Foreign direct investment, institutional quality and economic growth in Kenya

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Abstract

The study was done to investigate the effect of FDI on economic growth in Kenya, to determine the influence of institutional quality on the effect of FDI on economic growth, and to determine the effects of structural breaks on economic growth in Kenya. This was based on the failure of the reviewed studies to capture the role of institutional quality in this effect. Markets that are likely to persist in low-quality-institution jurisdictions are those in which exchange is simultaneous and self-reinforcing. Such markets are common either because many of the exchanges simply meet the conditions for self-reinforcement or just because they are so lucrative that the absence of self-reinforcement makes even risky exchanges worthwhile. However, many transactions require a third party for their reinforcement. These are non-simultaneous transactions whereby the quid is needed at one time or place and the pro at another. Data used in the study were obtained from published sources for the period 1975 to 2013 and they were subjected to statistical analysis. To answer objective one, two, and three the study used ordinary least square estimation and the findings were that FDI affects economic growth positively and institutional quality has a growth-enhancing effect on FDI.

Keywords: Foreign Direct Investments, Institutional Quality, Economic Growth, Kenya

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1. Introduction

Achieving high economic growth has been a central policy objective for Kenya for years on end. This has been driven by the desire to address the social and economic challenges that have been facing its citizens such as high poverty levels, low saving rates, balance of payment deficits and foreign exchange gaps. These developments have seen Kenya pursue various policy approaches to promote economic growth among them those focused on promoting foreign direct investment (FDI) inflows to augment the existing capital stock in production. The policy approaches include the enactment of Foreign Investment Protection Act (FIPA) of 1964 whose aim was to forestall the Burgeoning rate of capital flight as investors feared possible expropriations of their assets (Republic of Kenya, 1970). This was followed by the enactment of Import Substitution (IS) policies in 1974 including increases in import tariffs so as to restrain an imminent shortage in foreign exchange (Republic of Kenya, 1978). In the late 1980s and early 1990s, the government loosened its foreign exchange restrictions by introducing the tradable Foreign Exchange Bearer Certificates which marked Kenya's first biggest step towards exchange rate liberalization. This was on top of the 1988 implementation of the Manufacturing-Under-Bond (MUB) program which allowed for duty free import of factory plant, machinery and equipment and raw materials used for manufacturing export-oriented goods (Republic of Kenya, 1990).

The introduction of the Export Processing Zones (EPZ) in 1990 was to lure new firms into manufacturing for export. EPZ had incentives such as tax holidays and import tariffs waivers (Republic of Kenya, 1991). In 1993, the Export Promotion Programs Office (EPPO) was started as a duty free drawback scheme for reimbursing firms the import taxes paid on inputs used in production of export goods (Republic of Kenya, 1994). The launch of the Economic Recovery Strategy for Wealth and Employment Creation by the government in 2003 introduced a raft of reforms in governance, infrastructure, high business transactions, exchange rate dealings, insecurity and unfair competition from counterfeit imports (Republic of Kenya, 2003). This was succeeded by the First and the Second Medium-Term Plans of 2008 and 2013 respectively which have emphasized the need to enhance Kenya's absorptive capacity for trade flows. Training members of the informal sector on procurement procedures, strengthening capacity for verification and certification of institutions to meet international standards, creating conducive licensing and regulatory framework and strengthening the capacities of the institutions involved in trade development and negotiations were among the measures (Republic of Kenya, 2003). Further, emphasis have been made on the need for Kenya to adopt digital handling of trade and capital flows through the Business Information Centers (BICs), development and institutionalization of capacity building as well as training programs on Information and Communication Technology (ICT) and business procurement negotiation skills and rolling out of the e-Registry that entails developing an electronic platform where traders can apply for trade licenses and make due payments (Republic of Kenya, 2013; 2014).

Besides the direct policies by the Kenyan government, it has gone through changes in its political and economic environment over the years. These could have had differential bearing on the growth-enhancing effect of FDI. 1975-1985 marked a period of heavy market control which was followed by the SAPs in the period 1986-1992 (Republic of Kenya, 1980; 1982; 1984) and full liberalization for 1993-2013 (Republic of
Kenya, 1994; 2002; 2012). Full liberalization was intended to surmount the structural rigidities which characterized strict government controls in the early post-independence years and to stimulate the role of market in determining major variables such as prices and to bring them in line with the global trends (Republic of Kenya, 1992; 1994). On the political front Kenya has been under the governance of the first president between 1963-1978, the second one for the period 1979-2002 and the third one for the period 2003-2013.

For the fifteen years preceding 1990 FDI inflows as a percentage of GDP has remained perfectly below the economic growth rate pointing out that there is a relationship between the two variables. This relationship is presented in Figure 1.1.

![Figure 1.1. Link between FDI and Economic Growth for Kenya (1975-2013) (Source: The Kenya National Bureau of Statistics and UNCTAD County Reports)](image-url)

Between 1991, 1992, 1995 and 2000 however FDI inflows as a percentage of GDP rose above the economic growth rate. From 2001 onwards it has remained below the economic growth rate up to 2013. This is pointer that changes in FDI affect economic growth though the effect depends on a factor that is foreign in this model. This could explain why economic growth in some periods is above FDI inflows as a percentage of GDP and below it in some other years. The nature of the relationship between the two variables is a motivation for the research to go ahead and find out the magnitude and sign of their relationship. This study was conducted to estimate the effect of FDI on economic growth in Kenya, determine the influence of institutional quality on the effect of FDI on economic growth in Kenya, and determines the effect of structural breaks on economic growth in Kenya and to derive policy implications from the study's finding.
2. Statement of the problem and research objectives

The government of Kenya has made concerted efforts to propel economic growth to great heights. One of the greatest impediments to achieving this desire is inadequacy of capital (Abala, 2014). Capital needed to finance economic activities so as to achieve high economic growth can be sourced from the domestic sources as well as from sources across the borders. To attract foreign capital inflow into the country, the government has designed and implemented a raft of policy measures. The enactment of the Foreign Investment Protection Act in 1964, the passing of the Sessional Paper No. 10 in 1965, the introduction of Manufacturing Under Bond, Export Processing Zones and Export Promotion Programs Office and the proposal of the digital handling of trade and capital flows through the Business Information Centres are some of the programs that the government has pursued over time in order to attract FDI with the objective of promoting economic growth (Republic of Kenya, 1965; 1988; 1993; 2014). However, GDP growth has remained lower than the targeted rates (Republic of Kenya, 1976; 1986a; 1986b; 1993; 1994; 2001; 2012).

Earlier studies on the effect FDI on economic growth have found conflicting results with some pointing at negative effects (Kay, 2009), others positive effects (Ocharo et al., 2014; Nyamwange, 2011; Abala, 2014; Seetanah and Khadaroo, 2006) and others pointing to no significant effects (Alfaro et al., 2003). While these studies provided a good empirical foundation for understanding the effects that FDI has on economic growth, they failed to incorporate the influence that institutional quality would have in estimating the relationship between the two. Institutions are the platforms where contracts enforcement take place and property rights are exercised (Davis, 2003). Institutions include, but are not limited to, the country's judicial system, the capital markets, the financial institutions and the security systems. High quality institutions speed up the start-up of innovative ventures that can make the most of knowledge spillovers from the multinational enterprises. In this sense, high quality institutions are expected to enlarge the constructive indirect effects of FDI on economic growth. The growth-enhancing effect of FDI on the recipient economy is therefore expected to be determined by the quality of institutions. Ignoring the role of institutional quality would lead to the omitted-variable problem which would lead to biased and inconsistent estimates.

Another shortcoming of all the reviewed studies is that openness of the economy to trade is taken as the proportion of the sum of exports and imports on GDP. This measure is skewed and subjective and does not capture the subtleties of actual capital controls (Chinn and Ito, 2007). It is skewed and subjective because it captures the country's current account transactions only yet the effects of a country's capital controls are multidimensional and go beyond just the current account alone. They affect the country's foreign exchange market transactions and the transactions in the capital account (Chinn and Ito, 2007). There is therefore no reasonable basis that the measure for the openness of an economy to trade can be proxied by the current account transactions only. Such a measure may underestimate or overestimate the effect that FDI has on economic growth.

This study made use of the Capital Openness Index following the approach by Chinn and Ito (2007) which incorporates the effect of capital controls on the current account, the capital account and foreign exchange market transactions. This is expected to provide a more accurate estimation of the effect that FDI has on economic growth. Further, the study remedied the first deficiency by incorporating institutional quality in
estimating how it influences the growth-enhancing effect of FDI to Kenya. Specifically the study analysed the effect of FDI on economic growth in Kenya, and the influence of institutional quality and structural breaks on the effect of FDI on economic growth.

3. Methodology

3.1. Conceptual framework

Capital at any given time \( K_t \) is considered to consist of human capital at time period \( t \), \( K^H_t \) and physical capital at time period \( t \), \( K^p_t \)

\[
K_t = K^H_t + K^p_t
\]  
(3.1)

Physical capital comprises domestic capital, \( K^d_t \) and foreign capital \( K^f_t \) hence can be expressed as follows:

\[
K^p_t = K^f_t + K^d_t
\]  
(3.2)

Starting from an augmented Cobb-Douglas production function in which the output \( Y_t \) per capita depends on, \( K^f_t, K^d_t \) and \( K^H_t \). The Cobb-Douglas production function can be specified as shown in equation 3.3:

\[
Y_t = A(K^f_t)^\alpha (K^d_t)^\phi (K^H_t)^{1-\alpha-\phi} \cdot \left(\alpha + \phi + (1 - \alpha - \phi)\right) = 1
\]  
(3.3)

where \( \alpha, \phi \) and \( 1 - \alpha - \phi \) are the output elasticities of \( K^f_t, K^d_t \) and \( K^H_t \), respectively.

With the assumption that the production function exhibits constant returns to scale, the production function can be written in its intensive form as:

\[
y_t = A(k^f_t)^\alpha (k^d_t)^\phi
\]  
(3.4)

where \( y_t \) is the output per capita, \( Y_t/K^H_t \), \( k^f_t \) is the foreign capital per unit of effective labour, \( K^f_t/K^H_t \) and \( k^d_t \) is the domestic capital per unit of effective labour, \( K^d_t/K^H_t \).

The first log differences of equation 3.4 yields equation 3.5:

\[
\Delta \ln y_t = \Delta \ln A_t + \alpha \ln k^f_t + \phi \ln k^d_t
\]  
(3.5)

Decomposing \( \Delta \ln A_t \) into its observable and unobservable components we get equation 3.6 where the observable component is the growth-enhancing effect of institutional quality of FDI.

\[
\Delta \ln(A_t) = \delta A_0 + \delta A_1 (\ln k^f_t) \ast \ln IQ
\]  
(3.6)
where IQ is the institutional quality

Rewriting equation 3.5 as in equation 3.7 allows for testing whether FDI contributes to economic growth through institutional quality.

\[
\Delta \ln y_t = \delta_{A0} + \delta_{A1} (\ln k_t^f) + \ln IQ + \alpha \ln k_t^f + \phi \ln k_t^f
\]

3.2. Model specification

The study estimated two models as expressed in equation 3.8 and 3.9.

\[
GDP_t = \beta_0 + \beta_1 FDI_t + \beta_2 NX_t + \beta_3 PI_t + \beta_4 EO_t + \beta_5 IQ + \beta_6 PR_t + \beta_7 PC_t + \beta_8 GX_t + \beta_9 GX_{t-1}
\]

\[
+ \beta_{10} M_1 + \beta_{11} M_2 + \beta_{12} M_3 + \beta_{13} D_1 + \beta_{14} D_2 + \beta_{15} D_3 + \varepsilon_t
\]

\[
GDP_t = \beta_0 + \beta_1 FDI IQ_t + \beta_2 NX_t + \beta_3 PI_t + \beta_4 EO_t + \beta_5 IQ + \beta_6 PR_t + \beta_7 PC_t + \beta_8 GX_t + \beta_9 GX_{t-1}
\]

\[
+ \beta_{10} M_1 + \beta_{11} M_2 + \beta_{12} M_3 + \beta_{13} D_1 + \beta_{14} D_2 + \beta_{15} D_3 + \mu_t
\]

where GDP\(_t\) is the economic growth rate, FDI\(_t\) is the foreign direct investments, NX\(_t\) is external balance of trade for goods and services, and PI is the private investment expenditure. EO is the openness of the economy to trade and capital flow, GX\(_t\) is the government expenditure and GX\(_{t-1}\)is its first lag, PR\(_t\) is the political risk, PC\(_t\) is the private consumption expenditure and IQ\(_t\) is the institutional quality. FDI IQ\(_t\) in equation 3.9 is the interaction term for institutional quality and FDI\(_t\), \varepsilon\(_t\) is the error term and \(t\) is the given time period. M\(_1\), M\(_2\) and M\(_3\) are dummies that capture the changing market structures from heavy market controls (1975-1985), to SAPs (1986-1992) through full liberalization (1993-2013) respectively. In this formulation M\(_1\) is equal to one if the existing market control is heavy and zero otherwise, M\(_2\) = 1 if the market control is under the SAPs and zero otherwise and M\(_3\) was set equal to one if the period under study was associated with full liberalization and zero otherwise. D\(_1\), D\(_2\), and D\(_3\) are dummies capturing the changing presidential regimes from the first to the second one through the third one. D\(_1\) is set equal to one if the period under study is under the governance of the first president and zero otherwise, D\(_2\) = 1 if second presidential governance and zero otherwise and D\(_3\) = 1 if third presidential governance and zero otherwise. \(\mu_t\) in equation 3.9 is the error term. Subscript \(t\) in front of a variable represents its value at a specific time. This model made it possible to get the effect of FDI on GDP growth.

3.3. Data and data analysis

This study used secondary data collected from various sources. Data on economic growth, exports, government expenditure, inflation and personal consumption expenditure were sourced from the various issues of Economic Surveys and Statistical Abstracts from Kenya National Bureau of Statistics (KNBS). Chinn-Ito Openness Indices were obtained from the IMF’s Annual Report on AREAER while data on private investment was got from the World Bank Countries Development Reports. Data on FDI and external balance
of trade for goods and services were obtained from the UNCTAD Country Reports while data on M2 and overall liquidity were obtained from Central Bank of Kenya Annual Reports.

Ordinary least square regression analysis was done on equations 3.8 and 3.9 after testing for stationarity and cointegration of the time series used. The second model had an interaction term between FDI and institutional quality introduced to enable understanding the growth-enhancing effect of institutional quality. The estimated regression results were tested for and found to satisfy heteroskedasticity, autocorrelation and stability tests as presented in the next section.

4. Findings and discussions

4.1. Unit root test results

All the time series were subjected to unit root tests using the Augmented Dickey-Fuller and Kwiatkowski Phillips Schmidt-Shin (KPSS) unit root tests. The results of the tests are presented in Table 4.1 below.

<table>
<thead>
<tr>
<th>Variable</th>
<th>KPSS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intercept</td>
</tr>
<tr>
<td>Political Risk</td>
<td>0.136977***</td>
</tr>
<tr>
<td>Private Investment as a %age of GDP</td>
<td>0.229353***</td>
</tr>
<tr>
<td>External Balance of Trade for Goods and Services as a %age of GDP</td>
<td>0.603733</td>
</tr>
<tr>
<td>Institutional Quality</td>
<td>0.505226</td>
</tr>
<tr>
<td>GDP Growth Rate</td>
<td>0.151246***</td>
</tr>
<tr>
<td>FDI as a %age of GDP</td>
<td>0.132590***</td>
</tr>
<tr>
<td>Chinn-Ito Openness Index</td>
<td>0.596706</td>
</tr>
<tr>
<td>Critical Values at 5%</td>
<td>0.463000</td>
</tr>
</tbody>
</table>

Source: Extracted from Table A3 in Appendix 3.

***, ** and * denote statistical significance at the 1, 5 and 10 per cent levels respectively.

Based on the results the null hypothesis under KPSS test that the time series is stationary for political risk, private consumption expenditure as a percentage of GDP, private investment as a percentage of GDP, external balance of goods and services as a percentage of GDP, institution quality, FDI as a percentage of GDP, and Chinn-Ito openness index could not be rejected at levels. This is because the absolute values of the computed KPSS test statistics were less than the Mackinnon’s critical values for rejection of the null hypothesis at 5 per cent of significance (Greene, 2008). Because all the variables were stationary at levels as shown KPSS tests, it was concluded that there was no cause to carry out cointegration analysis of the variables.
4.2. Effect of FDI on economic growth in Kenya

Prior to making any conclusions from the study findings a string of diagnostic tests on the models were carried out to determine their statistical soundness. The following sections report results of the residual-based tests as well as model specification and the stability tests. Table 4.2 below presents the results for heteroskedasticity, autocorrelation and stability tests.

### Table 4.2. Diagnostic Test Results

<table>
<thead>
<tr>
<th>Test</th>
<th>Test Statistic</th>
<th>Model</th>
<th>Test-Statistic Value</th>
<th>p-value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH Test for Heteroskedasticity</td>
<td>P-value of the Observed* R-Squared</td>
<td>1</td>
<td>0.076744</td>
<td>0.7818</td>
<td>No heteroskedasticity</td>
</tr>
<tr>
<td></td>
<td>F-Statistic</td>
<td>2</td>
<td>0.070071</td>
<td>0.7912</td>
<td></td>
</tr>
<tr>
<td>Breusch-Godfrey Test for Autocorrelation</td>
<td>F-Statistic</td>
<td>1</td>
<td>0.9315</td>
<td>0.9007</td>
<td>No autocorrelation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>0.510710</td>
<td>0.8959</td>
<td></td>
</tr>
<tr>
<td>Jarque Berra Test for Normality</td>
<td>Jarque-Berra</td>
<td>1</td>
<td>0.009001</td>
<td>0.995510</td>
<td>Coefficients of the estimates are normally distributed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>0.018604</td>
<td>0.990741</td>
<td></td>
</tr>
<tr>
<td>Ramsey RESET Test for Model Specification</td>
<td>F-Statistic</td>
<td>1</td>
<td>0.219397</td>
<td>0.6437</td>
<td>No misspecification error</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>0.207777</td>
<td>0.8264</td>
<td></td>
</tr>
</tbody>
</table>

To establish the effect of FDI on economic growth in Kenya, equation 3.8 was estimated using least squares method. The results of the estimation are as presented in Table 4.3.

From regression results, it can be observed that the coefficient of FDI as a percent of GDP is positive 1.534 and it has a probability value of 0.0311. This implies that a percentage increase in FDI resulted in 1.53 percent increase in the economic growth in the same period. The results are at par with the findings of Ocharo et al. (2014), Nyamwange (2011), Abala (2014) and Seetanah and Khadaroo, 2002) which found out that the foreign firms are more efficient in terms of production, technology and management and the domestic firms benefit from technology diffusion and positive spillover effects from the foreign firms and in turn drive towards efficiency which is essential for economic growth. From the results, it can be concluded that FDI plays a vital role in economic growth in Kenya. The results however contradicted Alfaro et al. (2003) which found zero effects and Kay (2009) which found negative effects of FDI on economic growth.

The other variables that are found to be significant in explaining the variations in economic growth include institutional quality, personal consumption expenditure, private investment and political risk. Institutional quality and private investment are found to affect economic growth positively. The coefficient of institutional quality from table 4.3 is positive with a value of 11.38 with a p-value of 0.0375. This implies that, holding other factors constant, a percentage improvement in institutional quality would lead to about 11 per
cent increase in the rate of economic growth. This emphasizes the role that institutions would play in increasing economic. Private investment has a coefficient of positive 0.89 and a probability value of 0.027. This means that if all factors are held constant then a 10 per cent increase in private investment would translate to about 9 per cent increase in the rate economic growth. The findings on private investment is consistent with the findings by Abala (2014) in where it was found out that the gross private domestic investment is essential in complementing FDI in contributing to growth.

Table 4.3. Regression Output for Equation 3.9

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Coefficient</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in governance 1</td>
<td>-2.096426</td>
<td>-0.849515</td>
<td>0.4040</td>
</tr>
<tr>
<td>Change in governance 1</td>
<td>-0.361220</td>
<td>-0.436545</td>
<td>0.6663</td>
</tr>
<tr>
<td>Openness of the Economy to Trade and Capital Flows</td>
<td>0.258232</td>
<td>0.310552</td>
<td>0.7588</td>
</tr>
<tr>
<td>Foreign Direct Investment Flows</td>
<td>1.533885**</td>
<td>2.290510</td>
<td>0.0311</td>
</tr>
<tr>
<td>Government Expenditure on Goods and Services</td>
<td>-0.085926</td>
<td>-0.168018</td>
<td>0.8680</td>
</tr>
<tr>
<td>First Lag of Government Expenditure on Goods and Services</td>
<td>0.880773</td>
<td>1.455711</td>
<td>0.1584</td>
</tr>
<tr>
<td>Institutional Quality</td>
<td>11.37700**</td>
<td>2.201819</td>
<td>0.0375</td>
</tr>
<tr>
<td>Market Liberalization: M1 = 1 for 1975-1995 and zero otherwise.</td>
<td>-2.422860</td>
<td>-1.233431</td>
<td>0.2294</td>
</tr>
<tr>
<td>Market Liberalization: M2 = 1 1986-1992 and zero otherwise.</td>
<td>-2.284197</td>
<td>-1.399920</td>
<td>0.1743</td>
</tr>
<tr>
<td>External Balance of Trade for Goods and Services</td>
<td>0.160082</td>
<td>1.159642</td>
<td>0.2576</td>
</tr>
<tr>
<td>Personal Consumption Expenditure</td>
<td>-0.340073***</td>
<td>-3.340391</td>
<td>0.0027</td>
</tr>
<tr>
<td>Private Investment</td>
<td>0.894849**</td>
<td>2.351190</td>
<td>0.0273</td>
</tr>
<tr>
<td>Political Risk</td>
<td>-0.212808***</td>
<td>-4.293573</td>
<td>0.0003</td>
</tr>
</tbody>
</table>

Asterisk (***), (**) and (*) indicates that the effect is significant at 1%, 5% and 10% respectively.

Political risk and personal consumption are found out to affect economic growth negatively. The coefficient for political risk is negative with a coefficient of 0.21 and a probability value of 0.0003. This means that a 10 per cent increase in political risk would lead to about 2 per cent decline in the rate of economic growth. These findings are at par with Alfaro et al. (2003) which found that political risk is a threat to economic growth and development. As the political climate is getting riskier, investors, both local and foreign, will be discouraged to take up risky projects given the uncertainty of the outcomes alongside the associated risk of bearing capital losses.

The coefficient of personal consumption expenditure is negative 0.34 with a probability value of 0.0027. This implies that if all factors are held constant, a 10 per cent increase in expenditure on personal consumption would lead to about 3 per cent decline in economic growth. The findings agree with those of Seetanah and Khadaroo (2006) which found that personal consumption is negatively related to economic
growth. Private consumption is a take-away from the stock of capital that would have been used to undertake investment projects that would have contributed to the national gross capital formation.

The coefficients for the openness of the economy to trade and capital flows, government expenditure and its first lag and the coefficients of the dummy variables for changes in presidential regimes and changing market conditions were all found not to be statistically significant since their p-values were all greater than the threshold value of 5 per cent. This means that the variables are not significant in explaining the variations in economic growth. The findings on government expenditure and openness of the economy to trade and capital flows however contradict the findings of Ocharo et al. (2014). According to the study, government expenditure affects economic growth negatively while openness of the economy to trade and capital flows affects economic growth positively.

4.3. Influence of institutional quality on the effect of FDI on economic growth in Kenya

The second objective of the study was to determine the influence that institutional quality has on the growth-enhancing effect of FDI. This objective was addressed by estimating equation 3.9. The regression component of FDI involved the interaction term of FDI and institutional quality (FDI*IQ). The coefficient of the interaction term measured how much economic growth is expected to change as a result of the joint movement of FDI and improvements on quality of institutions. The results of the estimation are presented in Table 4.2.

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Coefficient</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in governance 1 D1 =1 for 1975 – 1978: 0 otherwise</td>
<td>-1.884628</td>
<td>-0.764589</td>
<td>0.4520</td>
</tr>
<tr>
<td>Change in governance 1 D2=1 for 1979 – 2002: 0 otherwise</td>
<td>-0.312091</td>
<td>-0.376854</td>
<td>0.7096</td>
</tr>
<tr>
<td>Openness of the Economy to Trade and Capital Flows</td>
<td>0.254132</td>
<td>0.305027</td>
<td>0.7630</td>
</tr>
<tr>
<td>Interaction Term between FDI and Institutional Quality</td>
<td>2.299747**</td>
<td>2.264860</td>
<td>0.0328</td>
</tr>
<tr>
<td>Government Expenditure on Goods and Services</td>
<td>-0.054115</td>
<td>-0.105281</td>
<td>0.9170</td>
</tr>
<tr>
<td>First Lag of Government Expenditure on Goods and Services</td>
<td>0.884390</td>
<td>1.459052</td>
<td>0.1575</td>
</tr>
<tr>
<td>Institutional Quality</td>
<td>10.14983*</td>
<td>1.902848</td>
<td>0.0691</td>
</tr>
<tr>
<td>Market Liberalization: M1 = 1 for1975-1995 and zero otherwise.</td>
<td>-2.479036</td>
<td>-1.261846</td>
<td>0.2191</td>
</tr>
<tr>
<td>Market Liberalization: M2 = 1 1986-1992 and zero otherwise.</td>
<td>-2.320933</td>
<td>-1.422431</td>
<td>0.1678</td>
</tr>
<tr>
<td>External Balance of Trade for Goods and Services</td>
<td>0.154752</td>
<td>1.121650</td>
<td>0.2731</td>
</tr>
<tr>
<td>Personal Consumption Expenditure</td>
<td>-0.334837***</td>
<td>-3.260845</td>
<td>0.0033</td>
</tr>
<tr>
<td>Private Investment</td>
<td>0.874865**</td>
<td>2.284645</td>
<td>0.0315</td>
</tr>
<tr>
<td>Political Risks</td>
<td>-0.209245***</td>
<td>-4.244297</td>
<td>0.0003</td>
</tr>
</tbody>
</table>

Asterisk (***) and (*) indicates that the effect is significant at 1%, 5% and 10% respectively
5. Conclusions and policy implications

This study was conducted to analyze the effect of foreign direct investments on economic growth in Kenya. Specifically, it sought to estimate the effect of FDI on economic growth in Kenya, determine the influence of institutional quality on the effect of FDI on economic growth in Kenya and to determine the effect of structural breaks on economic growth in Kenya. The motivation for conducting the study was the fact that the government of Kenya has over time pursued a raft of policy measures to attract foreign direct investments flows with the ultimate objective of achieving high economic growth rates. Findings emanating from different studies had made varied reports concerning the effect of FDI on economic growth with some drawing conclusions of positive effects, others negative effects and others zero effects, but the role of institutional quality in the growth-enhancing effect of FDI was not incorporated in the estimations.

The positive and statistically significant coefficient of FDI in the regression output implies that FDI flows contribute positively towards economic growth. This means that economic growth is expected to increase with increases in FDI flows. Further the growth enhancing effect is higher with improvements in the quality of institutions. This implies that if the economy has relatively well-functioning institutions, it is expected that the inflowing FDI would have higher growth-enhancing effect as opposed to if the institutions were not properly functioning. As for structural breaks, the conclusion is that there are no significant differences in growth between different presidential regimes and also between different market conditions.

These results imply that the government of Kenya should further pursue policies that attract the flow of FDI into the country. It should also enact laws and implement policies that focus on improving quality of its institutions. The Business Information centres (BICs), e-Procurement System, Judicial Reforms and Capacity Assessment and Rationalization Programmes (CARPs) that the government is implementing are therefore actions towards the right direction. Although the government has made efforts to attract the flow of FDI into Kenya, it should focus on placing Kenya at a strategic position where it can make the most of the positive spill-over from the MNCs. To achieve this it should keep the production costs low by availing adequate infrastructure (social and physical) for commercial operations. Good infrastructure makes transport and communication cheaper thus keeping production costs low.

The government should also pursue policies that discourage expenditure on consumption. For instance, by encouraging domestic borrowing the consumers will be left with a decreased proportion of their income to spend on consumption. This way, they will undertake increased levels of investments and thus contribute to economic growth. The policies should also aim at keeping inflation low. This is because high inflation levels discourage investors from undertaking investments due to the fear of capital loss. Hence, policies focusing on keeping inflation low such as incentivizing producers through production subsidies should be pursued. The government should also create a friendly atmosphere for investment to spur by ensuring that there is economic and political stability so as to achieve higher levels of economic growth.
References


