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Abstract: The importance of bilateral relations to any country is to offer the home country the chance to access resources that are not locally available. Bilateral relations between China and Kenya have been ever evolving since Kenya’s independence to date. The objective of the study was to assess the effect of Chinese loans, FDI and Aid on Kenya’s economic growth based on the years 2000 to 2015. Bilateral relations were found to have effect on economic growth of Kenya. Most of the effect is gained through AID and FDI while Loans do not have much effect. The study recommends that Kenya needs to develop a comprehensive policy to govern its aid relations with China in order to safeguard from negative political influence positions in the future while reducing loans received from China.

I. Introduction

Globalization is a phenomenon, where countries are interlinked in all aspects of life. Developed and developing countries are faced with both opportunities and challenges in this age. To deal with the challenges and take advantage of the emerging opportunities, bilateral relations have taken a more central role especially between developed and developing countries. China and Kenya is such a case having entered into several agreements and cooperations. Positive link between effect of bilateral relations and economic growth is evidenced by advanced econometric techniques. Ties on political, economic, and cultural among nations may be characterized by: common knowledge, understanding and community awareness about the other country and any ties existing between them, (Stein & Zozan, 2013), and therefore cooperation becomes a prerequisite for strengthened bilateral relations. Bilateral relations in most cases are measured by the foreign loans, foreign direct investment and foreign aid advanced to a given state.

According to the China Customs, the bilateral trade volume between China and Kenya in 2005 went up to US$480 million, which was up by 29.7 percent, China's export being US$460 million, an increase of 31.0 percent, while China's imported US$20 million from Kenya, up by 4.0 percent, (Ministry of commerce- China 2015) (MOFCOM). The turnover of completed engineering contracts by Chinese companies in Kenya reached US$35.32 million in 2005, while the volume of the newly signed contracts was US$67.24 million. The volume of completed labor service cooperation contracts was US$0.67 million, and that of the newly signed labor service cooperation contracts was US$5 million (MOFCOM, 2014).

According to Mugendi (2011), China's aid to Kenya was never unconditional; over the years, Beijing restructured its aid policy and imposed more restrictions. Interest-free government loans became discount loans offered through Chinese banks and aid grants were replaced by joint ventures and other forms of cooperation.

Chinese Loans to Kenya; China is currently Kenya's largest bilateral lender. The debt stood at Sh262 billion ($2.6 billion) in June 2015, as compared to Sh82.9 billion ($821 million) in 2014 and Sh14.7 billion ($146 million) in 2010, (CBK, 2015). This debt has grown at an alarmingly rate, averaging an annual growth rate of 54 per cent between 2010 and 2014; (National Treasury of Kenya, 2015).
The years 2000 to 2008 show a steady and gradual increase occasioned by the beginnings of a relationship with the east after it proved that any assistance from the west came with it political ties. A notably jump in the year 2014 was due to change in government which saw Kenya’s head of state turn heavily to China for partnership. Kenya formed and forged relationships with China in a bid to undertake development projects in the country. The decline in 2014 was occasioned by a slowdown in lending to Kenya as the country could not maintain the borrowing rate as the nation’s development project are long term in nature and results.

Chinese FDI to Kenya: According to Jenkins & Edwards (2005), Broadman et al. (2006), Kaplinsky & Morris, (2006), the effect of FDI differs among different regions determined by the relations and commodities involved. All major manufacturing plants are located in China due to the availability of cheap labor, the increase in FDI can be credited to the openness of the economy and the political regimes that Kenya has had in the last two decades.

China’s FDI in the early 2000s was low as Kenya had concentrated on investment from the West where most of the manufacturing companies were located. The year 2000 saw FDI between China and Kenya reach US$137 million, with US$133 million being imports from China to Kenya and US$ 4million being Kenya’s exports to China. In 2002 the FDI between the two countries hit US$186.37 million, exports being US$180.576 million and import US$5.798 million from China. The rapid increase in FDI from 46 Million in 2008 to 265 Million by the year 2015 has been as result of nations outsourcing their labor to China.

Chinese Aid to Kenya; Radelet(2006). Foreign aid is one of the largest constituents of foreign capital flows to low-income countries. According to Rosenstein-Rodan(1961), Chenery and Bruno(1962), Chenery and Strout (1966),
Mosley (1980), Mosley, Hudson & Horrell (1987), Karras (2006), foreign aid has positive effect on economic growth through provision of additional capital and human expertise needed to countries that cannot afford to do so on their own. In 1963, foreign aid was regarded as critical to economic rebuilding and with passing time it has become a noteworthy ingredient for economic development. The foreign aid proportion to GDP has been low with an annual average of 6.3 per cent between 2000 and 2015 yet there has been economic growth of the country.

From the year 2005 to 2015 the amount of foreign aid ranges from 30,000 USD to an all-time high in 2015 of 65,000 USD. The aid decreased over 2005 and 2006 as the Kenyan economy began to show significant growth and did not need to rely heavily on foreign aid. The year 2008 saw a decline in aid from China due to the troubled political elections of 2007 December which saw the nation of Kenya descend into Chaos.

Economic Growth of Kenya: Economic growth in Kenya has been steadily growing since the country gained independence in 1963. Economic growth of a country is measured by the GDP growth of a nation from one year to the next. There has been an average of 5.47 % in Kenya's GDP Growth Rate from 2004 to 2015. In 2005 the economy grew by 5.7%, 6.4% in 2006 and 7.1% in 2007 and in 2008 the economy declined to 1.7% due to post-election violence, external shocks including the global financial crisis and high fuel and food prices, and inadequate rainfall in various parts of the country (CBK April 2009 Report).

The figure 1.5 shows a comparison of Kenya’s economic growth to loans, FDI and aid from China to Kenya over the last 16 years. The Figure 1.5 shows a trend of increase in the three components with some years like 2008 showing the effect of political instability on bilateral relations. Aid from China compared to FDI and Loans has had the least in volumes received in Kenya. This has been occasioned because countries would rather give loans or invest in other countries, which has a positive effect on its own balance of payments as opposed to giving aid.

Figure 1.3 China’s Aid to Kenya

Source: China Ministry of Finance

Figure 1.4 Kenya’s GDP % Growth Rate

Source: (Author, 2018)
II. Theoretical Review

Debt Overhang Theory on Foreign Loans: Myers (1977) argues that as countries or firms continue to borrow and the outstanding claims are senior they come a time when the countries debt be more than their capacity to repay. Study by Krugman (2012) has shown a positive relationship between debt and economic growth detailing that debt overhang as where projected settlement of debt outstrips the real volume to which it was contracted. This has led to developing countries to borrow in order to keep up economic growth. However this simplified theory will lead firms and countries to make ineffective decisions as to at what point they should stop borrowing. The countries have reached the optimum borrowing levels and since they have taken long term loans any new viable opportunities that require debt financing find the country at a state where it cannot borrow. Further Borensztein (1990), defined debt overhang, as a situation where the debtor nation benefits as diminutive from the yields on extra investment due to vast debt service commitments. This theory explains that excess debt within a nation leads to discouraging investors due to the fear of heavy tax placed upon them. They fear that there higher taxes for the government to have means be meet its obligations to repay the debts they have. This is an assumption investors have and it leads to disinvestment and to overall decline in economic growth. Clement et al (2003) observed that borrowing extensively especially externally promote investment and economic growth up to a certain point (optimum level). In this case the overhang kicks in, leading deterioration by investor’s willingness.

OLI or Eclectic Paradigm Theory on Foreign Direct Investment: OLI paradigm theory was set forth by John Dunning (1993). This theory explains the connection between economic growth and Foreign Direct Investment. OLI represents, Ownership, Location and Internalization. The three components are what is used to measure the value that FDI have on economic growth especially on the host country. Ownership refers to what is commonly known as knowledge capital. This is in different forms such as human resource management, the reputation of a particular company, the brand identity, patents and technological knowhow. Ownership further can be viewed as capital replica-table and transferable into different nations without losing value and incurring high transactional costs. Location mainly checks whether or not the investment in a foreign country either save on transport costs, reduce the costs of inputs, take advantage of trade barriers, special tariffs or provide services that reduce overhead costs for the company. If the considered country can offer a few of the mentioned conditions that have significant effect on saving cost for the investing country the country then chose to invest there.
Two Gap Model of Foreign Aid: This model was established by Chenry and Strout in 1996. The model is amplification to Harrod Domer’s hypothesis of investment limited growth which assumes that a specific amount of investment to increases growth. The model is anchored in two gaps; the first gap is between investment and available domestic saving to attain a certain rate of growth. This is known as the savings gap. The second gap also referred to as the trade gap which occurs when there is a gap between import requirements and foreign exchange earnings. If the saving gap is larger than the trade gap, this undermines productive investment because of the limited imports of capital goods that are needed for investment. This theory further supports that at any time one gap is binding in aid recipient countries and thus foreign aid is required to fill that gap. The supposition that foreign aid resolve to fill this gap is only viable if the lack of investment is from constraints of liquidity and not unfavorable conditions to invest. If conditions are unfavorable, it does not matter how much foreign aid is directed to a country, the aid do not increase investment rather finance consumption. Also to note is that the foreign aid effectiveness is greatly depend on the output of the investments made not just inflow of the aid for use in any sector of the government.

\[ Y = C + I + (X - M) \]

Savings: \( S = Y - C \)

\[ I - S = M - X = F \]

\[ I - S: \text{ Saving Gap} \]

\[ M - X: \text{ Foreign Exchange Gap} \]

\[ F: \text{ Foreign Financing} \]

Harrod Domer Theory: Domer (1939 & 1946) is based on the national accounting model and states that economy’s growth rate depends on the national savings which can include Loans, Foreign Direct Investment or Aid if the country has no savings of its own. The model emphasizes the importance of investments and savings as determinants of economic growth. This is identification that output is dependent on investment rate and productivity of the same investment. The model states that higher the savings and investment of a country the greater its growth.

Domer further implied that GDP growth is proportional to the share of investment spending in total GDP.

\[ GDP = C + I + G + NX \]

where:

\[ C - \text{Consumption}, I - \text{Investment}, G - \text{Government Expenditure}, NX - \text{Net Exports} \]

Harrod Domer investigated, \( g = \frac{\Delta Y}{Y} \)

Growth equals to change in Income divide by the income of a specified time. Output is assumed to be proportional to capital input;

\[ \frac{K}{V} \text{ is constant} \]

\( \frac{v}{Y} \text{ is constant} \)

\[ Y = \frac{K}{V}, \frac{\Delta Y}{\Delta K} = \frac{\Delta K}{\frac{v}{Y}} \]

Net change of capital input (\( \Delta K \)) is equal to investment (\( I \)) less capital depreciation \( d. \ K (d); \text{ depreciation rate}, \Delta K = I - d. K \)

Savings eventually are invested thus \( S = I. \) The sum total of domestic and foreign saving is financed by investment in the open economy. Assuming savings is a fixed proportion of income \( S = s. \ Y. \) Substitute this


Growth rate \( g, g = \frac{\Delta Y}{Y} = \frac{\Delta K}{(v, Y)} = \frac{(s - dv). Y}{(v, Y)} = (s - dv). v = \frac{s}{v} - d \)

\[ g = \frac{\Delta Y}{Y} = \frac{\Delta K}{s} \]

\[ g = \frac{v}{v - d} \]

\[ g = s/v - d \]

\( s: \text{saving rate} \ v: \text{capital output ratio} \ d: \text{depreciation rate} \) \( d \) and \( v \) are assumed to be constant thus the only variable that can be changed is \( s \)
The theory gives two factors for growth which are quantity of national savings & the capital output ratio, where capital ratio is inversely proportional to the rate of growth. The theory concludes that the higher the savings rate the faster the rate of growth. It also assumes that the higher the savings, the more funds available to borrow and invest. Ultimately investment increases capital stock; which in turn generates economic growth caused by the rise in production of goods and services.

Statement of the Problem

The surging entry of China into African economies has continued to attract different views from various quarters. For the last three decades (1980-2007), China has been a strong ally to Kenya. What makes the relationship between Kenya and China special is China’s ability to take multifarious forms. China has actively personified her relationship with Kenya in different ways. China has contributed largely to Kenya’s infrastructural development: Jomo Kenyatta International Airport ($115 million), SGR ($3.6 billions), Thika Super Highway ($320 Million), LAPPSET ($220 million), geothermal project at Olkari ($400 million), Kenya Power Distribution System Modernization Project in Malindi ($185 million, Outer Ring Road ($108 millions), Nairobi Mombasa super highway ($320 Million), among others (NTK, 2015). This can attest to the tangible embodiment of Chinese relations with Kenya. The contributions to the above have been either through, loans, foreign direct investment or aid.

These bilateral relations are expected to stimulate Kenya’s economic growth significantly. Kenya’s economic growth is centered in: infrastructure development, ICT, building and construction, manufacturing and vibrant services sector, investment in energy and transportation. With improvement of infrastructure and enhanced construction, it has seen an influx of many foreign companies coming Kenya to invest (increase in FDI); leading to job creation and appreciation in prices of property. The loans on the other hand have led to increased inflation, increase in debt burden, and effect on rate of interest. The aid has been helpful as it allowed for improvement of community life and welfare in the rural arrears without the pressure of needing to repay the funds. However, Mugendi, (2011) stated that China’s aid to Kenya has never been unconditional. This statement has been proven by restructuring of its aid policy by Beijing and imposition of more restrictions. This resulted, in interest-free government loans becoming discount loans offered through Chinese banks and aid grants were replaced by joint ventures and other forms of cooperation increasing Kenya’s debt burden from China.

The relations with China have touched on each of the major sectors aforementioned and thus an assessment of their effect on economic growth is critical. The increase of loans, FDI and aid lead to an increase in the country’s investments which fosters economic growth. According to World Bank (2015), Kenya’s real GDP growth was 4.6% (2012), 5.7% (2013), 5.3%, & 5.5% in 2014 and 2015 respectively. During these years, there has also been an increase in the flow of loans, FDI and aid from China to Kenya.

According to the IMF (2005) bilateral relations exist but there seems to be contradictory results, (Chami, et al 2005), argue that there is statistical significant link between GDP growth and increased bilateral agreement among countries. However according to Chami et al. (2008) states “there is little evidence of a significant impact of bilateral relations on growth, especially in developing countries.”

With there being two schools of thought on the significance of GDP growth and bilateral relations, this study sought to find out if the significance of bilateral relations between Kenya and China can be seen in the Kenyan economy.

Objective of the Study

The objective of the study was to determine the effect of Kenya’s bilateral relations with China on economic growth in Kenya. The Bilateral relations were grouped as China’s loan, FDI, and Aid.

III. Methodology

The study adopted a descriptive research design; more specifically, non-experimental research design. Time series data was collected for the following variables: loan, foreign direct investment, and aid from China; inflation rate expenditure rate and growth annual GDP from Kenya for the period 2000-2015. The study adopted Harrod Domer’s theory of economic growth Multiple Regression as it empirical model. Trend property of time series was examined and finally utilization of a multiple regression technique was adopted to identify and approximate the relationship between the effect of the Foreign Loans, Aid and FDI on the economic growth using Kenya Inflation.
IV. Data Analysis

Before estimation of regression the data was first tested for Multicollinearity, homoscedasticity, and linearity. All the assumption of regression were fulfilled and were indicative that the relationship between GDP and Aid and GDP and Expenditure is strong while that of GDP and Loan, GDP and FDI and GDP and inflation have moderate strength in their relationship. Quarterly data for 16 years (2000 to 2015) was used in this study. The multiple regression model was extracted as highlighted below:

\[ Y = 5.102 - 0.016x_1 + 0.306x_2 + 0.839x_3 + 0.016x_4 + 0.518x_5 + \varepsilon \]

There was a negative effect of China’s loans on GDP of -0.016 (-1.6%) and a positive effect on both China’s FDI and China’s Aid of 0.306 (30.6%) and 0.839 (83.9%) on GDP. For the controlling variables, expenditure is a preferred controlling variable as compared to inflation with an effect of 0.518 (51.8%) as compared to 0.016 (1.6%).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>t-Statistic</th>
<th>Sig</th>
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</thead>
<tbody>
<tr>
<td>Constant</td>
<td>5.102</td>
<td>2.552</td>
<td>1.999</td>
<td>.050</td>
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<tr>
<td>Loan</td>
<td>-.016</td>
<td>.049</td>
<td>-.015</td>
<td>.749</td>
</tr>
<tr>
<td>FDI</td>
<td>.306</td>
<td>.062</td>
<td>4.937</td>
<td>.000</td>
</tr>
<tr>
<td>Aid</td>
<td>.839</td>
<td>.101</td>
<td>8.326</td>
<td>.000</td>
</tr>
<tr>
<td>Inflation</td>
<td>.016</td>
<td>.046</td>
<td>.338</td>
<td>.737</td>
</tr>
<tr>
<td>Expenditure</td>
<td>.518</td>
<td>.277</td>
<td>1.871</td>
<td>.066</td>
</tr>
<tr>
<td>R</td>
<td>.942*</td>
<td>Prob (F statistic)</td>
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<td></td>
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<tr>
<td>R Squared</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R squared</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>F Statistic</td>
<td>92.691</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durbin Watson</td>
<td>.603</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s Calculations (2018)

R discusses the variation between Kenya’s economic growth (measured as GDP), and China Kenya’s bilateral relations measured as China’s: Loan, FDI and Aid. 87.8% of Kenya’s economic growth is attributed to its bilateral relation with China as shown by the adjusted R with a 94.2% confidence interval. Further, indication 88.7% (R squared) of China’s: loans, FDI and Aid have contributed to Kenya’s economic growth. The study established a positive relationship of Kenya’s economic growth and China’s Kenya bilateral relation. Other factors that would be directly linked to the change of Kenya’s economic growth counted for 6% as represented by the standard error. The F-test value of 92.691 with probability of 0.0000 at 5% significant level shows that all the variables were jointly significant in determining economic growth in Kenya. The Durbin Watson of .603 implies the presence of autocorrelation, meaning the data was correlational.

Effect of loan on Economic Growth. From the analysis loan had a negative effect on economic growth of -0.016. The t statistic for the equation was -.015 which is indicative that the effect of Chinese loans on Kenyan economic growth is insignificant. This means the higher the loan Kenya receives from China the lower the rate of economic growth. The coefficients are statistically insignificant and thus borrowing from the Chinadoses not affect the economic growth in Kenya. This is because the effect of Chinese loans may not be felt immediately since these loans are channeled into capital budgeting investments whose returns may take longer to be recovered as affirmed by Hassan et al. (2005), they established that there is a negative and insignificant effect on economic growth from loans. It however was not in line with research done in the past on the effect of total debt on Kenya’s economic growth. Mageto (2015) found that public debt led to economic growth and increased investments. This presents an area where further research is required into what are the specific terms and conditions of China’s loans to Kenya.

Effect of FDI on Economic Growth. The relationship between China’s FDI and economic growth from the analysis of the model was positive. This is inferred from the t statistic that has a value of 4.937. This significance indicates that Chinese FDI is an important factor that contributes to economic growth in Kenya. An increase in inflows of Chinese FDI to Kenya results in an increase or growth of Kenya’s economy. The FDI coefficient was .306 which translates 30.6% increase in economic growth, attributable to FDI from China. Companies investing in Kenya through FDI, are able to pay taxes to the government, a year after the commencement of business; these taxes go along in effecting the economic growth. Due to the short duration that these companies take to break even and start multiple investments the returns are felt quicker which contributes to Kenya’s economic growth. Tax from the
companies is revenue, which further becomes part of the government expenditure. The results were also in agreement with study done by (Maranga, 2015) on FDI, International Trade and Economic growth a case study of Kenya.

Effect of Aid on Economic Growth. The study established aid has a positive effect on Kenya’s economic growth at 95 per cent significance levels. The t statistic was 8.326 which indicates that aid is significant in economic growth of Kenya. Aid is directed to sectors such as health and education, where the effect is felt almost immediately. In the education sector, a student receives a scholarship and after the duration of study they are able to be gainfully employed thereby joining the working force of Kenya which contributes to human capital which is a factor of economic growth. These results were further supported by (Ojiambo, 2014) on the effects of aid on economic growth of Kenya which were positive and significant.

V. Conclusion

The study established that China’s Aid and FDI have significant effect on Kenya’s economic growth; while China’s loans are detrimental on economic growth. Bilateral relations therefore have both positive and negative effects. Kenya can capitalize on the positive aspect of its bilateral relation with China to boost her economic growth. Aid and FDI richly produced positive effect; therefore, Kenya should seek more of this. But in the long run the two aspects of bilateral relations should be reassessed, in order to determine whether the effects last for short run duration or not. Further the study affirms that bilateral relations have taken and will continue to take a more central role especially between developed and developing countries, but dependability of the same must be put in question.

References


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