, level of economic growth, descriptive statistics were used in analyzing the objective one and two also the researcher will use time series graph and test for stationarity. On objective three correlation and regression analysis were used in determining the relationship between balance of trade and economic growth in

Uganda from 1984–2014, as well as to test the hypothesis. The scatter diagrams was used to show the relationship between variables, Pearson’s correlation coefficient used in finding the strength of relationship between independent and dependent variables. A bivariate regression analysis was to estimate the regression equation.

The regression model was

$$Y = \alpha + \beta_0 X_0 + e_i$$

Where

Y : economic growth rate

α : The economic growth rate without BOT variation

β_0 : The rate of change economic growth to BOT rate

x_0 : BOT rate

The Pearson’s correlation coefficient (r) is given by

$$r = \frac{n \sum xy - \sum x \sum y}{\sqrt{[(n \sum x^2 - (\sum x)^2)][n \sum y^2 - (\sum y)^2]}}$$

In order to test the hypothesis, t – test computed was given by the formula

$$t_c = \frac{r\sqrt{(n-2)}}{\sqrt{1-r^2}}$$

The critical region for rejecting or accepting the hypothesis was

$$|t_c| \geq t_{\alpha/2}$$

3.5 Limitations of the Study

In the processes of carrying out the research these problems were uncouneted.

In view of the following threats to validity, the researcher claimed an allowable 5% margin of error at 0.05 level of significance this might not lead to accurate data production

There is an expected difficulty into collecting data since the rates of balance of trade and economic growth levels may not be acquired with ease. The scattered nature of the information may not be attained and compiled with ease.

Despite all the above anticipated challenges, the researcher made efforts to adequately address them so as not to compromise the findings of the study in any way.

3.6 Ethical Consideration

The researcher ensured honesty in data handling for example in a bid to attain information (balance of trade and economic growth) information retrieved from right sources will be left unchanged.

The researcher recognized the contributory authors especially those authors from whom literature, related studies and theories were generated.

Data analysis estimation through secondary data processing were documented to enable the production of accurate information.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

4.0 Introduction

In this chapter, the researcher presents analyses and interprets the data. The presentation, analysis and interpretation of the data are dependent on the objectives. The study was a secondary data research that involved attainment of time series data on the topic "To determine the level of balance of trade in Uganda from 1984-2014. ii) Establish the level of economic growth of Uganda from 1984-2014 and establish the relationship between balance of trade and economic growth of Uganda 1984-2014. The presentation, analysis and interpretation are shown below.

4.1 The Level of balance of trade in Uganda from 1984-2014

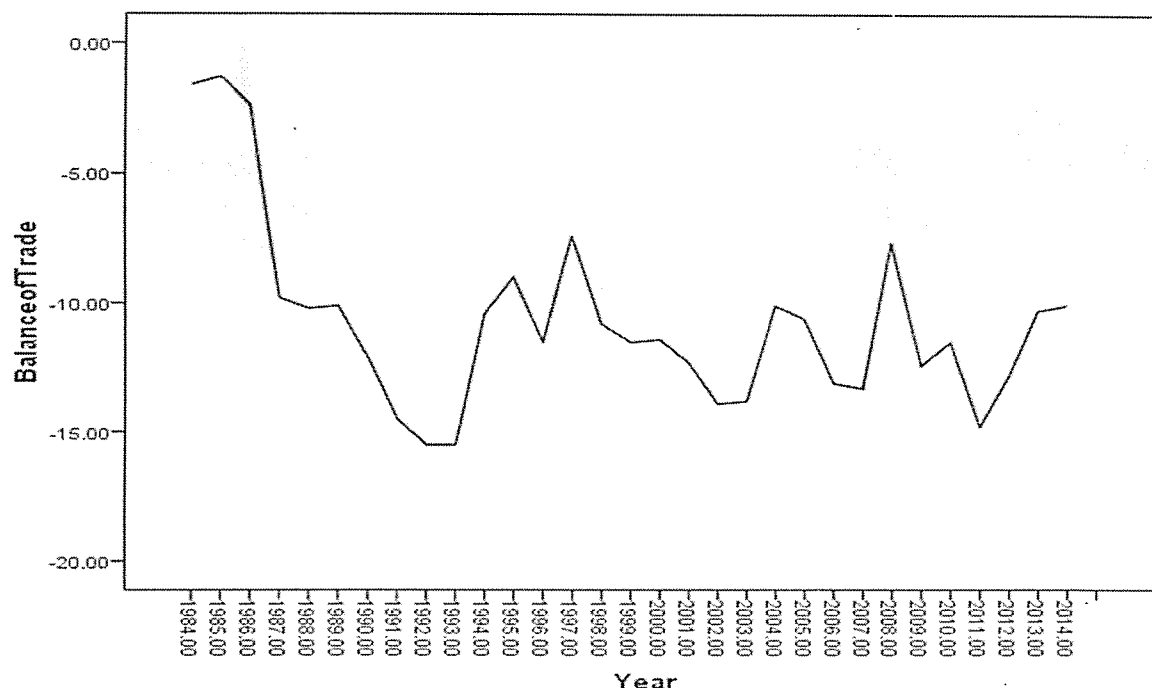
The first objective of the study was to determine the level of balance of trade in Uganda from 1984-2014. To achieve this objective, the researcher presented the data about level of balance of trade in Uganda for the period of 31 years in tabular form and on a line graph. The data about Level of balance of trade in Uganda is shown in the table 1 below.

Table 1: Balance of trade (1984- 2014)

Year	Balance of trade
1984	-1.6
1985	-1.3
1986	-2.4
1987	-9.8
1988	-10.2
1989	-10.1
1990	-12.1
1991	-14.5
1992	-15.5
1993	-15.5
1994	-10.4
1995	-9.0
1996	-11.5
1997	-7.4
1998	-10.8
1999	-11.5
2000	-11.4
2001	-12.3
2002	-13.9
2003	-13.8
2004	-10.1
2005	-10.6
2006	-13.1
2007	-13.3
2008	-7.7
2009	-12.4
2010	-11.5
2011	-14.8
2012	-12.8
2013	-10.3
2014	-10.1

Source: World Bank, IMF, World fact book (2015)

Figure 2: Line Graph showing the level of balance of trade in Uganda from 1984-2014



Source: Researcher, 2016

The data above shows that the level of change of the balance of trade was in negative meaning the balance of trade is in deficits. Over the 31 years the balance of trade was found in declines and increases though in deficit. The percentage change of balance of trade rate, taking 1984 as a base year, is -1.6%. However the preceding years up to 1990 had increases and decreases though not much. The highest rates of BOT deficits were registered in 1991 and 1992 with the -14.5% and -15.5%. The implication is that the BOT rates of the period of the study for Uganda from 1984-2014 was more worsening than improving.

4.2 The Level of economic growth of Uganda for the Year (1984–2014)

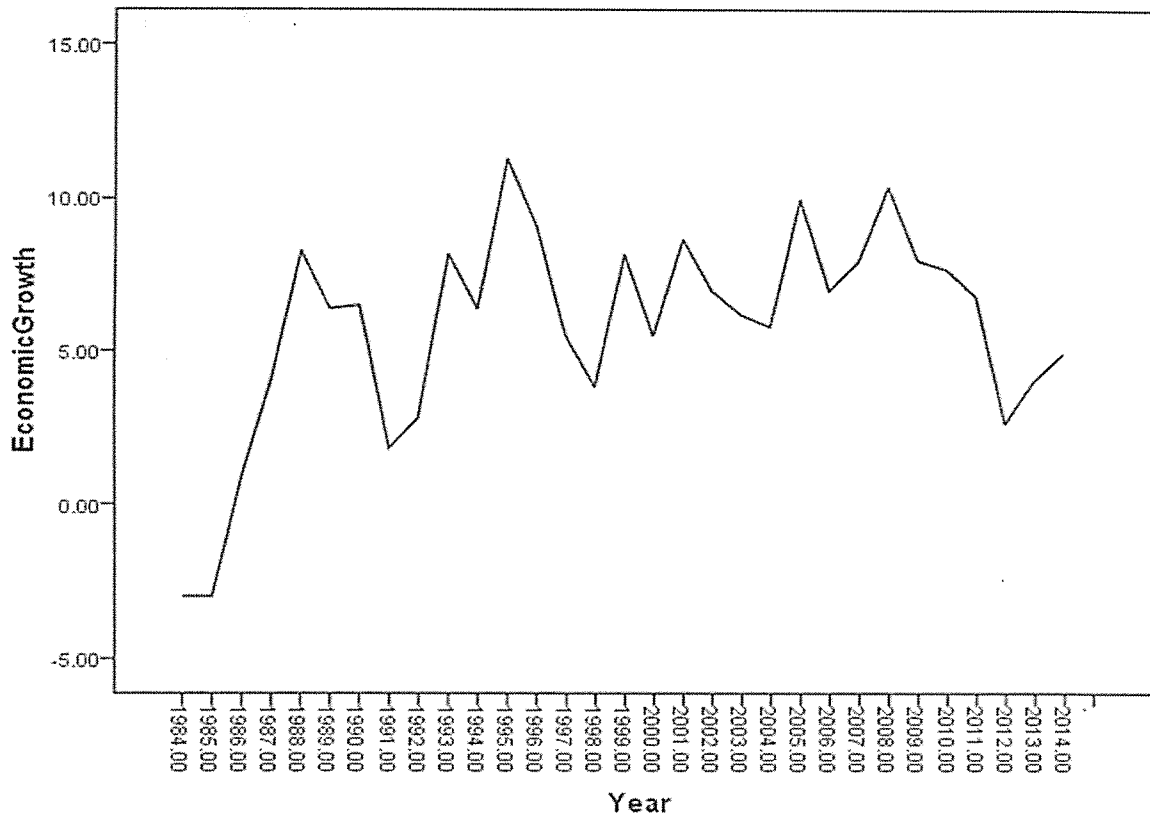
The second objective of this study was to determine the level of economic growth of Uganda for the Year (1984 – 2014). To achieve this objective, the researcher investigated the trend of GDP rates in Uganda for the period of 31 years (2003 – 2012). The table 2 below illustrates the GDP rates in Uganda from (1984–2014).

Table 2: GDP rates in Uganda from (1984–2014)

Year	Economic Growth
1984	-3.0
1985	-3.0
1986	0.9
1987	4.0
1988	8.3
1989	6.4
1990	6.5
1991	1.8
1992	2.8
1993	8.2
1994	6.4
1995	11.3
1996	9.1
1997	5.5
1998	3.8
1999	8.2
2000	5.5
2001	8.7
2002	7.0
2003	6.2
2004	5.8
2005	10.0
2006	7.0
2007	8.0
2008	10.4
2009	8.0
2010	7.7
2011	6.8
2012	2.6
2013	4.0
2014	4.9

Source: World Bank, IMF, World fact book (2015)

Figure 3: Line graph Showing the level of economic growth rate of Uganda (1984-2014)



Source: Researcher, 2016

Figure 2 above shows that Uganda experienced the highest GDP rate in 1995, with a rate of 11.5% followed by the 2008 with 10.4% rate, then 2005 with 10.0 rate. These periods could have been affiliated with the strong economic activities. The lowest rate was experienced in 1984 and 1985 with a -.03 implying a reduction in the economic growth from 1983, this could have been associated with the political turmoil at the time before the regime of Museveni was Ushered in. there was an increase to 0.9% in 1986 and a steady increase up to 1988 followed by subsequent increases and degrees in the economic activities in the economy. Uganda's economy for the period between 1995 to 2004 had a high and steady decline. In 2007, there was a decline in GDP rates, followed by an increase in 2008, from 8.4 to 8.8. It was however followed by a decline

in 2009 of the rate of 1.6. There was a further decline in 2010, up to 7.7. In 2011 the economic growth rates kept on increasing and reducing until 2014.

The general observation on the economic growth rates of Uganda shows a general increases though coupled with bottoms and ups. The rate of the economic growth rates prevail though much is still wanting in the economic growth rates. Some factors like politics and economic crisis are indirectly seen affecting the growth of the economy.

4.3 Descriptive statistical analysis of the Balance of trade and economic growth rate of Uganda

Further in determining the levels of balance of trade and economic growth of Uganda from 1984 to 2014, the researcher carried out a descriptive analysis of the rates. The result by use of SPSS (Statistical Package for Social Scientist) is shown in the table 3 below.

Table 3: Descriptive analysis of the Balance of trade and economic growth of Uganda

(1984 – 2014)

Descriptive Statistics												
	N	Range	Min	Max	Mean		Std. D	Var	Skewness		Kurtosis	
	Stat	Stat	Stat	Stat	Stat	Std.	Stat	Stat	Stat	Std. E	Stat	Std. E
Balance of trade	31	14.20	-15.50	-1.30	-10.70	.6468	3.6017	12.973	1.345	.421	1.875	.821
Economic Growth Rate	31	14.30	-3.00	11.30	5.800	.6137	3.4169	11.675	-1.027	.421	1.181	.821
R – Range, Mini – Minimum, Max – Maximum, Std. D – Standard Deviation, Var – Variance, Stat – Statistic, S.E – Standard Error, N – Number of observations												

Source: Researcher (2015)

The Table 3 above shows the descriptive analysis of balance of trade and economic growth rates of Uganda from 1984-2014. The results attained on the mean, minimum,

maximum, variance standard deviation, skewness and Kurtosis are presented as shown below.

The results show the average of from balance of trade 1984 to 2014 was 10.70, with -1.30 as the maximum and -15.50 as the minimum. Still on the balance of trade of Uganda, it shows that the deviation away from the mean was (Std.D = 3.6017) with variance of (Var=12.973). Considering the mean of balance of trade, the deviation away from it is small. The range was of a rate of 14.20, the skewness (1.345) and kurtosis (1.875). The results depict that the mean was higher compared to the standard deviation meaning that the rate of the BOT was not so much low and was spread not far from the mean since the standard deviation was lower than the mean attained.

Concerning the economic growth rate that was measured on the same dimensions. The researcher established that the mean was 5.800, with the maximum being 11.30, the minimum was -3.00 comparing the mean maximum and minimum the rate of economic growth is spread and the time of the study experienced both the high and lows of the growth rates, the deviation away from the mean was St.D= 3.4169, the variance was 11.675,). Considering the mean of balance of trade, the deviation away from it is small, further more the range was 14.30, the Skeweness was -1.027 and Kurtosis was 1.181. The results therefore show that the data was equally distributed, different years had data that was similar to each other and no much deviation was realized. The researcher denotes that the levels of the Balance of trade and that of economic growth rates are distributed though not normally but the rate of distribution is close to ssnormality.

4.2.3 Test for stationarity for Balance of trade rate and economic growth of Uganda 1984-2014)

The test for trend in Balance of trade rate and economic growth of Uganda 1984-2014)
The researcher use Autocorrelation function (ACF), Partial Autocorrelation function (PACF) test to test for stationarity between Balance of trade rate and economic growth of Uganda and the hypothesis stated can see below;

H_0 : There is stationarity Between Balance of trade and Economic growth rate

4.3.5.2 Autocorrelation Function and Partial Autocorrelation Function (ACF and d PACT)

The researcher also uses time series- Autocorrelation Function and Partial Autocorrelation Function for analysis. This look at the trend in Balance of trade rate and economic growth

ACF is denoted by the formulae below

$$r_k = \frac{(y_k - y_{k-1})}{\text{var}(y_k)}$$

r_k is the autocorrelation coefficient value.

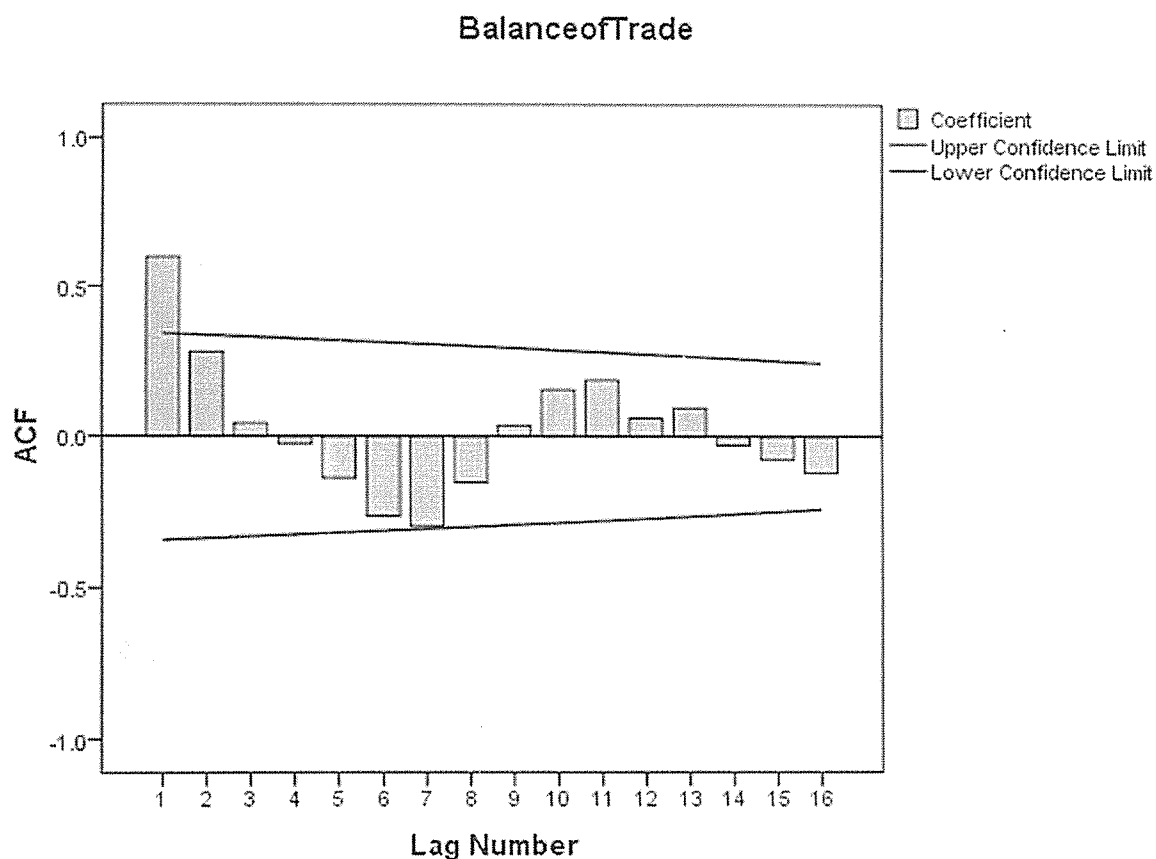
The value of the correlation coefficient lies between -1 and +1

The autoregressive of order one is denoted by formulae

$$r_k = \mu + \alpha_1 (y_{t+k} - \mu) + e_t$$

e_t is the uncorrelated error term with zero mean and variance σ^2 .

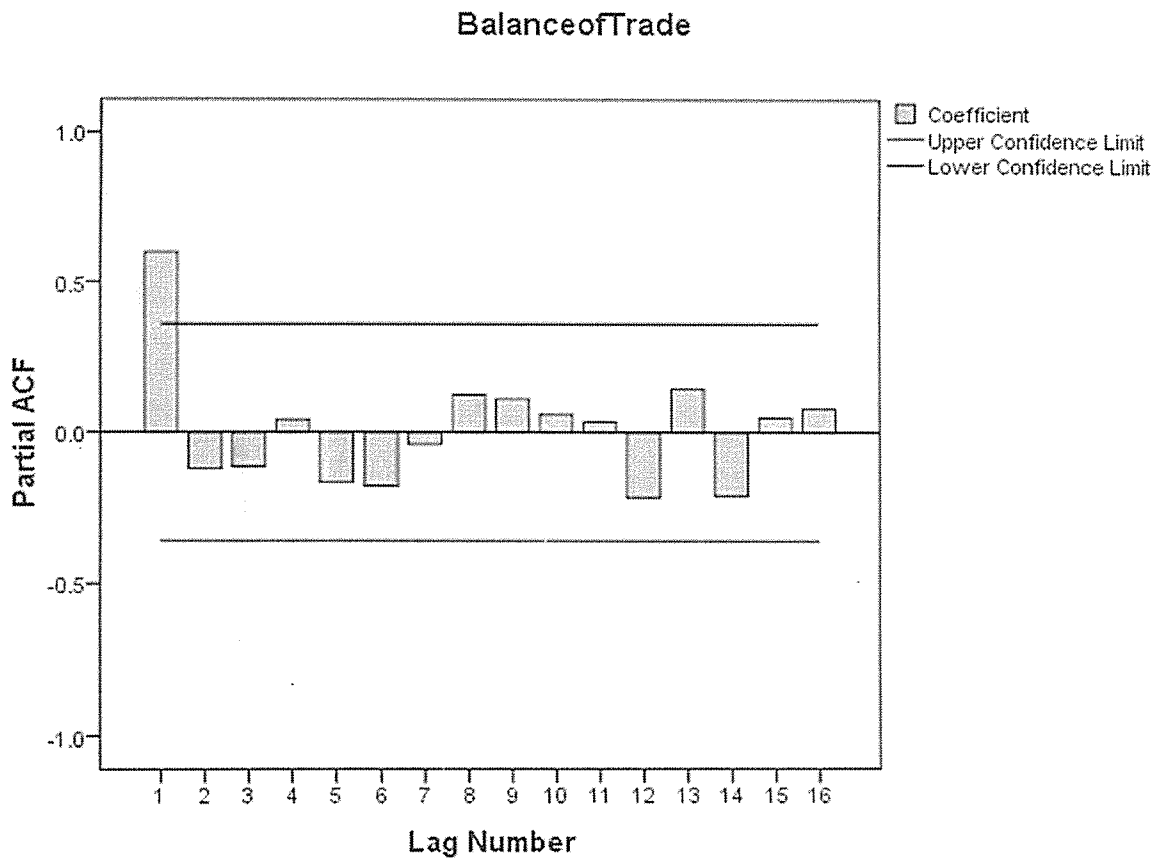
Figure 4: Autocorrelation Function (ACF) of Balance of trade rate in Uganda 1984 to 2014(0.05)



Source: Researcher (2016)

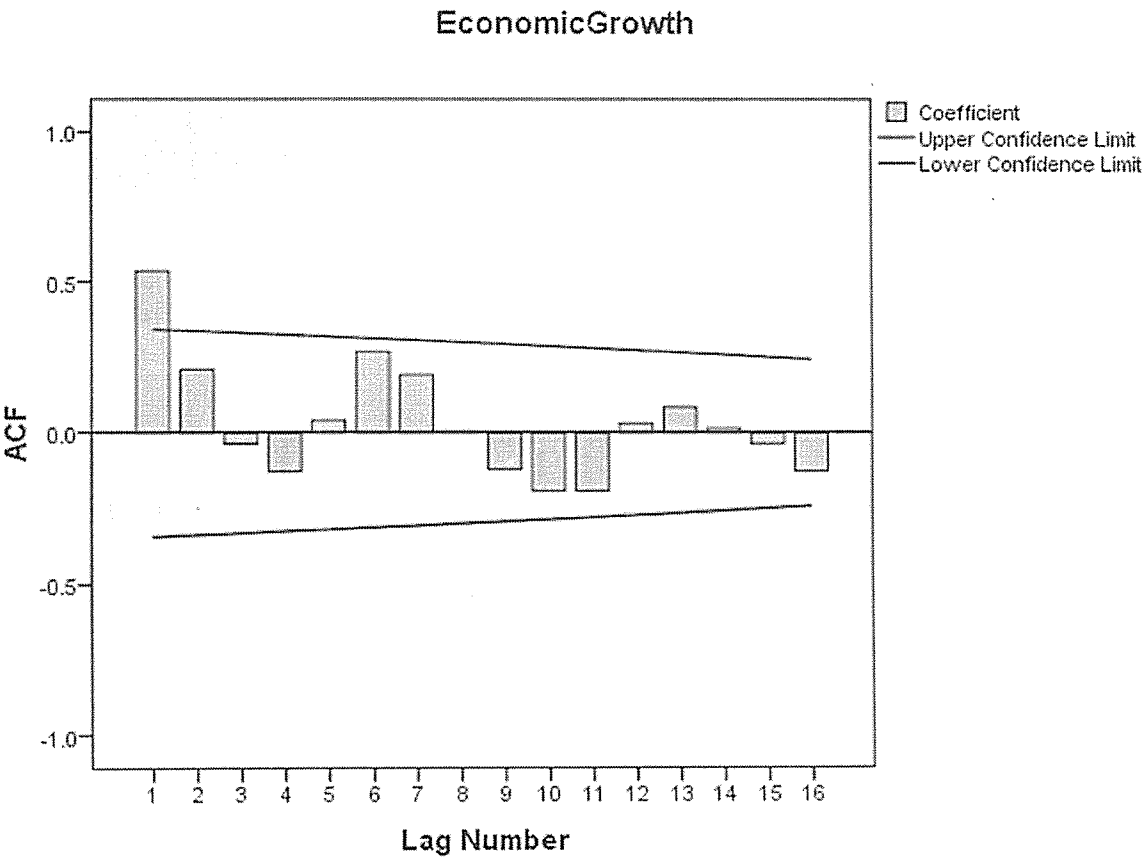
There is a normal distribution of balance of trade rate ,this because it has a constant mean and the variance are small as can be observed from Appendix iv and the $(\text{sig}=0.026) < (\text{sig}=0.05)$ therefore we reject the null hypothesis and conclude that there is no stationarity in the balance of trade rate for Uganda from 1984-2014.

Figure 5: Partial Autocorrelation Function (PACF) of Balance of trade in Uganda 0.05)



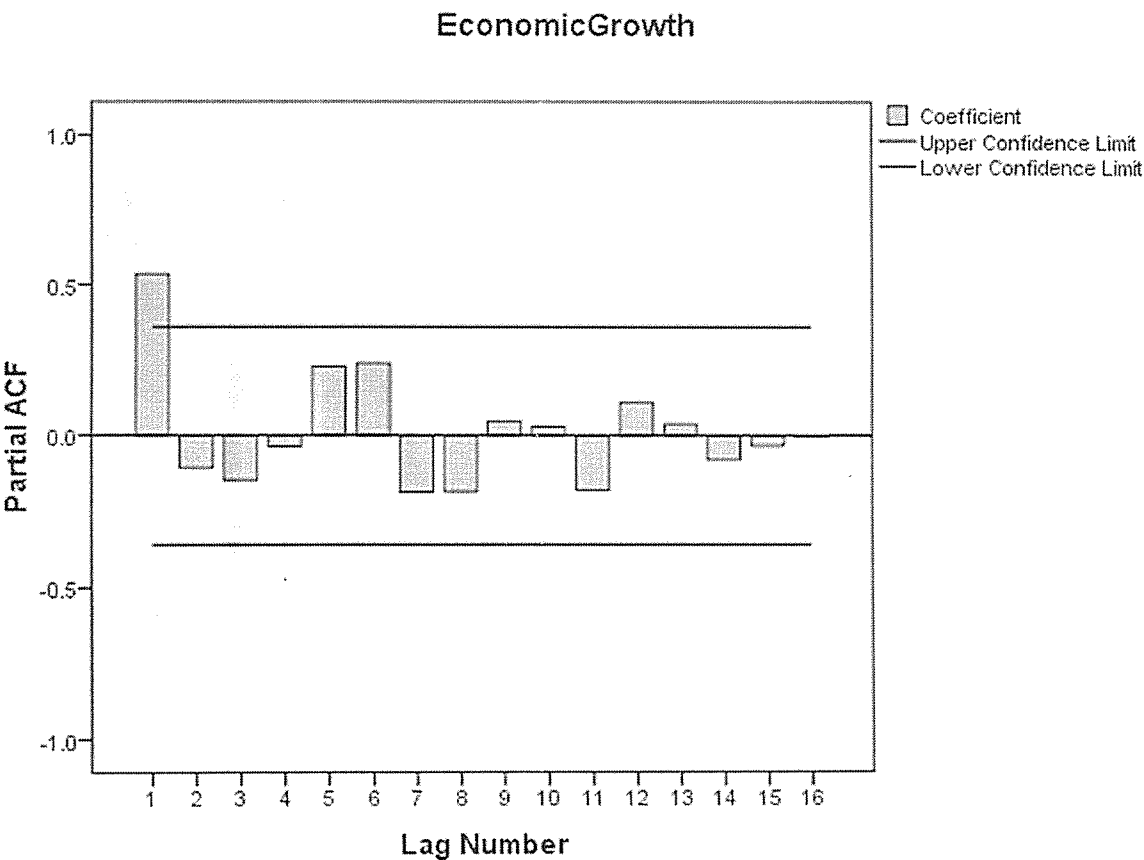
PACF of Balance of trade rate has not shown much of normal distribution this might be due to some other variable which may affect Balance of trade rate like low exports and high importation, but still from *Appendix iv* ($\text{sig}=0.018$) < ($\text{sig}=0.05$) we reject the null hypothesis and conclude that there is no stationarity in Balance of trade of Uganda for the period under study.

Figure 6: Autocorrelation Function (ACF) of Economic Growth rate in Uganda (0.05)



There is a slight normal distribution of economic growth rate ,this because it has a slightly changing mean and the variance are small as can be observed from *Appendix iv* and the $(sig=0.02)<(sig=0.05)$ therefore we reject the null hypothesis and conclude that there is no stationarity in economic growth rate of Uganda in the period under study.

Figure 7: Partial Autocorrelation Function (PACF) of Economic growth rate in Uganda (0.05)



Source: Researcher (2016)

PACF has shown some kind of normal distribution though not much this might be due to some other variables which affect economic growth as seen in *appendix iv, but still* ($sig=0.018$) < ($sig=0.05$) we reject the null hypothesis and conclude that there is no stationarity in economic growth rate in Uganda from 2003 to 2012.

4.3 Relationship between Balance of trade and economic growth of Uganda (1984-2014)

The third objective of the study was to establish the relationship between Balance of trade and economic growth of Uganda (1984-2014). To analyze this, the researcher used correlation and regression analysis. The scatter plot was used to illustrate diagrammatically the relationship between balance of trade and economic growth of Uganda (1984-2014). Further, the Pearson Linear correlation coefficient was used in determining the exact strength between the independent and the dependent variables. This was also used to test the hypothesis that there is no relationship between balance of trade and economic growth of Uganda (1984-2014) at 0.05 level of significance. The regression analysis was used to predict the trend or line of regression between balance of trade and economic growth of Uganda (1984-2014) and also to test the hypothesis.

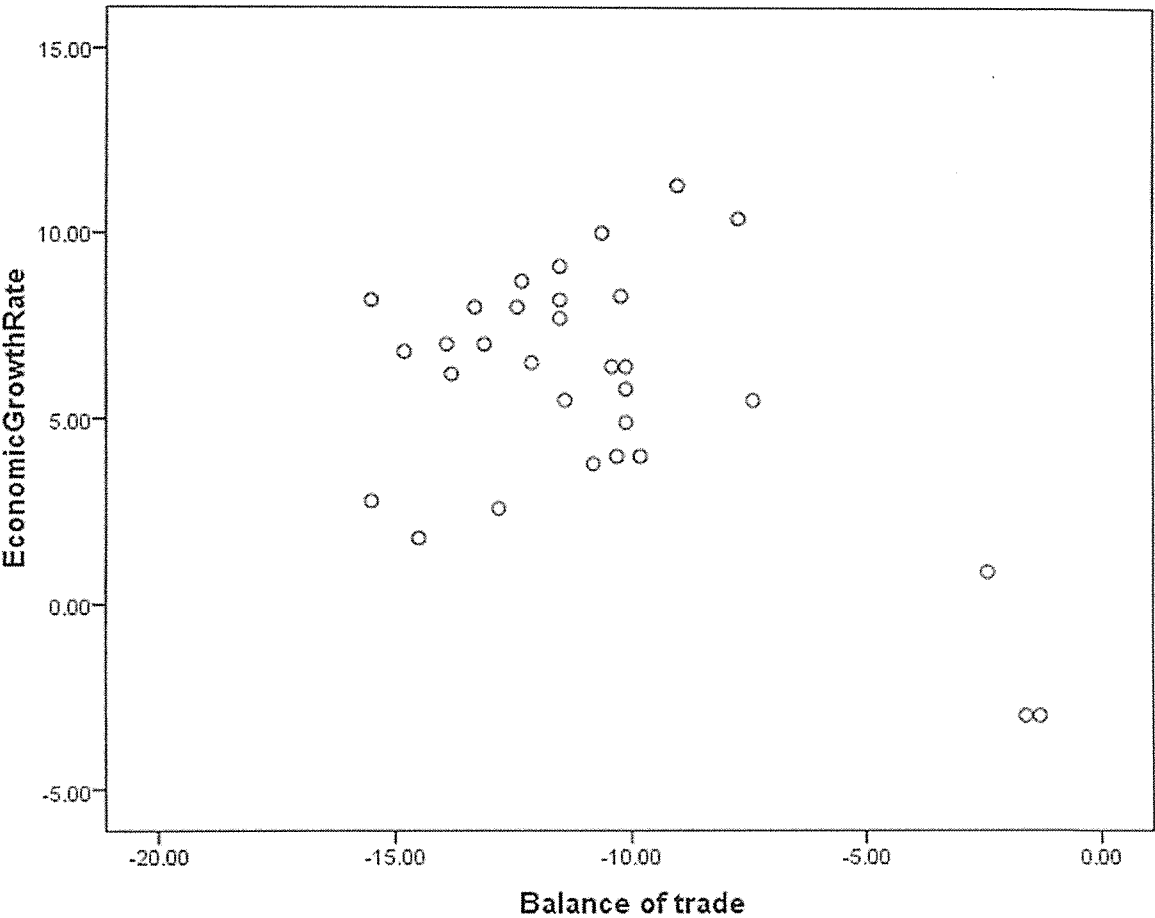
Table 4: Relationship between Balance of trade and economic growth of Uganda (1984-2014)

Year	Balance of trade	Economic Growth
1984	-1.6	-3.0
1985	-1.3	-3.0
1986	-2.4	0.9
1987	-9.8	4.0
1988	-10.2	8.3
1989	-10.1	6.4
1990	-12.1	6.5
1991	-14.5	1.8
1992	-15.5	2.8
1993	-15.5	8.2
1994	-10.4	6.4
1995	-9.0	11.3
1996	-11.5	9.1
1997	-7.4	5.5
1998	-10.8	3.8
1999	-11.5	8.2
2000	-11.4	5.5
2001	-12.3	8.7
2002	-13.9	7.0
2003	-13.8	6.2
2004	-10.1	5.8
2005	-10.6	10.0
2006	-13.1	7.0
2007	-13.3	8.0
2008	-7.7	10.4
2009	-12.4	8.0
2010	-11.5	7.7
2011	-14.8	6.8
2012	-12.8	2.6
2013	-10.3	4.0
2014	-10.1	4.9

Source: World Bank, IMF, World fact book (2015)

4.3.1 Scatter Plot Showing relationship between balance of trade and economic growth of Uganda (1984-2014)

Figure 8: The Scatter Plot Showing the Relationship between balance of trade and economic growth of Uganda (1984-2014)



Source: Researcher (2016)

The figure 1 above shows a scatter diagram illustrating the relationship between relationship between balance of trade and economic growth of Uganda. The scatter diagram shows that there is a positive relationship between balance of trade and economic growth in Uganda in the years (1984–2014). In other words, as balance of trade increase, the economic growth rate increases. It shows the existence of an average relationship between balance of trade and economic growth of Uganda showed by the dotted lines that are spread more at the centre. Implying a close relationship between the variables.

4.3.2 Correlation analysis between balance of trade and economic growth of Uganda

Table 5: Pearson Linear Correlation analysis between balance of trade and economic growth of Uganda (1984 – 2014)

At 0.05 level of Significance

Correlations			
		Balance of trade	Economic Growth Rate
Balance of trade	Pearson Correlation	1	.515**
	Sig. (1-tailed)		.002
	N	31	31
Economic Growth Rate	Pearson Correlation	.515**	1
	Sig. (1-tailed)	.002	
	N	31	31
**. Correlation is significant at the 0.01 level (1-tailed).			

Source: Researcher (2016)

A bivariate Pearson linear correlation analysis shows a positive relationship ($r=.515$) between balance of trade and economic growth at 0.05 level of significance. The positive sign of correlation indicates that there is a direct relationship between balance of trade and economic growth of Uganda (1984 – 2014). Since ($0.02 > 0.05$), we therefore reject the null hypothesis and adopt the alternate hypothesis and conclude there is a significant relationship between balance of trade and economic growth Uganda from 1984-2014.

4.3.3 Regression analysis between balance of trade and economic growth of Uganda

Table 6A: Regression analysis between balance of trade and economic growth of Uganda (1984 – 2014)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.515 ^a	.265	.239	2.97988
a. Predictors: (Constant), Balance of trade				

Source: Researcher (2016)

From table 6A; the value .515 of the regression coefficient between balance of trade and economic growth of Uganda, the regression coefficient expresses that only 51.5 % of change in the dependent variable (i.e economic growth rate) is caused by balance of trade rate change. The R^2 , 0.265, on the other hand expresses that for this change; only 26.5% of the data are accounted. The adjusted R^2 , of .239, shows the effect of balance of trade and economic growth. In this case, balance of trade rates accounts for 23.9 percent of the changes in economic growth. The standard error estimate of 2.97988 shows close scatter of the data.

Table 7B: Analysis of Variance (ANOVA)

At 0.05 level of significance

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	92.749	1	92.749	10.445	.003 ^a
	Residual	257.511	29	8.880		
	Total	350.260	30			
a. Predictors: (Constant), Balance of trade						
b. Dependent Variable: Economic Growth Rate						

Source: Researcher (2016)

Table 6B, shows the analysis of variance (ANOVA) explains further the relationship between the independent variable (Balance of trade rate) and the dependent variable (Economic growth rate). From the ANOVA table, the value of F, 10.445 is larger than the value of significance, 0.050. Therefore, the null hypothesis is rejected and the alternative hypothesis accepted. This means that balance of trade affect economic growth of Uganda.

Table 8C: Coefficients of Regression Analysis between balance of trade and economic growth of Uganda (1984 – 2014) (At 0.05 level of significance)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.576	1.703		.339	.737
	Balance of trade	-.488	.151	.515	-3.232	.003
a. Dependent Variable: Economic Growth Rate						

Source: Researcher (2016)

Legend:

Economic Growth rate = Constant + β (BOT Rate)

GDP Rate = .576 – .488 (Balance of Trade)

The table 6C illustrates the regression analysis between balance of trade and economic growth of Uganda. The regression analysis shows that the rate of economic growth that does not depend on balance of trade is .576. The rate of change of economic growth to balance of trade in Uganda is (β = -.488). This means that a unit change in Balance of trade rate leads to a reduction in economic growth by -.488.

The t values for the constant and β are (.339) and -3.232) respectively with their respective levels of significances as (.032 and .010) respectively. Since the level of significance is less than 0.05, the researcher rejected the null hypothesis and argues that there is a significant relationship between balance of trade and economic growth of Uganda.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter will present discussion of findings, conclusion and recommendation of the research.

This final section of the report deals with the discussion of the findings presented in the preceding chapter. The discussion is made with reference to other similar works done in previous studies. The section then draws conclusions from these discussions after which it offers its recommendations. Finally, it suggests areas that are potential grounds for research that could not be completed in the body of this report

5.1 Discussion of the Findings

5.1.1 The level of balance of trade in Uganda from 1984-2014

The balance of trade rate, taking 1984 as a base year, is -1.6%. However the preceding years up to 1990 had increases and decreases though not much. The highest rates of BOT deficits were registered in 1991 and 1992 with the -14.5% and -15.5%. The implication is that the BOT rates of the period of the study for Uganda from 1984-2014 was more worsening than improving.

The descriptive statistics results depict that the mean was higher compared to the standard deviation meaning that the rate of the BOT was not so much low and was spread not far from the mean since the standard deviation was lower than the mean attained. The overall argument was that the balance of trade was deficits. Therefore the data analyzed does meet the conditions of normality. These findings are backed by previous research studies that undertook to establish a similar purpose as elaborated below

(BOU, 2015) argued that overall balance of payments was deficit of US\$143.5 million during the quarter ended July 2015, with a net draw down in reserves assets of US\$140.6 million excluding valuation changes. In the short-term, the current account deficit is likely to widen due to the effect of low international prices for Uganda's export

commodities. However, dampened private sector demand due to the depreciation of the currency, could moderate the increase in the deficit.

Even Chu, Ke-young, and Gerd Schwartz, (2004). argued that trade balance is likely to differ across the business cycle. In export-led growth (such as oil and early industrial goods), the balance of trade will improve during an economic expansion. However, with domestic demand led growth (as in the United States and Australia) the trade balance will worsen at the same stage in the business cycle.

5.1.2 Level of economic growth of Uganda from 1984-2014.

The level of economic growth in Uganda over the period of 1984 to 2014 showed that the economic growth rates of Uganda had both increases and decreases. However the results also indicate that a double digit growth rate was also experienced in a few years than many years. These findings are backed by previous research studies that undertook to establish a similar purpose as elaborated below

Even Blecker and Ibarra, (2013). presented that the 2012 African Economic Outlook projects real GDP growth to improve to 4.5% and 4.9% in 2012 and 2013, respectively, mainly premised on good prospects in the oil sector. However, attaining these rates will depend on the ability of the authorities to address major infrastructural constraints, particularly in the energy sector, and to mitigate risk factors, including those linked to climate change. Inflationary pressures are forecast to subside in 2012 and to reach single digits in 2013, reflecting both global declines in food and fuel prices, as well as the impact of monetary tightening by the Bank of Uganda (BOU)

Henrekson, (2001). pointed out productive-sector activities in 2011 have continued to be dominated by developments in the power and oil industries, both of which are critical to Uganda's development prospects.

5.1.3 Relationship between balance of trade and economic growth

The overall determination of the relationships through correlations and regression show that the balance of trade was despite being in deficits have a close relationship with the

economic growth rate of Uganda, the scatter diagram, correlation and regression analysis all reveal that. Most previous studies that dealt in this context collaborate these findings as outlined hereunder.

Thirlwall, (1979). proposed a balance of payments constrained growth model where the dynamic foreign trade multiplier of Harrod became the law for providing the sustainable growth¹¹. According to this law, the growth rate for a developing economy is the rate of growth in real exports divided by the income elasticity of demand for imports

McCombie and Soro, (2002). provide a simple rule (45 degree rule) that the relative rates of growth in a domestic economy against the foreign economy are equivalent to the relative income elasticity of exports and imports. The fundamental logic in this rule is that if countries are basically alike, then the prices of their typical traded outputs should be the same, and apparent income elasticity's will be such as to make continued price equality possible

5.2 Conclusion

In conclusion, the study was successfully carried out and all the objectives fulfilled. The first objective was accomplished where it was found that the level of balance of trade was in deficit over the period of 31 years in Uganda though some improvements in deficits were cited in some years. This means that if properly handled the Ugandan exports, there is likelihood that there is going to be some improvement in the manner in the balance of trade exits.

On the second research objective, the researcher established that the level of economic growth of Uganda was both in its highs and lows though some years experienced increases there is really a double digit economic growth indicate seen. The researcher conclude that if well examined the economic growth of Uganda from 1984 to 2014 was on average fair.

The researcher on the third objective established that there was a closer relationship between the balance of trade and economic growth of Uganda from 1984-2014.

The level of relationship was found on all parameters used for measurements. The research further established that the further decrease in the balance of trade also led to reduction in economic growth rates of Uganda.

5.3 Recommendations

5.1.1 The level of balance of trade in Uganda from 1984-2014

There is need to improve exports through establishing export substitution industries in order to produce more exports.

There is need for government policy on the reduction of imports that are being produced in Uganda in order to reduce the BOT gaps.

The agricultural sector that is known as the engine for development need to be re-engineered to produce the value for the required business level returns for the development.

5.1.2 Level of economic growth of Uganda from 1984-2014

The government should embark on industrialization, and modern technique of agricultural production since this area can employ large population resulting into high productivity hence economic growth including attaining the products and services for export.

The government should also embark on strong fiscal policy to reduce the unnecessary money supply which can lead to inflation that negatively impact on economy and reduce economic growth.

There is need to encourage establishment of infant industries that can improve production for economic growth improvement

5.1.3 Relationship between balance of trade and economic growth

The relationship was found positive therefore there is need for supporting domestic investors that will be able to reinvest their profits for further development.

There is need for the management of the organizations to further implement the business deals in order to realize the values for operations across the globe.

The organizations dealing in production need to be enhanced to support the export oriented natures of the organizations for development.

5.4 Areas for Further Research

The results presented in this report may not be conclusive and should be treated as being preliminary. Further analysis of the survey data Balance of trade and economic growth rate needs to be done to validate these findings and provide greater confidence in explaining the changes in Balance of trade and economic growth rate, it was found out that the effect of Balance of trade and economic growth rate was prevailing hence provoking the fact that there are other factors that influence it. So, other researches needs to be done in this field. Therefore more studies can be carried on the following.

- i) The relationship between inflation and exchange rate.
- ii) The relationship between exchange rate and portfolio investments.
- iii) The relationship between interest rate and GDP rate
- iv) The relationship between interest rates and GDP rate

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Appendix i: Research Instruments

IMF World Economic Outlook (WEO), World Bank April 2015

	BALANCE OF TRADE (Balance of exports and imports % of GDP)	ECONOMIC GROWTH RATE GDP (Growth Rate)
Year	Percent change	Percent change
1984	-1.6	-3.0
1985	-1.3	-3.0
1986	-2.4	0.9
1987	-9.8	4.0
1988	-10.2	8.3
1989	-10.1	6.4
1990	-12.1	6.5
1991	-14.5	1.8
1992	-15.5	2.8
1993	-15.5	8.2

	BALANCE OF TRADE (Balance of exports and imports % of GDP)	ECONOMIC GROWTH RATE GDP (Growth Rate)
Year	Percent change	Percent change
1994	-10.4	6.4
1995	-9.0	11.3
1996	-11.5	9.1
1997	-7.4	5.5
1998	-10.8	3.8
1999	-11.5	8.2
2000	-11.4	5.5
2001	-12.3	8.7
2002	-13.9	7.0
2003	-13.8	6.2

	BALANCE OF TRADE (Balance of exports and imports % of GDP)	ECONOMIC GROWTH RATE GDP (Growth Rate)
Year	Percent change	Percent change
2004	-10.1	5.8
2005	-10.6	10.0
2006	-13.1	7.0
2007	-13.3	8.0
2008	-7.7	10.4
2009	-12.4	8.0
2010	-11.5	7.7
2011	-14.8	6.8
2012	-12.8	2.6
2013	-10.3	4.0

	BALANCE OF TRADE (Balance of exports and imports % of GDP)	ECONOMIC GROWTH RATE GDP (Growth Rate)
Year	Percent change	Percent change
2014	-10.1	4.9

Source: World bank, World economic outlook, IMF, 2015

Appendix ii: Research Budget

NO	ITEM	COSTS (USHS)
2	Preparation for proposal	100,000
3	Final proposal development	300,000
4	Data collection	300,000
5	Data analysis	200,000
6	Contingencies	100,000
7	Total	1,000,000

Appendix iii: Research Time Frame

No	Activity	Period (Time)	
1.	Proposal writing	March	2016
2.	Preparing the instruments	April	2016
3.	Approval and proposal hearing	Early May	2016
4.	Data collection	Late May	2016
5.	Data analysis	June	2016
6.	Report writing and submission	July	2016
7.	Viva and final submission	August	2016

Appendix iv: Test for stationarity Auto and Partial correlations for BOT and Economic growth

Autocorrelations

Series:BalanceofTrade

Lag	Autocorrelation	Std. Error ^a	Box-Ljung Statistic		
			Value	df	Sig. ^b
1	.599	.171	12.226	1	.000
2	.280	.168	14.996	2	.001
3	.043	.165	15.063	3	.002
4	-.027	.162	15.090	4	.005
5	-.139	.159	15.853	5	.007
6	-.264	.156	18.712	6	.005
7	-.297	.153	22.482	7	.002
8	-.154	.150	23.532	8	.003
9	.034	.147	23.587	9	.005
10	.153	.143	24.726	10	.006
11	.187	.140	26.509	11	.005
12	.059	.136	26.695	12	.009
13	.093	.133	27.184	13	.012
14	-.030	.129	27.239	14	.018
15	-.078	.125	27.624	15	.024
16	-.122	.121	28.647	16	.026

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.

Partial Autocorrelations

Series:BalanceofTrade

Lag	Partial Autocorrelation	Std. Error
1	.599	.180
2	-.122	.180
3	-.114	.180
4	.042	.180
5	-.169	.180
6	-.179	.180
7	-.040	.180
8	.124	.180
9	.109	.180
10	.058	.180
11	.034	.180
12	-.217	.180
13	.143	.180
14	-.211	.180
15	.047	.180
16	.078	.180

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	92.749	1	92.749	10.445	.003 ^a
	Residual	257.511	29	8.880		
	Total	350.260	30			

a. Predictors: (Constant), Balance of trade

b. Dependent Variable: Economic Growth Rate

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.576	1.703		.339	.737
	Balance of trade	-.488	.151	-.515	-3.232	.003

a. Dependent Variable: Economic Growth Rate



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