AN INVESTIGATION INTO THE EFFECTS OF SEIGNIORAGE IN FINANCING PUBLIC PROJECTS IN KENYA

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DECLARATION

This research proposal is my original work and has not been presented in any other University for the same award.

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This work has been submitted for examination with approval of the University Supervisor.

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F.W.S. NDEDE

Declaration by Chairman
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ABSTRACT

The development of public projects in Kenya is one of the flagship areas for the country to advance into a developing economy. This has been entrenched by the country in its latest development master plan, well referred to as Kenya, Vision 2030. This strategy paper has earmarked a growth rate of 10% in a number of years for key sectors such as tourism, agriculture, trade and manufacturing. However, achievement of such grand plans becomes impeded if there are not enough funds to spur this developmental growth. This study therefore has taken a look at Seigniorage and investigated its effects in financing government projects. The objectives of the study was to determine the cost of issuing banknotes and coins, to determine the income derived from the issue of banknotes and coins and to evaluate the extent that income derived from the issue of banknotes and coins can have an effect in financing public projects in Kenya. The study adopted the descriptive design method and a questionnaire administered to 14 respondents on a census basis. The study was also longitudinal and therefore it analysed data from the financial statements of the Central Bank of Kenya over a five year period so as to determine the currency in circulation growth and eventually derive the Seigniorage income that could result from this issue. The study was conducted in Nairobi, Kenya primarily at the Central Bank of Kenya. The study was facilitated by use of both primary and secondary data which were collected, collated and analysed statistically using mean, mode and range. The dependent variable for this study was financing of public projects and the independent variables were costs of issuing currency, derived income from issue of currency and the recognition of this income. The intervening variables were state of the economy, political stability and adopted accounting policies. The research revealed that currency in circulation has been on an upward trend and the total costs associated to these currencies much lower than the face values ascribed. With the positive trajectory in circulation growth and the much lower investment costs for getting these products to circulation, the uptake of another revenue source seems to be in the offing. Whereas incorporation of Seigniorage revenue as an important revenue stream could be considered for the Central Bank of Kenya, primary adoption should not be the focus as it may deter focus to revenue generation and not price stability. With the right focus, the possibility that Seigniorage income will more often than not be positive and in the billions annually, the overall effect to development of infrastructure in Kenya will be phenomenal. Financing of public projects in Kenya can be dependent on revenues from Seigniorage adoption and implementation.
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DEFINITION OF OPERATIONAL TERMS

Central Bank – This is the country’s currency issuing authority which is also in charge of monetary policy and price stability.

Currency – This constitutes banknotes and coins legally issued by a country’s central bank or monetary issuing authority for the purpose of purchase of goods and services.

Currency issue – This is the operational process of supplying currency to the economy of a country.

Issuing authority – This is equivalent to a central bank in some other countries.

Public projects – This are initiatives carried out by a government on behalf of its people, the citizenry for their use.

Seigniorage – this is the net revenue derived from the issuing of coins or bank notes.
CHAPTER ONE: INTRODUCTION

1.1 BACKGROUND OF THE STUDY

1.1.1 Development of currency notes and coins

The world today uses currency banknotes and coins for transactions on a daily basis. However, this was not the case from the beginning of days as the process has evolved over time. The world in itself had from the beginning abundance in terms of basic requirements. However, the demand for other needs led to people seeking a form of exchange primarily for goods to goods. This is what led to the beginning of what is commonly referred to as the barter trading system. Homer in the seventh book of the I1ad which dates back to 1194 BC, mentions that “all the other Greeks hastened to purchase, some with brass, and some with gleaming iron; some with hides, cattle or slaves (Avebury, 1903)

However, carrying out transactions under the barter system proved to be cumbersome and inefficient. Furthermore, not all those who wanted to buy found what they wanted nor were they able to provide all that the sellers required. It also took much time to haggle between a seller and a buyer to reach an agreement on the relative values of different items. In order to barter, you have to find someone who wants what you are offering and is at the same time offering something you want, and then you have to agree on the same value (Robertson, 2007). In Africa and the East Indies for example, the use of shells such as cowries became the primary choice for exchange and this eventually spread to China.

The use of coinage came into being first from the Chinese after it was discovered that coins were convenient, due to their ability to carry, easy to identify and easy to divide. Coins were also not susceptible to quick decay and were easy to weigh and attach a value
to them and hence the use of weights often passed as coins or money such as shekels, the lira and the pound. The Bible also mentions money very early in the book of Genesis Chapter 17, verse 12 – including those born in your household or bought with money from a foreigner. In Genesis 20:16 the use of coins as money was clearly described – “I am giving your brother a thousand shekels of silver”.

Historians attribute the introduction of banknotes to the Chinese. In the reign of Emperor Outi, about B.C. 119, the court was in want of money, and to raise it, Klaproth mentions that the Prime Minister hit upon the following device. When any princes or courtiers entered the imperial presence, it was customary to cover the face with a piece of skin. It was first decreed, then, that for this purpose the skin of certain white deer kept in one of the royal parks should alone be permitted, and then these pieces of skin were sold for a high price. But although they appear to have passed from one noble to another, they do not seem ever to have entered into general circulation (Avebury, 1903).

From the 13\textsuperscript{th} century paper "bills of exchange" helped merchants and bankers to do business in different places. Instead of carrying heavy loads of various kinds of coins with him, a merchant could buy a paper bill of exchange from his banker before he set out. It would instruct the banker’s agent in another city to pay the merchant a certain sum of money in that city’s currency on a certain day in the future, so that he would have the right money to spend when he got there (Robertson, 2007).

Bankers and goldsmiths also gave paper notes as receipts and "promises to pay" to customers who had deposited coins and gold and silver with them for safekeeping. In the course of time, people began to pass on these bankers' notes to one another as a convenient means of payment. Over the following centuries the notes became a widely
accepted substitute for money, and eventually they were recognised as actual money. That is how banknotes came into existence.

1.1.2 Costs of issuing currency

Determination of costs that are associated with the issuing of currency are key to determining the amount of Seigniorage a country can generate from keeping its own currency. In order to be able to gauge the gains, for a central bank for issuing currency, there is need to establish concrete statistics on the circulating and net issuing volumes per denomination of currency, as well as on the production cost structure.

Kenya’s central bank reflects costs associated to currency in its financial statement as currency expenses. The expenses have been further categorised as either production or issue expenses and further as to whether they pertain to notes or coins. With the increased demand for a country’s currency, it is expected that the costs associated to production and issue will also rise.

1.1.3 Income derived from currency issue

All Governments have an issuing authority for currency banknotes and coins. The cost of these notes and coins is often much lower than the face value or issue value for these currencies. The accruing benefit from the issue of currency is what is referred to as Seigniorage. The adoption of Seigniorage, though global, is often technical and not widely adopted by many governments issuing authorities.

Seigniorage is a derivative of money. Therefore, without money, it would be even hard to place taxes on anything other than the production, transport and trade of goods, since only goods (or labour time) could be delivered. By the same token, taxes payable in monetary
form raise the demand for base money. Since a government obtains Seigniorage from money creation, this benefits the fiscal position twice over, not only from taxes levied but also from the Seigniorage resulting from the induced monetary demand. This was, as Lerner (1954) notes, one of the major reasons for the introduction of Confederate currency by the South in the US Civil War (Goodhart, 2004).

Seigniorage income is completely a preserve of a central bank. However, understanding of central banking operations has been a challenge to several Finance experts. Standardised reporting of revenues and expenses has not been achieved due to diverse ways of accounting policies and practices adopted. Indeed, most Monetary Authorities (Central Banks) fail to make timely, full and fair disclosures of their financial positions. This allows them to operate under a thick shroud of secrecy (Sekerke, 2003). The confidentiality that surrounds the operations of a central bank has also further compounded the achievement of such standards.

With the unlikelihood that currency for a country will ever cease to be produced, the argument for Seigniorage use is further strengthened. In practice, cash is unlikely to be superseded by plastic (or other electronic wizardry), as a means of payment (Goodhart, 2004). Cash has the advantage of anonymity (for black and grey market purposes), whereas electronic transfers are traceable and thus the preference. Provided that central banks continue to provide the useful services to government, including managing monetary policy and the financial systems successfully, then the government in turn can make sure that the central bank remains the sole monopoly provider of the high powered monetary base, thereby leading to constant supply of Seigniorage.
1.1.4 Challenges associated to currency issuing

The issue of currency notes and coins for any country is a preserve of its central bank or monetary issuing authority. These institutions are one per country and do not generally avail much information in regard to their operations. As a result, homogeneity is not observed between global central banks in how they carry out the currency issuing functions. The Reserve Bank of New Zealand for example issues its currency by use of cash in transit firms while others like Canada and India use the commercial banks and agencies. The Kenyan case is issue directly by the Bank to the market without intermediaries.

Another challenge in issue of currency is the planning and logistics associated to the issue. Currency being a highly sought after commodity generally attracts all and sundry as it is being moved from one point to another. The same case applies to currency that is being issued by the central bank to either the commercial banking networks or to its own offices. Arrangements of logistics to ensure safe delivery of the product to the intended destination is always a challenge as it involves minimum personnel yet the expected outcome is meant to be successful.

The issue of currency is also affected by counterfeiting, which is a common vice in the money industry. In a detailed analysis for the year 2002, Judson and Porter estimated the value of the counterfeits passed at about $40 million for the United States only. This is a sunk cost to the central banks and so the reason for continuous fight to minimise the proliferation of counterfeits. Indeed, Robert Rankin, Assistant Governor, Currency of the Reserve Bank of Australia and Chairman of Note Printing Australia, points out that “one benefit of having very low counterfeit rates [...] is that there has not been the same
pressure as in other countries to upgrade the banknote series with enhanced security features or to introduce a new banknote series” (Bouhdaoui et al, 2010)

The other challenge of issuing currency is the expected lifespan of the currency viz the actual lifespan. Ideally currencies are prescribed ages to which they are expected to circulate. However, and especially in the African context, the currencies do not last as long as they are expected to due to their improper handling. Some of the parameters considered in determining the lifespan of currency are dependent upon climate and culture of the country and other factors involved in note withdrawal (Odozi, 2010).

With some of these cited challenges, Central Banks world over have to continuously deal with the factors that affect their smooth operations in issuing currency and eventually hamper their ability to generate Seigniorage.

1.1.5 Status of issuing currency in Kenya

Kenya as a nation began issuing its own currencies in 1964, after gaining independence from the British rule. However, as a primary British territorial base, the issue of currency did not begin after independence but way back in the 19th Century.

Entry of what is commonly considered as real currency in Kenya can be traced back to 1800 - 1850 when the Maria Theresa Thalers were introduced in the Kenyan coast. The Thalers were 18th and 19th Century silver coins used by Indian, Greek and European merchants at the Eritrean and Kenyan coasts. Despite the Thaler’s popularity in the East African Coast, it was not able to penetrate upcountry. The Indian Rupee which was used for payment of Indian workers during the building of the Kenya – Uganda railway in 1896 and managed to move inwards becoming acceptable by the African population who
in various mother tongues called it different names such as "Rupia" or "Pesa" (Central Bank of Kenya, 2008).

In 1897 Harry Jackson the leader of the British East African Protectorate (B.E.A.P.) introduced a new currency called "Specie" and "Pice" but it was not successful and hence in 1905 the Indian Rupee was made the official currency of the B.E.A.P. (Kenya-Uganda). For coins, the denominations produced were 1/2 Cent, 1 Cent, 5 Cent, 10 Cent, 20 Cent and 50 Cent whereas for notes the denominations produced were 1 Rupee, 5 Rupees, 10 Rupees, 20 Rupees, 50 Rupees, 100 Rupees and 500 Rupees.

The Indian Rupee was abolished after Kenya became a crown colony in 1920 when the Imperial British East Africa's (IBEA) mandate was terminated. A central body known as the East African Currency Board was then established to oversee the issuance of currency in the region. The Board comprised of four commissioners who reported to the secretary of state for colonies under the advisory of the Bank of England. Replacement of the Indian Rupee was to be done using the East African Protectorate Rupees. This was however short-lived as the East African Florins were instead introduced (Central Bank of Kenya, 2008).

In January 1922 the shilling equivalent was introduced in all the three East African countries and by June 1923, the E.A. shilling was firmly established as official currency in Kenya, Uganda and Tanganyika.

In 1964 after the independence of Kenya, Uganda and Tanganyika, there was a desire to establish a common East African Central Bank. Interim currencies were therefore introduced by the EACB to circulate within the region. For banknotes, the interim currency was commonly known as the Lake Victoria Money because of the background
of Lake Victoria on the notes. The Lake Victoria designed notes were in the denominations of 5, 10, 20 and 100 shillings. There were also a number of coins minted and referred to as the "Uhuru" coins since they too had no head or monarch on them (Central Bank of Kenya, 2008).

Kenya began printing and minting its own currency in 1966 under the mandate given to the Central Bank of Kenya in the Central Bank of Kenya Act cap 491. The initial issue of Kenya shilling notes were in the denominations of 5, 10, 20, 50 and 100 shillings, all bearing the portrait of the First President of Kenya, H.E. Mzee Jomo Kenyatta in the front, and diverse scenes of economic activities in Kenya at the back. Denominations have progressively changed since then and the current denominations of banknotes and coins in circulation include 50 cent, 1 shilling, 5 shilling, 10 shilling, 20 shilling and 40 shilling; Notes, 50 shilling, 100 shilling, 200 shilling, 500 shilling and 1,000 shilling.

1.2 STATEMENT OF THE PROBLEM

Kenya, like any other developing economy has problems with financing of public projects and has often used both domestic and foreign borrowing to finance her projects.

As her development plans, Kenya has in the past developed several blue prints, the latest in this series being the ambitious strategy paper, Vision 2030. In order to achieve development goals as set out in this strategy paper, an economy needs to have very clear strategies in financing its activities. However, this is not possible if the nation is constantly grappling with the challenge of dealing with deficits. A sustainable reduction in the budget deficit can only be achieved by increasing the rate of growth of government revenue (Gatheru and Shaw, 1998).
In the 2010 Kenya's budget speech for example, it was estimated that total revenues would amount to 686.9 billion shillings comprising of 609.6 billion in ordinary revenue and 80 billion in appropriations-in-aid, that is, fees charged to the public by government institutions such as amounts paid to enter national museums. Total revenues for 2010/2011 financial year were estimated to under-perform by about 3.2 billion shillings (The Accountant, 2011).

To attempt to address this issue of having constant deficits, one way of financing projects is by generating funds from within and at a cheaper cost. A method that could be applied in such situations would be the use of Seigniorage. This study therefore intended to find out how Seigniorage could be applied in the Kenyan case to bridge the gap in financing of public projects.

1.3 OBJECTIVE OF THE STUDY

1.3.1 General Objective

The main objective of the research was to investigate the effects of Seigniorage in financing public projects in Kenya.

1.3.2 Specific Objectives

The specific objectives of the study include:-

i. To analyse the cost of issuing currency banknotes and coins in Kenya.

ii. To determine the income derived from the issue of currency banknotes and coins.

iii. To evaluate the extent that the income derived from issue of banknotes and coins can have an effect in financing public projects.
1.4 RESEARCH QUESTIONS

The following research questions were used.

i. What are the costs associated to the issuing of currency banknotes and coins in Kenya?

ii. What is the income attributable to the issue of currency banknotes and coins?

iii. To what extent can the income derived from issue of banknotes and coins have an effect in financing public projects?

1.5 SIGNIFICANCE OF THE STUDY

It was expected that the study would provide new information to the public on the possibility of future developments by use of a new financing option. The study was expected also to provide vital information to the government of Kenya regarding the possibility of other forms of public project financing. In addition, the recommendations arising from the study would give experts in the field of finance a critical perspective on the challenges of adopting standards for central bank reporting. Finally, it was expected that the findings and recommendation, resulting from the study would add to the existing body of knowledge and serve as reference material for academia in conducting further research in this area.

1.6 SCOPE OF THE STUDY

The main area of research was at the Central Bank of Kenya which is the only institution mandated to issue currency in the country. The research brought out various aspects of public projects that the country envisages to drive its economy to growth and prosperity. Both primary and secondary data were analysed and results there from deduced for the purpose of making reasonable conclusions and recommendations. The Bank's financial
statements formed a key part this study. Other literatures were also used as broadly as possible to give credence to this project.

Data sought in this study was primary data collected via use of questionnaires. The secondary data was mainly from other research and publications relevant to this study both within the Bank and from experts in the field of Seigniorage. The study considered 15 respondents as the census from Central Bank operatives in this area of study.

1.7 LIMITATIONS OF THE STUDY

A number of challenges were experienced in the course of carrying out the study key among them being respondents' avoidance to answer the questionnaires provided for data collection. Some of the respondents literally did not want to answer and did not answer the questionnaires provided. In a number of instances, the respondents had to be convinced that the information they were divulging was only going to be used for academic purposes and that most of it was already in the public domain and that they were not to disclose anything that was confidential. It also worth noting that one of the expected respondents changed roles leading to the earlier projected census reducing by one.

As questionnaires were used for primary data collection, reliability of the data collected came into focus. At least one of the respondents seemed to have duplicated answers from another respondent and thus casting doubts as to the reliability of all data collected. However, since such a case seemed to be only one and to particular questions, then the possibility of skewed results was eliminated by averaging to all other results obtained. Triangulation of data from other secondary sources also reduced reliability on only primary data which could have been inaccurate.
The technicality and complexity of delving deep into the subject matter also posed as a challenge and limited the extent to which this study was done especially due to the fact that most of the material in this topic has focused on the field of Economics and not Finance. However, attempts were made to cover all the areas to the largest possible extent including seeking assistance from some of the experts in this field of study beyond the country's borders.
2.0 INTRODUCTION

In this chapter, the study undertook to explain the theoretical and empirical background that provides the premise of the study. It begins by providing details on what Seigniorage is and how it works. The chapter also delved into the historical development of Seigniorage, accounting and reporting of incomes generated from Seigniorage, the country’s financing of public projects, theoretical framework, variables being analysed that is dependent, independent and moderating variables and conceptual framework.

2.1 THE SEIGNIORAGE CONCEPT

Seigniorage is the net revenue derived from the issuing of coins or bank notes. It arises from the (often substantial) difference between the face value of a coin or bank note and the cost of producing and distributing it (Bank of Canada, 2001). It is only the Central Bank or Currency Issuing Authority of a country that can derive an income out of Seigniorage as they are the only ones with the mandate to issue notes and coins.

Seigniorage is literally all about making money from making money; however, the practice of Seigniorage has grown to the control of government securities held by the central bank as a substitute to the currency in circulation. With the possibility of making money quick for central banks, they need to be careful to raise Seigniorage revenue accordingly and not lose their independence over their money supply policy (Sekerke, 2003).
Seigniorage is defined as the ratio of the increase in the base money to the total government revenues. This being a more detailed definition of Seigniorage notes that the importance of Seigniorage is relative to other sources of government revenue and differs markedly across countries. Countries with a more unstable and polarized political system tend to have more inefficient tax structures and thus will rely more heavily on Seigniorage as their principle revenue source (Tabellini et al., 1992). From their definition, it goes to show that Seigniorage is actually a quick source of income since it is the method of choice to countries that cannot sustain revenue generation through other means such as taxation. This does not however imply that Seigniorage is for failing countries. Canada for instance has had its Seigniorage revenue fluctuating between 1.7 and 2.2 billion Canadian dollars per year yet it is considered as one of the most stable global economies.

Lonnberg noted that Seigniorage is income derived by central banks when the income from the monetary base is at zero (Lonnberg, 2008). He however went ahead to note that the global decline in inflation has undoubtedly slowed the erosion of central bank Seigniorage caused by technological innovation away from the use of cash and unremunerated balances at central banks, but this has not been sufficient to reverse the clear overall trend.

2.2 HISTORICAL DEVELOPMENT OF SEIGNIORAGE

Historically, Seigniorage was defined as a tax which the sovereign (seignior) took to cover the expenses of coinage and to make a profit (Lonnberg, 2009). The practice of Seigniorage financing began way before the era of banknotes in the economy. During the era of metal-based money, the monetary base consisted of precious metals
produced by the public and converted into coins by the State. The difference between the face value of the coins versus the cost of acquiring the metals and minting them generated a financial benefit for the State treasury, known as Seigniorage (Hummel, 2008).

Akira Motomura, notes that the practice of Seigniorage was formalized several years ago. In the 16th Century for example, the Habsburg Spanish Monarchy of Castile issued coins into two nearly distinct markets. One market was for large-denomination coins made of gold or silver, the other for small-denominations or petty coins made mostly of copper. To use one type of coin in the market dominated by the other was generally impractical. Differences between the two markets in the extent of royal market power encouraged different sovereign policies in them. Castile's currency unit was the maravedi.

Another accounting unit was the ducat, worth 375 maravedis notes Motomura. Common prices in maravedis around the year 1600 were 15 to 17 maravedis for a kilo of bread, 18 to 25 for a litre of wine or milk and 68 to 136 for a labourer’s daily wage. The types of coins minted were royally licensed and privately operated mints coined privately owned gold and silver bullion coins. The face values of each marc (one-half pound or 230.0465 grams) coined were 2,278 maravedis for 93.06 per cent pure silver and 27,200 maravedis for 91.67 per cent pure 22 carat gold. Silver coins ranged from the real of 34 maravedis, minted at 67 per marc, to the more common piece of eight (real de a ocho), worth eight reales or 272 maravedis.

The basic gold coin was the escudo, worth 400 maravedis from 1566 to 1609 and minted at 68 per marc. The bullion owner paid for the minting service. The Monarchy collected Seigniorage of 50 maravedis per marc of silver and one escudo
per marc of gold. The mint operator's fee, or brassage, was collected separately. The legal maxima per marc were 34 maravedis for silver and 125 maravedis for gold, though mints often charged less to attract bullion. The sum of Seigniorage and brassage was the total mint fee, or gross Seigniorage, which was generally under 4 per cent (Motomura, 1994). When the coins were trading at a nominal value the same as the cost of the coins, there was no Seigniorage income.

Today Seigniorage is established globally as a preserve of the central banks and other currency issuing authorities, though their accounting may not have been standardised across all the concerned parties.

2.3 ACCOUNTING FOR SEIGNIORAGE INCOME

Central banks may in several instances not formally practice Seigniorage. No particular line items in the financial statements of central banks are attributable to Seigniorage. Ideally, when a central bank issues banknotes or coins into the economy, it is assumed that there will be a profit element in those currencies arising out of the face value of those currencies being higher than the cost. Like trade-able goods where the trading profit is derived from the selling price less the cost of the item, then the same is for currency issued by a central bank. However, the concept of trading profit always assumes that the goods or services sold will not be returned. This is not the case for currency issued by a central bank as they can be deposited back to the issuing authority. The Seigniorage in this case therefore does not look real or sustainable in the long term.

In most countries, the legislation governing central banks has the same status as that of any other government body. Hence the structure of government, electoral and
partisan activity, as well as international considerations, in large part via the choice of exchange rate regimes, will contribute to explaining central bank performance. In other words, legislation covering the central bank is not typically organic in that it is not protected by some constitutional provision and can, therefore, be amended with relative ease. Hence, a central bank is usually a creature of the central government to whom it ordinarily pays Seigniorage profits even under federative structures (Siklos, 2002). Kenya is no exception to this rule despite the independence granted in the country’s newly enacted constitution in 2010. The guiding legislation for the central bank still remains to be the Central Bank of Kenya Act (Cap 491) which can be amended by parliament.

A Fiat money system is the ordinary coins and notes system or a system where money has been declared by a government to be the legal tender. Fiat money is the state of liabilities with no promise to convert thereby making itself nothing more than a debt (Wray, 1998). In a fiat money system, money is not backed by a physical commodity that is, gold. Instead, the only thing that gives the money value is its relative scarcity and the faith placed in it by the people that use it. In a fiat monetary system, there is no restrain on the amount of money that can be created. This allows unlimited credit creation. Initially, a rapid growth in the availability of credit is often mistaken for economic growth, as spending and business profits grow and frequently there is a rapid growth in equity prices. In the long run, however, the economy tends to suffer much more by the following contraction than it gained from the expansion in credit.

The Central bank thus acquires Treasury securities equal to the amount of base money it creates. The interest paid by the Treasury on those securities is the main
source of income for the Central bank. The Central bank keeps enough to cover its expenses, and refunds the balance to the Treasury. On average, over 90 per cent of the interest paid by the Treasury on those securities is refunded by the Central bank. Thus for all practical purposes, the Treasury securities held by the Central bank are retired.

Retiring outstanding Treasury securities in that way eliminates a cost to the Treasury. That is the way in which Seigniorage in a fiat money system differs from the classical view of Seigniorage. The value of the Seigniorage is approximately equal to the face value of the securities held by the Central bank, which in turn is equal to the monetary base created through open market operations. The monetary base can also be increased through lending by the Central bank, but that has no Seigniorage benefit for the Treasury.

Once the banknotes and coins are printed and minted, the central bank buys the notes at cost. The central bank provides notes on demand to banks at face value, debiting their accounts at the central bank in payment. Banks provide notes on demand to depositors, debiting their individual accounts in payment. Conversely depositors can return notes to their banks and regain credits in their accounts. Likewise banks can return notes to the central bank and regain credits in their central bank accounts.

Since the central bank buys notes at cost and sells them to banks at face value, it would seem that Seigniorage from notes accrues to the central bank. However until the notes are sold to banks, they are not a part of the monetary base, but only engraved pieces of paper stored in the vaults of the central bank as stock. As the central bank sells and redeems notes, it simply swaps liabilities (currency in circulation) on its balance sheet. The asset side of the balance sheet remains
unchanged, and the Central bank gains nothing from the “sale” of notes to banks. The more notes withdrawn, the greater the Seigniorage benefit to the Treasury.

Just like in the case of banknotes, coins are supplied by the minters to the central bank at a cost. The central bank again “sells” these coins to the commercial banks at face value. This sale takes place at the point of withdrawal by the commercial banks. To record the withdrawal, a debit entry occurs in the books of the commercial bank which is held in the central bank. The difference between the face value of the coins and the cost of their production is Seigniorage for the central bank, which accrues at the time of “sale”. However, for coins, there is a possibility of having negative Seigniorage which is a loss to the central bank.

Negative Seigniorage like the name suggests, occurs when a coin is produced at a higher cost than the face value. The situation occurs mostly when the cost of the metal is much higher than the cost of the coins. In the United States for example, Max Raskin notes that the price of the zinc required to mint pennies has been increasing. The cost of producing a penny has gone to 1.7 cents which means it costs nearly two pennies to make one literally put. This phenomenon has led many to question the continued existence of the lower denomination coins such as the penny and suggest it be abolished. However, understanding negative Seigniorage in economic terms will lead to an opposite conclusion: hundred dollar bills should be done away with (Raskin, 2008). The converse is true about positive Seigniorage, which is what most central banks would like to experience as a good source of revenue. If a country ends up getting negative Seigniorage or a low Seigniorage, then this would most likely indicate a problem with the structure of a country’s currency.
For Seigniorage to really work, central banks create a monetary base when they buy securities (bills and bonds) from the public and simply credit the sellers' banks with reserve deposits at the central bank. The central bank must supply reserves as needed to balance supply and demand at its target central bank funds rate. Cash withdrawals from banks are a drain on their reserves, which the central bank must replenish or lose control of the central bank funds rate. A net withdrawal of cash from banks causes a continuing demand for additional base money from the central bank. Under normal conditions, that is the principal reason for the growth of Treasury securities in the central bank's portfolio (Hummel, 2008).

Seigniorage derived from notes is more indirect, being the difference between interest earned on securities acquired in exchange for banknotes and cost of producing and distributing those notes. These costs generally include those related to production, transportation, staffing, issuing expenses and any other costs associated to the production of currency. When a central bank wants to increase the money supply, it buys some of the securities through the open market operations mainly from commercial banks who are the biggest holders of these security documents. The security is thus taken out of circulation and replaced, basically, with local currency which means more currency in circulation. The key part to this is that more currency in circulation means more government securities being held by the central bank and unlike the shilling, the government securities earn interest. So the central bank profits by its holding onto those government securities, which pay off with interest.
A separate form of Seigniorage can also arise where a central bank demonetises a particular series of currency with no buy-back option, or with preclusion following a conversion period associated with the issue of a new currency series. When the issuer declares that the currency is no longer legal tender, the central bank should remove the remaining balance of that issue from its balance sheet (Lönnberg et al, 2007). However, decisions to reduce the liability for currency and to record a corresponding profit in the income statement need to be approached with considerable caution. From an accounting perspective, a central bank’s liability for the currency it issues and stands ready to repurchase at call can only be written down when certainty exists that the obligation to repurchase has ceased to exist. So when demonetising a currency or the demonetisation period has lapsed, the central bank needs to be certain that it will not give room for further claims on currencies presented after lapse of the time lines specified. Normally such certainty would be established by clear evidence such as documentary proof that a creditor has granted relief from an obligation.

Currency provides Seigniorage through both the implied nominal return on currency balances and the increase in real demand for currency. It is worth noting that central banks’ exclusive right to issue currency gives them privileged access to Seigniorage, effectively converting them into unregulated monopolies. In the past, the siphoning off of Seigniorage to governments (through quasi-fiscal expenditures, profit transfers, or subsidized financing) raised familiar issues of fiscal dominance and inflationary finance. In recent years however, substantial efforts have been made to weed out these linkages and enhance central banks’ independence by reforming their charters, prohibiting direct financing to governments, and getting rid of quasi-fiscal expenditures. However, keeping the Seigniorage inside central banks to build up their
assets, cover the carrying costs of these assets, or cover operating expenses has brought to the forefront issues of efficiency and governance (Ize, 2006).

While all central banks record paper currency issued as a liability, only some specifically identify either Seigniorage or the assets that back the currency issued. One well-known example of the latter, however, is the currency board arrangement where a central bank is required to hold foreign currency assets to back currency issue. Elsewhere, some central banks, notably the Bank of England, have a separate Issue Department, and related balance sheet, where assets are held to cover the currency liability. The Issue Department, including those central banks that have adopted the Bank of England model, can only have banknotes as a liability. Finally, some central banks have legislative requirements defining the assets that must be maintained to cover the value of currency in circulation. Such assets may include both foreign currency and national currency assets (Loennberg et al, 2007).

Despite these challenges, Seigniorage ought to be properly accounted for by each and every central bank as this forms a substantial bit of its earnings. The nature of central banks is that they are usually a hybrid of the commercial and public sectors even in terms of operations and reporting. Historically, their financial reporting has followed a commercial model whereby a financial profit is reported and a balance sheet is maintained. As a result of this kind of reporting, there are misconstrued perceptions about the bottom line figures published by central banks, sometimes leading to failure to understand the real reason for existence of a central bank. But in reality central banks have primarily public sector functions and generate revenue mainly from non-competitive monopoly activities. The profits are even referred to as surpluses and the losses as deficits.
It would appear that the corporate financial structures of central banks have received little explicit attention in recent decades. The neglect of central bank corporate finance may be attributed to several factors which have led to the view that central bank finances can be ignored as they are either properly analysed only within the consolidated public sector accounts or irrelevant owing to the central banks unlimited ability to create money (Stella et al, 2008).

In as much as the International Reporting Financial Standards (IFRS) do not have an explicit standard concerning central bank accounting, a number of clarifications have been made in other general standards. Regarding the recognition of financial losses, the general movement toward greater financial transparency in central bank financial accounts has been apparent over the past number of years. This has been accompanied by improved clarity in the accounting standards for corporations in general. Of particular relevance in this respect is the gradual adoption of IFRS for corporates which spread to certain central banks.

Perhaps a key point of consideration as to the ability to implement the International Accounting Standards (IAS) is due to the differences with other institutions. Many central banks have not implemented the IAS and thus the question, is there anything special about the central banks that invalidates them from these standards designed for commercial enterprises? The answer lies in the fact that central banks rank profit generation very low in their list of priorities and yet their shares are not exchanged in the market like those of other firms. Central banks are also immune from bankruptcy, as a matter of policy, they may be subject to significant economic risk but they are a
A key element of IFRS is the requirement that foreign exchange revaluation changes be brought into the profit and loss account of the entity in review. As most central banks, as an essential element of their institutional roles, have large net exposures to foreign currencies, the adoption of IFRS bring with it the possibility of volatile income and balance sheet statements. Whereas in the past a central bank might have set aside revaluation losses in opaque asset accounts, they are now more likely to reflect these losses in the profit and loss accounts and in equity. With the disclosing of these kinds of losses, the risk coming from heightened exposure in particular to foreign exchange revaluation losses has become more apparent.

Under several occasions, there has been and implied perception that the Treasury is often the major beneficiary of Seigniorage. This is however an illusion. As Herb Stein observed, "The government is no one, there is nobody here but us people." Rather it is a temporary assemblage of citizens who determine how the government should spend and tax. However the government must spend at least as much as it acquires from taxes and the sale of securities, otherwise it would drain the monetary base and stifle the economy. In a modern fiat money system, the Treasury has no need for balances in excess of its near term obligations (Hummel, 2008). If its balances increase due to Seigniorage, it will have to be returned to the private sector, either through reduced taxes or increased spending. Thus the private sector is the ultimate beneficiary. The private sector in this case will also include the citizenry of a country since they may most likely be beneficiaries of a reduced tax regime.
The Central Bank of Kenya being the only institution mandated to issue currency in Kenya remains the only point of reference to anyone as to how Seigniorage income in Kenya is treated. The financial statements for the Bank which are public material become a key reference point in determining the revenue base from Seigniorage.

Kenya’s central bank reflects costs associated to currency in its financial statement as currency expenses. The expenses have been further categorised as either production or issue expenses and further as to whether they pertain to notes or coins. With the increased demand for a country’s currency, it is expected that the costs associated to production and issue will also rise.

The Bank notes that printing expenses for each denomination which include ordering, printing and freight, insurance and handling costs are initially deferred. Based on the currency issued into circulation, the respective proportional actual costs incurred are released to the income statement from the deferred costs account over the useful period (life span) of each banknote denomination. The deferred amount is recognised as prepayment and represents un-issued banknotes (currency) stock. Previously the costs were expensed upon delivery of currency stock. Cost of coins minted is expensed in full on delivery in the year of purchase/acquisition. The Central Bank of Kenya places the useful lives of the various banknotes denominations as 2 years for the KES.1000, 500 and 200 banknotes and 1 year for the KES. 100 and 50 banknotes (CBK Financial Statements, 2011).

Based on the net effect in the value of currency issued within the years and the production costs posted by the Bank, then it would seem that the face value of
currency issued is way above the costs of production. Taking note of the Banks treatment of costs, that is, it incorporates ordering, printing and freight, insurance and handling costs, then the costs written off can be taken as the total costs. The derived Seigniorage therefore is computed by getting the difference in the face value increase of currency in circulation and the expensed costs for the same period.

2.7 KENYA’S FINANCING OF PUBLIC PROJECTS

A public project is any initiative that is funded by a government and is meant to be owned or operated by that government. As a result of this, most public projects relate to works that a government does to fulfil a public purpose. There are instances where the government of a country may not want to be directly involved in the running of some projects and therefore the use of governmental agencies may come into perspective. Government partners such as the United Nations, World Bank, Development agencies etc. may also participate in the role of running public projects as a means of directly assisting the peoples of a country. Under Kenya’s Vision 2030 blueprint, great emphasis has been placed in the delivery of government projects especially under Pillar II and III for long term development.

In 2003, Kenya began its development towards a globally competitive and prosperous economy. As a response to past economic and social challenges, Kenya implemented bold economic and structural reforms as elaborated in the Economic Recovery Strategy for Wealth and Employment Creation (ERS) covering the 2003 – 2007 periods (National Economic and Social Council of Kenya, 2007). Whereas some of these gains have begun materialising, others are yet to be seen or felt and they mostly constitute public projects.
Under Pillar II which entails rehabilitation and expansion of infrastructure, the Economic Recovery Strategy (ERS) has identified poor infrastructure as a major obstacle in the country’s economic recovery program. An efficient, modern infrastructure was seen as one of the most critical factors to lowering the cost of doing business and opening up income generating opportunities for poor households. Singled out specifically is the construction of roads and enabling environment for their construction and maintenance. The most important of these projects is the northern corridor linking the Mombasa, Nairobi and Malaba corridor to Uganda and the Great Lakes Region (National Economic and Social Council of Kenya, 2007).

Under Pillar III responsible for Equity and Poverty Reduction, Kenya’s Vision 2030 strategy document notes that a number of targeted fiscal interventions, structural reforms and regional development initiatives which aggregate to public projects have already been initiated. Firstly, there is the introduction of universal free primary education as one of the initiatives. Increase in the share of resources allocated towards priority development areas of agriculture and rural development, including core poverty programs to accelerate development and reduce inequality is the second area of focus. Various structural reforms in agricultural sector including the dairy, sugar, coffee, tea, pyrethrum and the co-operative sectors becomes the third initiative and finally, construction of more than 1000 dispensaries and deployed personnel and medical supplies to make these facilities operational and improve access to medical care.

Jim McFie who is a fellow of the Institute of Certified Public Accountants (ICPAK) in Kenya, notes that in the financial year 2011 alone, a total of 8.3 billion shillings in public funds will be spent free primary education for the 9.381 million children in
primary schools, 18.5 billion shillings on the 1.702 million secondary school children, and 103 billion shillings on salaries of 185,000 primary and 53,000 secondary school teachers (The Accountant, 2011). The sum aggregate of these figures is close to 130 billion Kenya shillings for education at the primary and secondary level only, a huge amount to bear for the tax payers.

Kenya’s total budgetary expenditure comprises three main components: recurrent expenditures, development expenditures (together referred as ministerial expenditures), and payments for Consolidated Fund Services (CFS) and the recurrent expenditures by the Treasury. The recurrent expenditure contains primarily the current expenditures by the ministries covering day-to-day normal services by the ministry, wages and salaries (labour costs), and operation and maintenance (along with minor capital expenditures such as purchase of equipment).

Development expenditure comprises the total of expenditures from all the development projects and activities, sometimes referred to as public or government investments undertaken by ministries. This accounts for slightly over 10% of total government expenditure and though being public projects, they are the most vulnerable to budget reductions. All donor funding for the projects, whether current or capital expenditures, is channelled through the development vote of the budget. The development budget has become increasingly reliant on donor funding. According to printed estimates, the expected donor support to the development budget increased from about 40% in the 1980s to about 70% in the 1990s (Njeru, 2003).

2.8 CONCEPTUAL FRAMEWORK

In this study, major effects of currency issue were used as a proxy to investigate alternative ways of financing public projects. The dependent variable was financing
of public projects and the independent variables being circulation or distribution of currency in Kenya, costs associated to issuing currency, computation of income from issue of currency and the recognition and reporting mechanisms of income obtained from a currency issue. Each of the independent variables was captured in a header and indicators identified for testing.

At the onset, it was important to determine if the operatives at the central bank responsible for the currency issue process were conversant with the concept of Seigniorage. The understanding and level of experience gained by the operatives was to highly determine the possibility of adoption of the concept.

The study was aimed at establishing the circulation and distribution of currency in Kenya. This was done by determining the networks available for currency distribution, the amount of currency in circulation and the growth of currency in circulation over a five year period.

The study also sought to track the costs associated to currency production and issue. The determination of these costs was an input into computing incomes from currency issue which was another area of focus in the study.

Finally, the study sought to determine the recognition and reporting of income from the currency issue. The study sought to determine if there were accounting policies or defined financial reporting standards adopted for reporting of Seigniorage.
DEPENDENT VARIABLE

FINANCING OF PUBLIC PROJECTS

Indicators
1. Availability of funds
2. Reduction in borrowing
3. Increased infrastructure
4. Increased individual and foreign investments
5. Improved social amenities
6. Economic growth

INDEPENDENT VARIABLES

CIRCULATION/DISTRIBUTION OF CURRENCY

Indicators
1. Distribution networks
2. Circulation structure
3. Circulation growth

COST OF ISSUING CURRENCY

Indicators
1. Printing costs
2. Minting costs
3. Logistical costs
4. Replacement costs

COMPUTATION OF INCOME FROM CURRENCY ISSUE

Indicators
1. Identified margins from issue of currency
2. Income generated
3. Adequacy of income

RECOGNITION AND REPORTING OF INCOME FROM CURRENCY ISSUE

Indicators
1. Currency circulation growth
2. Accounting policy in place
3. Financial reporting

INTERVENING VARIABLES

1. State of the economy
2. Choice of currency to use
3. Currency convertibility factors
4. Political stability
5. Threats to currency circulation (counterfeiting)

Figure 1: CONCEPTUAL FRAMEWORK
Source: Author (2012)
3.0 INTRODUCTION

This chapter defines the methodology used for the study. The descriptive research method was used to carry out the study with the administration of questionnaires to capture primary data. A longitudinal perspective for the research was also adopted to analyse the financial statements over a five year period beginning 2007 to 2011 inclusive. The quantitative research approach was adopted and the data analysed using Microsoft Excel as the data analysis software. Measures of central tendency of mean, mode and median were used together with range as a method of measuring variability about the average.

Several previous researches on the analysis of Seigniorage have been mixed qualitative and quantitative in nature (Lonnberg, 2008; Sekerke, 2003; Stella, 2008). In this study the methodology was divided into the following categories; Research design, study area, population of study and selection procedure, data collection and data analysis techniques.

An introductory letter was obtained from the university detailing the purpose of undertaking the study so as to eliminate the potential difficulties in obtaining information during the study.

3.1 RESEARCH DESIGN

The research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure (Kothari, 1978). The research design is the conceptual
structure within which research is conducted; and constitutes the blueprint for the
collection, measurement and analysis of data.

For this research, the descriptive research design was used including both desk and
field research. The choice of descriptive research was made because it is ideal for
fact-finding enquiries of different kinds. The major purpose of descriptive research is
description of the state of affairs as it exists at present (Kothari, 2004).

The desk research involved the collection of secondary data using publications such
as books and journals stored in libraries, internet and any other relevant sources of
information whereas field research was by use of questionnaires administered
directly to respondents. The research questionnaires were designed in a way that the
objectives of the investigation which were determination of the cost of issuing
banknotes and coins, determination of the income derived from the issue of
banknotes and coins and evaluation of the extent that income derived from the issue
of banknotes and coins can be applied in financing public projects in Kenya were
obtained. A census of 15 central bank personnel involved in the currency cycle
process was taken for the research. However, only 13 respondents gave back their
feedback based on the administered questionnaires thus resulting in an 86.7%
feedback rate.

3.1.1 Locale of Study

The study area or locale for this study was in Kenya with a specific concentration of
the Central Bank of Kenya. The Nairobi office being the headquarters of the Bank
was the main area of focus for data collection. Both primary and secondary data was
analysed and results there from deduced for the purpose of making reasonable
3.1.2 Target Population

In a research, population is generally referred to as a large collection of individuals or objects that is the main focus of a query. A population is the total collection of elements about which we wish to make some inferences (Schindler and Cooper, 2001).

Populations generally have their subjects with common observable characteristic. All individuals or objects within a certain population usually have a common, binding characteristic or trait and therefore, the description of the population and the common binding characteristic of its members are considered homogenous (Castillo, 2009).

For this study, the population comprised of Central Bank of Kenya, Currency Operations staff responsible for the technical areas of currency issue. As at 6th April 2012, 15 staff formed the population but one changed roles in while the study was on going.

3.1.3 Selection procedure

For this study, the census method was used to collect data through the questionnaire option. The census option was emphasised for use since the universe was a small one and thus no use resorting to a sample survey (Kothari, 2004). It was presumed that in such an inquiry, when all items were covered, no element of chance was left and highest accuracy is obtained. However, the element of bias may not be completely eliminated. It was expected that 15 Central Bank of Kenya currency operations staff were to constitute the census though the number eventually dropped by one to 14.
3.1.4 Data Collection

Data is defined as the facts presented to the researcher form the study’s environment and may be characterised by their abstractness, verifiability, elusiveness and closeness to the phenomenon (Schindler and Cooper, 2001).

This study relied on primary and secondary data. The primary data was collected through administration of questionnaires which were administered to the respondents. The questionnaires adopted both open and closed ended options. Secondary data was collected from various literatures such as published annual financial statements, journals, books and internet materials.

3.1.5 Data Analysis

Data analysis usually involves reducing accumulated data to a manageable size, developing summaries, looking for patterns and applying statistical techniques (Schindler and Cooper, 2001). In this study, descriptive and statistical tools were used for analysis. The data received was verified for accuracy, relevance, and consistency and then summarized, coded, edited, organized and tabulated according to the sub-topics starting with the most important information addressing the research questions. The use of charts and tables was adopted to present what has been analysed.

The quantitative research approach was adopted and the data analysed using Microsoft Excel as the data analysis software. Measures of central tendency such as mean, mode and median were used together with range as a method of measuring variability about the average.
All analysed data is not useful for any decision making purposes unless it is properly presented. It is in this regards that the data should be presented in a meaningful manner (Shrivastava et al, 1989). To conclude the study, data analysed was presented diagrammatically by use of tables, charts and graphs to give clear pictorial view and for evaluating the trend of each variable.

3.1.6 Output

It was found that currency banknotes and coins have been continuously growing into the economy at least over the last five years analysed. The cost of producing and issuing these currency banknotes and coins has been significantly lower than the face values of what has been issued. The resultant effect is a substantial and un-accounted for revenue flow through Seigniorage, a stream which is substantial enough to directly fund public projects both of physical and social nature.
CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION

4.0 INTRODUCTION

The purpose of this study was to investigate the effects of Seigniorage in financing public projects in Kenya. The data analysed and presented in this chapter was collected using a questionnaire administered to the respondents. The questionnaire adopted both open and closed ended options. Other data analysed and presented in this chapter was collected from secondary sources, mainly the published financial statements for the Central Bank of Kenya over a five year period. Out of the 14 questionnaires distributed, 12 were responsive and their answers used to carry out the data analysis. The research findings were classified into four categories to address the objectives of the study. The first category analysed the trends and distribution of currency, secondly the costs associated to the issuing of currency, thirdly the adoption of Seigniorage through computation of income from currency issue and finally recognition and reporting.

4.1 GENERAL INFORMATION ON RESPONDENTS

The questionnaire was administered to 14 respondents of which 12 responded. The average working years at the central bank for the 12 respondents was 19 years of service and 5 years in their current posting.
All respondents had post-secondary level of education with 67% of them having obtained a Master's level of education as their highest education level and the rest 33% having obtained a Bachelor's degree.

All respondents had a clear understanding of the role of the Central Bank of Kenya even though 33% of them indicated that the Bank had not achieved its role. Based on this general information, it can be determined that the respondents' level of education and experience was acceptable for answering the questionnaire.

4.2 TRENDS AND DISTRIBUTION OF CURRENCY

Currency is issued by the Central Bank of Kenya through various available networks which are primarily the branches and currency centres. The other currency distribution points identified include commercial banks, Automated Teller Machines (ATMs), mobile money agents and supermarkets. The trend for currency in
circulation over the past five years was also affirmed to be a positive growth. A further analysis of the Central Bank of Kenya published annual report and financial statements from 2007 to 2011 confirmed that the currency in circulation has grown by up to 63% in the five years.

![Kenya Currency in Circulation Chart](image)

Figure 4: Kenya Currency in Circulation
Source: Research Data (2012)

Distribution of currency to circulation has also changed with the expansion of the Central Bank of Kenya away from the traditional towns of Nairobi, Mombasa, Kisumu and Eldoret. The Bank has been pushing for financial deepening and has now opened offices in Nyeri, Nakuru and Meru which has led to a wider distribution base for currency to circulate. Commercial banks have also increased in number leading to more circulation points for currency. The same has been noted with mobile money agencies. Respondents to the questionnaire observed the central bank branches, currency centres, commercial banks, ATMs and mobile money agents were the most significant points for currency distribution. However when asked about the adequacy of these distribution points 59% of the respondents noted that they were not sufficient,
33% were satisfied with the distribution points and the remainder 8% were on neither side.

![Adequacy of Currency Distribution Networks](chart.png)

**Figure 5: Adequacy of Currency Distribution Networks**

Source: Research Data (2012)

All the respondents however were able to positively identify the currencies issued by the Central Bank of Kenya.

### 4.3 COSTS ASSOCIATED TO CURRENCY ISSUE

When it came to the area of costs associated to issue of currency, a number of the respondents sought clarification as to the level of disclosure due to the sensitivity of the matter. However, as some of the information is already in the public domain, there was assurance that they could answer based on public information.

Posed with the question as to whether the Bank engages in printing money regularly, 83% of the respondents affirmed this. As to the frequency of this process, the answers ranged from 2 years to 8 years.

<table>
<thead>
<tr>
<th>How often does the Central Bank print/mint currency?</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2 yrs.</td>
</tr>
<tr>
<td>42%</td>
</tr>
</tbody>
</table>
Table 1: Frequency of printing/minting currency
Source: Research Data (2012)

The respondents noted that the funds to print or mint currency were directly from the central bank though a number of them also answered that the sources were from the government or taxation, an answer which could have been an indirect form of noting that government funding is from the public.

It was unanimous with all the respondents that the cost of printing and minting currency is substantial. Analysis of the Bank's financial statements from 2007 to 2011 confirmed the substantial nature of these expenses.

<table>
<thead>
<tr>
<th>Year</th>
<th>Banknotes</th>
<th>Coins</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>-</td>
<td>-</td>
<td>1,248</td>
</tr>
<tr>
<td>2008</td>
<td>340</td>
<td>63</td>
<td>403</td>
</tr>
<tr>
<td>2009</td>
<td>1,115</td>
<td>145</td>
<td>1,260</td>
</tr>
<tr>
<td>2010</td>
<td>1,056</td>
<td>434</td>
<td>1,490</td>
</tr>
<tr>
<td>2011</td>
<td>1,172</td>
<td>589</td>
<td>1,761</td>
</tr>
</tbody>
</table>

Table 2: Currency Production and Issue Costs
Source: Research Data (2012)

The production and issue expenses for banknotes and coins analysed from the published financial statements can be illustrated using the column chart below.
The Central Bank of Kenya places the useful lives of the various banknotes denominations as 2 years for the KES.1000, 500 and 200 banknotes and 1 year for the KES. 100 and 50 banknotes as stated in its 2011 financial statements. This seems to have also been agreed by some of the respondents who gave answers to be within 6 months to 2 years. Others however associated the lifespan of banknotes to the way they are handled. In regard to the lifespan of currency to the issue costs, only 42% of the respondents felt that they were proportionate.

4.4 INCOME FROM CURRENCY ISSUE

The purpose of this study was to investigate the effects of Seigniorage in financing. It was therefore imperative that the study determines if the respondents understand the concept of Seigniorage, which is income derived from currency issue. When put across to the respondents if they have ever come across the term Seigniorage, 83% of the respondents answered in the affirmative while the other 17% in the negative.
Have you ever come across the term Seigniorage?

![Familiarity with Seigniorage](image)

Figure 7: Familiarity with Seigniorage
Source: Research Data (2012)

The next two questions were aimed at following through if the respondents understood the term and only 75% of them seemed to understand the term despite 83% having heard about it. Consensus to the tune of 100% of the respondents was however evident that the concept is not widely known in the finance circles.

The respondents were also posed with the question as to whether Seigniorage could be deemed as a substantial source of revenue and 67% were positive to the question. However, notable was the fact that another 25% of the respondents were indifferent to the question probably signifying lack of knowledge on the subject matter.

<table>
<thead>
<tr>
<th>Seigniorage as a Revenue source</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>1</td>
<td>8%</td>
</tr>
<tr>
<td>Agree</td>
<td>7</td>
<td>59%</td>
</tr>
<tr>
<td>Disagree</td>
<td>1</td>
<td>8%</td>
</tr>
<tr>
<td>Indifferent</td>
<td>3</td>
<td>25%</td>
</tr>
</tbody>
</table>

Table 3: Seigniorage as a source of revenue
Source: Research Data (2012)
The respondents were also presented the question as to whether Seigniorage could be deemed as a quick source of income and whether its adoption could compromise on the inflationary balance. Whereas 42% of the respondents felt that this was a quick source of income, 34% if them felt that it would likely compromise on the inflationary balance as the release of too much currency into the economy may happen.

Figure 8: Seigniorage as a quick source of revenue
Source: Research Data (2012)

Figure 9: Adoption of Seigniorage compromising inflationary balance
Source: Research Data (2012)
The questionnaire also aimed at finding out if the concept of issuing currency into the economy and generating revenue out of this process is understood within the Bank. None of the respondents felt that the management of the Bank fully understood the concept while majority felt that they do not understand. This was also demonstrated by the fact that 83% of the respondents felt that the Bank management were not keen on adopting the concept of Seigniorage. It was also felt by up to 42% of the respondents that even the key revenue departments of the Bank did not understand the concept of Seigniorage. 100% of the respondents observed that the concept of Seigniorage had not been sensitised to other staff and stakeholders.

4.5 RECOGNITION AND REPORTING

The study also aimed at finding out if the concept of recognising incomes from the issue of currency banknotes and coins had found its way into the financial statements of the central bank. Of the 12 respondents 9 affirmed that there was no specific line items in the financial statements of the Bank attributing anything to Seigniorage. This number accounted for 75% of the respondents. Another 17% were non-responsive to this question while only 1 respondent equivalent to 8% noted that there was a specific line item attributed to Seigniorage.

<table>
<thead>
<tr>
<th>Response on if there are specific line items attributable to Seigniorage</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>9</td>
<td>75%</td>
</tr>
<tr>
<td>Yes</td>
<td>1</td>
<td>8%</td>
</tr>
<tr>
<td>No response</td>
<td>2</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 4: Specific line items attributable to Seigniorage

Source: Research Data (2012)
All the respondents to the questionnaire confirmed that the trend for currency in circulation over the past five years has been a positive growth. The same was confirmed from the financial statements of the Bank beginning the year 2007 to 2011. The growth in currency in circulation has gone up by 63% over the past five years. The respondents however noted that surpluses/deficits for the Bank within the same five year period have been mixed and not shown consistency like the circulation growth. From the financial statements of the Bank, the surplus/deficit trends were analysed as depicted in table 5 below.

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surplus/ (Deficits) (KES.Million)</td>
<td>(386)</td>
<td>8,995</td>
<td>23,229</td>
<td>(1,639)</td>
<td>39,556</td>
</tr>
</tbody>
</table>

Table 5: CBK five year surplus and deficits
Source: Research Data (2012)

The financial statements of the Bank reported a surplus in 3 of the five years being researched and a deficit in the other 2 years.

<table>
<thead>
<tr>
<th>Reporting Year</th>
<th>Operating Surplus / (Deficits) KES.Million</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>-5,000</td>
</tr>
<tr>
<td>2008</td>
<td>5,000</td>
</tr>
<tr>
<td>2009</td>
<td>10,000</td>
</tr>
<tr>
<td>2010</td>
<td>15,000</td>
</tr>
<tr>
<td>2011</td>
<td>20,000</td>
</tr>
</tbody>
</table>

Figure 10: CBK Operating Surplus / (Deficits)
Source: Research Data (2012)
Relating the circulation growth to the income statement results, 42% of the respondents to the questionnaire observed that there was no consistency between the surplus/deficit reporting and circulation growth. Another 33% were non-committal and the remainder 25% observed that there was a relationship.

![Comparison of Currency in Circulation and Reported Surplus/Deficits](image)

**Figure 11: Currency in Circulation and Surplus/Deficits**  
Source: Research Data (2012)

Based on the respondent’s feedback in the questionnaire, it was evident that there were no clear policies in place on how to deal with Seigniorage with 83% of the respondents noting that the policy was not there or they were uncertain about it. Without a clear policy to deal with Seigniorage, then there is likely to be an impact in the revenue collection patterns, a fact attested by 92% of the respondents noting that Seigniorage has not had an impact on the revenue collection patterns. One of the respondents who said there is an impact clarified that the impact is that of unaccounted revenues.
Based on the financial statements over the five year analysis period, a computation of the unaccounted Seigniorage income was determined for substantiality as depicted in table 6. The average of foregone Seigniorage income over the 5 year period analysed is close to 13.5 billion shillings per annum, an amount substantial enough to be directly used in development of public infrastructure.

<table>
<thead>
<tr>
<th>Year</th>
<th>Incremental currency issued to Circulation (KES. Million)</th>
<th>Production and Issue Costs (KES. Million)</th>
<th>Derived Seigniorage (KES. Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>22,695</td>
<td>1,761</td>
<td>20,934</td>
</tr>
<tr>
<td>2010</td>
<td>16,983</td>
<td>1,490</td>
<td>15,493</td>
</tr>
<tr>
<td>2009</td>
<td>8,292</td>
<td>1,260</td>
<td>7,032</td>
</tr>
<tr>
<td>2008</td>
<td>9,952</td>
<td>403</td>
<td>9,549</td>
</tr>
<tr>
<td>2007</td>
<td>15,597</td>
<td>1,248</td>
<td>14,349</td>
</tr>
</tbody>
</table>

Table 6: Derived Seigniorage Income 2007 - 2011
Source: Research Data (2012)

On the concluding side, 58% of the respondents noted that a central bank is a key revenue generation point even though they described taxes, rates, fees, tourism, exports, penalties, aid and securities trading as primary sources of revenue for the government. All the respondents observed that the country’s level of financing is not adequate and that there are other major sources of revenue that remain untapped, most notably Seigniorage.
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 INTRODUCTION

This chapter presents a summary of the study findings and draws conclusions out of it. The chapter also gives various recommendations in line with the study. The limitations to the study are once again highlighted and recommendations for further research given.

5.1 SUMMARY OF FINDINGS

The development of Kenya’s public projects requires heavy flow of funds a fact which is a strain to the country. The development and adoption of other income streams is therefore a welcome option in moving forward with sustaining public projects development. The concept of Seigniorage is not widely known in finance circles and more studies need to be conducted. The findings have been summarised under four headings, firstly the trends and distribution of currency, secondly the costs associated to the issuing of currency, thirdly the adoption of Seigniorage through computation of income from currency issue and finally the recognition and reporting of any Seigniorage.

5.1.1 Trends and distribution of currency

Kenya’s central bank has been the only source of currency in circulation. Over the past few years the Bank has embarked of a financial inclusion program which aims at entrenching banking services to the people. The result is that currency in circulation has had a positive growth to the tune of 63% from 2007 to 2011. The increased use of mobile payment options, Automated Teller Machines accessibility, opening of
commercial bank branches, Micro Finance Institutions and access to cheaper credit has spurred the demand for currency leading to the positive growth. Rise in currency in circulation contributes directly to a positive Seigniorage income since at any one time it is unlikely that the cost of currency being issued into circulation super cedes the face value. The growth of currency in circulation is very likely to continue and therefore the possibility of higher revenues in derived Seigniorage.

5.1.2 Level of costs associated to issue of currency

Complete disclosure of costs associated to currency issue per unit was not achieved. However, the total costs associated to issue of currency were available in published material. Setting aside the unit costs of currency, the total costs are good enough to determine that there is some level of revenue that can be computed. The costs associated to currency production and issue varied year on year but was always way below the face value of the currency issued to circulation. One of the years seemed to have very low published costs for currency issue. The fact that in all these years of analysis the costs were lower than the face values denotes the possibility of having foregone quite some substantial form of income over the same period. With the concluding results that currency is printed or minted regularly, and the nature of costs associated to its printing or minting being substantial then monitoring of these costs by the public needs to be stepped up as these constitutes public spending.

5.1.3 Adoption of Seigniorage computation from currency income

There has been a lot of ambiguity in the understanding of Seigniorage, including amongst the technocrats that are supposed to be the ones championing for the concept. The management of the central bank do not understand the concept either meaning that implementation of the concept will be a challenge. A lot of public
education and sensitisation is required to effectively adopt the concept and tap some substantial reporting income out of it. The key revenue departments of the central bank need to step up their ability to understand the concept and be ready to embrace it as well for a bigger income reach. There is no proper team that fully understands the full implementation of Seigniorage practice and the competence of staff mandated to implement the practice is not amongst the best.

In as much as Seigniorage can be deemed as a quick source of income it should not be left as a main choice for source as countries still need to sustain revenue generation through other means such as taxation. With its sensitivity, the complete adoption of Seigniorage in a country’s financial system should be carefully observed so that it does not end up compromising on the inflationary balance since there could be possibilities that too much currency may be released into the economy for the sake of revenue. If this takes place, then it will be a zero sum game as one side of the economy gets revenue and the entire economy gets punctured.

5.1.4 Recognition and reporting of Seigniorage revenues

There is no recognition of Seigniorage revenues in Kenya. The Central Bank of Kenya does not have any line items that report profits or losses emanating from the direct and continuous activity of issuing currency banknotes and coins into the economy. With the continuous growth of the economy, the demand for currency picks up as well leading to the positive rise in amount of currency in circulation. With this growth, the amount of Seigniorage revenue being created soars up in the same proportion to growth, however, all these is foregone as there are no reporting mechanisms to recognise surplus from rising growth of currency issues.

There are also no defined policies associated to recognition of incomes from the issue of currency at the Central Bank of Kenya. With no clear guidelines set up, business
becomes the usual without further exploration of better ways to soar up revenues. The international accountancy standards body has also published a number of financial reporting standards but none has been specifically published for central banks and monetary issuing authorities that will take care of this special form of revenue generation through issuance of currency banknotes and coins into the economy. Alternatively, central banks themselves have not come up with standards on the same in regard to treatment of Seigniorage revenues.

The income statements of a robust economy, with a central bank that is actively engaged in its economic affairs should therefore be proportionate to the rise of currency in circulation. There should never be losses reported, unless the currency in circulation is greatly diminished which is unlikely in a growing economy and currency is sought after by all. It remains that the central bank is a key revenue point for the country in order to spur adequate economic growth and infrastructural development. Un-accounting for huge possible revenue streams has an impact in funding for public projects which require substantial figures annually.

5.2 CONCLUSIONS

The aim of this study was to investigate the effects of Seigniorage in financing public projects in Kenya. Analysis of the costs involved in issuing currency banknotes and coins in Kenya and determination of any possible income from this process was important to this study.

According to the research findings, it is apparent that Kenya’s currency in circulation is on the upward growth path. The demand for currency banknotes and coins has steadily grown over the years despite the fact that new ways of transaction and access to this commodity have been developed. Whereas the costs associated to currencies
issued have not been specific to the denominations, their total sum has been much lower than the face values of the issued currencies. With the positive trajectory in circulation growth and the much lower investment costs for getting these products to circulation, the uptake of another revenue source seems to be in the offing.

In order to achieve development goals as set out in Kenya’s Vision 2030 strategy paper, the economy needs to have very clear strategies in financing its activities. However, this is not possible if the nation is constantly grappling with the challenge of dealing with deficits. The possibility of another revenue stream is a welcome option to finance this ambitious strategy. The Central Bank of Kenya needs to therefore consider the incorporation of Seigniorage revenue as one of its important though not key revenue streams. In as much as the amount derived from Seigniorage is often substantial, the Bank should ensure that it does not rely on it fully as it may alter the objectives set for the Bank and focus may be on revenue generation and not price stability among others.

With the possibility that Seigniorage income will more often than not be positive and in the billions annually, the overall effect to development of infrastructure in Kenya will be phenomenal. The government will have a new financing option for all public projects whether of social or physical nature. The deficits often experienced in the budget plans may be a thing of the past and reliance on internal and external borrowing may greatly diminish as well. The elimination on taxation reliance should definitely not be a thought but the relief on the tax payer will be a welcome choice. Recognition and reporting of this form of revenue may therefore be a considerable selection to take. Seigniorage use is a sensitive but worthwhile option of choice to finance our public projects.
It can therefore be concluded that financing of public projects in Kenya can be dependent on revenues from Seigniorage adoption and implementation. However, the state of the economy needs to be suitable for this having a proper functioning price stability mandate. The political stability of the country is also important as without a stable political base, then the currencies in question becomes close to redundant or obsolete.

5.3 RECOMMENDATIONS

The recommendations drawn from this research are meant to be for the benefit of the beneficiaries. The key beneficiaries are the people of Kenya through its Government as the probability of raising another revenue stream for public project developments could be in the offing. The key recommendations have been itemised as follows:

i. The Government should consider the implementation and adoption of Seigniorage as a form of revenue generation in order to boost development of public projects in Kenya. The use of Seigniorage can also minimise if not eliminate the budget deficits usually reported on an annual basis.

ii. Development of operating standards and specific accounting policies for central banks especially in regard to treatment of currencies issued to circulation and the resultant positive or negative Seigniorage thereon should be highly prioritised. Whereas other countries seemed to have adopted Seigniorage revenue as standard working procedure, many others are not in the know of this revenue source. Setting up of a technocrats group that will champion for standards development in regard to treatment of Seigniorage will therefore be a welcome move.

iii. There is need to facilitate development of human skills and knowledge especially within the Central Bank of Kenya to boost their knowledge capacity on the subject
matter. Many of those responsible for adoption of Seigniorage are not even aware how the concept works and therefore such a move could spur the adoption of the concept. Internal sensitisation to the management and other key members of the Bank and outside the Bank may also be a welcome move to further develop the possibility to use Seigniorage incomes to facilitate development of Kenya's projects.

iv. Other students interested in Finance and options of finance could use this research to further study the opportunities available as a finance option away from the traditional sources of funds. It would be highly recommended that more study is undertaken on this concept even at a higher and national level.

v. Finally, having noted that Seigniorage revenue is often substantial, its use to fund public projects will be a welcome move that would be highly acceptable to all since the reliance on traditional sources of funds will have been reduced drastically. The use of Seigniorage in funding public projects will lead to increased physical and social infrastructural developments that will spur the country into greater heights and even towards achieving its short and long term development objectives. With Kenya's economy being the giant of East Africa, the use of Seigniorage will make the country maintain its rightful economic leadership role in the region.

5.4 LIMITATIONS OF THE STUDY

A number of challenges were experienced in the course of carrying out the study key among them being respondents' avoidance to answer the questionnaires provided for data collection. Some of the respondents literally did not want to answer and did not answer the questionnaires provided. In a number of instances, the respondents had to
be convinced that the information they were divulging was only going to be used for academic purposes and that most of it was already in the public domain and that they were not to disclose anything that was confidential. It also worth noting that one of the expected respondents changed roles leading to the earlier projected census reducing by one.

As questionnaires were used for primary data collection, reliability of the data collected came into focus. At least one of the respondents seemed to have duplicated answers from another respondent and thus casting doubts as to the reliability of all data collected. However, since such a case seemed to be only one and to particular questions, then the possibility of skewed results was eliminated by averaging to all other results obtained. Triangulation of data from other secondary sources also reduced reliability on only primary data which could have been inaccurate.

The technicality and complexity of delving deep into the subject matter also posed as a challenge and limited the extent to which this study was done especially due to the fact that most of the material in this topic has focused on the field of Economics and not Finance. However, attempts were made to cover all the areas to the largest possible extent including seeking assistance from some of the experts in this field of study beyond the country’s borders.

5.5 SUGGESTIONS FOR FURTHER RESEARCH

The practice of Seigniorage has mainly been with the large western economies. It would be important if further research is undertaken for small economies to determine the role of Seigniorage and whether its implementation is worth it.

Studies also needs to be undertaken on a cross comparison basis for countries that have adopted Seigniorage and how they have incorporated it as a standard together
with those countries that have not adopted it to gauge if the adoption of the concept will be a welcome choice.
REFERENCES


Dear [Name],

I am a graduate student at the [University Name] and am undertaking an investigation on the topic of public procurement in Kenya.

Due the time constraint and the nature of the study, I am developing a questionnaire to be used in this study. I hope you can help by filling the questionnaire as a detailed survey on the issue.

I strongly believe that the answers you provide will be essential in the study. The questionnaire is to gather views for the purpose of the study.

Thank you for your time and cooperation.

Yours sincerely,

[Your Name]
Appendix I – Introductory Letter

Evans K. Muttai
D53/RI/11399/04
Kenyatta University
MBA Program
P.O. Box 43844
Nairobi

Dear Respondent,

AN INVESTIGATION INTO THE EFFECTS OF SEIGNIORAGE IN FINANCING PUBLIC PROJECTS IN KENYA

I am a postgraduate student at the Kenyatta University pursuing a degree in Master of Business Administration, specialising in Finance. In partial fulfilment of the stated degree I am undertaking an investigation into the effects of Seigniorage in financing public projects in Kenya.

It is for this reason that I have developed a questionnaire to obtain information that will be used in this study. I appreciate if you can take some of your time to answer the questionnaire in a detailed way as possible.

It is my sincere hope that this questionnaire will go a long way into obtaining the relevant views for the purpose of this study, which will be purely for academic purposes. Do not hesitate to answer the questions on an additional sheet of paper.

Thank you for your time and looking forward to your response.

Yours Sincerely,

Evans K. Muttai
Appendix II – Questionnaire

QUESTIONNAIRE ON THE TOPIC - AN INVESTIGATION INTO THE EFFECTS OF SEIGNIORAGE IN FINANCING PUBLIC PROJECTS IN KENYA

Please complete the questionnaire by checking on the appropriate box or providing answers in the spaces provided alongside the questions.

Name of Respondent ____________________________ (Optional)

Respondents Department __________________________

Title/Position __________________________

SECTION A: GENERAL BACKGROUND INFORMATION

1. For how long have you worked for the Central Bank?

________________________________________________________________________

2. For how long have you worked in your current posting?

________________________________________________________________________

3. What is your highest level of education?

________________________________________________________________________

4. What is your understanding of the role of a Central Bank?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

5. Do you feel the Central Bank of Kenya has fully achieved the objectives or role stated above?

☐ Yes ☐ No

If yes, in what ways has this been done?

________________________________________________________________________
SECTION B: CIRCULATION AND DISTRIBUTION OF CURRENCY

6. What are the main distribution networks for circulating currency in Kenya?

7. Can you state if the distribution networks available are adequate?

☐ Yes  ☐ No

If you no, what do you think can be done about this?

8. Which are the currencies currently issued for distribution in Kenya?

9. To what extent has the currency in circulation grown over the past five years?
   a. Positive growth
   b. No growth (stagnation)
   c. Negative growth

SECTION C: COST OF ISSUING CURRENCY

10. Does the central bank engage in the printing and minting of currency on a regular basis?

   ☐ Yes  ☐ No
11. Where do the finances for issuing currency to the economy come from?

- Government
- Central Bank
- Taxpayer
- Foreign borrowing
- All the above
- No idea

12. Are the amounts used to print and mint currency substantial?

- Yes
- No

13. How long does currency issued to circulation take before it is retired?

14. In your opinion, do you think that the cost of printing and minting of currency is proportionate to the lifespan of the currency issued?

- Yes
- No

SECTION D: PRACTICE OF SEIGNIORAGE

15. Have you ever come across the term Seigniorage?

- Yes
- No

If yes, what is your understanding of the term Seigniorage?

16. Give a brief description of how Seigniorage is practiced.
17. In your opinion is the concept of Seigniorage widely adopted to make it a common
term like other finance terms?

☐ Yes  ☐ No

If no, how do you think the concept can be acknowledged in finance circles to make it
widely understood?

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

18. "Seigniorage is a substantial form of revenue generation for a government" - How do
you rate this statement?

a. Strongly agree
b. Agree
c. Indifferent
d. Disagree
e. Strongly disagree

19. Do you think the complete adoption of Seigniorage in a country's financial system
could end up compromising on the inflationary balance since there could be
possibilities that too much currency may be released into the economy?

☐ Yes  ☐ No

Please elaborate your answer.

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

20. "Seigniorage is actually a quick source of income since it is the method of choice to
countries that cannot sustain revenue generation through other means such as
taxation" Do you agree with this statement?

☐ Yes  ☐ No

Please elaborate your answer.

____________________________________________________________________
____________________________________________________________________
21. To what extent in your opinion, do you think the management and staff of the Central Bank of Kenya understand the concept of Seigniorage?
   a. Fully understand
   b. Somewhat understand
   c. Not sure
   d. Do not understand

22. Do you think the Central Bank of Kenya management is keen on practicing the concept of Seigniorage?
   □ Yes □ No
   How?

23. To what extent in your opinion, do you think the key revenue generation departments of the Central Bank of Kenya understand the concept of Seigniorage?
   a. Fully understand
   b. Somewhat understand
   c. Not sure
   d. Do not understand

24. In your opinion, does the Central Bank of Kenya have a team that understands the concept of Seigniorage and have adopted it as a core function of their operations?
   □ Yes □ No
   If yes for how long has this been the scenario?

25. The competence of the staff mandated to implement the concept of Seigniorage is very good. (Rate this statement)
a. Strongly agree
b. Agree
c. Indifferent
d. Disagree
e. Strongly disagree

26. Has the concept of Seigniorage been sensitised to other staff and stakeholders?

☐ Yes  ☐ No

If yes, how elaborately has this been done?

a. Very elaborate and specific
b. 50/50
c. Not specific

SECTION D: RECOGNITION AND REPORTING OF INCOME FROM CURRENCY ISSUE

27. Are there specific line items in the financial statements of the Central Bank of Kenya that are directly attributed to Seigniorage revenues?

☐ Yes  ☐ No

28. What has the trend been for currency in circulation as reported by the Central Bank of Kenya over the past five years?

29. What has been the trend for surplus or deficit generation as reported by the Central Bank of Kenya over the past five years?

30. Based on your understanding of Seigniorage, have the surplus/deficits reported been consistent with the trend of currency issued to circulation?

☐ Yes  ☐ No
31. Are there policies, processes and procedures in place that are used to entrench the practice of Seigniorage? 

Identify some of the major ones

32. Overall, do you think the concept of Seigniorage has in any way had an impact in the Central Bank of Kenya and the Government in terms of revenue collection? 

What is the impact?

SECTION G: GENERAL MATTERS

33. Do you consider a country’s Central Bank as a key revenue generator for a government?

☐ Yes ☐ No

If you do, then how is this done?

34. Please state some of the primary sources of revenue for the Government of Kenya?

35. Do you think there could be other major sources of revenue that may remain untapped?

☐ Yes ☐ No

If yes, briefly describe some of these sources and how they can be optimised.
36. In your opinion, is the country’s level of financing adequate to ensure that all planned projects are complete?

☐ Yes  ☐ No

Kindly elaborate your answer.
<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Costs (KES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Proposal Development:</td>
<td></td>
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<tr>
<td></td>
<td>- Typing expenses</td>
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<tr>
<td></td>
<td>- Printing expenses</td>
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<tr>
<td></td>
<td>- Transport</td>
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<tr>
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<td>- Storage Media (Flash disk)</td>
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<td></td>
<td>- E-mail &amp; Internet costs</td>
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<td>Questionnaire Development:</td>
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<td>- Transport costs</td>
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<td>3,100</td>
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<td>4.</td>
<td>Data Analysis:</td>
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<td></td>
<td>- Printing &amp; copying expenses</td>
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<tr>
<td></td>
<td>- E-mail expenses</td>
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<td>- Transport costs</td>
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<td>Draft Paper Preparation:</td>
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<td>- Internet expenses on</td>
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<td>Final Paper Preparation:</td>
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<td>7.</td>
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<td><strong>Total Estimated Costs</strong></td>
<td><strong>37,850</strong></td>
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CERTIFICATION OF CORRECTIONS

Name of student: 

Reg. No: 053/21/11311/04

Date of Defence: 15th March 2012

I certify that the student has done all the corrections as recommended by the Board.

Name of Supervisor (i):

Signature: 

Date: 4/4/2012

Name of Supervisor (ii):

Signature: 

Date: 4/4/2012

I certify that the student has done all the corrections as recommended by the Board.

Name of Corrections Assistant:

Signature: 

Date: 1/6/2012