Gender Inequality, Financial Development and Economic Growth in Kenya

Susan Moraa Onuonga
morasusa2@gmail.com;smo602000@yahoo.com

Abstract

Closing the gender gap is one of the Millennium Development Goals. Because of this, and due to many benefits of closing the gender gap, the role of gender inequality on economic growth has received a lot of attention in empirical work. This paper analyzes the relationship among gender inequality, financial development and economic growth using time series data of the period 1980-2012 of Kenya. The results for this paper will assist development policy makers set gender development policies that reduce gender gaps and those that develop the financial sector. Different from most of the earlier studies this paper used econometrics approach to study the relationship among the variables. The study used the Autoregressive distributed lag model to investigate long-run relationship among the variables. Secondary data was used covering the period 1980 to 2012. The results of the study show that there is a long-run relationship among gender inequality, financial development, government expenditure, investment, economic growth and trade openness. The findings also revealed that gender inequality impacts negatively on economic growth while financial development impacts positively on economic growth. If gender inequality increases by one percent, per capita income of Kenya reduces by approximately 10.2 percent. Further results indicate that government expenditure, investment and trade openness impacts positively on economic growth. The results give evidence that wider gender gaps reduce economic growth while financial development enhances economic growth. The results suggest that increased government expenditure on promotion of social economic status of women, will increase the country`s economic growth.

Key Words: *Gender Inequality, Economic Growth, Financial Development, Autoregressive Distributed Lag Model, Kenya*

INTRODUCTION

Closing the gender gap is one of the Millennium development Goals (MDGs) set by United Nations owing to the benefits that eliminating the equality has on socio-economic aspects of a country. Research shows that countries which invest in promoting the social economic status of women experience lower poverty rates. Moreover, increasing secondary school education for women by one year increases their future wages by 10 to 20% (World Bank, 2011).The vast literature on gender inequality in education that include Hill and King (1995), SACME (2011), and Summers(1994),suggest that gender inequality and fertility rate and infant mortality rate are positively correlated. Gender inequality in education affects negatively children`s education and their health (Lagerlof, 1999).

The summation of the above have a long- run effect on a country`s economic growth. According to Hill and Kings (1995) and Klasen (1999), gender inequality can also directly and indirectly affect economic growth. For example, if girls are more talented than boys and a country invests more in boys this will result to misallocation of resources. The country will end up not having a good quality of human capital for production of goods and services (Pervaiz, Chani, Jan & Chaudhary, 2011). Since human capital is one of the determinants of national income, continued gender inequality in education hampers progress in national income of the country. As a consequence, the slow growth of national income affects the well-being of individuals (Klasen, 1999), which results in poor economic growth and a country slowing up from moving away from poverty.

Countries that have narrow gender gaps experience slow population growth and a reduced dependence burdens. This is as a result of reduction in fertility rate, infant mortality rate and improvement in children`s education and health that are products of reduced gender inequality. Reduced dependence burdens increase per capita income of the country, savings and investment. With all the above, gender equity plays a very important role in a country`s development such as Kenya`s Vision 2030 development goals.

Importantly though is an aspect of contradicting results from various studies on the effects of gender on economic growth. For example, many studies have shown that gender disparity in education reduce

economic growth (Galor & Weil, 1996). Other studies indicate that gender disparity in education increase economic growth (Robert Barro & Jong-Wha Lee, 1994). With respect to Kenya, a lot of disparities in gender exist making a research on this area highly suitable.

There are very few studies which have looked on the relationship among gender inequality, financial development and economic growth in Kenya. The aim of this paper was to examine the relationship among gender inequality, financial development and economic growth in Kenya. The importance of this area is that it has been observed that gender inequality in many countries reduces economic growth. If this is the case then, the government needs to strengthen policies that promote gender equality. The results are important in setting gender and development policies in Kenya.

This study contributes to the current literature on gender inequality and economic growth, and also on the relationship of other control variables (openness, government expenditure and investment) and economic growth of Kenya. Unique from the previous studies especially those done in Kenya is that, this paper has used econometrics approach to analyze the relationship among the variables.

PROFILE OF GENDER DISPARITIES IN KENYA

Information from UNDP (2013), shows that Kenya is far from achieving gender equality. Kenya is still not doing well on the area of human development; Kenya`s Human development index was 0.519 for the year 2012 positioning the country 145 out of 187 countries and territories (UNDP, 2013). On the gender development, using the Gender Inequality Index(GII), which reflects the gender-based inequalities in three indicators: reproductive health, empowerment and economic activity, Kenya had a value of 0.608 in the year 2012 (UNDP, 2013) which gave Kenya a position of 130 out of 148. This indicates a 60.8% loss in potential human development due to gender inequality. This confirms that Kenya still has widespread gender disparities.

Kenya‘s constitution promulgated in 2010 has set the conditions which are expected to reduce the gender inequality in Kenya. The highlights of the Kenya constitution on gender is that violence against women is prohibited, women can own and inherit land and there is provision for greater female representation in all decision making organs including the devolved government. For example, in each county there is a provision for women representative and in all public bodies not more than two thirds of the elected individual should be of the same sex.

LITERATURE REVIEW

Women` role in national income of a country is connected to the changed fertility pattern which is due to schooling and women`s participation in paid employment that lead to reduction in fertility rate and a positive effect in growth (Galor & Weil, 1996). As women increase their formal schooling especially above secondary school level, they contribute positively to economic growth through reduced maternal mortality and improved maternal care, better education and children nutrition, reduced fertility rate and increase in average age in the first marriage (Shen & Williamson, 1999). All these lead to increased economic performance (Klasen & Lamina, 2008). The reduction in fertility rate reduces population growth and increases per capita income of a country (Todaro & Smith, 2006). In addition, women`s education enhances a country`s international competitiveness through promotion of female –intensive exported oriented manufacturing industries (Klasen & Lamina, 2008).

Several researches have been done on the role of gender inequality on economic growth although the findings are not conclusive. Arora (2012) investigated the relationship between gender inequality, economic development and globalization for India. The study findings showed that gender impacts negatively on per capita income. However, other findings of the same study showed that gender inequality increases both per capita income and globalization in some states of India.

Sang *et al.* (2012), using content analysis of selected documents, studied the extent of gender inequality in secondary school administration in Kenya. The discussion shows existent of gender gaps in administration of secondary schools in Kenya. The paper pointed that the previous constitution failed to have adequate policies to address gender inequalities in the administration of secondary schools.

Pervaiz, Chani and Chaudhary (2011) investigated the effect of gender inequality on economic growth for Pakistan. The results of the study showed that labour force growth, investment and trade openness have significant positive impact on economic growth, while gender inequality significantly retards economic growth in Pakistan.

Klasen and Lamanna (2008) investigated the impact of gender inequality in education and employment on economic growth in developing countries. Their study found that gender gaps in education and employment significantly reduce economic growth.

Kiriti and Tisdell (2003) studied the relationship among gender inequality, poverty and human development in Kenya. The study observed that women are more likely to be affected by poverty than men. It also observed lower enrolments for women in primary, secondary and tertiary institutions as compared to men. It was also observed that income earned by men was above that earned by women. The same trend was observed in all indicators for gender inequality.

Dollar and Gatti(1999) examined the relationship between economic growth and gender inequality in education. The findings of their study showed that gender inequalities are higher in developing and poor countries. The results also revealed that gender inequalities contribute to slow economic growth with the argument that economic growth reduces gender inequalities.

Klasen (1999) investigated the effect of gender inequality in education and employment on economic growth and development. The findings of the study found that gender inequality in education has a direct effect on economic growth through lowering the average quality of human capital. The other finding was that gender inequality affects economic growth indirectly through its impact on investment and population growth. Other results indicates that gender inequality in education prevents progress in reducing fertility and child mortality rates thereby compromising progress in well being in developing countries.

Ahmed and Hyder (2006) studied the relationship among gender inequality and trade liberalization for Pakistan. The study found that trade openness, per capita GDP and the ratio of girls to boys were major determinants of gender inequality in the labour market of Pakistan, while gender inequality in educational attainment was found to be explained by per capita GDP, the ratio of number of girls school to boys school and the number of female teachers per school.

King and Hill (1995) investigated the role of gender inequality on levels of GDP. Their findings shows that low female- male enrolment ratio affect GDP per capita negatively.

Barro and Lee (1994) and Barro and Sala-i-Martin (1995), in their studies found an unexpected result where number of years of schooling for both primary and secondary for females negatively affect economic growth. Klasen (199) attributes this result to multi-collinearity of the data.

A study by Suda (2002) observed that there are gender disparities in education and training at primary, secondary and tertiary levels. The paper argues that women`s limited access to formal education undermines their capacity to participate on the formal and informal labour market on equal basis with men. Several factors are responsible for women`s low participation in the formal employment sector that include lower levels of education and training, lower access to property, heavy domestic workloads, cultural attitudes and segregation of the labour market.

Kendo, Baye and Sikod (2008) carried out a study on financial development, gender parity and poverty reduction in rural Cameroon. Their work found that financial sector development has a positive effect on income growth for both male and female heads of households and reduces inter-gender inequalities.

While a lot of empirical work has shown that gender inequality reduces economic growth, the impact of financial development and gender inequality on economic growth has not been researched much in Kenya. This paper bridges this gap.

METHODOLOGY

Data, Sources and Empirical Model

This study used time series data covering the period 1980 to 2012. The data was obtained from various sources that included: Kenya Statistical abstract various years, Kenya economic survey various years, World Development Indicators 2013, ILO Labours at various years.

Measuring gender inequality is not easy (Klasen, 1999). Several issues make gender inequality measurement not easy; lack of reliable data on all women's work; such as income from their domestic work and labour in the agricultural sector. There is no adequate data on other indicators such as access to technology, land and productive resources. As a result, most of the approaches used to measure gender inequality are biased and results obtained from empirical work on gender inequality and economic growth is not accurate. In this study, gender inequality index (GII) was calculated by the use of the methodology suggested by Ahmed and Hyder (2006). The GII was estimated by the following formula:

$$GII_i = \left[\frac{PS_W}{100} + \frac{PS_M}{R_i} \right]^{-1} \quad 1$$

Where, PS_w= share in the relevant population of women, PS_m= Share in the relevant population of men (PS_w+PS_m=1).GII_i represents gender inequality index in dimension i.R_i = ratio of the magnitude of the indicator for men to the magnitude for women. Expressing the indicators in terms of ratios reduces the problem of multi-collinearity of the data. This ratio is expressed in percentage. If GII_i=100, implies perfect equality**,** if R_i greater 100% then GII_i is greater 100, and if $R_i$is less 100% then GII_i is less than 100. The higher the value of GII_i the wider is gender disparity.

To estimate composite GII the following variables were used: primary school enrolment by sex, secondary school enrolment by sex, life expectancy by sex, infant mortality rate, labour force participation by sex, parliamentary seats held by each sex.

To investigate long-run relation the following Autoregressive distributed lag bounds model was estimated.

$$\Delta LnY_t = \varphi_0 + \sum_{i=1}^{k} \theta_i \Delta LnY_{t-i} + \sum_{i=0}^{k} \delta_i \Delta LnFdindex_{t-i} + \sum_{i=0}^{k} \pi_i \Delta LnOP_{t-i} + \sum_{i=0}^{k} \beta_i \Delta LnG_{t-i} +$$

$$\sum_{i=0} \chi_i \Delta LnGII_{t-i} + \sum_{i=0} \alpha_i \Delta LnK_{t-i} + \varphi_4 LnY_{t-1} + \varphi_5 LnFdindex_{t-1} + \varphi_6 LnOP_{t-1} + \varphi_7 LnG_{t-1} + \varphi_8 LnGII_{t-1} + \varphi_9 LnK_{t-1} + u_t \quad 2$$

The coefficients, ϕ_ii=4…9, are long-run parameters (elasticities). Cointegration among the variables is investigated by testing the null hypothesis of no cointegration H0: ϕ_i=.. 0, against the alternative hypothesis H_1: $\phi_i \neq 00$ of the existence of cointegration. The existence of cointegration is tested by the F-test of the joint significance of the long-run coefficients

To investigate the impact of GII and financial development on economic growth in Kenya the following model was estimated by ordinary least square method.

$$LnY_t = a_0 + \sum_{i=1}^{k} \beta_i LnY_{t-i} + \sum_{i=0}^{k} \delta_i LnGII_{t-i} + \sum_{i=0}^{k} \theta_i LnK_{t-i} + \sum_{i=0}^{k} \pi_i LnG_{t-i}$$

$$+ \sum_{i=0}^{k} \phi_i LnOP_{t-i} + \sum_{i=0}^{k} \varphi_i LnFD_{t-i} + U_t \quad 3$$

Where Y represents Gross Domestic per capita, a proxy for economic growth, GII represents gender inequality index, K represents capital formation, G represents government expenditure, OP represents trade openness, FD represents financial development and U stands for the error term.

Apart from gender inequality, the rest of the explanatory variables are control variables that affect economic growth that include government expenditure, investment and trade openness.

Financial development affects economic growth in various ways; such as through efficient allocation of resources, mobilization of savings, and provision of most profitable investment opportunities among others. The financial development index was estimated using the methodology of Allen and Ndikumana (2000).

EMPIRICAL RESULTS

To answer the objectives of this study, gender inequality indices were estimated and the results are presented in figure 1, presents gender indices in various dimensions.

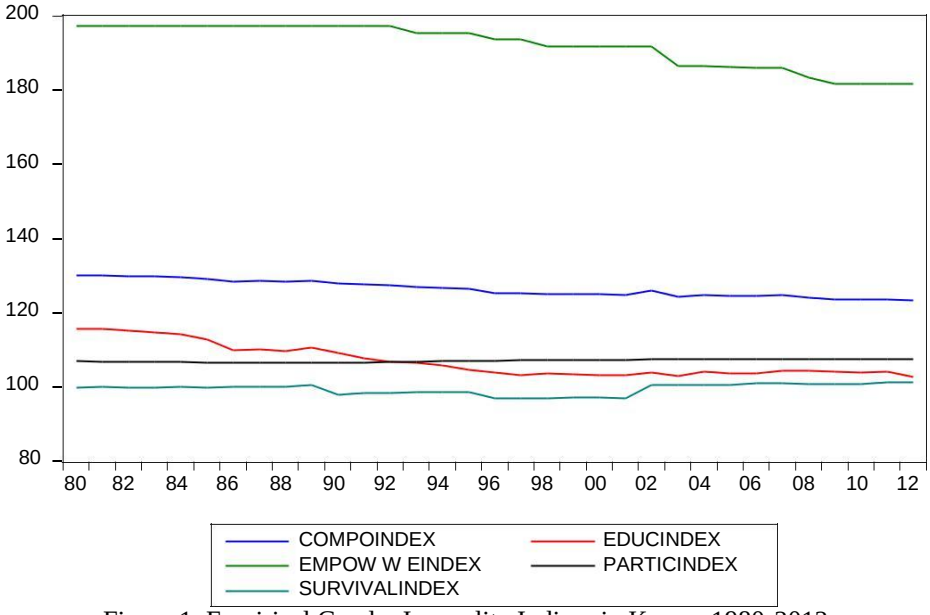

Figure 1. Empirical Gender Inequality Indices in Kenya, 1980-2012
Source: Estimated by the author of the paper.

Where Compoindex, Educaindex, empowweindex, particindex and Survivalindex represent composite gender index, education index, empowerment index, participation index and survival index, respectfully. Throughout the study period, primary, secondary, and tertiary colleges; the enrolment of men are seen to be above of those of women. In this study, primary and secondary enrolments schools were used to estimate gender inequality index for education. On average, in the study period the GII in education is seen to be declining from around 116 in 1980 to 103 in the year 2012. This is a great improvement in educational dimension. Gender inequalities can also be attributed to differences in paid employment, resource and property ownership. The available data shows that most of wage employees are men. The major problem in this dimension is lack of adequate data on women`s income. Women`s income from their work especially in domestic areas and in the agricultural sector in hardly recorded. To estimate the participation index, labour force participation was used as a proxy for gender differences in employment. In the whole period of study, women were worse off in employment with around 8 percent as compared to men. The participation index was on average above 100% in the whole of the study period.

Gender differences are also seen in parliament representation. In Kenya over time men, are seen to dominate in parliamentary seats. With the new constitution, the country is expected to improve tremendously on this dimension. To estimate the empowerment index in this study, the number of seats

held by women in parliament in the study period was used as a proxy. The empowerment index is almost 200, suggesting a very big gap between men and women in this area. There were very few women participating in national decision making although there is a slight improvement in this index from 197 in the year 1980 to 182 by the year 2012.

One of the factors that explain gender inequalities is access to health facilities. In this paper, life expectancy and child mortality rate in 1-4 years old were used to estimate the survival index. On average, women were doing fairly well as compared to men as from 1980 to 1989 after which the index dropped by around 2-3% between 1990 to the 2001. The health index again deteriorated between the year 2002 and year 2012.

The composite gender inequality index has been above 100 percent over the study period. This confirms that gender disparities are still widespread in Kenya. GII ranged between 130 percent in 1980 and 123 in 2012. This shows a downward trend meaning that gender inequalities in Kenya are somehow narrowing; however, the gap remains wide.

Co integration Analysis

One of the objectives of the paper was to investigate the long-run relationship among the variables gender inequality index, government expenditure, economic growth, financial development and trade openness in Kenya. To achieve this objective, the autoregressive distributed bounds model was estimated. Table 1 presents the results for bounds test for cointegration.

Table 1. Bounds F- tests for a Co-integration Relationship

k	F-statistics	Level of significance	Lower Critical values	Upper critical values
5	4.33**	1%	4.134	5.761
		5%	2.910	4.193
		10%	2.407	3.517
	Diagnostic Tests			
	R_2=0.80		Adj R_2=0.63	
	D.W=2.4		J.B=0.4(0.8)	
	B.G=1.9(0.19)			

Notes: ** represents statistical significance at 5% level, Critical values were obtained from Narayan (2004) for the case of restricted intercept and no trend. K stands for the number of independent variables in the model.

To accept or reject the null hypothesis, the estimated F value was compared with the upper and lower critical values of Narayan (2004) at 1%, 5% and 10% levels of significant. The estimated F (4.33) was above the upper critical value (4.193) at 5 percent. This means that the null hypothesis of no cointegration is rejected at 5 percent. This results, therefore confirm that there is a long-run relationship among GII, per capita income, financial development, trade openness, government expenditure and investment.

Regression Results

Table 2 shows results of regression analysis of the effects of gender inequality index and financial development on economic growth in Kenya. Estimation of the model was done by Ordinary Least Squares method. Table 2 provides the estimated coefficients of the variables in included in the model, the t values, the p-values, the long-run estimated parameters and the diagnostic test results.

Table 2. Regression Results, dependent variable Ln (per capita)

Variable	Coefficient	t-stat	p-value
Constant	22.80	2.0**	0.04
Ln (GDP per capita (-1)	0.8	6.0**	0.00
Ln (gdp per capita (-2)	-0.28	-2.5**	0.02
Ln(GII)	-4.9	-2.2**	0.04
Ln(FinanceIndex)	-0.06	-1.4	0.16

Ln(financeIndex(-1)	0.23	4.3***	0.00
Ln(government expenditure)	1.3	4.2***	0.00
Ln(Government (-1)	-0.6	-1.8*	0.08
Ln(capital formation)	-0.19	-1.0	0.34
LN(capital formation(-1)	0.40	2.2**	0.04
Ln(Trade openness)	0.07	1.5	0.13

Long-run parameters		**Diagnostic Results**			
GII	-10.20	R-square	0.97	D.W	2.4
Financeindex	0.35				
Government	1.45	Adj R square	0.96	Jarue-Bera	1.099, Prob (0.5)
Capitalformation	0.44	F-stat	82	B.G Seral	correlation F 2.7 (0.09)
Tradeopenness	0.15	Prob(f-sta)	0.000		

***, ** represents significant at 1% and 5% respectively.

The estimated model fitted the data well as seen by the value of both the R square and adjusted R squared (0.97, 0.96). This shows that about 97 percent of the changes in the dependent variable are explained by GII, financial development, government expenditure, trade openness and capital formation.

The regression results show that gender inequality index has a negative effect (-10.20) on economic growth in Kenya. Among the explanatory variables, it has the greatest impact on economic growth in Kenya. A one percent increase in GII leads to 10 percent decline in economic growth. This effect is significant at five percent. This suggests that with gender disparities widening, holding other factors constant, economic growth will show a downward trend. Similar results have been found by other studies(Arora, 2009; Rashmi, 2012; Klasen & Lamanna, 2008 , King &Hill 1995).

Financial development promotes economic growth. With a one percent development in the financial sector, economic growth increases by 0.35 percent. This effect is statistically significant after a lag of one year. Improvements in the financial sector, increases the availability of credit to the private sector, increases financial inclusion among other benefits which contribute positively to economic growth.

Government expenditure impacts positively on economic growth. The state spends in educational development, infrastructure, health and security among other roles. All these are expected to impact positively on economic growth. A one percent increase in government expenditure, leads to increase in Kenya`s economic growth by 1.45 percent. This effect is statistically significant.

Capital formation was taken as a proxy for investment and it acted as one of the control variables for economic growth determination. This variable as expected was found to impact positively on economic growth. A one percent increase in capital formation increases economic growth by 0.44 percent holding other factors constant. Notably, this effect is statistically significant after one year lag.

International trade is another control variable included in the model. This variable was measured as sum of the exports and imports expressed as a percent of GDP. The variable has a positive effect on economic growth where an increase of trade openness by one percent leads to an increase of economic growth by 0.15 per cent. However, the coefficient of trade openness was found to be non-significant. The estimated model passed all diagnostic tests.

SUMMARY, CONCLUSIONS AND POLICY IMPLICATIONS

The aim of this paper was to investigate the relationship among economic growth, gender inequality and financial development in Kenya. In this paper, time series data for the period 1980 to 2012, was used. To investigate long-run relationship the ARDL model was applied. The empirical results show that there is long-run relationship among economic growth, GII, financial development, trade openness, investment and government expenditure. The results show that GII significantly impacts negatively on economic growth.

The rest of the variables, including financial development had a positive effect on economic growth. All explanatory variables had a significant effect on economic growth except trade openness. The non significant result for trade openness can be explained by the trend of the value of imports which were consistently above the value of exports.

The results of this paper are important for development policies setting in Kenya. High gender inequality is associated with low economic growth. It is therefore, important for Kenya to address the issue of gender inequality since it retards economic growth. To achieve this, the government should invest in gender equality by enhancing and strengthening policies that reduce gender disparities; this may include improvement in educational and health care facilities access for women and supporting more women for parliamentary seats. The government should also consider increasing training for women so that there will be increased women participation in formal wage employment. The most important is that disparities in gender can be reduced if reforms start from the family level where each child, male and female should be treated equal and also deal with cultural issues that impede the achievement of gender equality in Kenya. Moreover, since financial development induces economic growth, the government should strengthen policies and regulations that lead to the development of the financial sector and also provide favourable investment environment that enhances development of the financial sector.

REFERENCES

Ahmed, N., & Bukhari, S. (2007). Gender inequality and Trade Liberalization: A case study of Pakistan. *Social Policy and Development Centre*, Research Report no 67.

Ahmed, N., & Hyder, K. (2006). Gender Inequality and trade Liberalization: a case study of Pakistan. *MPRA*

Allen, D. S., & Ndikumana, L. (2000).Financial intermediation and economic Growth in Southern Africa. *Journal of African Economies*, 9(2), 132-160.

Arora, R., U. (2012). Gender inequality, economic development and Globalization: A state level analysis of India. *The journal of development Areas*, 46(1), 147-165.

Barro, R. & Lee. (1994). Sources of economic growth. Carnegie- Rochester series on Public Policy

Barro, R & Sala-i-Martin, X. (1995).*Economic growth*. New York: McGraw-Hill.

Dollar, D., & Gatti, R. (1999). Gender inequality, income and Growth: Are Good times for women (policy research reports on gender and development working paper series no 1). Washington DC: World Bank.

Galor, O., & Weil, D. N. (1996).The Gender Gap, Fertility and Growth. *American Economic Revie*w, 86(3), 374-387.

Kendo, S., Baye, F. M., &Sikod, F. (2008). Financial sector development, Gender Parity and Poverty Reduction: Theoretical and Empirical Evidences. *Proceedings of the African Economic conference* 2008.

Klasen, S. &Lamanna, F. (2008). The impact of Gender inequality in education and employment on economic growth in developing countries: Updates and Extensions. World Bank Group. EUDN/WP 2008-10.

Klasen S. (1999). Does Gender inequality reduce growth and development? Evidence from cross- country regression. Policy Research Report on Gender and Development, Working paper series no 7. The World Bank development research Group

King, E A. & Hill, A. (1995).*Women`s education on developing countries*. Baltimore: Johns Hopkins Press.

Kiriti T., & Tisdell, C. (2003). Gender inequality, poverty and human development in Kenya: Main Indicators, Trends and Limitations. *Social Economic Policy and development*. The University of Queensland. WP No 35.

Lagerlof, N. (1999). Gender Inequality, Fertility and Growth. University of Sydney, Department of Economics, Australia.

Murthi, M., Guio, A., C. & Dreze, J. (1995). Mortality, Fertility and Gender Bias in India: A District –Level Analysis. *Population and Development Review*, 21 (4), 745-82.

Narayan, P. K. (2004). Reformulating Critical values for Bounds F-Statistics approach to co-integration: An application to the Tourism Demand model for Fiji. Discussion papers. Department of Economics, Monash University, Australia.

Pervaiz, Z., Chani, M. I., Jan, S. A & Chaudhary A. R. (2011). Gender inequality and economic growth: a time series analysis for Pakistan. *Middle- East Journal of Scientific Research*. 10(4), 434-439.

Pritchett, L. (1999). The Impact of Public Spending on Health: Does Money Matter? *Social Science and Medicine*, 49, 345-367.

Republic of Kenya. (Various issues).*The Economic Survey. Nairobi*: Government Printer.

Republic of Kenya (2010).*The Kenya constitution. Nairobi*: Government Printer.

Republic of Kenya. (2007). *Kenya Vision 2030: A Globally Competitive and Prosperous Kenya*. Nairobi: Government Printer.

Saadia, Z., & Augusto, L. (2005). *Women` empowerment: Measuring the Global Gender Gap*. World Economic Forum 2005.

SACME (2011), *Progress in Gender Equality in Education: Kenya*. Policy Brief No 6, 1 -8

Sachs, J, D. & Warme, A. (1995).Economic Reform and the Process of Global integration. Brookings papers on economic activity. 1-118

Suda, C. (2002).Gender disparities in the Kenya Labour Market: Implications for poverty reduction. *Nordic Journal of African studies*. 11(3), 301-321.

Summers, L., (1999).*Investment in all the people.* Washington, D.C: World Bank

Shen, C., & Williamson, J. (1999).Maternal mortality, women`s status and economic dependency in less developed countries: a cross-national analysis. *Social science and Medicine*, 49, 197-214.

Todaro, Michael P., &Stephen, C S. (2006).*Economic Development*: Addison-Wisley

UNICEF. (2011). Women`s indicators and *Statistics (WISTAT). New York: UNICEF*

United Nations Development Programme (2010).Human Development Report 2010- 20th Anniversary Edition. The Real wealth of Nations: Pathways to Human Development. New York, U.SA: United Nations development Programme.

World Bank. (2001). *World Development Report: Attacking Poverty*. Washington DC: The World Bank.

WHO (2011).*Women and Health*. WHO.

United Nations Development Programme (2013).Human Development Report 2013

United Nations Development Programme (2011).*Human Development Report 2011,* available at http://hdr.undp.org/en/media/HDR_2011_EN_Complete.pdf, accessed 29 February 2012. p.129

United Nations Development Programme (2011).*Human Development Report 2011,* available at http://hdr.undp.org/en/media/HDR_2011_EN_Complete.pdf, accessed 29 February 2012.p.141.

World Bank. (2001).World Development Indicators. Online Database. Washington D.C., USA: The World Bank

World Bank. (2010). *Millennium Development Goals*. Washington DC: The World Bank

World Bank. (2011). *Millennium Development Goals*. Washington DC: The World Bank

World Bank. (2012).*World Development Indicators.* Online Database. Washington D.C., USA: The World Bank.

World Economic Forum. (2011).*The Global Gender Gap Report 2011,* available at http://www3.weforum.org/docs/WEF_GenderGap_Report_2011.pdf, accessed 2 March 2012.p.11

BIO-DATA

The author is a lecturer in the school of economics, department of econometrics and statistics, Kenyatta University, P. O. Box 43844-00100, Nairobi, Kenya