

***EFFICIENCY MANAGEMENT OF FOREIGN CURRENCY
IN DEVELOPING COUNTRIES: A CASE OF SOUTH SUDAN***

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DECLARATION

This is to declare that the Research Project entitled ‘**Efficiency Management of Foreign Currency in Developing Countries: A Case Of South Sudan**’ submitted for a Masters of Arts in Economic Policy & Management to the University of Nairobi, Kenya, embodies the original work carried out by **Gabriel GarangAtem**

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This is to declare that this research thesis has been submitted for examination with our approval as the University’s Supervisors

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Jasper A. Okelo

DEDICATION

I dedicate this research work to God for His grace and wisdom without which this would never have been completed.

To my mother, Rev. Rachiel Anok Guot who passed on 24 days after enrolling for this masters' program. Her wishes for better future for me, gave me the strength to continue.

Finally to my daughter, Anok Garang Atem who was born to school – going father, together with her mother, Betty Yom Dau, who endured hardship in a very supportive manner.

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I am very grateful to my dear friend Elijah Chol for his great assistance in reviewing my work throughout this work, special thanks to staffs at the Bank of South Sudan for helping me in getting the data I needed.

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ABSTRACT

Since independence in July 2011, South Sudan adopted a fixed exchange rate regime. This system has been faced with growth of black market for dollars; rent seeking behaviour, corruption and poor controls on channels of distributing dollars with licenses given to well-connected political elites and business brokers.

Foreign currency management in developing countries is an instrumental tool used by governments to direct economic growth and macroeconomic stability. In this research, the research evaluated channels for distribution of dollars; controls, oversight and legislations on management of foreign currency; determined the cause of black market's premium; and identified gaps and proposed recommendations that will enhance management of foreign currency management in South Sudan.

The research reviewed processes, controls, oversight roles and legislations on foreign currency management in South Sudan; analysed channels and data on supply of foreign currency to the market; and conducted focus interviews with stakeholders and experts.

The study found that the government of South Sudan gave amount of US\$ 250,000 and US\$ 500,000 per month to bureaus and commercial banks respectively each at predetermined rate. There was no mechanism put in place by the Bank of South Sudan to determine the amount of dollars demanded by the market; there was no oversight over reporting and compliance of financial institutions with various laws and regulations; licensing of commercial banks and bureaus was not properly controlled with bureaus licensed only for well-connected persons; the Bank of South Sudan did not have sufficient staff with technical capacity to manage foreign currency.

Though the fixed exchange rate adopted by the government of South Sudan was appropriate base on South Sudan economic situation, the management process has been abused with corruption and rent seeking behaviour. An analysis of data significantly showed that 77.4% of black market premium is caused by the amount of dollars supplied to the black market and inflation rate. It was noted that weak controls on management of dollars supplied to bureaus and banks, enforcement of laws could have contributed to growth of black market.

This research recommended that the Bank of South Sudan creates a mechanism to determine the amount of dollars demanded by the market instead of supplying dollars without determining the market demand which is a prime cause of black market's premium; increase controls on licensing, enhance oversight ability on the banks and bureaus over management

of currency allocated; strengthen financial systems and enforcement of laws and regulations; auction dollars to bureaus and banks to reduce the gap between the official and black market rates to reduce incentives for the black market. The government should also increase the capacity of the Bank of South Sudan employees both in number and technical competency to increase their capacity to discharge the mandate of the Bank.

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CHAPTER ONE

BACKGROUND

1.1 Introduction

Since the collapse of the Bretton Woods system in 1973, countries made efforts to establish exchange rate system that would enable them achieve macroeconomic stability and international competitiveness. Countries adopted either fixed or floating exchange regimes to achieve these objectives. Based on their economic interest, some countries implemented a mix of float and fix regimes.

The choice of exchange rate regime is determined by the integration of the financial system to the global economy and extent of envisaged domestic economic policies. The regime that is adopted by each country reflects its disturbance exposure, economic structure, risks and its economic objectives as exchange rate policy has great influence on economic performance.

Some economists argued that inappropriate exchange rate policies that were implemented in 1970s were the cause of financial crisis that was experienced by Asian countries in 1980s and 1990s. The World Bank (1984) stressed that overvalued exchange rate was the causes of deterioration of balance of payment and agriculture in many developing countries in 1980 – 1990s.

According to Dornbusch (1981) a fixed exchange rate works like any price support scheme implemented by governments to protect local farmers and jobs. Whatever regime a country adopts, this regime must suit the local economic circumstances and institutional set up. The exchange rate regime influences the economic growth, trade competitiveness with the neighbours, and in fact, a protective tool.

A consensus has been built among economists and policy makers that domestic imbalances can be corrected with exchange rate adjustment. Furthermore, liberalization of economies has freed huge capitals that influenced the global economy. This has reinforced the importance of

exchange rate policy as a vital monetary tool. It is now easy to transfer foreign currency between countries with improved technology and globalization of the banking sector.

The key role played by exchange rate regime has propelled exchange rate policy into the heart of economies' monetary policy. The dilemma of nations is to determine the regime that suits their economic needs. While the wind of liberalization has blown most nations to adopt floating regime, China seems to make considerable trade gains against the major world economies due to the undervalued Yuan. This has created some economic discomforts in geo-economics.

In South Sudan, a debate has been ignited by International Monetary Fund by proposing a float exchange rate. The government of South Sudan favours a fix regime. This debate is crucial for South Sudan and its trading partners. South Sudan entirely depends on imported goods and services. Fixing the exchange rate will keep the foreign currency at affordable price from a theoretical sense. Whether this can be sustained without distributive injustices is a different thing altogether.

The situation in South Sudan presents the known dilemma on choosing the regime. It is crucial to note that whatever regime is chosen by the government of South Sudan, there will be winners and losers economically. The growth of black market and lack of proper mechanism to deal with it undermines government's argument to continue with the fixed exchange regime.

1.2 Statement of the problem

In 1990s, countries that had pegged their currencies suffered great financial crisis as the crisis were easily spread in the global financial systems through financial links. The crisis that engulfed Asia in 1980-90s was a manifestation that an exchange rate management possesses a lethal threat to the economies if it is not properly managed.

It is known that fix exchange regime is prone to sustainability challenges while floating exchange regime is highly volatile. Therefore, any regime chosen by the monetary authority should be based on its economic preferences.

On 9th January 2005, A Comprehensive Peace Agreement (CPA) that ended over two decade of protracted war in Sudan was signed in Kenya. This agreement provided for an autonomous government in South Sudan with partial control of economic policies in South Sudan till 9th July 2011 when citizens of South Sudan overwhelmingly voted for an independent state in a referendum as provided by the Comprehensive Peace Agreement.

During the interim period, key financial and economic decisions were made in Khartoum. After independence, these decisions were transferred to the government of South Sudan. The government's ability to perform its foreign currency management and monetary policies is impeded by lack of strong institutions, poor policies and legislations, lack of qualified persons and possible rent seeking behaviour in foreign currency management that has led to mushrooming of black market in foreign currency trade.

Since 2005, public access to foreign currency by citizens has been a great challenge in doing business in South Sudan. Black market has flourished parallel to official government's rate.

The government distributes foreign currencies to banks and foreign currency dealers for distribution to needy corporations and individuals. These channels for distribution of foreign currency by the government have been compromised by corruption, and nepotism in licensing of foreign currency dealers.

South Sudan economic circumstances are unique, with its huge inflows of petrodollars, huge import bills and weak regulatory and management capacity which characterises South Sudan economy. It is therefore not possible to prescribe the same economic treatment to other countries to South Sudan. A detail study of exchange rate regime to adopt is therefore crucial. South Sudan economy is undiversified with oil as the only source of foreign currency. The export is done through pipeline infrastructure in North Sudan a neighbour to South Sudan which has given constant-squabbles ranging from border demarcation, nationality, and cost for the use of pipeline, Abyei and other disputed areas. This complicates the predictability of inflows of dollars for short term. This means, also that an exchange rate regime that will hedge against this unpredictability is crucial.

As part of its capacity enhancement on foreign currency management, the government of South Sudan has put in place foreign exchange guidelines (September 2011); Bank of South Sudan Act 2011; Banking Provisional order No.22; and Foreign exchange business provisional order No. 23 as measures to enhance its regulatory environment. There is need to review the appropriateness of these laws taking into consideration the economic and human capacities of the Bank of Republic of South Sudan.

Key to South Sudan economic development and compliance with liberalised economic management is pegged on its management of exchange rate policy. The type of regime it adopts and the manner in which it utilises its capacity will have crucial role in catalysing its development.

When the government fixes exchange rate, prices of imports and inflation will be manageable from the theoretical perspective. However, the threats to fix exchange rate will possibly increase nepotism, corruption and rent – seeking in licensing of foreign currency dealers; and increase geo- economic discomfort as the case between China and United States illustrates.

This study aims to evaluate the mechanism used by the Bank of South Sudan to determine market demand of foreign currency, process and oversight over channels of distribution, capacity of Bank of South Sudan and proposed appropriate actions to enhance foreign currency management in South Sudan.

1.3 Justification and Importance of the Study

Exchange rate regimes today are dictated by high level of financial globalisation that had happened in the last forty years. South Sudan is a unique economic case. It emerged as a new nation 50 years after independence of most African countries. It is endowed with natural resources, and started from low level in terms of institutional and regulatory framework on monetary and exchange rate management in 2005.

Establishing a credible exchange rate regime that will enhance its economic stability and sustainable economic growth is crucial. This research therefore aims to evaluate economic circumstances of South Sudan's exchange rate regime.

Due to her unique economic characteristics and level of institutional and regulatory framework, there is need to evaluate the laws and regulations in place to gauge lessons learnt during commencement and advancement of foreign currency management in South Sudan; check if laws enacted conform to the demand of South Sudan economic realities. It is critical that the analysis of institutions and laws is done in a timely manner to provide lessons that will be used to improve the overall foreign currency management in South Sudan.

In South Sudan, the growth of the black market for foreign currency is a challenge that the government has grumbled with for long. This research underpins the causes, effects and ways to control the growth black of market in South Sudan.

This research is the first of its kind in South Sudan to evaluate government's policies and regulations on foreign currency management. It provides a new perspective on exchange rate

management in developing countries and sets reform agenda on foreign currency management for the government of South Sudan; provides an insight on lessons in foreign currency management and highlight weakness and opportunities on foreign currency management as part of integral monetary policy to direct and dictate economic development and growth in South Sudan.

The pioneering contribution of this research is to develop a model will explain the cause of black market premium for foreign currency in South Sudan.

1.4 Objectives of the study

- i. Review institutions, policies, procedures on foreign currency management and identify gaps on foreign currency management in South Sudan.
- ii. Evaluate distribution channels for foreign currency by the Bank of South Sudan and determine the appropriateness of these channels; investigate the cause, impact of black markets in South Sudan; and propose solutions to challenges identified.
- iii. Develop an econometric model that can be used to predict the black market premium for foreign currency in South Sudan. The model can be used to explain the cause of black market in South Sudan.

1.5 Hypothesis of the Research

- I. Poor laws, regulations and lack of oversight from Bank of South Sudan are the key causes of black market in South Sudan;
- II. The premium gains in the black market on dollars; contributed to high demand for dollars; and hence encouraged corruption and nepotism in the licensing of foreign dealers and distribution of dollars;

- III. Lack of proper mechanism to determine amount of foreign currency demanded by the market contributed to black market premium.

1.6 Limitation of the study

This research is affected by the following challenges:

- South Sudan was involved in a protracted war that lasted for over 20 years, this destroyed institutions and capacity to collect, analyse and keep data. There is no accurate data on most of the variables that I studied.
- This research was a very expensive exercise in terms of time, computer and accessories, internet, books and printing of journals.
- There was a tendency to withhold information by government officials.

CHAPTER TWO

ANALYTICAL LITERATURE REVIEW

2.1 Introduction

According to Akramet.l (2011) countries change their strategies regarding exchange rate management and adopt those regimes that are in their interest. A key determinant in adopting an exchange rate policy is the expected gains that will be accrued to a nation from the new exchange rate regime.

Nothing illustrates the role of exchange rate in economic development than the competing views, and accusations between China and United States of America. China fixed its exchange rate against the United States Dollar and this lead to cheap export for china to United States.

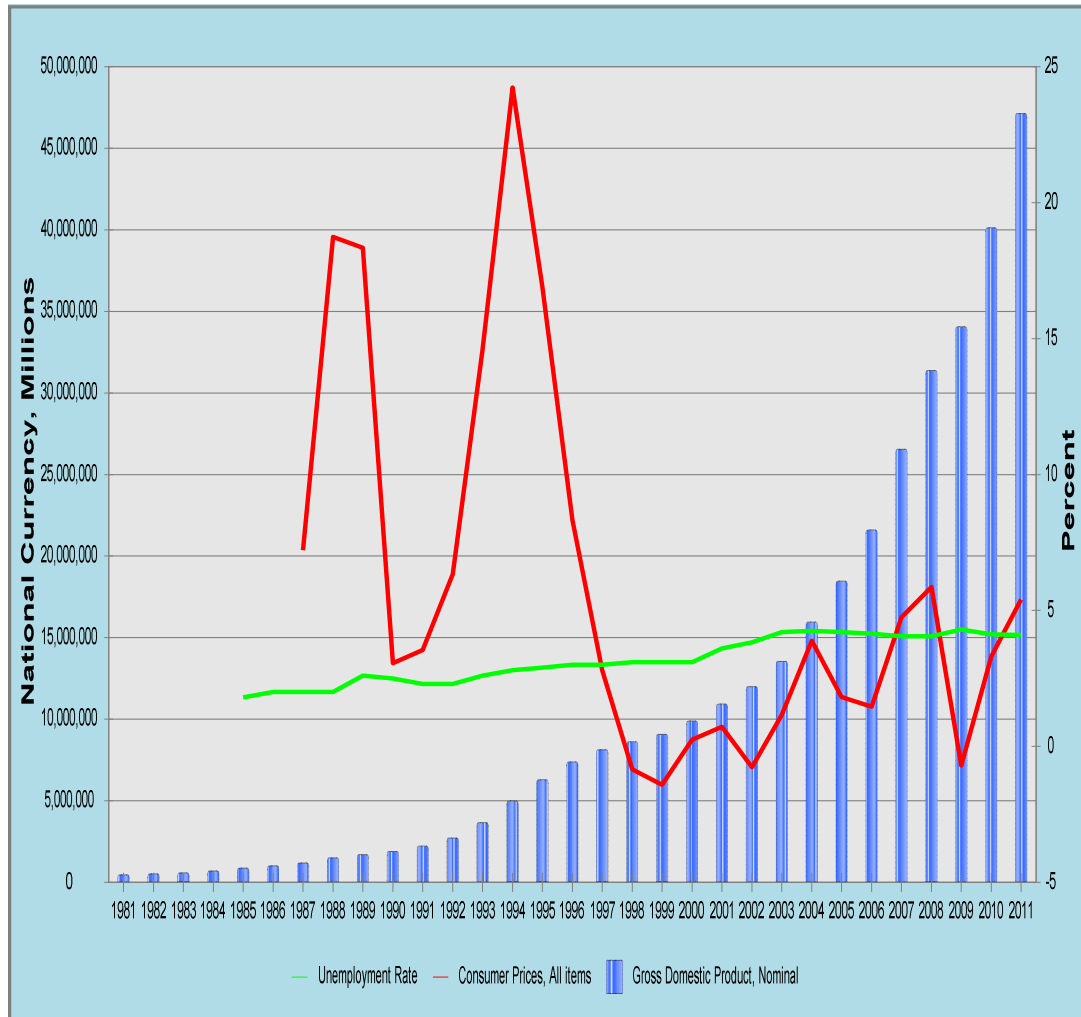
As a result of this, manufacturers have relocated to china where production has become cheaper compared to the United States. This illustrates that whether a nation adopts, a fixed or floating exchange rate regime, there are gains and losses. While a floating exchange rate is therefore beneficial for the global economy, this cannot be said conclusively from a national perspective.

As can be seen from figure 1 and 2 obtained from International Monetary Fund, the growth rate of Gross Domestic Product in China by 2011; the unemployment rate in China during the same period was less than 5% while unemployment rate in the United State was about 10%.

There was no significant difference in inflation rates during the same period. This seems to confirm that due to the undervalued Yuan, manufacturers relocated to China which led to reduction of unemployment rate and high growth rate of Gross Domestic Product (GDP).During the period of financial crisis, (2008 – 2010) while there were varied performance in GDP and employment rate between United States and China, inflation rate in

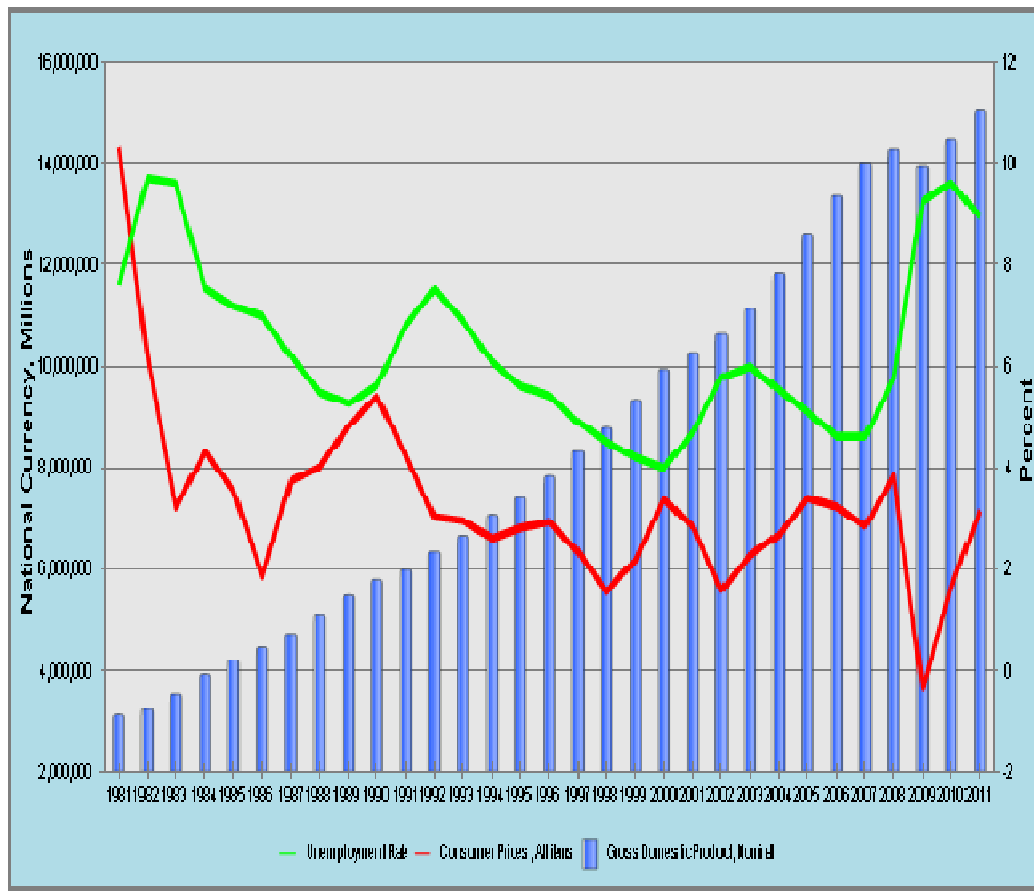
both countries moved in the same direction. This could be explained by the fact that there was reduced consumption during the crisis.

Figure 1: China's key economic indicators



Source: International Financial Statistics (IFS), Data extracted from IMF Data Warehouse, 2011

Figure 2: Key Indicators for United States



Source: International Financial Statistics (IFS), Data extracted from IMF Data Warehouse, 2011

Exchange rate had become an important economic tool for manipulation of economic system. That is why immediately after separation of the two Sudans, South Sudan and Sudan introduced new currencies exclusively controlled by their respective central Banks. This was to minimize manipulation of exchange rate which might lead to macroeconomic disturbances. As China's and United States' performances illustrate, the exchange rate policy is not a zero sum game; there are winners and losers depending on the exchange rate policy adopted by a nation's trading partner, economic endowments and capacity to execute its policies in

accordance with its strategies. The current policies adopted by Republic of South Sudan were adopted from Sudan. According Mohamed B. ELGALI, and Rajaa H. MUSTAFA1 (2012), Sudan overvalued its pound which has had an impacted on agricultural products and raising of parallel market the same problems experienced by South Sudan

To prevent the flow of old pounds into South Sudan, during the period of introduction of new currency in July 2011, the Bank of South Sudan allowed the old Sudan pound to depreciate against the dollar to prevent speculators from importing Sudan pounds to South Sudan. From the discussions with employees of the Bank, it was reported that due to poor control during exchange of old pound collected, Bank's employees sneaked out the same pounds collected and exchanges them again for new pound that was being introduced.

2.2 Debates on World Exchange Rate Management

Today more than before, countries are faced with enormous tough decisions on their exchange rate regimes. Policy makers must make choices between whether to float or fix their exchange rates. With increased focus on liberalization, supported by 1990s experiences of countries in Asian countries, floating regimes has become the most favourable choice for most developed and developing countries.

As demonstrated above, floating rates might be good for the global economy and sometimes to the domestic economy. However, a lesson from China has proved that a country can fix its rate overtime, used the exchange rate policy as a tool to enhance its economic growth. According to Kram (2004), between 2001 – 2008, United States lost 2.4 million jobs to China.

China gains from fixed regime because the undervaluation of its currency against the dollar acts as the subsidy that makes its exports to United States cheap and imports to it expensive. This is the trick and the benefit derived in China by devaluing its currency. United States

complained to the World Trade Organization about the behaviour of China. Can the World Trade Organization and International Monetary Fund force China to devalue its currency? World Trade Organization and IMF will do little as China is neither a member nor a signatory to the two institutions.

According to Cline and Williamson (2010), China exports are cheaper by 40% of the United State prices. This means that if China and United States were to compete fairly in the market, China must appreciate its Yuan by about 40%. If appreciation is done slowly, China will continue to have advantage in the world trade over other economies.

The debate on China and United States debacle raises fundamental economic questions on whether IMF and WTO have the capacity to discipline economies and nations to a fair economic play. It also raises issues of economic morality as it is clear now that market forces can be directed as demonstrated by China.

In the recent past, China has focused its attention on world natural resources. It pays little attention to domestic issues of its trading partners, as long as it gets its way to natural resources base. For the period 2005 - 2008, China accumulated 1.9 trillion USD which is equal to 20% of USD public debts, Christopher (2009).

All these strategies in my view are to ensure that China dictates world trade and I foresee the possibility of retaliation from big economies like the United States. This is likely to cause disturbances to the world economy. The view point of China is that if it liberalised its exchange rate, this will curtail its ability to set the pace for its balance of payment and good employment performance.

Fixed exchange rate according to Kram (2011) helps China to increase foreign reserves, and Gross Domestic Product.

In a globalised economy, China has to decide whether to allow floating exchange rate to prevail and hence affects its employment and fragile banking sector according to Roubini

(2007) or holds onto its guns and faces the world outrage lead by United States. This critically puts the role of international monetary systems in critical focus.

In developing countries and in Africa in particular, the exchange rate policy has always followed the international practices, and mostly influenced by the demand of the development partners as viewed by Cheserem (2006). In 1970/80s most countries in Africa fixed their exchange rates. However during 1990s, the World Bank through Structural Adjustment Programs, encouraged developing countries to liberalise their exchange rates and financial markets. However, there are costs and gains to each end of exchange rate spectrum; whether fixed or float and there was need to analyse economic situation for each country case by case by economic conditionality of each nation.

The floating exchange rate is beneficial to the global economy but if a country can sustain its fixed regime, supported by non-rent seeking institutions, a country gains more individually depending on its economic circumstances. Secondly, market forces can be dictated as demonstrated by China and therefore even floating exchange rate is never 'surely float'. Thirdly the current world financial systems need to address the bickering between China and United States on sharing losses and gains from exchange rate regimes. There is an eminent danger from counter retaliatory acts which might breakdown the global financial systems, which might be the next war in the World and fourthly, China's interest in accumulation of foreign currency, mainly the United State dollars, and natural resources in Africa are part of its wider scheme to dictate the world trade.

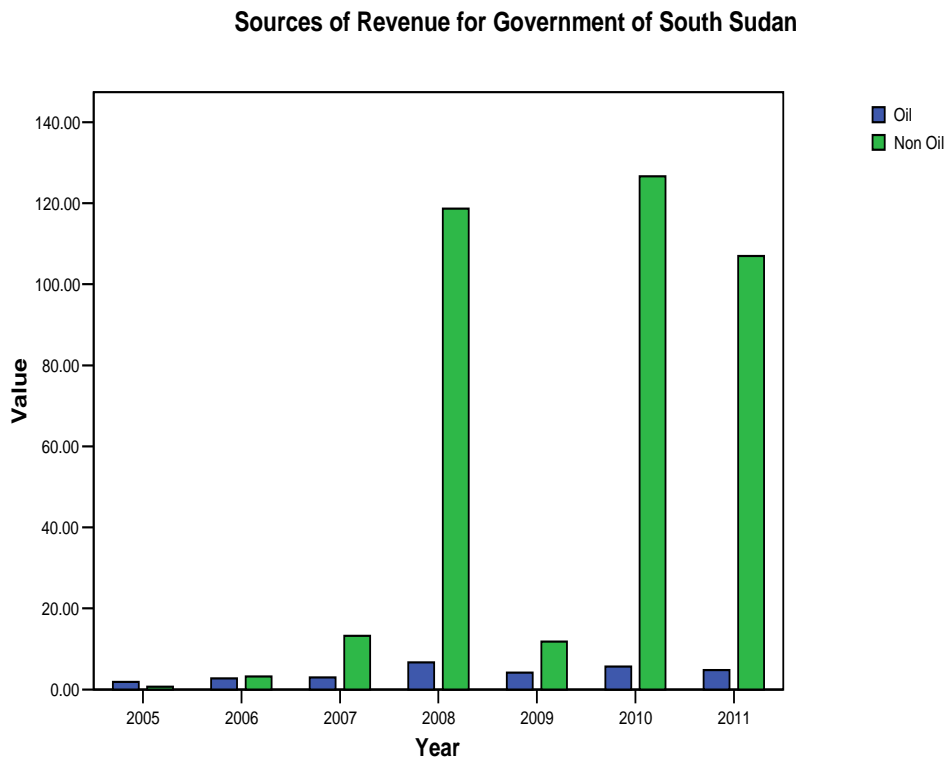
2.3 Determinants of Exchange Rate Regimes

It has not been resolved conclusively by economists whether economies should float or fix their exchange rates. What is not in doubt is the fact that whichever regime a country adopts there are gains, and losses to either trading partners or other economic agents within a country. There are two areas of research that have been identified by economists as the main determinants of exchange regimes. These are political economy and economic factors.

The political economy theory states that the regime adopted by a country is determined by the political leaders of the country and development partners. This means that the decision on the regime to adopt is not grounded in economic premises but on political whims.

On the other hand, economic factors theory says that the regime adopted by a country is purely based on the economic viability. As an exchange rate regime is key determinant on economic growth, the study uses economic variability as the basis to evaluate an exchange rate regime appropriate for South Sudan. The table below represents the income for South Sudan for the year 2005 – 2011. The table shows that Republic of South Sudan's main source of revenue is oil.

Figure 3: Main Sources of Income for Government of South Sudan (Million in South Sudan Pound)



Source: Republic of South Sudan budget, 2012, Juba, South Sudan

Deciding between a fixed and float regimes is a tricky affair. The choice of a regime is determined by level of economic liberalisation of external trade and capital, structure of production, stage of financial development and integration, inflationary history and nature and sources of shocks that a country might experience Nabli, et.al (2008).

As we have already alluded to, no exchange regime provides automatic solutions to all economic challenges. Float regimes are appropriate for developed and industrialised countries with high sophisticated financial system, diversified production and trade. Float rates enable countries to absorb shocks and allows flexibility to monetary authorities to pursue an independent monetary policy.

Fixed Exchange rate regime on the other hand, according to Robert Flood and K. Rose (1997), led to stability of macroeconomic variables. Experiences of the last forty years provided clear risk indicators. Float rate is subject to high exchange rate volatility; on the hand, fixed regimes are subject to contagion, speculation attacks and loss of investment opportunities as huge deposit of reserves are set aside to defend the fixed exchange rate.

The difficulty faced by fixed exchange regimes in Mexico, Russia, and Brazil in the 1990s has reinforced the trend to liberalise economies. But as the above analysis showed, no exchange regime provides a complete economic immunity to a nation, each country and the world at large must work in a collaborative manner to ensure that benefits or cost of exchange systems are shared, and to the extent possible each country must pursue its economic interest without compromising the world economic co-existence.

2.4 Choosing Appropriate Exchange Rate Regime for South Sudan

Republic of South Sudan's main source of revenues is oil which contributes 95% of government revenues before the oil was shutdown in January 2012 due to disagreement between Khartoum and Juba on transit fees.

In our analysis of determinants of exchange rate regimes, we noted that type of production plays a significant role in determination of an exchange regime. South Sudan as an oil producing country can sustain a fixed exchange regime. This means if it adopts a fixed exchange regime, it will have low risk in terms of running out of reserves as oil contributes to its foreign currency flows. However, the risk will be associated with lack of a reliable infrastructure to export its oil through Khartoum, a flow path that has been affected by lack of agreement on transit fees and other unfinished negotiation issues.

The level of financial development and integration is very low in South Sudan. This requires that it adopts a fixed exchange regime. The fears for a fixed exchange regime are currency attack and contagion as happened in Mexico in 1994, Russian and Brazil in 1998, Argentina

and Turkey 2000. This cannot happen in South Sudan due to low level of financial integration.

South Sudan relies on imports for most of its consumption. The country has not yet diversified its production. The level of prices in the country is determined by what happens outside the country and partly by oil revenues. The only main export is oil and teak, though export of teak is done by individual political elites to Uganda and Congo. This means to enhance the life of its masses, South Sudan must support importation by fixing the exchange rate as this will ease costs on all goods and services imported.

As noted by Nabli et al. (2008) in his research on North African countries, oil sector depends less on imported materials and is less elastic to demand so appreciation has little impact on oil exporting countries. In oil producing countries, the manufacturing sector which is more elastic will suffer in case of fixed exchange rate regime. But for now South Sudan has no meaningful manufacturing sector. In my view, favouring importation will lead to cheap cost of setting up of industries that will produce for the local consumption.

2.5 Managing Exchange Rate Policy

As Maurice Obstfeld and Kenneth Rogoff (1995) asked that if fixed exchange rates are problematic then what is the alternative. I am sure the alternative might not be exclusively floating rate as it has its problems. The alternative is to implement policies, create strong financial and credible institutions that are well supervised; supported by efficient legal and judicial systems; encourage financial intermediaries to disclose all material information.

According to Micheal Cheserem (2008) the main problems for managing foreign currency are poor legislations, lack of enforcement of laws, corruption, and lack of technical capacity by employees of Central Banks in Africa. He precisely noted that lack of independence by Central Banks to pursue macroeconomic stability contributes to problems faced by economies in developing countries.

Though we agreed that fixed exchange rate is the most appropriate regime for South Sudan under its current economic condition, the distribution channels for foreign currency has to be managed in a transparent manner and continuous efforts made to identify problems that affect macroeconomic stability in a country.

In case of a fixed regime where insufficient foreign currency is supplied to the market, this might lead to growth of a black market and consequently causing distributive injustice and contributing to inequalities in wealth distribution. It is crucial that underlying challenges in the distribution of foreign currency are well understood and workable solutions are proposed. This research provides some recommendations to improve management of foreign currency in South Sudan.

2.6 Review of Exchange Rate Models

Monetary models of exchange rate are often called structural models since they are derived from a system of equations representing equilibrium relationships in monetary markets. These models are used to determine the exchange rate between currencies. Overtime, these models have been outperformed by random walk models.

These models emerged as the dominant exchange rate models since the breakdown of the Bretton Woods agreement in the early 1970s. These models focus on the ‘relationship between exchange rate and macroeconomic fundamental variables,’ and examine the ‘explanatory power of economic fundamentals in forecasting exchange rate.’ The most popular structural models are:

Meese and Rogoff (1983a) examined three representative models:

- The flexible-price (Frenkel-Bilson) model;
- The sticky-price (Dornbusch-Frankel) model

➤ The sticky-price (Hooper-Morton) model (which also takes into account the current account)

1. The Flexible-price (Frenkel-Bilson) Model (Model 1)

Based on Purchasing Power Parity (PPP)

Monetary equilibria in domestic and foreign economies:

$$m_t = p_t + \beta y_t - \theta r_t \dots\dots\dots 2.6.1$$

$$m_t^* = p_t^* + \beta^* y_t^* - \theta^* r_t^* \dots\dots\dots 2.6.2$$

The derived domestic and foreign price levels:

$$p_t = m_t - \beta y_t + \theta r_t \dots\dots\dots 2.6.3$$

$$p_t^* = m_t^* - \beta^* y_t^* + \theta^* r_t^* \dots\dots\dots 2.6.4$$

The model is based on the assumption of continuous PPP:

$$e_t = p_t - p_t^* \dots\dots\dots 2.6.5$$

Thus,

$$e_t = c + \alpha(m_t - m_t^*) + \beta(y_t - y_t^*) + \theta(r_t - r_t^*) + u_t \dots\dots\dots 2.6.6$$

In empirical studies, researchers often imposed two restrictions as follows:

$$\beta = \beta^*, \theta^* = \theta \dots\dots\dots 2.6.7$$

And estimated the following model:

$$e_t = c + \alpha(m_t - m_t^*) + \beta(y_t - y_t^*) + \theta(r_t - r_t^*) + u_t \dots\dots\dots 2.6.8$$

2. The Sticky-price (Dornbusch-Frankel) Model (Model 2)

Allows for deviations from PPP by adding long-run inflation differential

$$e_t = c + \alpha(m_t - m_t^*) + \beta(y_t - y_t^*) + \theta(r_t - r_t^*) + \varphi(\pi_t - \pi_t^*) + u_t \dots\dots\dots 2.6.9$$

3. The Sticky-price (Hooper-Morton) Model (Model 3)

Allows for long-run changes in Real Exchange Rate by adding cumulative trade balances of domestic and foreign economies

$$\alpha(m_t - m_t^*) + \beta(y_t - y_t^*) + \theta(r_t - r_t^*) + \varphi(\pi_t - \pi_t^*) + \gamma \overline{TB}_t + \gamma^* \overline{TB}_t^* + u_t \dots\dots\dots 2.7.0$$

Where: e_t : Exchange rate; p_t : Price level; m_t : Money supply; y_t : Output;

r_t : Interest rate; π_t : Inflation; TB_t : Cumulative trade balances and (*): Foreign variables.

However, none of these models that fit the data we wanted to analyse. We therefore developed a simple regression model as explained in chapter 3 to test explanatory variables of black market's premium.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

In this section, the study outlined the research approaches that were used to collect data, present and analyse the data. In this research, we used both secondary and primary data. The study reviewed the data and foreign currency financial system for the period January 2011 – November 2012, a period in which South Sudan has managed its exchange rate policy. Tables, graphs and regression analysis were used to present a trend or a relationship.

3.2 Research Methods

3.2.1 Institutional and Regulatory Review

Institutional and regulatory environment around foreign currency management in South Sudan were reviewed. In this regard, laws and regulations were used as basis of reviews; findings from the reviews were discussed with experts and independent commentators to obtain the appropriateness of the institutions in place to manage foreign currency.

The study also analyse the oversight role of the Bank of South Sudan over foreign currency bureaus and banks; reviewed the technical capacities of foreign currency department of the Bank of Republic of South Sudan; evaluated the licensing of bureaus and distribution channels of foreign currency in South Sudan.

On sample basis, records maintained by banks and foreign currency bureaus were verified, tools and equipment maintained by bureaus were validated; weakness identified, and recommendation were made.

3.2.2 Focused Interviews of Resource Persons

Focused interviews were conducted with experts, stakeholders and traders of dollars in black market. The aim of these focused discussions was to validate issues identified in course of analysis of regulatory and institutional framework.

Economic rationale for the exchange rate regime adopted by South Sudan were evaluated, impact of this exchange rate regime on South Sudan's economic growth, distributive justices and its incentives to black market growth in South Sudan were also studied.

The study adopted a one – on – one discussion with experts, and stakeholders while fitting all issues required for validation into discussions. Development partners, individuals with expertise in finance, and economics were targeted in focus discussions.

3.2.3 Reviews of Secondary Reports and Legislation

In the course of this research, reports were reviewed and their findings were incorporated into this research. The study evaluated the appropriateness of laws taking into consideration the economic situation in South Sudan; and verified implementation and compliance with the laws enacted.

3.2.4 Model Building

An econometric model was developed to predict the black market premium as determined by the amount of dollars to supply to the market and inflation rate in a month. In this model, it is expected that in a month when few dollars are supplied to the market, the black market premium will increase in-line with law of demand and supply and Cobweb theory.

It is noted that there are many variables like interest rate, economic growth rate, and exports imports and inflation rate which affects black market's premium. However, due to lack of

data, the study has restricted the model to test the impact of amount of dollars supply to the market and inflation rate on black market premium.

Thus,

- Amount of foreign currency supply to the market in a particular month is represented by

$$M_s$$

- The official rate for the dollar be E_x
- The black market rate for the dollar be E_b
- Black Market's premium $P_b = E_b - E_x$ 3.2.4.1
- Inflation rate be Inf

The variable above is used to build a model to predict black market's premium.

When the government supply M_s dollars, it is expected a model as:

$$P_b = \alpha - \beta_1 M_s + \beta_2 \text{Inf} + \mu \text{3.2.4.2}$$

Interpretation of the coefficients

α is the black market premium that does not depend on amount of dollars supplied by the government in a particular month.

β_1 is the rate at which black market premium change when foreign currency supply change by one unit of foreign currency supply. This has to be negative because as foreign currency supply increase, this will lead to reduction in official rate and hence the premium.

β_2 is rate at which one unit change in inflation rate affects black market premium by one unit. It is positive because one unit change inflation rate leads to increase of black market premium by one unit to maintain the same level of profit by the economic agents. Here, it is assumed that economic agents have a predetermined black market premium to be maintained.

μ is the error term.

Testing the Model

Data on monthly foreign currency supplied by Bank of Republic South Sudan for the period January 2011 – November 2012 to the market was obtained and regressed black market premium on foreign currency and inflation rate.

After the data was obtained, legislations x and institutional arrangements reviewed, findings, conclusions and recommendations are presented in chapter four and five respectively.

CHAPTER FOUR

PRESENTATION OF FINDINGS

4.1 Governance and Regulatory Framework

Bank of Republic of South Sudan (BSS) was established by Bank of South Sudan Act, 2011. The bank is managed by Board of Directors as the highest policy and decision making body. The board is made up of 9 members: Governor; two deputies; and 6 non-executive members who are not employees of the Bank.

The governor and deputy governors are appointed by the president for five, four and three years respectively, in order to stagger expiry of their contract terms. Non-executive board members are proposed by the governor and appointed by the President.

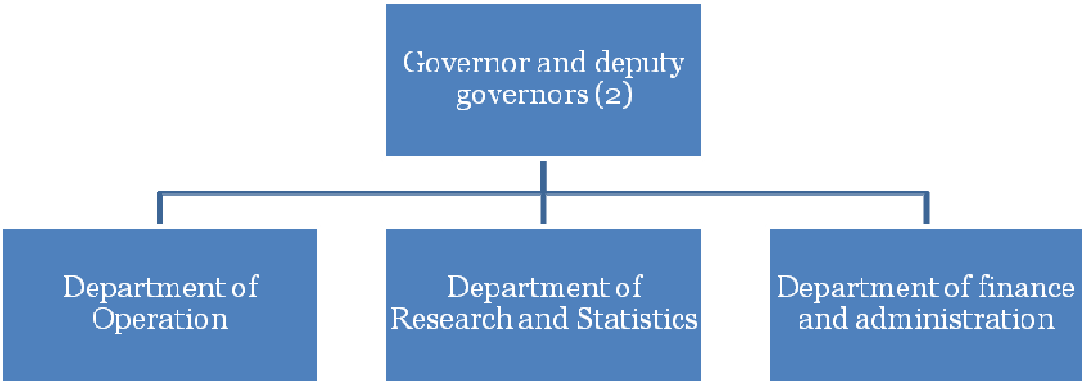
The governor is the chair of the board. From our review of the board membership, all members are economists, from whom the audit committee was appointed. The board did not have an accountant, auditor or finance expert. This has affected the ability of the board to discharge its audit function and controls related policies function according to a board member interviewed.

In selecting the board members, technical qualifications and expertise were not taken into consideration a part from 'tribal arithmetic' according to one board member we interviewed. In addition, the board is chaired by the governor who proposed other board members, this weaken the oversight role played by the board. The audit committee of the board did not have any qualified accountant and this inhibits the board to discharge its audit mandate competently.

The Bank has 3 departments (**See figure4**): namely; Operation, Research and statistics, finance and administration. Foreign currency is managed by operation department. From review of operation department, the department has two units: Banking Supervision, and Non-Banking Supervision. Each unit has no more than 3 degree holders in related fields. The

department lack capacity to supervise banks and bureaus. The employees were few and lack the required technical capacity to supervise the banks and banking institutions involved in foreign currency business.

Figure 4: Structure of Bank of South Sudan



Source: Information from the Bank of Republic of South Sudan, graph was done by the author.

4.2 Licensing of Bureaus and Banks

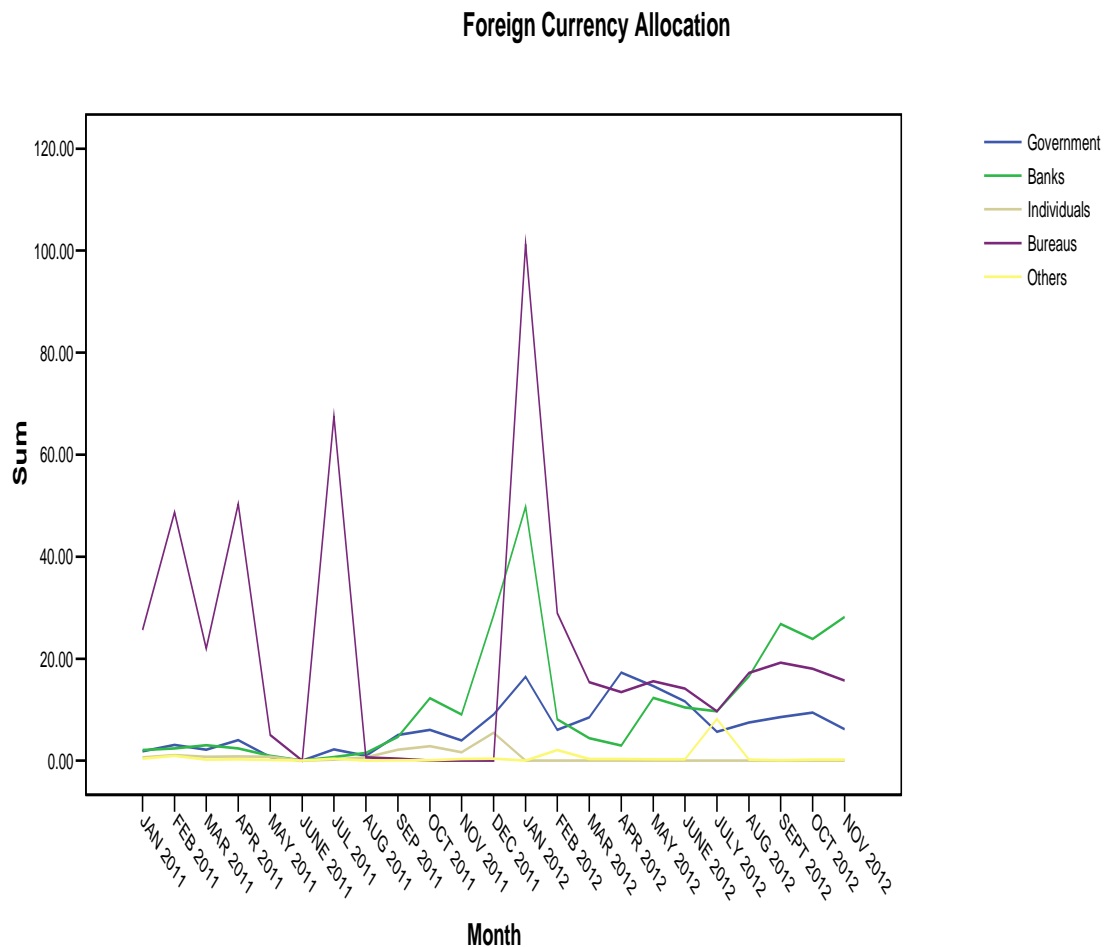
The banks and bureaus are the main dealers allowed by Banking Provisional Order Number 22 and Foreign Exchange Business Provisional Order Number 23 respectively to trade in foreign currency. Foreign Business Provisional Order Number 23 stipulates that no person other than a bank licensed under the Banking Act 2012 shall engage in foreign exchange business. However, the order is silence on technical qualifications, and capital requirement as guide to license the bureaus and this has opened window for corruptions, and nepotism.

From the data obtained from the Bank, foreign currency was supplied to individuals, government’s agencies, and Non-Governmental Organizations who are not legally allowed to buy foreign currency from the official window of the Central Bank. This opportunity has

been abused and misused by well-connected individuals within the Bank to make money from the black market due to difference between the black market and official rates.

Figure 5 presented the foreign currency supplied to various stakeholders by Bank of Republic of South Sudan.

Figure 5: Foreign allocations



Source: Bank of South Sudan, Department of Statistics, Monthly Foreign Currency Allocation (November 2012). The graph was done by the author.

As seen from the above graph, the amount of foreign currency allocated to bureaus exceed amount allocated to banks. It was also noted that there is huge allocation to individuals,

others and to government. Individuals and Non-Government Organizations were supposed to access foreign currency from banks and bureaus but allowing them to access foreign currency with official rate, create incentive for corruption and abuse as foreign currency bought at official rate can be taken to the black market.

From discussions with Bank's employees, licensing for Bureaus is done in a very ad hoc manner; no conditions are strictly followed, licenses are issued to political elites and business brokers.

4.3 Foreign Currency Management in South Sudan

Government of South Sudan has adopted a fixed exchange rate immediately after independence when foreign currency was auctioned to banks and bureaus for period of July – September 2011.

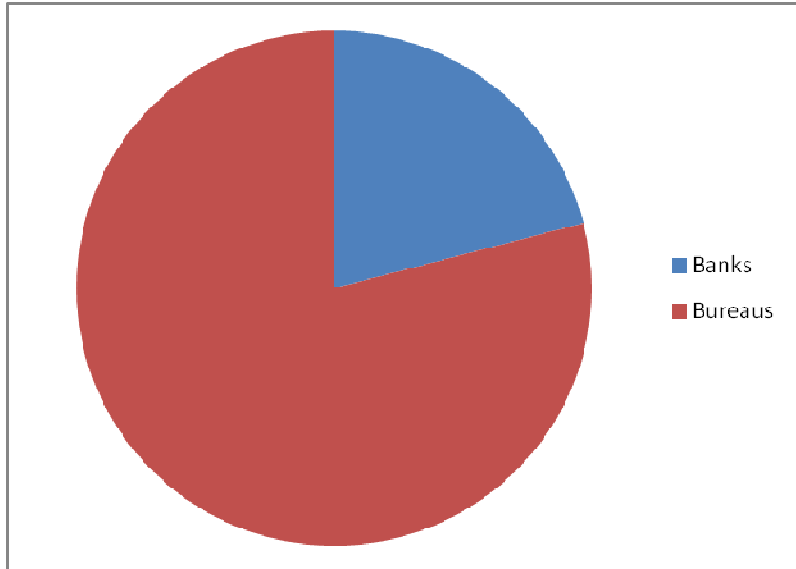
However, the above approach was overruled by council of ministers and foreign currency allocation of US\$ 500, 000 and US\$ 250, 000 is given to the banks and bureaus respectively at the rate of 2.96 South Sudan Pounds to be sold to the public at the rate of 3.16 South Sudan Pound. Most commentators and employees of the Bank agreed that auction of dollars conducted in July – September 2011 was better way to reduce the gap between the black market and official rate market. It is believe that auctioning of dollars was stopped at the end of September 2011 after powerful brokers influenced the council of ministers to revert to old way of distributing foreign currency at fixed rate to banks and bureaus and this was meant to make profit from the black market.

As at the end of November 2012, there were 68 bureaus and 18 banks. The growth of the banks and bureaus is driven by the desire to trade in foreign currency mostly in the black market. The initial capital for a bureau license was US\$ 600,000 and US\$ 1000,000 for

banks. This huge initial investment indicates an existence of incentives in this business.

Figure 6 indicates 18 banks and 68 bureaus licensed as at end of November 2012.

Figure 6: Total number of banks and bureaus as at end of November 2012

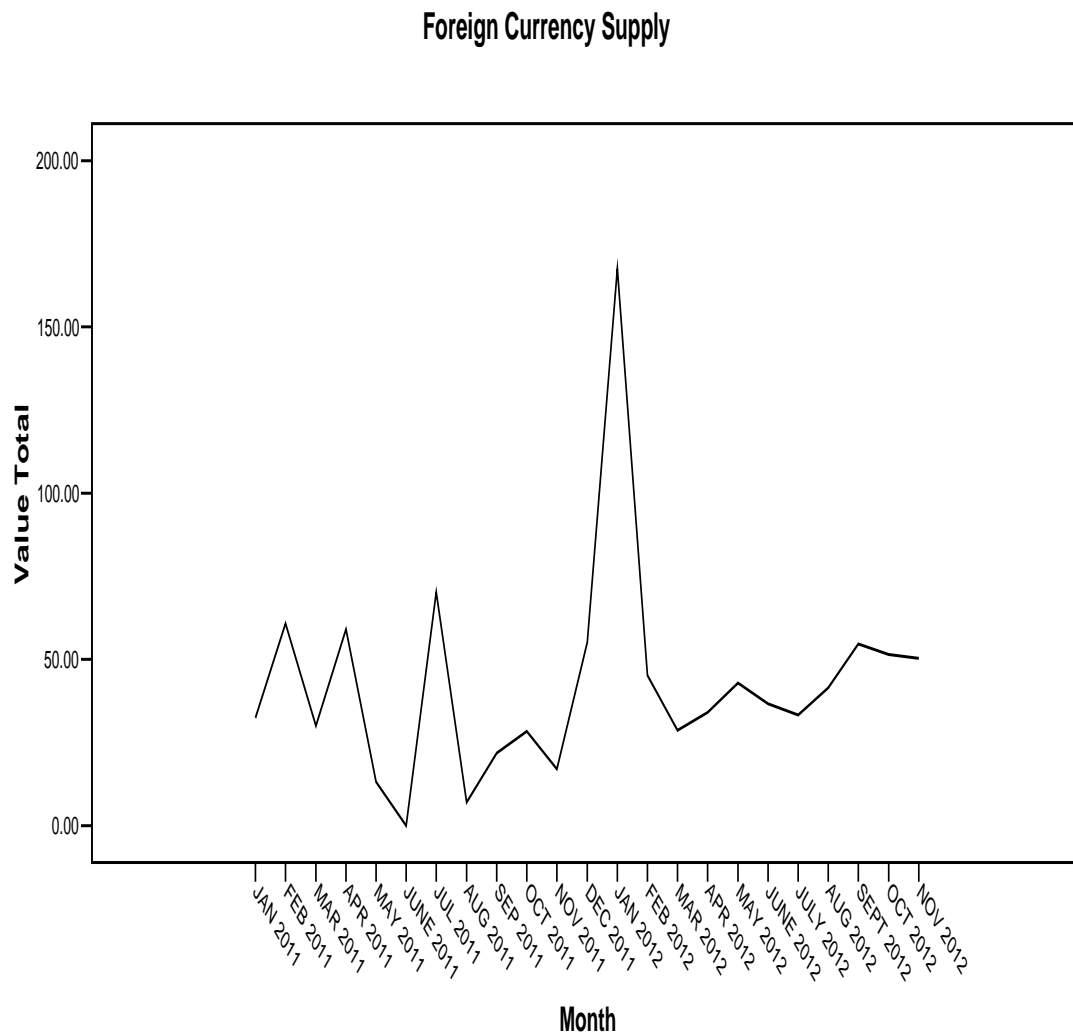


Source: Bank of Republic of South Sudan, Research and Statistics Department,(November 2012). The chart was done by the author

The allocation of foreign currency to the banks and bureaus is not based on any criteria but uniform allocations which create injustices to banks and bureaus that served many customers. From our discussion with staff of the Bank and board members, the total allocation to the market is not based on any scientific rationale but on ad hoc basis of available amount for foreign currency.

This means that there is always a chance to under supply or over supply foreign currency to the market this creates incentives for black market premium. Figure 7 show total amount of foreign currency (Million) supplied to the Market for the period January 2011 and November 2012.

Figure 7: Total foreign currency allocation for January 2011 – November 2012



Source: Bank of South Sudan, Research and Statistics Department, (November 2012).

The graph was done by the author

From discussions with the employees of the Bank, no explanation was given for any amount of foreign currency supplied in any month. The supply was based on availability of dollars and random decision of the Bank's management.

It was noted that after closure of oil in January 2012, there was increased supply of dollars to the market maybe to insist confident in the market but there was some consistence in amount of dollars supplied after February 2012.

Immediately after independent of South Sudan, the Bank of South Sudan auctioned dollars between July –September 2011, this led to reduction of gap between the black market rate and official rate. However, this approach was overruled by the council of ministers and the Bank went back to distribution of dollars at predetermined rate.

The stability between October – November 2011, can be attributed to crisis that occurred in Eurozone, dollar become stronger and as South Sudan received huge petrodollars income, its exchange rate become stable.

For the period October 2011 –March 2012, the black market price was stable. Striking was the fact that even the oil shut pronouncement in January 2012, the market did not respond to oil shutdown. Portfolio or stocks effects predict that in such cases; there should be a sharp loss of value for South Sudanese pound. Why didn't this happen?

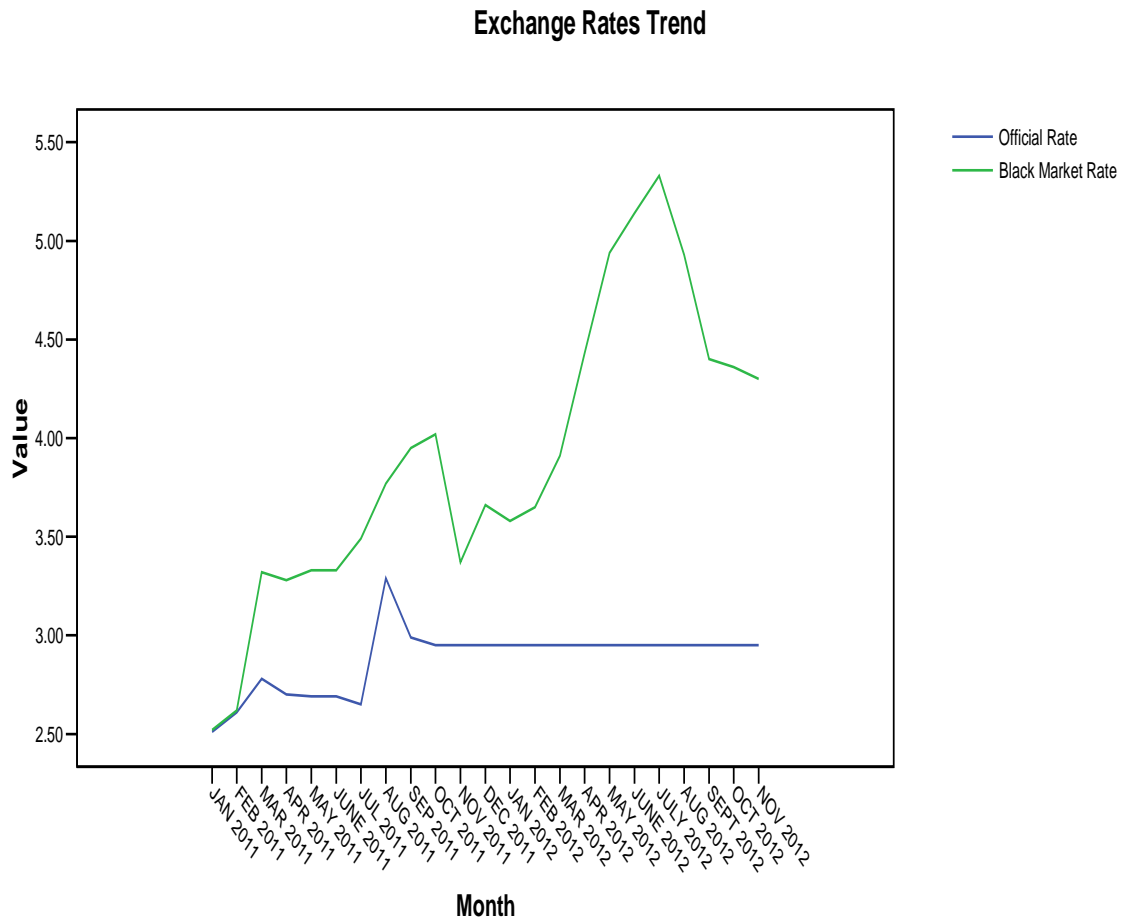
If a portfolio effect plays a weaker role, we expected current account to respond decisively by depreciation of pound immediately after January 2012 due to oil shutdown. Importers were expected to bring forward purchases while suppliers were expected to withhold their supplies to the market; all these should lead to depreciation of pounds.

A possible explanation is ignorance from the people as most people who buy and sell dollars are illiterate so they did not understood the implications of oil shut down. Secondly, the market participants didn't hold any assets denominated in South Sudanese Pound. In this case; a change in expectation didn't have any major effect. Thirdly, the government increased supply of foreign currency in January 2012that provided an assurance that the government is capable of defending the local currency.

Around May 2012, the World Bank published a memoire that criticised the Bank of South Sudan response to oil shut down crisis. The World Bank predicted that in above three months unless an alternative source of foreign currency funding is sourced, South Sudan economy will crush. During the period May – August 2012, South Sudanese pound depreciated sharply; the Bank maintained official rate at 2.95 pounds per a dollar while the black market rate depreciated above to 5 pounds per a dollar. This depreciation was due to panic by economics agents as results of concerns raised by the World Bank and G6 on their assessment of government respond to oil shut down crisis.

In September 2012, the government of South Sudan signed an agreement with government of Sudan for resumption of oil production. This new window of hope strengthened the value of the pound. The appreciation of pound could be due to supply of dollars by agents who had hoarded dollars and wanted to ripe before dollar loss value. Over this period, there was no significant change in amount of dollars supplied to the market and hence variation in dollar cost was due to speculation.

Figure 8: Black market and official rates

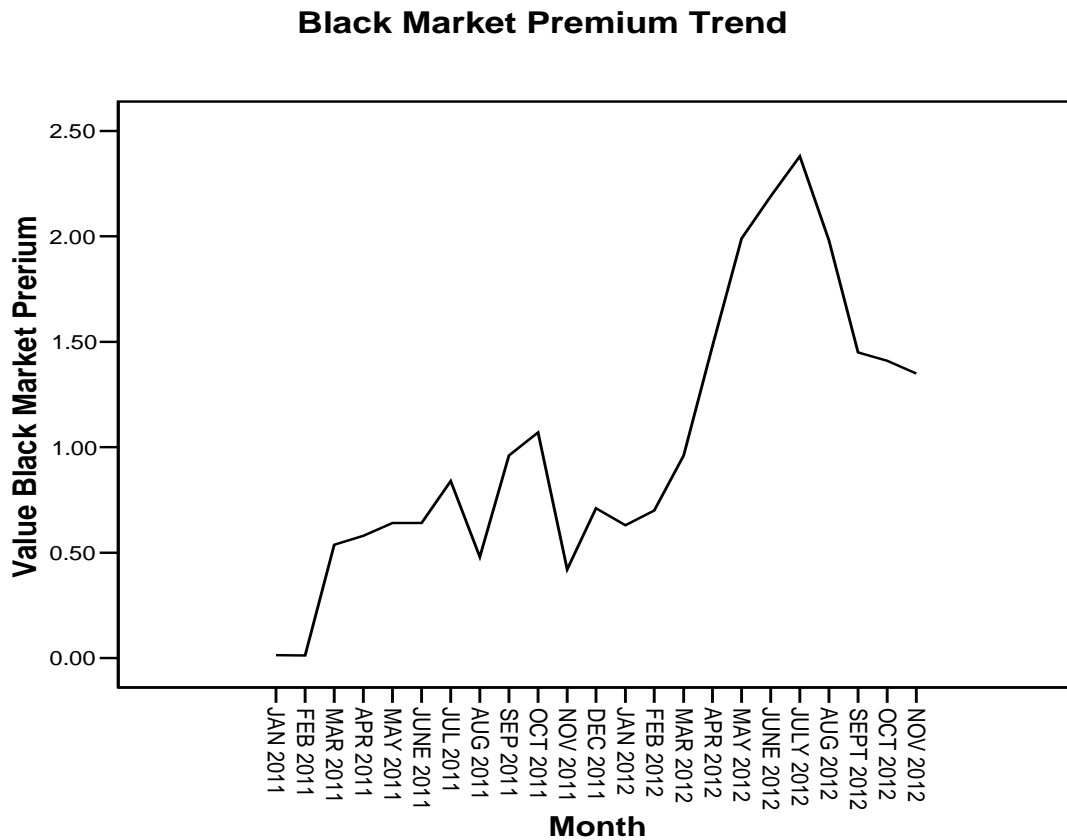


Source: Bank of South Sudan, Research and Statistics Department, (November 2012).

The graph was done by the author.

Figure8, demonstrated that despite the constant rate of 2.95 SSP per dollar used to supply dollars to the banks and bureaus, the premium in the black market increased rapidly.

Figure 9: Black Market's Premium



Source: The author computed the premium and prepared the graph for the premium

4.4 Testing the Model

The main purpose of the study was to determine the effect of exchange rate premium on foreign currency supply and inflation rate. Regression analysis combined selected independent variables with the exchange rate premium being dependent variable and foreign currency supply and inflation rate as predictors representing the independent factors. This was to determine any significance for the assumed relationships based on the magnitude and direction of the relationship.

R represents the values of multiple correlation coefficients between the predictors used in the model and exchange rate premium. The R^2 represented the measure of variability in exchange

rate premium that is accounted for by the predictors (independent variables). From the model, ($R^2 = .774$) shows that all the predictors account for 77.4% variation in exchange rate premium as summarized in table 4.1. Therefore, the predictors used in the model have captured the variation in the exchange rate premium.

Table 4.1: Model Summary on exchange rate premium

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.863 ^a	.744	.719	.36210	.744	29.094	2	20	.000	1.334

a. Predictors: (Constant), Supply, Inflation

b. Dependent Variable: Premium

Source: The table is derived from regression of model 3.2.4. 2 on data Table 4.4 and 4.5 on Appendix

The adjusted R^2 gave the idea of how well the model generalizes and ideally, its value would be the same or very close to R^2 . In our case the value of adjusted R^2 is .719, showing that if the data was derived from the population rather than the sample it account for approximately 71.9% of exchange rate premium in black market.

The change statistics were used to test whether the change in R^2 is significant using the F ratio. Model caused R^2 to change from zero to .744 and this change give rise to an F ratio of 29.10, which is significant at a probability of 5% level of significant. The analysis of variance was used to test whether the model could significantly fit in predicting the outcome than using the mean as shown in Table 4.2. The F- ratio represents the ratio of improvement in prediction that results from fitting the model, relative to the inaccuracy that exists in the

model. The F- ratio was 29.10 which are likely to happen by chance and was significant ($P < .05$). The model significantly improved the ability to predict the exchange rate premium. Thus the model was significant leading to rejection of the null hypotheses.

Table 4.2: ANOVA on Exchange Rate Premium

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	7.629	2	3.815	29.094	.000 ^b
Residual	2.622	20	.131		
Total	10.252	22			

a. Dependent Variable: Premium

b. Predictors: (Constant), Supply, Inflation

Source: The table is derived from regression of model 3.2.4. 2 on data Table 4.4 and 4.5 on Appendix

Coefficients of Academic Achievement

Table 4.3 shows the estimates of β values and gives an individual contribution of each predictor to the model. The β value tells us about the relationship between the exchange rate premiums with each predictor.

The positive β values indicate the positive relationship between the predictors and the outcome whereas a negative coefficient represents a negative relationship. The β value for inflation rate was positive and foreign currency supply was negative. The negative and positive b values indicate the direction of relationship between predictors and outcome.

From the results (Table 4.3) the model was then specified as:

$$\text{Exchange Rate Premium} = 0.574 + 0.19\text{Inf} - 3.53 M_s$$

The t test was used as a measure to identify whether the predictors were making a significant contribution to the model. When the t-test associated with b-values is significant then the predictor is making a significant contribution to the model. The smaller the value of significance (the larger the value of t) meaning greater is the contributor of that predictor. For this model the inflation ($t = 7.58$, $P < .05$) and currency supply ($t = -1.6$, $P > .05$).

Table 4.3: Coefficients of Exchange rate premium

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Partial	Tolerance	VIF
(Constant)	.574	.153		3.762	.001	.256	.892					
Inflation	.019	.003	.860	7.577	.000	.014	.024	.845	.861	.857	.993	1.007
Supply	-.3535	.000	-.172	-1.519	.144	.000	.000	-.099	-.322	-.172	.993	1.007

a. Dependent Variable: Premium

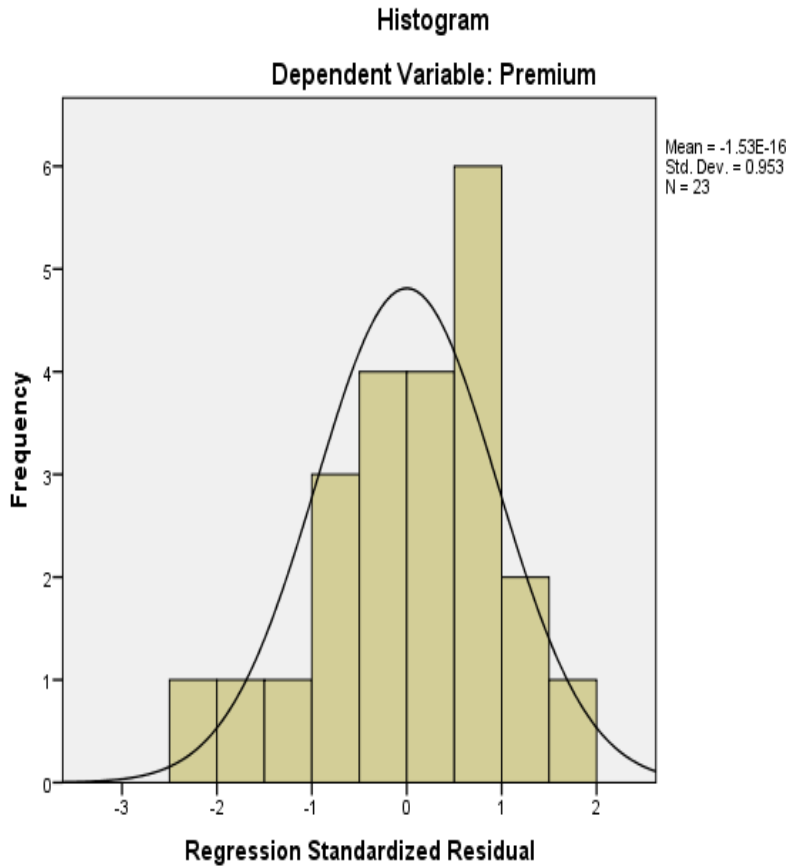
Source: The table is derived from regression of model 3.2.4. 2 on data Table 4.4 and 4.5 on Appendix

The coefficients for each of the variables indicates the amount of change one could expect in exchange rate premium given a one-unit change in the value of that variable, given that all other variables in the model are held constant. The constant is .574, and this is the predicted

value when all the independent variables equal zero. The unstandardized regression coefficient for inflation is .019, meaning that for a one unit increase in inflation, we would expect a .019 unit increase in exchange rate premium. A -3.54 unit increase in the exchange rate premium was identified for every one unit decrease in supply of currency, assuming that all other variables in the model are held constant.

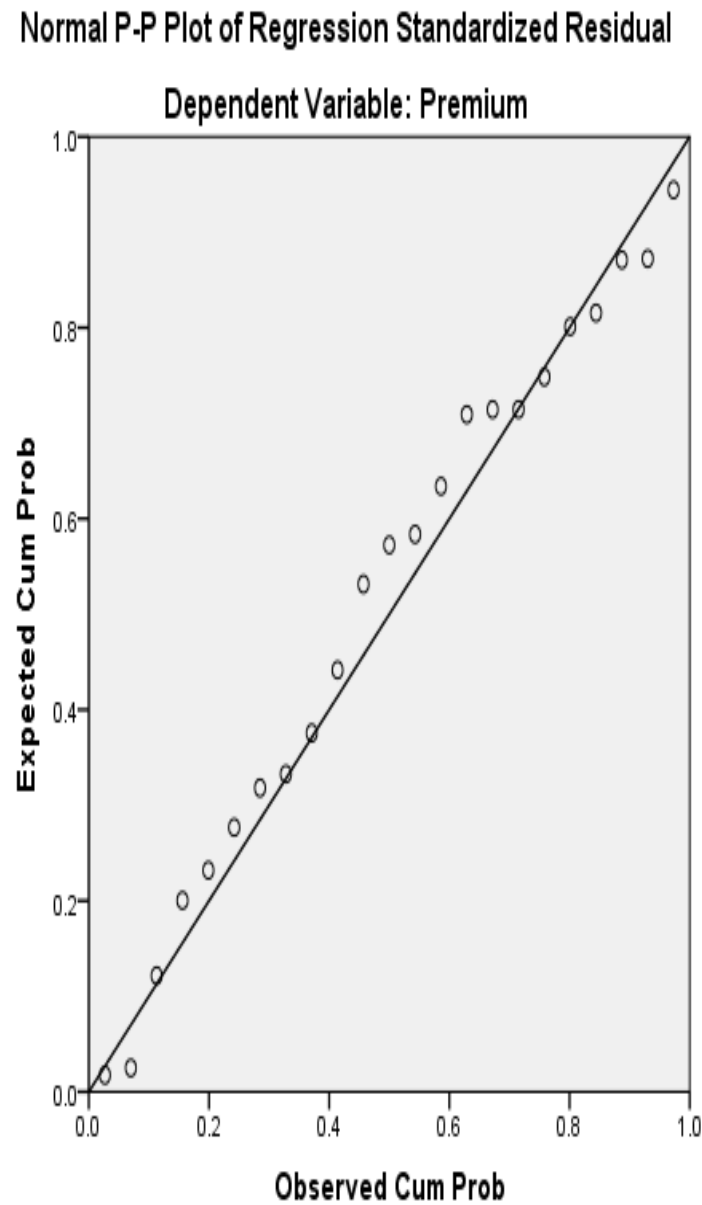
To test whether there was collinearity; tests were carried out using tolerance and Variance Inflation Factor (VIF) statistics. For this model, VIF values are all below 10 and tolerance statistics are all well above 0.2 and we can conclude that there is no Collinearity within our data (Bowerman & O’Connell, 1990).

Figure 10: Histogram of premium



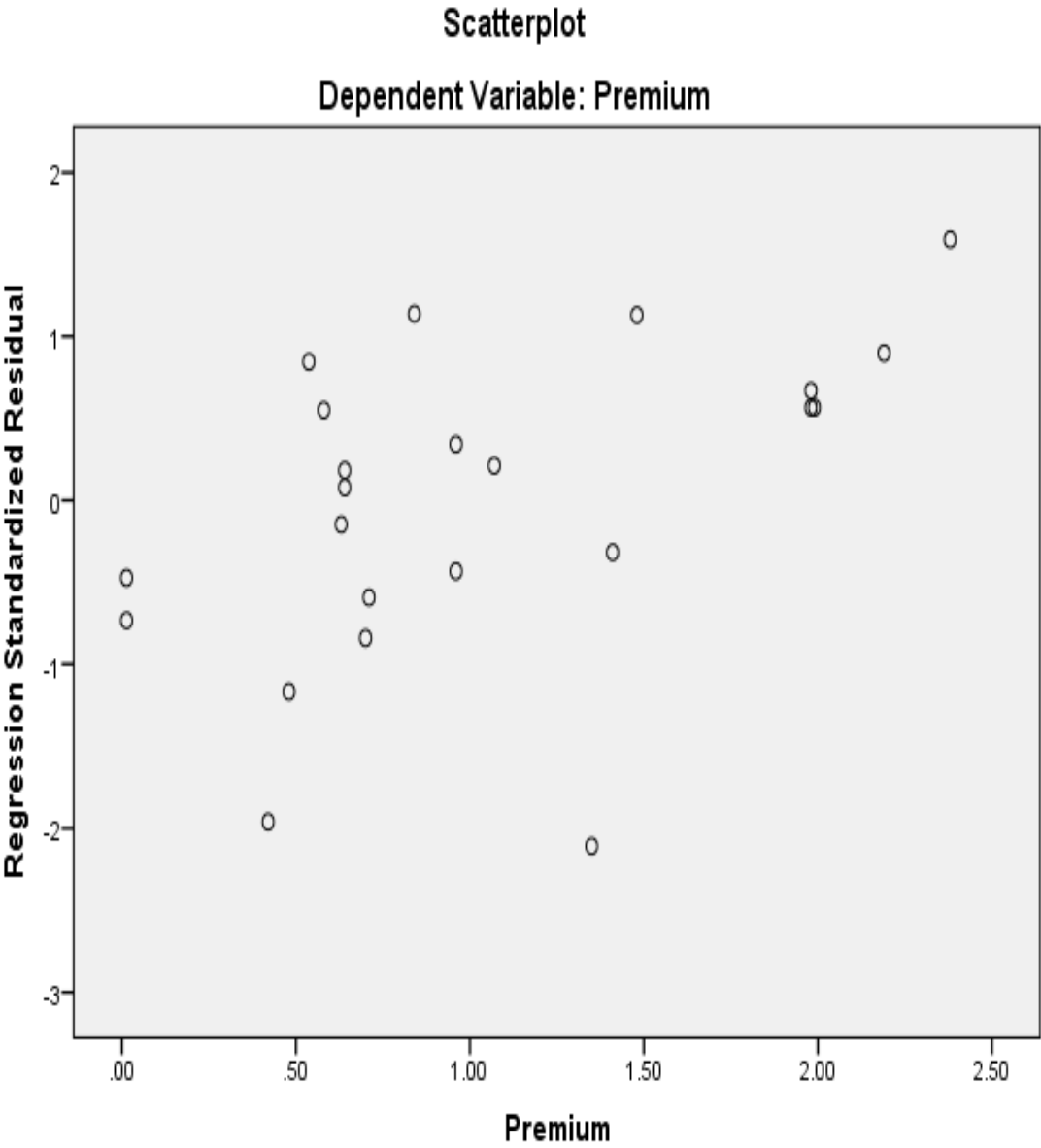
Source: The table is derived from regression of model 3.2.4. 2 on data Table 4.4 and 4.5 on Appendix

Figure 11: sketch of premium



Source: The table is derived from regression of model 3.2.4. 2 on data Table 4.4 and 4.5 on Appendix

Figure 12: Scatter plot of premium for actual and observed data



Source: The table is derived from regression of model 3.2.4. 2 on data Table 4.4 and 4.5 on Appendix

4.5 Causes of the Black Market in South Sudan

For managed or fixed exchange rate to work properly, the government must be able to supply all foreign currency demanded by the market at the fixed rate. As we have seen in our test of the model, foreign currency is main the determinant of the black market premium. In this section, we analysed key issues and incentives for growth of the black market.

- **Lack of mechanism to determine the amount of foreign currency demanded by the market**

The Bank of South Sudan does not have any scientific mechanism to determine the amount of foreign currency demanded by the market. In absence of mechanism to determine the amount of foreign currency demanded by the market, the bank can supply fewer dollars which does not meet the demand of the market.

When foreign currency supply to the market is reduced and the import is not tightened, this leads to depreciation of local currency unless fiscal adjustment is made. Elsewhere, the parallel rate is likely to depreciate significantly and driving the inflation upward. In the case of South Sudan, both inflation and depreciation of local currency happened after closure of oil flow in South Sudan which was the main source of oil revenue.

We therefore conclude that lack of clear mechanism to determine amount of foreign currency demanded by the market create an incentive for growth of black market, mostly when under supply is made to the market. In South Sudan, after closure of oil, the black market premium has grown; people with nothing to do with foreign currency queue in bureaus and banks to get dollars at 2.95 SSP and sell at black market rates; employees of commercial bank with pretence to send dollars to meet their needs in East Africa, obtained dollars at official rate at commercial banks, sent this amount to East African countries only to be send back as dollars for sell in black market and other sale dollars to companies at higher rate than official rate.

- **Corruption and rent seeking behaviour**

Many exchange windows that involves non market allocation mechanism create rents. In South Sudan, there are no clear laws on licensing and oversight on banks and bureaus. The growth of the bureaus and banks in South Sudan is driven by desire to make money from black market than the conventional banking services.

According to Christopher Adam and Lee Crawford (May 2012), the non-market rules determine which transactions are conducted at the official rate and which market participants are entitled to trade at the official rate. In fact, it was noted that individuals were allocated huge amount of dollars. How special are these citizens? If not corruption and rent seeking agents! In South Sudan, these individuals, bureaus and to some extent some banks are one and the same thing.

It is difficult to estimate amount of money loss through this corrupt practice. But from our discussions with employees of the Bank who estimated that the 68 bureaus are estimated to sell only 25% at the official rate and the 18 commercial banks sell only 50% at the official rate, the remaining is taken to the black market.

The public lost about US\$ 27.7million per month to commercial banks and bureaus. A bureau made about US\$ 301, 875 per a month while a commercial bank made about US\$ 402,500 per a month from black market sale of dollars (**See computation below**). The point is that incentive for corruption exists; and collusion between those selling dollars at official rates and those allocating public resources is high.

Computation of lost to commercial banks and bureaus

- Loss by public to bureaus for November 2012= $75/100 * 250,000(4.3 - 2.96)*68 = \text{US\$ } 20.5 \text{ million per a month.}$

- Loss by public to commercial banks for November 2012 = $50/100 * 500,000(4.3 - 2.96) * 18 = \text{US\$ } 7.2 \text{ million per a month.}$

It was noted that incentives for public procurement officers and importers to over invoice to get more foreign currency allocation to finance more imports or sell to black market at a premium. This showed that dual market generates rents. To reduce the effect of rent seeking, access to official rate should be reduced and ensure that if rent exists, they accrue to the public budget instead of to individuals and reduce the oligopolistic nature of the market.

- **Lack monitoring capacity at Bank of South Sudan**

The Bank of Republic South Sudan has never reviewed how foreign currency allocated to the bureaus and banks are distributed to the Public. The Bank has developed a Forex exchange guidelines September 2011 that stipulates documents to be maintained by bureaus and banks. However, the Bank of South Sudan has never audited or reviewed reports submitted by the banks and bureaus.

There is no clear policy on qualification of bureaus managers and this inhibits the ability of owners to report to the Bank. In absence of competent bureau owners, lack of monitoring mechanism for the banks and bureaus there are high incentives to take dollars obtained at official rate to the black market. After all, bureau owners and those who sell dollars at official rate are one and the same.

- **Political interferences**

As noted by Cheserem (2008), in absence of legal framework that shields Central Bank from political influences to pursue macroeconomics goals, Central Bank cannot deliver their mandate due to interference. In case of South Sudan in August 2011, the Bank of South Sudan started to auctions dollars to bureau and banks.

This led to depreciation of local currency but also reduced the black market premium. During the period of July 2011 – September 2011, premium for black market has reduced.

Despite the gain made by auctions of foreign currency, this approach was condemned by the council of ministers and an approach of distributing foreign currency at pre-determined rate recommended. The employees of the Bank noted that auction of dollars managed to reduce the black market premium but was outlawed by power bureau cartels who are in government.

It is clear that the black market cartel is built around people with close relationship with political elites and it is critical that efforts made to break the cartelism are resist by the cartel networks. Critical to the breaking this cartel is through reliable legislation, independent Bank of South Sudan and capable employees at the bank to ensure compliance with regulations.

- **Non enforcement of laws**

The Bank of South Sudan Act, Forex business guidelines September 2011 and Bank Provisional Act 2012 provided some key requirements and documents to be maintained by banks and bureaus. However, from our review, no monitoring mechanism has been put in place by Bank of South Sudan to monitor how banks and bureaus used foreign currency allocated to them and compliance with statutory requirement.

4.6 Review of exchange regime in South Sudan

Though a fixed exchange rate is broadly effective in a macroeconomic sense, this regime has been plagued by serious problems of corruption and rent seeking. It is not achieving the objective of stability as inflation rate follows the black market exchange rate.

The government and policy makers face very difficult situation and there is no simple option. In many respects, the fixed exchange regime fits South Sudan economic situation.

But this system can only work properly if the discipline it needs is respected. If not, black market will increase as those who access dollars at official rate take them to the black market.

South Sudan share of import is large and for government to maintain stable prices, it must fixed prices of the World Prices, second both fixed and float exchange regimes require that authorities display high degree of fiscal discipline and both are vulnerable, in their way, to loss of fiscal control. As recent events in Europe illustrate, no regime solves the fiscal problems (Adam & Lee, 2012).

Key question for South Sudan is thus: which regime is best suited for a country with weak institutions, and limited technical capacity and less vulnerable to loss of fiscal discipline. More often, the rules for running a fixed exchange regime are straightforward than conducting an independent monetary policy. A fixed regime is stable than to assess whether money supply targets are being hit – and is less reliant on technically economic analysis that Bank of Republic of South Sudan does not have.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this chapter, the conclusions and recommendations from our findings are presented in section 5.2, and section 5.3 respectively.

5.2 Conclusions

Board composition

In appointing the body, the president did not take into consideration the technical benefits each board member brings to the board. All board members are economists. This weakens the capacity of the board's audit committee and other specialised expertise like financial and legal experts. There was technical capacity to analyse foreign exchange policy issues, no balance sheet is prepared, and there is no independent of the board.

Low capacity of the Bank's employees

The Bank of South Sudan was thinly staffed; staffs did not have technical capacity to monitor banks, and bureaus and formulate policies that will solve issues the Bank faces.

Licensing of Banks and bureaus

The licensing process is very weak. Only well connected persons mostly get license for the bureaus and more often, banks and bureaus do not comply with requirements. Foreign currency was allocated to individuals which is illegal according to Bank of South Sudan Act 2012.

Lack of scientific mechanism to determine market demand for foreign currency

The Bank did not have any tool to determine the amount of dollars demanded by the market. This means that the Bank could under supply which is the key cause of black market's premium.

Corruption and rent seeking

There is high degree of corruption and rent seeking in licensing of bureaus and banks; and in distribution of foreign currency through the official window.

Auction of dollars narrow the gap between official and black market rate

When dollars are auctioned to the bureaus and banks, the official market depreciated and black market's premium reduces.

Political interferences and non-enforcement of laws contribute to growth of black market

Political interferences and lack of capacity to enforce laws and legislations contributed to the growth of black market in South Sudan.

Amount of dollars supplied to the market is the determinant of black's market premium

The model predicts that amount of dollars supplied to the market is the key determinant of the black market.

Managed regime than fixed regime for South Sudan

It was noted that with abuse of official window by the employees of the Bank, there is need to create a competitive process to access dollars at the official rate. Auction of dollars or managed rate will be better for South Sudan.

5.3 Recommendations

Board composition

There is need to create a competitive recruitment process, identify expertise needed for the board and hence the independence of the board from the Bank executive. This will improve the capacity of the board to discharge its oversight role over the Bank's management.

Low capacity of the Bank's employees

The government should allocate more resources to the Bank to recruitment capacity staffs who will monitor the reporting of the banks and bureaus; ensure compliance with laws; and create systems that are reliable for the prosperity of the financial sector.

Licensing of Banks and bureaus

Strengthen licensing of Bank and Bureaus, create an oversight over licensing and ensure that continuous monitoring of the banks and bureaus are carried out and those that do not meet the lay down conditions are closed down as when necessary.

Lack of scientific mechanism to determine market demand for foreign currency

The Bank need create a systematic scientific method of determining the actual amount of dollars that is demanded by the market this will go a long way in closing the gap between the official and black market.

Corruption and rent seeking

There is need to create controls around allocation of foreign currency, licensing, and routine monitoring. This will reduce the high degree of corruption and rent seeking that is currently being practised.

Auction of dollars

There is need to initiate reforms that encourage competition at the access of foreign currency, the government can auction the dollars or adopt a managed exchange rate regime.

Enhance independence of the Bank

The government should increase operation and policy autonomy of the Bank to pursue macroeconomic policies that are subject to review by the parliament instead of executive.

Enforcement of laws

The Bank should dedicate competent staffs that will ensure all laws are followed by banks and bureaus. There is also need to enhance the capacity of internal audit and audit's committee of the Bank.

Conduct continuous policy analysis on foreign currency dynamic

The Bank should conduct research on dynamism of foreign currency management and take into consideration emerging issues into its policy formulation and intervention.

APPENDIX

Table 4.4: Foreign currency monthly allocation

Month	GOVT	Banks	Individuals	Bureaus	Others	Total
Jan-11	1,827,450	2,095,000	6,429,595	25,585,300	421,160	36,358,505
Feb-11	3,112,720	2,400,000	11,057,780	48,721,732	978,405	66,270,637
Mar-11	2,147,865	3,020,000	7,843,400	21,954,333	228,434	35,194,032
Apr-11	4,064,300	2,400,000	8,447,000	50,320,455	313,870	65,545,625
May-11	700,600	1,000,000	7,963,400	5,073,650	123,000	14,860,650
Jun-11	-	-	-	-	-	-
Jul-11	2,218,450	720,000	2,329,550	67,503,195	423,720	73,194,915
Aug-11	997,450	1,500,000	6,355,800	631,393	15,050	9,499,693
Sep-11	5,048,428	4,705,800	21,348,070	419,530	62,580	31,584,408
Oct-11	6,065,761	12,250,000	28,250,000	34,579	86,002	46,686,342
Nov-11	3,645,390	9,100,000	16,650,000	-	372,386	29,767,776
Dec-11	9,088,498	28,515,665	54,740,254	-	412,236	92,756,653
Jan-12	16,469,667	49,800,000	-	101,250,000	-	167,519,667
Feb-12	6,088,774	8,115,510	-	28,923,594	2,115,963	45,243,840
Mar-12	8,489,992	4,420,000		15,391,747	368,500	28,670,240

Apr-12	17,290,178	2,963,200		13,462,349	368,500	34,084,227
May-12	14,614,683	12,295,000	118,156	15,621,567	300,230	42,949,635
Jun-12	11,609,119	10,455,380	157,049	14,136,453	268,647	36,626,647
Jul-12	5,660,562	9,730,712	23,732	9,692,315	8,191,761	33,299,082
Aug-12	7,498,725	16,510,560		17,212,721	204,661	41,426,667
Sep-12	8,537,516	26,830,460		19,245,574	80,180	54,693,730
Oct-12	9,414,466	23,839,190		18,030,540	184,509	51,468,705
Nov-12	6,202,412	28,184,800		15,716,947	184,556	50,288,715
Total	150,793,004	260,851,277	171,713,786	488,927,974	15,704,350	1,087,990,390

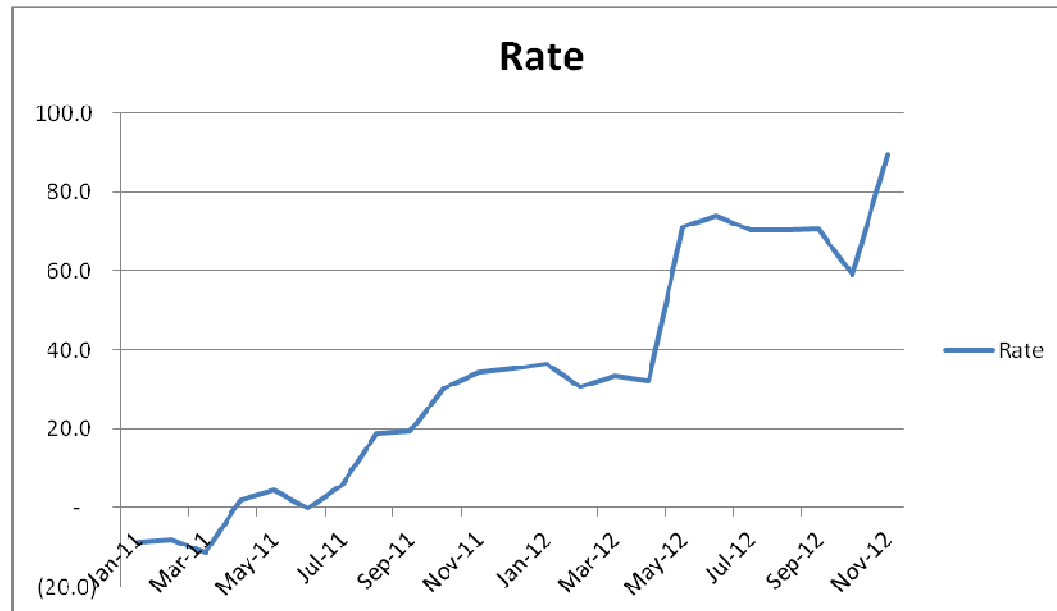
Table 4.5: Exchange Rate

Month	Official rate	Black market rate	Black market premium
Jan-11	2.5067	2.52	0.0133
Feb-11	2.6069	2.62	0.0131
Mar-11	2.7829	3.32	0.5371
Apr-11	2.7000	3.28	0.58
May-11	2.69	3.33	0.64
Jun-11	2.6900	3.33	0.64
Jul-11	2.6500	3.49	0.84
Aug-11	3.2900	3.77	0.48
Sep-11	2.9900	3.95	0.96
Oct-11	2.9500	4.02	1.07
Nov-11	2.9500	3.37	0.42
Dec-11	2.9500	3.66	0.71
Jan-12	2.9500	3.58	0.63
Feb-12	2.9500	3.65	0.7
Mar-12	2.9500	3.91	0.96
Apr-12	2.9500	4.43	1.48
May-12	2.9500	4.94	1.99
Jun-12	2.9500	5.14	2.19
Jul-12	2.9500	5.33	2.38
Aug-12	2.9500	4.93	1.98
Sep-12	2.9500	4.4	1.45
Oct-12	2.9500	4.36	1.41
Nov-12	2.9500	4.3	1.35

Table 4.6: Government of South Sudan's Revenue

Year	2005	2006	2007	2008	2009	2010	2011
Oil	1,869,075,124	2,732,921,413	2,964,530,210	6,690,924,370	4,121,464,187	5,630,253,974	4,782,100,000
Non-Oil	646,954	3,178,001	13,274,969	118,652,071	11,833,744	126,586,605	107,000,000

Figure 13: Inflation trend



Source: Bank of Republic of South Sudan, November 2013

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