THE EFFECT OF THE SIZE OF THE INFORMAL SECTOR ON ECONOMIC GROWTH IN KENYA (1974 TO 2016)

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ABSTRACT

The Kenyan economy is dual and predominantly informal. The size of the sector in the country has grown over time. The sector employed 19 percent of the total workforce in 1974 which increased to 84 percent in 2016. The country targets economic growth averaging 10 percent per annum, and a reduction in poverty rates to 28 percent of the total population by the year 2030. Efforts to develop the sector for economic growth, employment creation and poverty reduction can be traced to the period 1986, under the *Sessional Paper No.2 of 1986 on Economic Management for Renewed Growth.* The growth of the informal sector in the country has led to a marked increase in employment numbers, but not much is known about the effect on the other two objectives, which are economic growth and poverty reduction. Reports on the contribution of the sector to economic growth are largely conflicting with limited econometric studies. The study analyzed the relationship between the size of the informal sector and economic growth in Kenya. A growth accounting exercise was conducted using the standard Cobb-Douglas production function. From the study findings, the informal sector is the lowest contributor to output growth in the country. Given the size of the sector the study concludes that there is a need to target increased productivity in the informal sector for increased economic growth.

Keywords: The informal Sector, Economic growth, Growth accounting.

1. INTRODUCTION

1.1 Background

The informal sector traditionally consisted of productive activities in unregistered firms characterized by any one or more of the following features: family ownership, no separate

accounts, small scale of operation, low entry requirements, low levels of organization, labour intensive, use of locally available resources and adapted technology, apprentice skill acquisition, competitive and unregulated markets, and non-registration with the government registration bodies under the Companies Act. This definition of the sector follows the International Conference of Labour Statisticians (ILCS) definitions in 2003 and 1993 (Chen, 2012). However, structural changes in the labour market in many countries has resulted in increased informalization of previously formal employment opportunities creating work that has no social or legal protection commonly referred to as casual or informal employment. The informal economy consists of both the informal sector and informal employment in the formal sector (Chen, 2012). The informal sector as used in this study refers to the informal economy, therefore captures both the traditional informal sector and informal activities in the formal sector popularly referred to as the '*Jua Kali*' sector in Kenya following Hope (2014).

The sector was in the past associated with low-income countries with the expectation that the size of the sector would reduce with economic growth as adequate employment opportunities were created in the formal sector, also referred to as the "Lewis Turning Point" (Lewis, 1954). This has however not been the case. Globally, the size of the sector has been on the increase. The informal sector contributes to total output, total productivity and income in an economy as it facilitates increased use of resources, and encourages entrepreneurship, research and investment with no formal costs. However, the sector is characterized by tax avoidance which undermines government revenue and limits state ability to provide public services which are essential support structures for increased total productivity and economic growth. Additionally, the firms in the sector are largely small-scale which limits firm productivity and hinders the output potential of the sector.

1.2 The Informal Sector and Economic Growth in Kenya

The development of the informal sector in Kenya targets increased economic growth, poverty reduction and employment creation. Graphic analysis of the annual rate of growth in the size of the sector and in economic/output growth from 1974 to 2016 is shown in Figure 1.2.
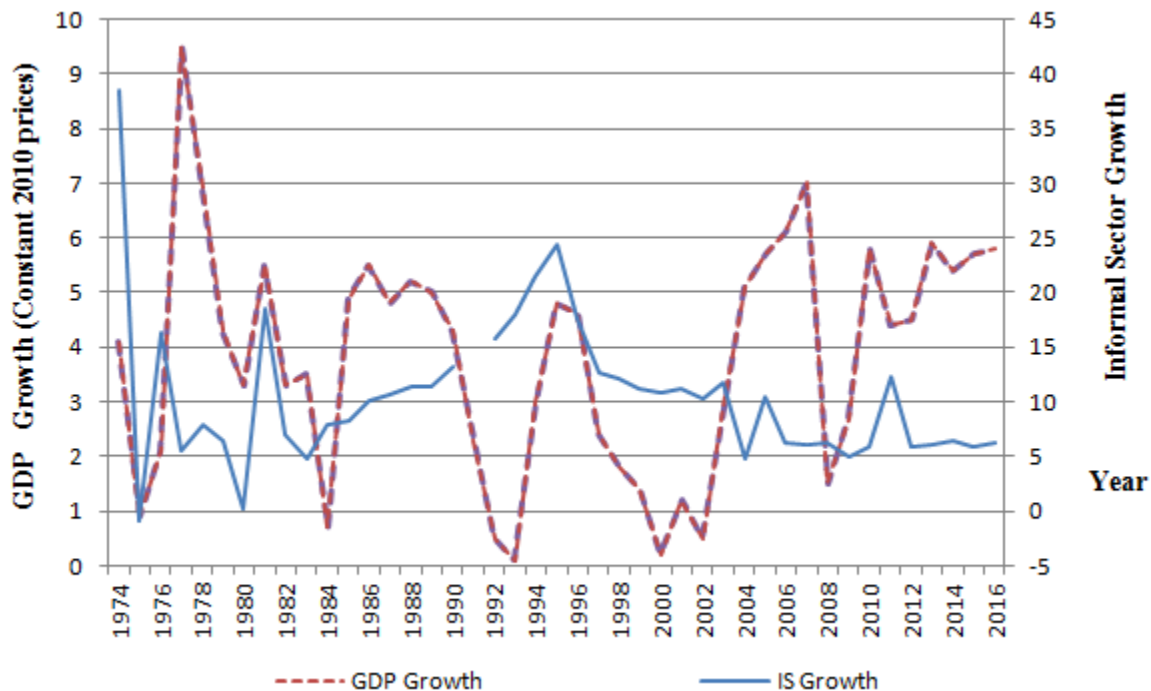
**Figure 1.2: Economic Growth and the growth of the Informal
Sector in Kenya (1974 to 2016)**

Data Source: Republic of Kenya Economic Surveys, Various Issues

The official recognition of the informal sector in Kenya followed the 1972 ILO report on the sector in the country. However, the study used 1974 as the start period as there was a steep increase in the reported number of workers employed in the sector from 1973 which can be attributed to underestimation of the size of the sector in the previous time periods which was difficult to quantify. A marked increase in the size of the sector was again experienced from 1990 to 1991 (127 percent) due to better methods of data collection (Omolo, 2010). The growth in the informal sector for the periods 1973 and 1991 were therefore excluded from the graphic analysis. Though the size of the sector measured by employment numbers has steadily increased, the country experienced a reduction in the rate of growth of the sector between 1995 and 2004, which largely remained stable from 2006 to 2016. However, the rate of growth of GDP exhibited wide fluctuations showing no clear relationship between the size of the sector and economic growth. The econometric analysis covered the period 1974 to 2016 to avoid loss of information and a dummy for the size of the sector introduced to capture the structural break.

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2. STATEMENT OF THE PROBLEM

The number of persons employed in the informal sector in Kenya increased from 95.4 thousand persons in 1973 to about 13.4 million in 2016. This is equivalent to 19 percent and 84 percent share in total employment in 1973 and 2016 respectively. Ninety-one (91) percent of new employment opportunities in 2016 were created in the sector (Republic of Kenya, 2017). The key policy objectives of the sector have been the creation of employment opportunities, income generation and economic growth making the sector pivotal in the achievement of the country's macroeconomic goals.

The contribution of the informal sector to national output in Kenya remains questionable. The baseline survey on Micro and Small Enterprises (MSEs) conducted in 1999 found that the sector contributed 14.3 percent of the country's GDP in 1993 and 18.4 percent in 1999 (KNBS, ICEG and K-Rep, 1999). However, the ILO (2002) estimated the sector's contribution to non-agricultural GDP at 25 percent in 1999 while Charmes (2006) put the sector's contribution to GDP in the same year at 18.5 percent (Hope, 2014) which is consistent with the 1999 baseline survey by the Kenya National Bureau of Statistics and its partners. According to Ouma, Njeru, Khainga, Kirima and Kamau (2007), the sector contributed 12 percent of GDP in the period 1975 to 1980, 19 percent between 1980 and 1990; 26 percent in the period 1990 to 2000; and 20 percent from 2000 to 2005. The *Medium Term Plan (MTP) 2008-2012,* and the *Labour, Youth and Human Resource Development Sector Plan -* 2008, put the contribution of the sector at 18 percent of the country's GDP over the period 2003 to 2006 (Republic of Kenya, 2008a; 2008b).

Most of the studies on the informal sector in Kenya focus on constraints to firm growth (Kimenyi, Mwega & Ndungu, 2016; Akoten, J. 2006; Omolo and Omiti 2005; Ongile, G., & McCormick, D., 1997) and on firm productivity (Bigsten *et al.* 2010: 2004: 2000). However, econometric studies on the contribution of the sector to output growth is limited to Ouma *et al,* (2007) who used the excess currency demand approach to estimate the size of the sector in the country. Though empirical literature for other countries give mixed findings on the relationship between the size of the informal sector and economic growth (Abou-Ali and Rizk, 2015; Pablo, 2014; Biau 2011; Loayza *et al.* 2009; Taymaz, 2009; Macias 2008; Beck *et al.* 2004;), economic growth theories do not support the development of the sector for improved economic performance. This is based on the constraining effect of the sector on the ability of the government to provide public infrastructure, the retrogressive characteristics of production processes used by informal sector firms which compromise productivity and output and the low wages and poor working conditions faced by employees in the sector.

Therefore, there is a need to understand the relationship between the size of the informal sector and economic performance in Kenya. The aim of this study was therefore to determine the contribution of the informal sector to output growth in Kenya. Unlike Ouma *et al*, (2007), the study used the production theory and measured the size of the informal sector using the number of workers employed in the sector.

3. METHODOLOGY

3.1 Theoretical Framework and Research Design

The production theory which shows the relationship between inputs and output and is frequently used in growth accounting was adapted using the Solow growth model (Solow, 1956). The study was based on the dualist theory of the economy (Harris & Todaro, 1970; Todaro & Smith, 2015).

According to the Solow growth model, economic growth (Y_t) in any given time period is determined by the amount of capital employed (K_t), the amount of labour employed (L_t), and labour effectiveness (A_t) (Romer, 2012; Solow, 1956) given as:

$$Y(t) = F[K(t), A(t)L(t)] \qquad (3.1)$$

Labour effectiveness is determined by technological advancement. Technological progress enters the production function through labour and is therefore *labour-augmenting or Harrod-neutral* (Romer, 2012). Technological progress may also enter the production function through capital, thus be *capital-augmenting* as presented in equation (3.2) (Romer, 2012).

$$Y(t) = F[A(t)K(t), L(t)] \qquad (3.2)$$

Increased output may also be attributed to technological progress that increases the productivity of both capital and labour. In this case the production function may be presented as equation (3.3) where technological progress is *Hicks-neutral* (Romer, 2012).

$$Y(t) = F\{A(t)[K(t), L(t)]\} \qquad (3.3)$$

In this study, growth was analyzed under the assumption that technological progress is *Hicks-neutral*. The presentation of equation (3.3) allows the decomposition of the sources of economic growth as arising from growth in labour, growth in capital and technological progress. Isolation of the independent contributions of each factor was critical in the study which was specifically interested in decomposing the contribution of labour from the two sectors of the economy (the formal and informal sectors).

Based on the dualist theory of the economy, the labour component of the production function presented in equation (3.3) can be decomposed into formal and informal labour following Cimoli *et al.,* (2006) so that:

$$L = L_F + L_I \qquad\qquad (3.4)$$

Where L is the total employment, L_F is labour employed in the formal sector, and L_I is labour employed in the informal sector. Incorporating (3.4) into (3.3) gives an extended form of the production function as presented in equation (3.5):

$$Y(t) = F\{A(t)[K(t), L_F(t)L_I(t)]\} \qquad\qquad (3.5)$$

Following the Solow growth model in which the Cobb-Douglas functional representation is adopted, the specific production function can therefore be given as:

$$Y_{(t)} = A_{(t)} K_{(t)}^{\alpha} L_{F(t)}^{\beta} L_{I(t)}^{\rho} \qquad\qquad (3.6)$$

Where the parameters: α, β, and ρ are the elasticities of output with respect to capital, to labour in the formal sector and to labour in the informal sector, respectively, when the function is transformed into log-linear form as shown in equation (3.8). Equation (3.6) can be empirically analyzed to enable the estimation of the contributions of capital in general, but labour by sector to output growth of a country.

The portion of output growth that is not explained by the quantities of capital and labour employed is attributed to total factor productivity (TFP). A Cobb-Douglas production function was adopted under the assumption of constant returns to scale following Euler's theorem (Greene, 2012) and other growth accounting studies for the country (Hammouda *et al.,* 2010; Oduor & Khainga, 2010; and Njuguna *et al.,* 2005).

3.2 Empirical Model

The study used the Cobb-Douglas production function. This facilitated simplified analysis of the sources of output growth, and has been used in many growth accounting studies for Kenya, e.g. Kalio *et al.* (2012), Hammouda *et al.* (2010), Oduor and Khainga, (2010) and Njuguna *et al.* (2005). The Kenyan economy is characterized by a dual labour market, i.e. formal and informal labour. Based on this, the study modelled total employment as presented in equation (3.4) following Cimoli *et al.* (2006). Capital stock was estimated from gross fixed capital formation using the Perpetual Inventory Method (PIM) following Berlemann and Wesselhoft (2012).

Theoretical literature states that the formal sector is capital-intensive, hence technology based while the informal sector is labor-intensive (Todaro & Smith, 2015). However, in a study on the adoption of adapted technology in Kenya's informal sector, Kuuya (2003) found that the informal sector in the country also uses technology. Therefore, incorporating equation (3.4) into (3.3) gives the following *Hicks-Neutral* Cobb-Douglas production function for the Kenyan economy:

$$Y = AK^{\alpha}L_F^{\beta 1}L_I^{\beta 2} \tag{3.7}$$

Where: α is the elasticity of output with respect to capital
β_1 is the elasticity of output with respect to formal labour
β_2 is the elasticity of output with respect to informal labour
and $\alpha + \beta_1 + \beta_2 = 1$

These factor shares are based on the assumptions of Euler's theorem, that the production function is homogenous of degree one (Greene, 2012).The contributions of capital, formal labour and informal labour to output are captured by the parameters $\alpha, \beta_1 \, and \, \beta_2$, respectively. Equation (3.7) was first linearized by taking the natural logarithm which yields:

$$logY = logA + \alpha logK + \beta_1 logL_F + \beta_2 logL_I \tag{3.8}$$

The growth in output is given by differentiating equation (3.8) with respect to time leading to equation (3.9).

$$\frac{\partial \log Y}{\partial t} = \frac{\partial \log A}{\partial t} + \alpha \frac{\partial \log K}{\partial t} + \beta_1 \frac{\partial \log L_F}{\partial t} + \beta_2 \frac{\partial \log L_I}{\partial t} \tag{3.9}$$

or $\quad \dfrac{\dot{Y}}{Y} = \dfrac{\dot{A}}{A} + \alpha \dfrac{\dot{K}}{K} + \beta_1 \dfrac{\dot{L_F}}{L_F} + \beta_2 \dfrac{\dot{L_I}}{L_I}$ $\qquad\qquad$ (3.10)

Where:

$$\frac{\dot{Y}}{Y} = \frac{Y_t - Y_{(t-1)}}{Y_{(t-1)}}; \quad \frac{\dot{K}}{K} = \frac{K_t - K_{(t-1)}}{K_{(t-1)}}; \quad \frac{\dot{L_F}}{L_F} = \frac{L_{Ft} - L_{F(t-1)}}{L_{F(t-1)}}; \text{ and } \frac{\dot{L_I}}{L_I} = \frac{L_{It} - L_{I(t-1)}}{L_{I(t-1)}}$$

Show the rates of growth of the factor inputs.

Equation (3.9) states that the growth in output is a weighted summation of the effect of growth in the different factor inputs and growth in total factor productivity. The factor contributions were estimated using the output elasticities obtained from equation (3.8) which were multiplied by the annual growth rate in the respective factor input as expressed in equation (3.10).

To ensure that the growth equation reflected a robust estimate of the production function, several specifications of the model were estimated. The basic model, (model 1) used to obtain the elasticities was the general production function with total employment decomposed into formal and informal employment as presented in equation (3.8) which can also be expressed as equation (3.11).

$$GDP_t = A + \alpha K_t + \beta_1 FS_t + \beta_2 IS_t + \varepsilon_t \qquad (3.11)$$

where all the variables are in logarithms.

Various restrictions were then placed on the model coefficients for estimation of subsequent variants of model 1. The first restriction was for constant returns to scale (CRS) based on Euler's Theorem. The Theorem states that the production function is homogenous of degree one, implying that the sum of coefficients for all factor inputs is equal to one. This was the first variant of model 1 (model 1a) presented in equation (3.12).

$$GDP_t = A + \beta_1 FS_t + \beta_2 IS_t + \emptyset K_t + \varepsilon_{1t} \qquad (3.12)$$

where $\emptyset = 1 - \beta_1 - \beta_2$ to impose CRS restriction

The study then incorporated dummy variables to capture the structural breaks observed in GDP, capital and the size of the informal sector and equation (3.13) estimated. This is the second variant of model 1 (model 1b) which was estimated maintaining the restriction of constant returns to scale.

$$GDP_t = A + \rho_1 D_1 + \beta_1 FS_t + \beta_2 IS_t + \emptyset K_t + \sigma_1 K_t * D_2 + \sigma_2 IS_t * D_3 + \varepsilon_{2t} \qquad (3.13)$$

The third variant of model 1 incorporated dummies to smooth out the outliers representing cyclical changes in GDP (Romer, 2012) as presented in equation (3.14).

$$GDP_t = A + \rho_1 D_{1_t} + \beta_1 FS_t + \beta_2 IS_t + \emptyset K_t + \sigma_1 K_t * D_2 + \sigma_2 IS_t * D_3 + \rho_2 D_5 + \rho_3 D_6 + \varepsilon_{3t}$$
$$(3.14)$$

4. FINDINGS AND DISCUSSIONS

Model 1c was the best of all estimated models. The results are presented in Table 4.3. The elasticity of output with respect to capital, formal labour and informal labour were all positive. The signs of all the coefficients including the dummies were in line with economic theory and statistically significant.

Table 4.3: Regression Data Estimates for the Growth Equation (Model 1c)

Dependent variable: GDP		
Variable	**Coefficient**	**Standard Error**
Constant	3.6400***	0.1126
Capital	0.4203***	0.0415
Formal Employment	0.5383***	0.0229
Informal Employment	0.0414***	0.0105
D1 GDP	-0.0819***	0.0049
D2 Capital	0.0048***	0.0004
D3 Informal Employment	-0.0099***	0.0018
D4	-0.0289***	0.0030
D5	0.0206***	0.0030
Adjusted R-Squared	0.9958	
Durbin-Watson Statistic	2.0357	
Prob. F-statistic	0.0000	

*NB: *** Significant at 1 %, ** Significant at 5 %, * Significant at 10 %*

D1=1 for years 1990 to 1995;

D2 = 1 for years 1990 to 1999

D3 = 1 for years 1991 to 2016

D4 = Unusual unfavourable occurrences

D5 = Unusual favourable occurrences

Source: Author's Computation

According to the estimated results, the output responses to capital, formal labour and informal labour were 0.4203, 0.5383, and 0.0414, respectively. All the coefficients were significant. The results imply that output response to the size of the informal sector in Kenya is low. The size of the coefficient suggests that a one percent increase in the size of the informal sector causes a

0.0414 percent increase in output. This could be due to inefficiency and low productivity in the informal sector. Additionally, firms in the sector have the tendency to avoid tax payment which undermines government revenue collection, leading to the overcrowding of public infrastructure compromising total output in the country. The dummy coefficients (D2 and D3) for capital and informal labour were 0.0048 and -0.0099, respectively. Both were significant at the one percent level. This implies that over the time period 1990 to 1999 the response of output to capital was higher than the average rate of 0.4203 by 0.0048; while the response of output to informal labour reduced from the average of 0.0414 by 0.0099 in the period after 1990.

The estimated model was subjected to diagnostic tests (Jarque-Bera Normality Test, Breusch-Godfrey Serial Correlation LM and the Breusch-Pagan-Godfrey). All confirmed that estimated model conformed to all the assumptions of the classical linear regression model. The elasticities obtained were then used to calculate the contribution of capital, formal labour and informal labour to output growth over the period 1974 to 2016 based on equation (3.10), while taking into account the dummies for capital and for informal labour which were found to be significant. The results are presented in Table A1 in the Appendix.

The findings were then summarized in five year periods following the various national development plans as each planning period may have different political regimes, usually accompanied by changes in government focus, policy direction and resource use which may affect output growth. Table 4.5 shows the average factor contributions over various national plan periods. The development plan period 1974 to 1978 marked the transition from the *Sessional Paper No. 10 of 1965.* The plan targeted poverty reduction and the elimination of disease and ignorance through creation of formal employment opportunities. The 1980s through to 1995 marked the implementation of the Structural Adjustment Programs (SAPs) which resulted in stagnation in formal employment growth and a rapid increase in informal employment.

Table 4.1: Growth Accounting Results (Average)

Time Period	Growth in GDP (%)	Factor contributions to output growth			
		Capital (%)	Formal Labour (%)	Informal Labour (%)	TFP (%)
1974-1978	2.38	-2.74	2.00	0.56	2.56
1979-1983	1.11	-0.31	2.00	0.31	-0.88
1984-1988	3.75	1.16	2.12	0.40	0.06
1989-1993	-5.41	-3.55	1.16	1.22	-4.23
1994-1996	14.47	2.12	1.70	0.67	9.99
1997-2001	0.31	2.99	0.39	0.37	-3.43
2002-2007	3.47	1.09	1.17	0.26	0.96
2008-2012	2.23	1.48	1.30	0.22	-0.77
2013-2016	7.04	3.90	2.38	0.19	0.56

Source: Author's Computation

From the findings, inspite of the size and growth of the informal sector in Kenya, the desired increase in the contribution of the sector to output growth has not matched the growth. Though the size of the informal sector has consistently increased from 1974, the percentage contribution of the sector to output growth has remained low, standing at 23.53 percent in the period 1974 to 1978; 4.63 percent in 1994 to 1996; 7.49 percent in 2002 to 2007; and 2.69 percent in 2013 to 2016.

On average, the GDP of Kenya grew by 2.66 percent over the study period (1974 to 2016), with the contributions of capital, formal labour and informal labour standing at 0.55 percent, 1.55 percent and 0.46 percent, respectively as presented in Table A1 in the Appendix. These translate to 20.64 percent, 58.19 percent, and 17.23 percent of the average output growth for capital, formal labour and informal labour, respectively. The combined contribution of labour over the study period was found to be 75.40 percent. The study findings on the contribution of labour compare favourably with those of Hammouda *et al.* (2010) who found that of the average GDP growth of 2.9 percent from 1981 to 2000, labour contributed 2.19 percent translating to 75.71 percent of the average GDP growth. However, the study did not decompose the contribution of labour into formal and informal labour.

5. SUMMARY, CONCLUSIONS AND POLICY IMPLICATIONS

Kenya has over the last five decades sought to develop the informal sector for economic growth, employment creation and poverty reduction. Though the sector is the lead employer in the country and is the largest creator of new employment opportunities, the contribution of the sector to output growth is low. The sector contributed on average 17.23 percent of the average annual output growth of 2.66 percent between 1974 and 2016. This was the lowest with the formal sector and capital contributions estimated at 58.19 and 20.64 percent, respectively.

The low contribution can be explained by retrogressive characteristics of the sector which is labour-intensive; labour is largely unskilled with low levels of education; technology where used is outdated; and the firms are small which hinders the ability of firms to enjoy economies of scale. The firms in the sector also face multiple challenges with include lack of access to credit, poor infrastructure, low access to markets, no secured work sites, lack of property rights, and low access to technology and information. Additionally, the firms avoid payment of taxes and remain informal to avoid the costs of formalization which acts as a barrier to their ability to benefit from state provided support. These challenges compromise firm efficiency, resulting in the survival of inefficient firms, therefore resource mis-allocation. Additionally, other challenges faced by the firms which limit output include lack of access to markets, limited information, and poor linkages with large and medium enterprises. As a result the existence and growth of the sector in the country has not been accompanied by the desired increase in output contribution.

Though the sector is the lowest contributor to output growth, the magnitude of the informal sector in Kenya makes it difficult to dismiss. The government should place more emphasis on firm growth for increased productivity and output growth. Worker productivity increases with firm growth as large firms are usually more capital-intensive than the small firms. The capital/labour ratio is a key determinant of worker effectiveness. Firm productivity has been addressed by various policy documents including the Sessional Paper No. 2 of 2005 on the *Development of Micro and Small Enterprises for Employment Creation and Poverty Reduction;* the *Private Sector Development Strategy;* the *Kenya Vision 2030: First Medium Term Plan (MTP) 2008-2012;* and the *Micro and Small Enterprises (MSE) Act No. 55 of 2012* which provide a 25 percent public procurement from the sector, increased firm linkages, improved access to capital, development of SME Industrial parks in key towns in the country, technology and market development, among others. The government should also pursue policies that bring the sector under the tax net which will result in increased revenue collection and assist in the maintenance and improvement of public infrastructure for increased output. The two objectives are being implemented by the Micro and Small Enterprise Authority (MSEA) which is charged with availing modern technology to the sector, increasing market access through training in E-

marketing, linking the firms to incubation centers, work with various MSE Associations to safeguard the right of firms in the sector, and to formalize the informal sector for a wider tax bracket among others.

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Appendix

Table A1: Growth Accounting Results

Year	Growth in GDP (%)	Capital (%)	Factor Contributions Formal labour (%)	Informal labour (%)	TFP contribution (%)
1974	2.51	-4.35	4.59	1.59	0.68
1975	-5.29	-4.72	-0.47	-0.03	-0.07
1976	8.99	-1.11	2.52	0.68	6.90
1977	11.44	-2.01	2.85	0.23	10.36
1978	-5.75	-1.51	0.52	0.32	-5.08
1979	5.28	3.05	3.58	0.26	-1.62
1980	1.60	-1.24	1.85	0.01	0.98
1981	3.08	-0.41	0.99	0.77	1.74
1982	-6.13	-3.22	1.14	0.29	-4.34
1983	1.71	0.26	2.43	0.20	-1.18
1984	1.67	0.43	1.30	0.33	-0.39
1985	-0.04	-0.89	2.63	0.34	-2.13
1986	13.63	3.50	2.39	0.42	7.31
1987	2.78	2.18	2.08	0.44	-1.93
1988	0.71	0.58	2.22	0.47	-2.56
1989	0.99	0.26	1.31	0.47	-1.05
1990	-2.13	-1.51	1.93	0.54	-3.09
1991	-4.94	-1.78	1.30	4.00	-8.46
1992	-7.37	-4.69	0.76	0.50	-3.94
1993	-13.59	-10.03	0.47	0.56	-4.60
1994	-6.77	-4.82	1.12	0.68	-3.74
1995	14.34	6.71	1.84	0.77	5.03
1996	35.84	4.48	2.14	0.55	28.68
1997	0.54	2.63	0.95	0.40	-3.45
1998	3.49	3.74	1.01	0.38	-1.64
1999	0.81	3.90	0.33	0.36	-3.78
2000	-2.97	1.44	0.21	0.34	-4.96
2001	-0.31	3.22	-0.58	0.35	-3.31
2002	-0.47	4.95	0.73	0.32	-6.47
2003	-0.46	0.44	0.87	0.37	-2.14
2004	0.87	-0.84	1.13	0.15	0.42
2005	0.71	-0.03	1.37	0.33	-0.97

Table A1 *Continued*

Year	Growth in GDP (%)	Factor Contributions			TFP contribution (%)
		Capital (%)	Formal labour (%)	Informal labour (%)	
2006	14.92	-0.63	1.52	0.20	13.83
2007	5.26	2.62	1.38	0.19	1.08
2008	-8.57	-3.07	1.03	0.19	-6.72
2009	5.58	2.40	1.53	0.15	1.49
2010	6.45	4.49	1.61	0.19	0.16
2011	3.11	0.82	0.65	0.39	1.25
2012	4.56	2.74	1.68	0.19	-0.04
2013	5.34	4.48	3.36	0.19	-2.70
2014	6.43	3.31	2.05	0.20	0.87
2015	8.19	4.24	2.45	0.19	1.31
2016	8.20	3.57	1.66	0.19	2.78
Total	*114.25*	*23.59*	*66.48*	*19.69*	*4.49*
Average	*2.66*	*0.55*	*1.55*	*0.46*	*0.10*
Percentages	*100.00*	*20.64*	*58.19*	*17.23*	*3.93*