

Influence of Government Borrowing On Economic Growth in Kenya

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ABSTRACT

The issue of government borrowing has been the major underlying main issue that most empirical data has ignored when it comes to the field of economic growth. However, the level of indebtedness has been agreed upon globally as the main dependent issue on a country's growth and development. Poor investment, low consumption, and overtaking the production level of a given economy are limitations towards economic growth in cases where government borrowing is used to fuel development. The aim of this paper was to determine the effect of government borrowing on economic growth of Kenya as a country. The main aims of this study were to establish the impact of domestic, external commercial, external concessionary borrowing and interest on economic growth of Kenya. Debt overhang was the basis of the research theorem, Theory of Expenditure, and Neoclassical Growth Theory. The research applied descriptive research design, within the study secondary data was collected. Secondary data was used in the analysis on external borrowing was derived from Central Bank of Kenya (CBK), Ministry of Finance, world development indicators and World Bank data, internet and the Kenya National Bureau of Statistics. Data collected ranged from the year 1989-2019. The data analysis tool, SPSS version 25.0, was utilized for this study. The study findings were that government borrowing significantly impacts on economic growth and that it can be used to significantly predict economic growth. Further findings were that that the government borrowing component that entails internal borrowing has both a significant positive association and relationship with economic growth. Final findings were that that the government borrowing components that entail external commercial and external concessional borrowing both have a significant positive association but an insignificant negative relationship with economic growth. This implies that government sector borrowing is an important factor for economic growth. Further implications were that internal borrowing is an important factor for economic growth. Policy recommendations are made to the National Treasury to utilize government borrowing to spur economic growth. However, public debt should be utilized up to a certain point because government borrowing and economic growth have been cited by various empirical literature reviewed in the study as having a downward sloping curvilinear relationship.

KEY WORDS: Public Debt, Domestic Debt, External Debt, Economic Growth

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I. INTRODUCTION

Between the 1950s and the 1980s, it became increasingly normal for countries to run deficits on their current accounts. Adepoju (2007) noted that international monetary institutions and advanced nations promoted the concept of economic development that was underwritten by loans, especially for developing countries. The uptake of loans was supposed to drive economic growth that would act as an incentive for external firms to invest in the nation. The ability of the indebted countries to service the loans was not a key consideration, which only spurred these countries to borrow more without regard for the liabilities being incurred on their current accounts. This period of hassle-free loans persisted until 1982, when the international financial system was shocked back into reality when Mexico defaulted on its loans, yet it was an oil exporting country.

As Krumba (2005) observed, the defaults from developing countries that followed that of Mexico were simply a byproduct of the political and economic environment across these countries. The access to easy credit afforded by the relaxed rules from financial institutions saw a significant growth in the public expenditure of these countries. Additionally, the oil crisis of the 1970's precipitated by OPEC's embargo on western countries, and its adverse economic impact in the west that trickled down to developing countries, had already weakened the economies of countries around the world. A global recession followed in the 1980's as a direct consequence of the oil crisis and also as a result of the contraction of capital from developed countries. Capital was no longer cheap and attracted hefty interest rates. Inadvertently, the economies of third world countries were the most affected.

In a 2001 report, IMF noted that Kenya had the potential to sustain high economic growth without uptake of unsustainable debt. Although there was an uptick in economic growth for the first few years that followed the report, the ensuing economic morass that was triggered by political instability and the post-election violence of 2007 curtailed this growth and neutralized any gains that had been achieved thus far. The decade had not started well for the country. Although the country was deemed capable of absorbing and servicing debt sustainably, it was denied the favorable borrowing terms and debt relief given to peer countries with similar economic outlook. This was mostly informed by the lack of political reforms (Adepoju, 2007). For the economic period between 1980-1990 and 1991-1999 the two nation's foreign debt signals or indicators on the level of debt which are debt: GDP ratio and debt: exports ratio has risen on average level of 38.4 percent to 120.1 percent and 88.2 percent to 268.3 percent.

From World Bank Debt Sustainability Analysis report (2014) noted that the country's debt outlook had changed for the better. Despite the slower than expected economic expansion, the country's Kenya's debt indicators were on an upward trajectory due to reduction in current account deficits in the preceding 2012-2013 period, coupled with more positive foreign exchange terms. The report went on to note that Kenya's economy was resilient enough to absorb the shock of disruption in availability of debt, with the debt levels being sustainable. Additionally, the report emphasized when subjected to baseline scenarios and stress tests, the debt levels were not found to have exceeded the optimum policy-directed threshold.

Government Borrowing

Public debt can be described as the total debt incurred from both foreign and domestic borrowing (Akram, 2010). In a centrally managed political system, public debt is borrowing held by the central government. In contrast, a federal system of government would mean that public debt is debt owed by states, provinces, municipalities, or local governments. According to Patillo, Poirson, and Ricci (2004), the effect of public debt on a country's economy can be measured through the total factor productivity (TFP) metric. When a country borrows externally to plug a deficit, it essentially guarantees that a good amount of its future economic output will be directed to external firms or governments. This has the unintended effect of disincentivizing the country's workers from being more productive, who are not only denied the fruits of their labor, but who also see the outflows of their output to the benefit of foreigners.

A rise in debt levels usually cause a decrease in both domestic and foreign investment, principally due to the rise of the risk in both private and public entities. To mitigate against this risk, investors increasingly resort to short-term investments to reduce their exposure to the uncertainties in the market. This outcome adversely affects the ability of companies to raise capital, with the capital raised bearing higher interest rates. The underlying risk discourages long-term investments that are more beneficial to a country's economy. The overall effect is felt in the decline in productivity in the country, which leads to a dire economic outlook (Patillo, Poirson & Ricci., 2004).

Empirical studies have established public debt either spur or hinder economic growth. Akram (2010) argues that public debt can spur growth where the rendered finances are directed to the right sectors of the economy, which in turn generate revenue that is used to offset the debt. In a study to gauge the impact of debt on Jordan's economy, Al-Zeaud (2014) demonstrated that debt had positively impacted the Jordanian economy, contributing to a significant jump in growth.

Similarly, Pattillo, Ricci, and Poirson (2002) argued that when debt is managed prudently, it can have a considerable positive influence on a developing country's economic outlook. Proper utilization of this investment which applies to borrowed funds and domestically ploughed back funds are properly utilized for this be rendered effective. The economic expansion underwritten by borrowed funds can accommodate debt servicing that is not detrimental to a country's economy. When a country sustains this growth model of prudent borrowing and repayment over a given period of time, the per-capita income will increase boosting the quality of life of citizens.

On the other hand, studies such as Siew and Yan (2015), Atique and Malik (2012), and Cerra, Rishi, and Saxena, (2008) have demonstrated that public debt can hinder the development of a country's economy. Siew and Yan (2015) studied the impact that borrowing had on Malaysia's economy between 1991-2013. The

study documented that Malaysia's uptake of debt saw a corresponding reduction in the country's GDP. Similar findings were noted by Atique and Malik (2012), whose study of the economic performance of Pakistan demonstrated that increase in debt negatively correlated with economic performance.

According to Siew and Yan (2015), the appetite for debt uptake prevalent in emerging economies, especially sub-Saharan countries, has raised questions on whether the debt is a net positive to these economies, or whether the debt is simply misappropriated or misallocated, to the detriment of future generations which will have to shoulder the responsibility of repayment. High debt levels are also a turn-off for investors, who have to factor in a nation's ability to repay its loans before they invest. The loans taken up by a highly indebted country attract high interest rates, as a hedging mechanism for the investors against the considerable exposure to risk (Cerra, Rishi & Saxena, 2008). At the very best, country in such a predicament will hinder its economic performance and at the very worst, when this unsustainable cycle is perpetuated over the long haul, it might go into a recession or depression.

Economic Growth

Economic development is the rise in the market value of the products and services produced by an economy over a period of time either due to rise in quantity or quality. It is conventionally estimated by evaluating the percentage increase in real gross domestic product (GDP). Adam and Bevan (2005), argued that the financial implosion of the 1980's that cut off access to cheap credit for Third world countries was a large negative impact on their economic development. The crisis forced these emerging economies to seek debt-relief measures from creditor countries to offset the negative repercussions of their skewed current accounts.

In practice, debt repayment is a drain on a nation's coffers, depleting limited resources that would otherwise be redirected to development initiatives. This robs a country's nascent industries of access to capital for expansion, with the attendant result of an uptick in unemployment. Debt repayment also curtails the growth of the export industry, inhibits human resource development, and discourages investment in development expenditure that is critical for economic growth. Similarly, as the ratio of foreign debt vis-a-vis GDP rises, the difference real cost of foreign borrowing defined as the summation of the risk-free interest rate & risk premium rises accordingly. This creates a cash crunch in the economy that triggers insolvency, leading to a financial meltdown if the situation is not arrested sooner. In effect, an affinity for debt to fund expenditure exposes a country to a glut in investments and decline in economic performance.

Despite the foregoing conclusion on the effects of unregulated borrowing, when other factors are held constant, debt can be a vital tool for driving economic growth in a country, especially one with limited access to internal sources of capital or one with significant budget deficits. External borrowing might also be preferable to internal borrowing where stringent conditions that protect against misappropriation are attached to the loan facility by creditor countries, and where these conditions are actually enforced. These forces debtor countries to channel these funds to the earmarked projects; facilitating growth, reducing wastage, curtailing corruption and generating revenues that be used to offset the loan.

Laubach (2009) observed that debt was only sustainable when the borrowed funds were channeled to income-generating activities or development expenditure, with the revenue from the projects used to settle the debts. Diamond (2005) conducted an analysis to gauge the effect of taxation on citizens in respect to financing debt, both internally and externally. Diamond concluded that although taxation might be an option for a government looking to offset debt, it should be a last resort measure. This is due to the fact that debt financing through taxation reduces the purchasing power of citizens, reducing consumption and impeding business. The loss of expenditure income and savings that would otherwise be directed to other investments negatively impacts capital availability for business, making capital acquisition expensive and therefore impossible for individuals and business. Additionally, Laubach (2009) observes that when governments borrow domestically, they crowd out other individuals and entities from accessing capital, as the interest rates go up due to demand from the government.

Statement of the Problem

The increase in advanced countries' foreign debt as result of international monetary crisis has led to a serious concern of debt sustainability and the financial impact. Public debt may affect financial development through different methods for example; extended interest rates, raised future tax distortion, a rise in inflation, uncertainty and a sector of vulnerability to crisis (Reinhart, 2012). If financial development is negatively impacted, budget sustainability issues are likely to be worsened which further affects tax adjustment efforts to reduce debts to more effective level.

While Kenya is still trying to fight the poverty levels where 56% of the people live below poverty line, the financial performance continues to go down. In the year 2000 from a report made the country experienced its first negative GDP growth level since independence. According to Manundu (2004), the exclusion of Kenya

from the high borrowing poor countries debt initiative is likely to have been partly caused by its poor record of reforms and financial performance rather than its ability to attain effective levels of financial debt.

For the economic period between 1980-1990 and 1991-1999 the two nation's foreign debt signals or indicators on the level of debt which are debt: GDP ratio and debt: exports ratio has risen on average level of 38.5 percent to 121.1 percent and 89.2 percent to 268.2 percent respectively. Since the year 1991 there has been a considerable net outflow and this has been used to service debt obligations. Reduction of domestic resources available has been caused by paying out more funds than the country is receiving. Very controlled options exist in the financing of development between the national government and through internal borrowing. Internal borrowing has been rendered ten times expensive than foreign borrowing and has only constituted less than 1/3 of the total borrowed amount. The motivation for public borrowing must always be distinguished from the reason for borrowing.

The recent amendment to Section 50 (7) of PFMA 2012 makes the interrogation of the borrowing motives imperative. From the time the amendment was done in May, 2014, public debt has increased by 34% from Kshs. 2,190.39 billion to Kshs. 2,933.69 billion in August, 2015. The sections 50 (7) (c) and (d) of the PFMA (Amendment) Act, 2014 allows external parties to motivate national borrowing with the intention to benefit from fees, commissions and expenses associated with money borrowed. The external parties include financial arrangers, book runners, tax agents, trustees, paying agents, exchange and information agents, syndicate agents, counsel, clearing systems, listing agents and rating agencies [PFMA (Amendment) Act, 2014, sections 50 (7) (d)].

The debt repayment capacity and sustainability of government debt in Kenya has also elicited substantial public debate. Debt obtained should be used efficiently, in a manner that allocation of resources in the long run is efficient and in which financial growth is secured. Debt is used to be used efficiently if the ratio of debt service: total revenue collected as well as foreign debt service: exports fall or remain constant. Borrowed money should be used in projects that will be in a position to produce products to repay the debt. However, a section of the public, financial experts and legislators criticized government for rising public debt, increased wage bill and grand development project which are yet to be implemented despite government borrowing to finance such projects. Government critiques cite examples such as KENREN project in which the intended fertilizer manufacturing company was not established, the Anglo leasing and the recent debate on the management of proceeds from Eurobond.

None of the empirical studies analyzed investigate the link between combined foreign and internal borrowing and economic development of Kenya. This subject paper sought to bridge the research gap by examining the impact of government borrowing on financial development in Kenya. The study also sought to answer the question: what is the impact of government borrowing on financial development in Kenya?

Objectives

- i) To establish the influence of internal borrowing on economic growth in Kenya
- ii) To determine the influence of external commercial borrowing on economic growth in Kenya
- iii) To establish the influence of external concessional borrowing on economic growth in Kenya.

II. LITERATURE REVIEW

Theoretical Review

The study is anchored on the debt overhang theory. The theory is seen when an entity such as a business or government is so indebted to the point that it can barely access further sources of financing, irrespective of whether the new loan is being channeled to a very viable investment that is guaranteed to offset the debt. The term was coined by Myers (1977), who observed that when new financing is channeled towards viable projects, the accruing profits can be used to offset old debts. The greatest beneficiaries in that scenario would therefore be external debt holders. Consequently, equity owners, managers or leaders of the entity or country are desensitized from launching new investments since they do not stand to be the principal beneficiaries. The theory is pertinent to the study since it explains the fact that as a country increasingly turns to debt to finance its deficits, debt repayments will also constitute a greater part of the country's output

The study is also premised on the theory of expenditure. The theory states that war is not funded through taxation as no nation has the capability to achieve such a large taxable amount. The need to borrow arises and debt charges are only enacted after the turbulence is over. The "imperfection effect" was another impact that they were thought would make keener to be aware of social problems during the crisis. For the government to fund the expanded budget expenditure it should therefore convince the people that the expanded volume to cater for the expanded need of social services and hence a decrease in taxation levels will not be experienced (Cohen, 1999). When the government is forced to raise the taxation levels, this theorem then becomes relevant to the study as it tries to meet the expanded budget of expenditure in a swift manner. During these periods of disorder and social turbulence it is only then when the people regard it to be acceptable to raise taxes. According to

Peacock and Wiseman (1990) they referred this to as the “displacement effect”. During the turbulence period the government expenditure pushes upwards and throughout the entire ordeal the relocated private budgets counter for the public budget and ensures that it does not drop back to the starting level.

The neo-classical growth theory also guides the current study. The theory links between employment, investment and growth economics of an economy can only be explained by the neoclassical growth theory of Harrod-Domar (1956) archetype. This theory states that the production volume is directly proportional to capital stocked. During his contribution to the economic growth Solow (1956) put emphasis that growth was dependent on capital development and presumed production was dependent on technology, capital and labour. In his argument he states that if there is an experience of capital constraints then labour can be used as a substitute. Long run growth will then be impacted by technological transformation and not investments and savings. Saving can only be considered during a short-lived growth. The reason behind this is due to the experience on the economy of diminishing returns as the proportion of capita per work raises. In the foreseeable future the analysis depicts that economic development is possible through labour to technological difference and a raise of capital per work. The transitional dynamics is used to elaborate on exogenous development module in the level; of economics as defined by Claessens (2000). Until the economy has reached its steady state, capital gathering will enhance productivity to increase. Savings increases with the proportional increase in invested capital. Due to depreciation, technological growth and population the current situation, savings go past the natural depreciation in per worker capital. To achieve a gradual steady health state of economic growth, a higher investment timeline which will lead to more capital available per worker will be needed. In the future growth rates of an economy that has gone beyond its steady state will experience a slow growth rate or even suffer from stagnation. The theory is relevant to the study since it defines the link between growth estimates, investment and employment capability in an economy.

Empirical Literature Review

Domestic Debt and Economic Growth

Before issuance of domestic debt in order to plug a budgetary deficit or to reduce monetary liquidity in the market, a thorough cost-benefit review is necessary. Despite the fact that some studies exist on the subject, there lacks a substantive report on the benefits or drawbacks of issuing domestic debt; specifically, its impact on public finance, the financial market, and the economy at large. Those critical of domestic debt cite the negative impact it might have on private sector financing, the risk of unsustainable debt, the risk of introducing bank inefficiencies, and the risk of causing inflation to spike.

One of the first concerns about internal debt is the ‘crowding-out’ effect it might have on other investments in the economy. When the government turns to the domestic financial markets to raise funds, it essentially mops up domestic private savings from the market, which denies other domestic borrowers from the private sector access to these funds for investment. This spikes up the interest rate on the remaining capital for the private borrowers, which disincentives them from borrowing, which hampers the growth of private organizations and lowers the quality of life for citizens (Diamond, 1965). In a country with an unsophisticated financial sector, especially one that is not well connected with international financial markets, domestic borrowing can have quite severe repercussions for the private sector, as they have fewer or no alternatives to raise capital.

Second, those critical of domestic debt also point to the negative effect it might have fiscal and debt sustainability. One argument is that internal debt is usually more costly as compared to external borrowing (Beaugrand et al, 2002). This is as a result of internal debt attracts significantly more interest than external debts. The interest payments constitute a greater part of a country’s output, which creates a crowding-out effect that impairs investment in poverty-mitigating and growth-stirring industries. Additionally, overreliance on domestic borrowing may result in reduced tax collection as growth is hampered, which may lead to political instability as job creation is hampered. Because most internal debt initiatives are structured to be short-term in nature particularly in sub-Saharan Africa (Christensen, 2004), most governments are constantly at the risk of a liquidity crunch due to debt-overs.

Third, raising domestic debt might turn out to be an expensive venture in situations where trust in the government is low, which raises time inconsistency issues. When a government’s tax collection mechanisms are poor, a situation that prevails across sub-Saharan Africa, the government will be compelled to turn the deficits in monetary value and utilize the net internal economic gap to both, fuel seignior age, as well as decrease the real burden of existing DD. A time inconsistency problem is experienced due to these circumstances, therefore cannot provide minimal debt at all, to compensate for the risk of surprised inflation a significant premium has to be paid.

Fourth, when domestic debt yields significant returns for the banking sector, the sector will be disinclined to; push for private deposits, provide low interest rates to borrowers, or invest in private sector initiatives. The motivation to provide affordable financing to private borrowers, or to even innovate by offering

tailored financial solutions to different segments of the economy is hampered by domestic borrowing. By analyzing the risk, domestic debt is vastly lucrative for local banks due to the low-risk it attracts coupled with the certainty of returns, which only denies credit to the private sector and stifles innovation (Hauner, 2006).

In contrast, proponents of domestic borrowing point to its capacity to stir growth, reduce inflation, and increase savings especially for economies with mature financial markets. Domestic debt therefore enhances private sector growth. Additionally, proponents of domestic debt finger the zero net domestic financing (NDF) policy adopted by some countries as being responsible for the underdevelopment of local financial markets. According to them, such a policy only stunts the growth and development of local economic markets which then encourages overreliance on foreign financial markets for capital.

Domestic debt can be useful in strengthening the financial sector, boosting domestic savings, and stimulating investments. Government-backed securities are an essential mechanism for effecting the government's monetary policies and are also used as collateral in inter-bank lending. Inter-bank lending ensures that private banks can have access to capital without necessitating regular intervention by the central bank. This is the observed case in countries with sophisticated economic markets and with a mature domestic debt market. In such markets, the government does not have to impose financial controls such as a credit ceiling, interest rate cap or a steep capital reserve requirement, measures that inhibit the growth of the financial industry while stifling intermediaries to the detriment of the private sector (Gulde et al., 2006).

Second, returns from investing in government securities inform the pricing rates for other financial products or loans issued by banks or financial firms, stimulating the growth of the corporate bond market and thereby boosting the competitiveness of these firms and of the financial sector as a whole (Fabella & Mathur, 2003). Third, government securities floated on the domestic market are a viable investment option for domestic savings and curb capital flight, while also recalling savings from the informal financial sectors into the official economic sector (IMF, 2001). Internal debt can therefore stretch the advantages past saving encouragements and broaden into a decrease in the volume of the African financial stability, broader fiscal coverage, higher budgeting base, introduction of new currency and beliefs on monetary and the national risk.

Similarly enhancing the size of cashing in, DD raises the total factor productivity as well as improves the effectiveness of the investment. Engagement between the private sector and the banks within the developing countries is reluctant as these banks face an inherent risk as well as an unpredictable business environment. As a result, banks prefer to finance consumption related sectors and instead avoids financing building blocks sectors in terms of agricultural production and local manufacturing, regarding Africa, (Gulde et al., 2006). Lending to riskier sectors emerge as in a case of financial institutions requiring a constant source of money and hence the public resources can be presented as collateral. This shows that the government may weigh in to help out the due to the lack of a strong legal cooperate framework (Kumhof, 2004; Kumhof & Tanner, 2005).

Assurance value of DD comes into play when the bank overheads have no possibility to be minimized further and this raises the risks of lending a result of high contradicting details or an undefined contract being followed which is inclusive of laws regarding to foreclosures. In the long run nominal debt difference ensures political responsibility and assists the government and nation to have made access to the international economic markets. Raising the dependence on internal financing may assist in remedying the problems of external lending which has which has raised the issue of crowding out the internal institutions by making the citizenry futile and hence serves the means through which the institution reforms are forced (Moss et al, 2006; Abbas, 2005). Maintaining of a clean track record may grant entry to world markets. Findings have shown that nations that have successfully incorporated the sovereign bonds in the world markets have had issuance of bonds in the internal markets according to past experiences (Kahn, 2005).

Research on DD has minimized by lack of dependable data, especially in the case of time series data cutting across a large number of countries. The only panel study Fry (1997) is on the other hand lack financing methods on financial development in LICs and Ems. Across 66 LICs and Ems from the year 1979-1993, Fry finds out that the cheapest method of financing is market-based DD provision as opposed to seigniorage, external funding, financial restraining, all of which at the end are viewed to suppress development, restrain internal saving, and accelerate inflation. According to Fry the question should not be whether the nations should opt for domestic based financing but how they should achieve this.

Various research has assessed the effect of domestic economics on financial institution efficiency and private sectors borrowing. From bank level data obtained from 73 middle income earning countries from the year 1990, Hauner (2006) results show that banks, which give more credit to the government, are less efficient but more profitable. However, application of aggregate national level data on financial holdings of DD gives mixed analysis, DD only shows destruction on financial growth when high levels are reached. Hauner's study can be said to be biased as they exclude the sub-Saharan Africa and other LICs, which display low DD, the findings are aimed at identifying a low residual DD volume. In addition, the research does not consider that the nature of competition in the financial sector controls the extent at which the banks can "sit on" government bond interest income or "pass them on."

Furthermore, Hauner (2006) does not put into account that the decision taken by banks to hold DD can be financially efficient from a risk wide base perspective. In an example; if the long-run banks' income from government securities then the risk would drop through the widening effect if the income was negatively correlated. As a result, decrease in depositors' required return hence making banks to decrease their borrowing-giving rate for any given interlinking margin. Abbas (2007b) supports the negative correlation through the theoretical and empirical approach.

The crowding effects of DD at the huge economic level is mixed from results shown in an empirical data evidence. Further research shows the indicators of economic depth, such as loans and deposits calibrated to GDP, Detragiache et al. (2005) include government internal interest payments as a proxy for DD in 82 LICs and Ems from the year 1990-2001 period. The dependent valuable interest payments are seen to display significantly negative, however it is not vigorous so in regressions of bank assets scaled to GDP, hence providing a crowding out effect of nominal standard, at first glance. A collateral argument suggests that domestic interest payments enter the loans to GDP and deposits to GDP regressions positively which shows that the crowding in effect is acceptable in Kumhof and Tanner's (2005).

In an examination over the 1993-2002 period IMF (2005a) the effect of DD on private sector credit in relation of 40 LICs of which was inclusive of 15 mature stabilizers. The limited data of government financing and crowding out of the private sector by lending from the mature stabilizers. Increased levels of DD are found to be linked with small levels of cooperate lending, and the relationship can only be found to break down if first levels of the variables are used. The study found not enough proof of a negative link between original T-bill rates and variations in DD for either involving the mature stabilizers or the wider LICs. The study proves that interest levels, such as rationing of credit, and cautioning against a fast build up in DD, mainly in the form of the availability of constituting the external economics are channels through which crowding may occur.

Commercial External Borrowing and Economic Growth

A Eurobond is essentially a government security floated on the international financial markets, denominated by a currency different from that of the country or entity floating the bond. Although the exact make-up of the bond varies from country to country, the maturity period of a typical bond is usually 5 years or 10 years. The bonds also pay fixed interest coupons, without provision for amortized repayment of the principle, which means that there is a lump sum repayment of the principle at maturity. In addition, Eurobonds come in various sizes, historically ranging from \$250 million to \$ 1.5 billion.

Sy (2013) observes that more than 20% of sub-Saharan African (SSA) countries have floated Eurobonds in international markets. On the supply side, the appetite for Eurobonds has primarily been informed by the increased capacity to absorb loans afforded by debt relief measures, the growth of development expenditure especially in respect to infrastructural development, availability of cheap financing options in both domestic and international markets, relaxed borrowing requirements and the elimination of stringing borrowing terms that were historically attached to loans from the IMF and World Bank. On the demand side, the willingness for creditors to fund Eurobonds issued by sub-Saharan African countries has been informed by improved financial regulation mechanisms that guarantee debt sustainability, better returns in SSA countries as compared to more mature countries, and the need to diversify their portfolios by having a foothold in emerging markets.

There are a variety of reasons why Kenya would find a Eurobond attractive. For instance, Eurobonds provides access to a greater pool of financing than typically accessible through other financing options such as concessional loans or domestic borrowing, which makes Eurobonds ideal for financing projects requiring substantial capital outlay, such as roads and railways. Eurobonds also boost foreign exchange reserves of Kenya by injecting foreign currency, necessary for importing key products such as Oil, without depleting existing reserves while simultaneously boosting the local currency. Eurobonds also negate the need for the government to turn to the domestic markets for its financing needs, which only drives up interest rates for private sector borrowers, making borrowing prohibitive and stifling economic growth. Eurobonds are also a diversification measure for the government, providing an extra stream of financing for the government, which protects the government from a capital crunch arising from disruption to any one stream, whether domestic or foreign.

Nevertheless, Eurobonds are not the ultimate panacea for the government's financing needs, seeing that they come with a myriad of costs and risks. The most prominent cost outcome is the high interest rates that come with Eurobonds. The interest rate is usually determined by two primary factors: The first is the risk-free benchmark, which is informed by the current yield on a US treasury security of a similar duration, while the second factor is the spread above this benchmark, which is a risk premium specific to each country depending on its risk profile, Kenya's being .6565. Because these numbers are not fixed, the cost of a Eurobond is not uniform across the board, but varies from country to country and from year to year. In 2013, post the economic recession of 2007-2009, a US treasury bond with a maturity period of 10 years increased from 2% at the beginning of the year to 3% by the beginning of 2014. Over the last one decade, the yields on US Securities

have been on an upward trajectory, raising the cost of capital for emerging markets and sub-Saharan African countries such as Kenya. The attractiveness of US government securities ensures that lenders direct capital to these securities at the expense of countries with a higher risk profile such as Kenya, which raises the cost of Eurobonds.

To get an idea of the interest rates Kenya might be expected to pay on a Eurobond floated today, it is important to benchmark with the yields on Eurobonds floated by other SSA countries with a similar rating. As of 10th December 2014, Zambia's Eurobond with a maturity date of 2023 was trading at a yield of 7.4%, Rwanda's Eurobond with a maturity date of 2024 was at 7.6%, while Ghana's 2023 Eurobond was trading at 8.4%. Based on these yields, if Kenya had also floated a Eurobond covering a similar period, the country could expect a yield ranging between 7.5% and 8.5%. However, this is an arbitrary percentage that might be very different from reality, as the exact yield on future issuance might be subject to wide variations informed by prevailing global financial conditions, the perception of the country's ability to finance the debt, and the specific nature of the bond. In essence, benchmarking with other countries in sub-Saharan Africa is crucial in determining the average yield expected from the issuance, which informs budget planning.

Other than the interest rates incurred, floating a Eurobond attracts other costs such as the fee paid to financial and legal firms handling the bond, who determine the success or failure of the bond. Unlike interest rates, however, the fees are not fixed but are informed by the size of the bond, and are usually arrived at through negotiation. Okwiri (2017) notes that as of December 2013, the total fees for a debut Eurobond range in the region of \$1 million on a \$500 million issue.

There are other risks that are inherent in the issuance of a Eurobond; exchange rate risk and the risk of default on principal repayment. The majority of Eurobonds issued in sub-Saharan African countries have required a bullet or lump sum repayment of principal: a financing structure that carries greater risk unlike an amortization structure. To mitigate against the risk inherent in such a structure, the country can: set up a sinking fund: which is a savings account where money is channeled periodically in preparation for the bullet repayment; execute debt buybacks or swaps – which entails buying back part of the debt from creditors or swapping it for longer-term debt; issuing a new Eurobond; or a mitigation mechanism that combines all the preceding options. Although most SSA countries resort to bullet repayment of principal, the Kenyan government could opt for an amortization mechanism with permission from creditors.

Apart from the cost and risk implications highlighted above, there are macro-economic and monetary issues that must be taken into consideration before Kenya can issue a Eurobond, in order to guarantee that the country derives maximum benefit from the float, and to mitigate against any negative externalities such as unforeseen risks and costs that might emanate from the issue. The overarching consideration is the financial viability of the projects which are earmarked to be supported by the Eurobond funds, seeing that returns on these investments will be used to offset the interest and principal payments. Ideally, the funds would be channeled to developmental expenditure projects with the highest financial returns for the country- either through direct user charges and/or the government's stake in profit generated, or through creating a ripple economic effect that translates to an expanded tax base for the government – ensuring that interest payments are not a drain on the government's budget. A project requiring massive capital outlay such as a port or railway might also require significant foreign participation in terms of expertise or machinery, which necessitates foreign exchange expenditure to settle fees and buy machinery. A Eurobond issue would protect against the drain on the country's foreign exchange reserves as those payments will be settled with the foreign currency generated from the issue. The ideal projects would also stimulate the export industry so that the country can generate foreign currency that would be used to pay off the debt, in order to protect the strength of the local currency. With the foregoing considerations, a Eurobond issue remains the most viable avenue for financing capital-intensive projects in the country.

In addition, the government should ensure that size and timing of the Eurobond is taken into consideration. Financial advisors should perform a debt-sustainability review to confirm whether the additional debt is sustainable for the country's economy. Additionally, it is crucial to ensure that the total amount to be raised does not exceed the required threshold for the earmarked projects, and that the government has the capacity to absorb the funds in terms of budgetary planning and technical expertise. When the government raises more capital than necessary, it is a drain on the economy as the country will be making interest payments on non-productive capital. Although \$500 million is the minimum threshold for an issue to be included in the global emerging market bond indices, Kenya should not feel compelled to abide by this threshold if a feasibility study shows lack of capacity to utilize the whole amount productively. In effect, there is no requirement for an issue to be of a particular size to guarantee success – as demonstrated, for instance, by the \$420 million issue floated by Rwanda in 2013, which turned out to be a success.

A Eurobond issue also generates a myriad of market and refinancing risks, which also need to be taken into account. The government accomplishes this by ensuring that any issue is a component of a well-defined fiscal strategic policy that has enough safeguards against adopting unsustainable fiscal policies; a

comprehensive debt management strategy; and adequate financial and technical expertise in regard to managing debt (which includes hiring and training competent staff whose key responsibility is managing debt, by monitoring and managing risks). The government has a responsibility to communicate to the market the structural capacity in place for debt management, in order to allay any concerns, sway public opinion and build investors' confidence.

Practically, the initial stages of any offer involve the hiring, by the government, of competent financial and legal advisors, who have been subjected to a competitive process, and who have adequate experience on Eurobond issuance in sub-Saharan African countries. In the last decade, other than Kenya, a considerable number of SSA countries have issued Eurobonds, and their success points to growing confidence in these economies by international investors. Kenya could therefore be expected to issue more Eurobonds in the years to come, if conditions permit.

Although the interest from international investors was more pronounced before the 2007-2008 financial recession, the intervening years have demonstrated that SSA countries remain a priced destination for investment. A country can derive a myriad of advantages from a Eurobond issue. Other than providing an avenue for raising capital for capital-intensive projects such as roads and railways, a Eurobond also negates the need by the government to borrow domestically; mopping up liquidity from the market and stifling economic growth. However, the downside is that a Eurobond issue is significantly more expensive than concessional and semi-concessional loans, and also carries more risks than these other sources.

"Debt overhang" is the main focus on the theoretical evidence on the link between the piled foreign debt and development. Debt overhang can be defined as a situation in which the anticipated reimbursement on foreign debt does not meet the contractual value of debt. In case a nation's borrowing level is level is expected to go past the country's ability to repay depending on some probability on foreseeable future, expected debt pile up is likely to be an increasing denominator of the nation's production level. Economic growth is therefore discouraged by some of the benefits from which investment in the local creditors of which they are taxed by both internal and external financial bodies.

Originally, the debt overhang theorem revolves around the impact of foreign debt on investment in physical investment. The coverage of the study is however much wider; fiscal and structural reforms are reduced by government, as the strengthening the position by even promoting that induced by the structural reforms undergone, could increase pressures to reimburse external creditors. In low income countries, the depressants for reform should be paid attention, whereby fueling of structural reforms is required to uphold increased development to drive towards the MDGs.

Through increased uncertainty levels the debt overhang has depressed growth and investment. Severe impacts on investment are experienced as the government alters policies with increased uncertainties to meet the raising volume of public debt. To be specific, as the volume of the government debt raises, it can be expected that the government's debt service obligations will be budgeted and met through distortionary measures; the inflation and tax rates, for instance, as in Agénor and Montiel (1996). The broad and wide approach in literature on uncertainty and investment depicts that in some cases, potential private investors will opt rather than exercising the option to wait (Serven, 1997).

Quick returns are preferred than long term, high risk and projects that cannot be reversed are the diversion taken of the activity of an investment. Capital flight is accompanied by quick accumulation of debt in which case the private sectors fears imminent loss of value or the raised taxes to meet the debt (Oks & Wijnbergen, 1995). Theoretical literature supports that external borrowing shows positive impact on the growth and investment and reaching a given level of threshold mark after which then the impact is adverse. According to Cohen (1993) the link between the face value of debt and capital can be presented in the form of "Laffer curve" which breaks down to show that a rise in the outstanding debt level past a given threshold mark results to the fall of the decline in reimbursement, this begins to drop as a result of the adverse impacts mentioned in the latter.

The effects are that arise in the presence of value debt leads to a raise in reimbursement up to the threshold mark unto adjacent side graph of the debt Laffer curve, however, a raise in the face value debt decreases the debt expected payments. A similar Laffer curve drawn to express external debt versus growth provided that capital pile up on the economic activity gives positive effects. The debt 'overhang' hypothesis cannot be fully supported by the empirical data evidence found in literature as the results are mixed up. The proportional effect of the debt accumulation on investment have been directly econometrically assessed by proportionately few researches. Assessments made given that the stock debt is presumed to have an effect on growth directly through reducing the fuels to perform structural reforms and indirectly on the effects of investment have been derived from reduced-form equation.

Concessional External Borrowing and Economic Growth

This paper defines concessional external loans as those with a grant element of greater than or equal to 35 per cent (in line with standard international practice) a standard which has defined Kenya's historical concessional borrowing. The relative importance of concessional borrowing in plugging budget deficits in Kenya is on a downward trend as the country's GDP continues to rise, and as the capacity of foreign countries to advance loans declines. Ngure (2013) estimates that net concessional financing will decline as a ratio to GDP from 2.4% of GDP in FY19/20, to just 1.2% of GDP by FY22/20. This estimation is informed by the IMF-World Bank debt sustainability analysis, which assumes that concessional financing remains generally constant over the medium-term but dips in the long-run. Going by the report's projection, concessional financing as a share of GDP in Kenya would only dip to 1.6%, and not the 1.2% that Ngure (2013) forecasts, which is a deviation from the norm.

This paper defines semi-concessional borrowing as loans which incorporate a grant element of less than 35 per cent but that are still contracted on more generous terms than fully-commercial lending. Other factors held constant, semi-concessional loans are more attractive than concessional loans in respect to affordability and terms of borrowing. However, semi-concessional loans have some disadvantages. The loans are usually attached to a particular project, which constraints the government from channeling the funds to more viable projects that might arise in the interim, or from diverting the funds due to an emergency. In addition, semi-concessional loans are fronted as tied aid; devoid of a competitive public procurement process or oversight, which makes it impossible to gauge the exact costs of the concession. In comparison to concessional borrowing which is on a downward trend, semi-concessional financing is on an upward trend as SSA countries increasingly employ the mechanism to plug budget deficits, although it is hard to predict whether that trend will hold over the long term.

According to Warner (1992) he concludes that in the middle income economies the debt crisis didn't pull back investment, however data to support the overhang hypothesis have been supported by Greene and Villanueva (1991), Serven and Solimano (1993), Elbadawi, Ndulu, and Ndungu (1997), Deshpande (1997), and Chowdhury (2001). In addition, an empirical study of 35 Sub-Saharan African countries found supportive evidence of the overhang theory (Fosu, 1999). Nonetheless, Hansen (2001) studying from a sample of 54 developing countries with the composition of 14 HIPCs, and consisting of 3 added variables including openness, inflation and budget balance. This will lead to leaving out of any statistically significant negative effect. The ratio of debt to GNP has not had statistically significant impact on growth Savvides (1992). In another review results show that the empirical data supporting "debt overhang" hypothesis is inconclusive Dijkstra and Hermes (2001). In the ratio mark of the debt-to-GDP through which debt overhang play a role have no enough research to back up the statistics.

Laffer-type link connecting the stock of foreign debt and development have been backed up in a recent study of nonlinear data. According to Pattillo, Poirson, and Ricci (2004) they state the average effect of foreign debt on per capita GDP increase is negative for net present value of debt levels exceeding 160-170% of exports plus 35-40% of GDP. From acquired analysis results, it can be suggested that doubling debt levels is high across different specification and estimation methodologies. Impact on the physical capital and total factor productivity development have been experienced due to a high debt accumulation.

From the year 1969-998 Pattillo, Poirson, and Ricci (2004) use a development accounting framework to a data of 61 developing countries in sub-Saharan Africa, Asia, Latin America, and the Middle East to collect data on a follow up study. From the findings they state that on average, accumulation of debt decreases by almost 1% point both the growth in per capita physical capital and development in total factor productivity. Debt growth and relationship is also affected by the policy environment.

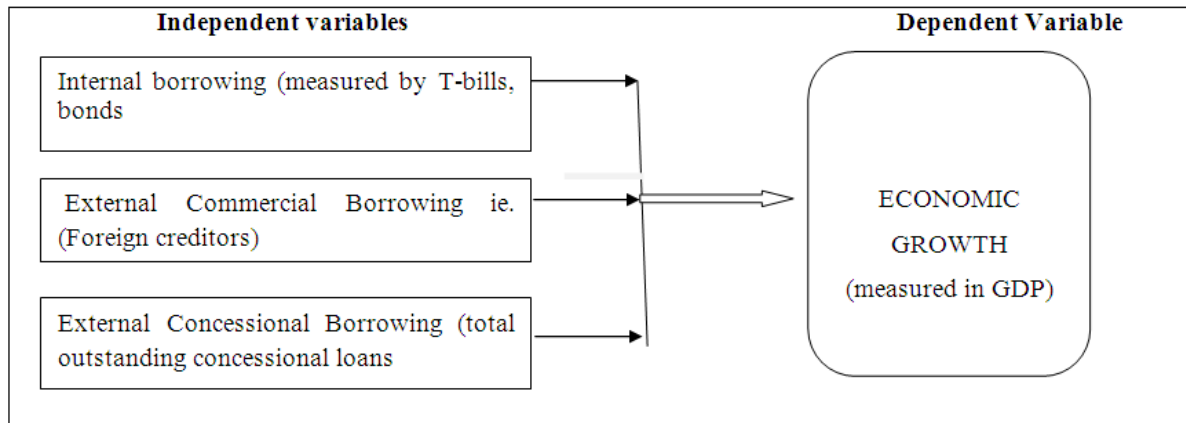
Changing private financing and changing the means of public spending are means in which the foreign debt service (as compared to the total debt accumulated) can bring in impacts. Other factors remaining constant the higher debt service can increase the government's interest bill and financial deficit, lower public savings; thereby crediting out thee available private investment, increasement of interest rates and lastly dampening of the economic growth. The adverse effects of increased debt service payment on the composition of public utilization by restraining the amount of resources available for infrastructure human capital, with negative effects on development can be experienced. From the scope of the study, non-governmental organizations (NGOs) have come to conclude that increased foreign debt service is one of the major hindrances to achieving the basic human requirements in developing nations.

Studies used to assess the effect of debt service on private investment as well as the composition of public utilization is relatively few. Serieux and Samy (2001) find a related relationship between debt service and sum investment while relatively Greene and Villanueva (1991) finds that external debt service dampens private sector investment. A large sample obtained from developing countries with the inclusion of some HIPCs. Savvides (1992) discovers that debt service crowds out public investment utilization. From the study of a well sort out 24 African HIPCs, Stephens (2001) concludes that a US\$1 in debt service causes: a US\$ 33 Decline in education funding, a US\$ 0.14–0.23 Decline in government salary expenses, a US\$ 0.12–0.23 Rise in health

funding. Therefore, these results show that a raise in debt service may not necessarily cause a reduction in investment on health spending in this case.

In conclusion, the available empirical data provides little backup support on how the stock of foreign debt and debt service in low-income countries affect growth. More research and studies should be done to elaborate on the magnitude of these effects, and aimed at low income countries which are immensely gaining from debt relief. In addition, means through which debt affects growth needs to be immensely studied and explored. This paper supposes to fill in the gap in the field and light being shed upon the impacts of external debt service on public investment.

Conceptual Framework



Source: Author (2021)

III. RESEARCH METHODOLOGY

The current study used a descriptive research method, which is stated to be the method that is most effective in a research where the paper seeks to define the attributes of various groups, approximate the number of attributes and make predictions. The primary role of the research study was to define the effect of government borrowing on economic growth in Kenya.

Throughout this study secondary data was obtained. The research used secondary data on external borrowing from the Ministry of Finance (MOF), Kenya National Bureau of Statistics (KNBS), Central Bank of Kenya (CBK), internet, international development signs and indicators as well as the World Bank data. Due to lack of harmony in the data, reconciling was done and the most consistent data was used for analysis. Data was collected annually, and it ranged between the years 1989 to 2019.

The researcher collected data on government borrowing. From the secondary data sources, the study incorporated the following model to analyze the link between government borrowing and economic growth. The research made an assessment of the economy of Kenya within the period of 1989-2019. The Ministry of Finance or Treasury Latest actual data, Kenya Bureau of National Statistics (KNBS) and World Bank data are the designated sources of both the primary and secondary data that were subjected to study in this paper. The Kenya National Bureau of Statistics (KNBS) was the source of data for national savings data, external and internal debt data while the personal consumption bills, investment financing, inflation, import, government consumption was obtained from the World Bank. Descriptive investigation of data applied measures of central tendencies, and measures of dispersion. Further, the associations between the study variables and testing of the hypothesis were executed using inferential statistics, which included correlation and multiple linear regression analyses.

The study adopted the following multivariate regression model:

$$EC = \beta_0 + \beta_1 ED_1 + \beta_2 DD + \beta_3 ED_2 + \epsilon$$

Where:

EC = Economic Growth measured by (GDP growth rate)

(GDP is calculated as $C + I + G + (Ex - Im)$, where “C” equals spending by consumers, “I” equals investment by businesses, “G” equals government spending and “(Ex - Im)” equals net exports, that is, the value of exports minus imports).

ED₁ = External Commercial debt measured as natural log of total foreign debt from multi-lateral and bi-lateral partners accumulation in USD

DD = Ln Domestic Debt (annual amounts in million Kenya Shillings)

ED₂= Ln External Concessional Debt
 β₀= constant term of the regression
 B₁– β₅ are the regression co-efficient
 ε= standard error

IV. DATA ANALYSIS AND FINDINGS

Descriptive Statistics

In the current study, descriptive research design was selected since it will enable the generalization of the findings of the population; it will allow analysis and relation of variables. The descriptive analysis included measures of central tendency that entailed mean together with deviation of standard, the median, and the mode. Measures of dispersion such as the minimum and maximum statistic, range were utilized. Measures of symmetry such as and Kurtosis and Skewness were also employed. The values for external commercial debt, domestic debt, and external concessional debt are enumerated in millions, the denomination is Kenya Shillings (Kshs)/

Table 1: Descriptive Statistics

		GDP Growth	External Commercial debt	Domestic Debt	External Concessional Debt
N	Valid	31	31	31	31
	Missing	0	0	0	0
Mean		0.040	320,893.8940	690,486.2699	425,370.9757
Median		0.044	175,329.2965	301,190.5800	232,413.2535
Mode		0.0632	74,121.8520	125,498.3000	98,254.5480
Std. Deviation		0.0241	332,828.7799	780,126.2523	441,191.6385
Skewness		-0.603	1.971	1.662	1.971
Std. Error of Skewness		0.4210	0.421	0.421	0.421
Kurtosis		-1.059	3.034	1.877	3.034
Std. Error of Kurtosis		0.8210	0.821	0.821	0.821
Range		0.077	1261812.021	2816605.24	1672634.539
Minimum		-0.008	74121.852	125498.3	98254.548
Maximum		0.0685	1335933.873	2942103.54	1770889.087

Source: Study Findings (2021)
Economic Growth Trend Analysis

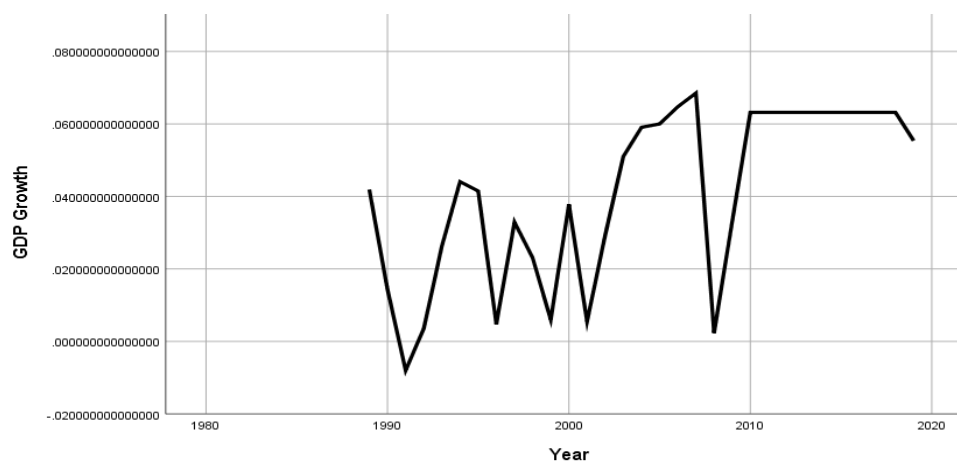


Figure 1: Simple Line Graph of GDP Growth by Year

Source: Study Findings (2021)

The simple line graph of GDP growth by year showcases that the GDP has shown variability and is cyclical in tandem to the economic growth stages. However, it exhibits higher levels the mid-2000s.

External Commercial Debt Trend Analysis

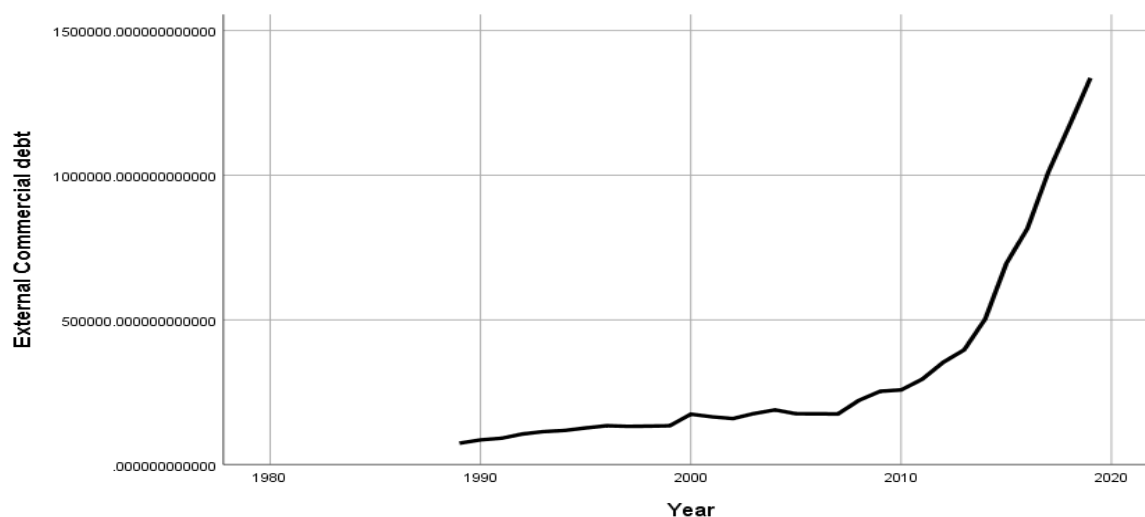


Figure 2: Simple Line Graph of External Commercial Debt by Year

Source: Study Findings (2021)

Figure 2 showcases that the external commercial debt has been increasing steeply since the year 2010.

Domestic Debt Trend Analysis

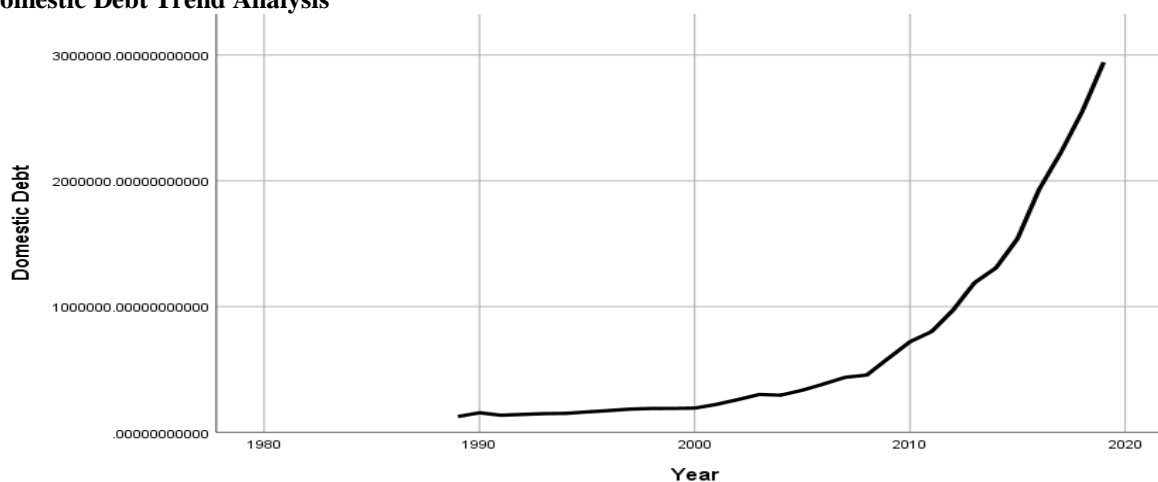


Figure 4.3: Simple Line Graph of Domestic Debt by Year

Source: Study Findings (2021)

Figure 4.3 showcases that the domestic debt has been increasing steeply since the year 2010.

External Concessional Debt Trend Analysis

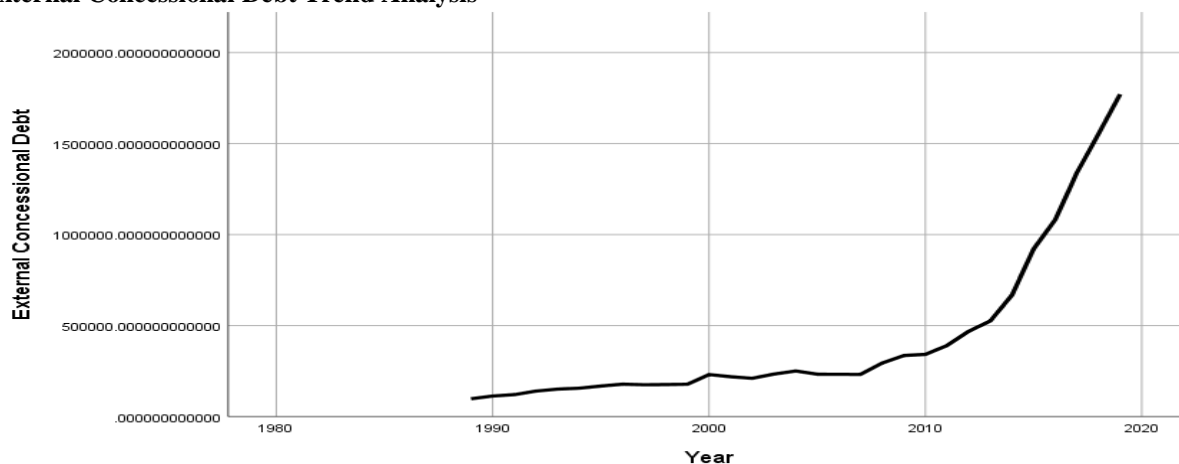


Figure 4: Simple Line Graph of External Concessional Debt by Year

Source: Study Findings (2021)

Figure 4 showcases that the external concessional debt has been increasing steeply since the year 2010.

Inferential Statistics

Inferential insights are utilized in deciding the heading, relationship, and quality of the relationship between the indicator factors and the reaction variable. The segment involves the inferential insights utilized in the examination, which involved correlation analysis and multiple linear regression.

Correlation Analysis

Correlation analysis establishes whether there exists an association among two variables. The association falls between a perfect positive and a strong negative correlation. The study used Pearson Correlation. This study employed a Confidence Interval of 95% and a two tailed test.

Table 2: Correlation Analysis

		GDP Growth	Ln External Commercial debt	Ln Domestic Debt	Ln External Concessional Debt
GDP Growth	Pearson Correlation	1	.603**		
	Sig. (2-tailed)		.000		
Ln External Commercial debt	Pearson Correlation	.603**	1		
	Sig. (2-tailed)	.000			
Ln Domestic Debt	Pearson Correlation	.672**	.972**	1	
	Sig. (2-tailed)	.000	.000		
Ln External Concessional Debt	Pearson Correlation	.606**	1.000**	.974**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	31	31	31	31

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Study Findings (2021)

The null hypothesis is that each predictor variable is not significantly correlated to the GDP growth at the 5% significance level. Table 4.6 displays that all the predictor variables employed in the study are significantly correlated at the 5% significance level to GDP growth. This is because their significance values are less than the α (0.05) and consequently, the null hypothesis is rejected. They all have a significant positive relationship with GDP growth.

Multiple Linear Regression Analysis

The cause and effect relationship between the predictor variables and response variable was evaluated using a multiple linear regression model. The data did not meet all the First-Order conditions to conducting linear regression. All the data series employed in the study did not meet the condition of normality while the predictor variables employed in the study did not meet the conditions of multicollinearity. Thus, standardization

was applied to the variables as a remedy for rectifying normality and multicollinearity. The regression analysis adopted a 5% significance level. The significance critical value exhibited from the Analysis of Variance (ANOVA) was compared with the critical value obtained in the analysis ($\alpha=0.05$). The significance critical value exhibited from the model coefficients was compared with the critical value obtained in the analysis ($\alpha=0.05$). When the government borrowing components entailing; external commercial debt, domestic debt, external concessional debt, external interest, and domestic interest were regressed against GDP growth, the findings are displayed in Table 4.3.

The Co-efficient of Determination (R^2) indicates deviations in response variable as a consequence of variations in the predictor variables. From Table 4.3, the R^2 value is 0.497, a discovery that government borrowing causes a 49.7% of the deviations in economic growth. Other factors not incorporated in the model justify for 50.3% of the variations in economic growth.

Table 4.3: Multiple Linear Regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.705 ^a	.497	.441	.74761803		
Model	Sum of Squares		Df	Mean Square	F	Sig.
1	Regression	14.909	3	4.970	8.891	.000 ^b
	Residual	15.091	27	.559		
	Total	30.000	30			
Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1	(Constant)	3.819E-15	.134		.000	1.000
	Zscore: Ln External Commercial debt	-.184	5.031	-.184	-.037	.971
	Zscore: Ln Domestic Debt	1.591	.644	1.591	2.469	.020
	Zscore: Ln External Concessional Debt	-.759	5.273	-.759	-.144	.887

a. Dependent Variable: Zscore: GDP Growth

The null hypothesis is that the model consisting of government borrowing components entailing; external commercial debt, domestic debt, and external concessional debt, significantly impacts on economic growth. The significance value obtained in the study (0.000) is greater than the critical value of 0.05. Consequently, the null hypothesis is rejected. The F value obtained in the study (8.891) is greater than the critical value of 2.53355455. Consequently, the null hypothesis is consequently rejected. Thus, the model significantly impacts on economic growth and it can be used to significantly predict economic growth.

The null hypothesis was that there was no significant relationship between each of the government borrowing components entailing; external commercial debt, domestic debt, and external concessional debt with economic growth. The study findings exhibited that only the component of government borrowing entailing domestic debt had a significant effect on economic growth. This is because its significance value (0.020) are less than the study critical significance value (α) of 0.05. The T value obtained for all domestic debt (2.469) lies out of range of the T test critical value of ± 2.042272 . Thus, the null hypothesis is rejected. There was a significant positive relationship between domestic debt and economic growth. However, the government borrowing components entailing external commercial debt and external concessional debt did not have a significant effect on economic growth. This is because their significance values are less than the study critical significance value (α) of 0.05. Additionally, the T values obtained for the variables lie out of range of the T test critical value of ± 2.042272 . Thus, the null hypothesis is not rejected. Thus, external commercial debt and external concessional debt did not have a significant positive relationship with economic growth.

The following model was thus developed;

$$Y = 3.819E-15 + 1.591X_1$$

Where;

Y = GDP growth

X_1 = Domestic Debt

The constant value of 3.819E-15 indicates that when there is no domestic debt, economic growth is 3.819E-15. The domestic debt beta coefficient of 1.591 implies that when domestic debt increases by one unit, there is an increase in economic growth by 1.591 units.

Summary of Study Findings

The study established that government borrowing significantly impacts on economic growth (F-value = 8.891 and p-value = 0.000<0.05) and it can be used to significantly predict economic growth. The study findings also exhibited that domestic debt was significantly positively correlated ($r = 0.603$, $p = 0.000 < 0.05$) to economic growth. The study also established that domestic debt had a significant positive relationship ($B = 1.591$, $p = 0.020 < 0.05$) with economic growth.

Further study findings exhibited that external commercial debt is significantly positively correlated ($r = 0.606$, $p = 0.000 < 0.05$) to economic growth. The study also established that external commercial debt interest had an insignificant negative relationship ($B = -0.184$, $p = 0.971 > 0.05$) with economic growth. The study findings also exhibited that external concessional debt is significantly positively correlated ($r = 0.606$, $p = 0.000 < 0.05$) to economic growth. The study also established that external concessional debt had an insignificant negative relationship ($B = -0.759$, $p = 0.887 > 0.05$) with economic growth.

V. CONCLUSIONS AND RECOMMENDATIONS

Conclusion

In this section, the conclusion of the study is given; the conclusion is affiliated to the study objective, which was to assess the relationship between government borrowing and economic growth in Kenya. The study also specifically sought to establish; the effect of internal borrowing, external commercial borrowing, and external concessional borrowing on economic growth in Kenya.

The study concluded that government borrowing significantly impacts on economic growth and that it can be used to significantly predict economic growth. This implies that government sector borrowing is an important factor for economic growth. The study also concluded that the government borrowing components that entails internal debt has both a significant positive association and relationship with economic growth. This implies that domestic borrowing is an important factor for economic growth. The study also concluded that the government borrowing components that entail external commercial borrowing and external concessional borrowing both had a significant positive association but an insignificant negative relationship with economic growth. This implies that external borrowing is not a crucial factor for economic growth.

Recommendations for Policy and Practice

Policy recommendations are made to the National Treasury and that since it has been established that government borrowing does significantly impact on economic growth and therefore it can be utilized to significantly predict the economic growth, to utilize government borrowing to spur economic growth. However, public debt should be utilized up to a certain point because government borrowing and economic growth have been cited as having a downward sloping curvilinear relationship. The policy makers should utilize government borrowing in combination with other factors to bolster economic growth. The study findings have portrayed that a country can have a robust economy but have dampened capital markets. Thus, this recommendation will guide the government in making policies and practices to boost the country's economic growth.

Since the study findings exhibited that internal borrowing does significantly impact on economic growth, policy recommendations are made to the National Treasury to utilize it to spur economic growth. Additionally, since the study findings exhibited that external commercial borrowing does not significantly impact on economic growth, policy recommendations are made to the National Treasury not to focus entirely on external commercial borrowing to spur economic growth. Finally, since the study findings exhibited that external concessional borrowing does not significantly impact on economic growth, policy recommendations are made to the National Treasury not to focus entirely on external concessional borrowing to spur economic growth.

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