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Job Creating Growth and Governance: The Case of Rwanda

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Preface

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Job Creating Growth and Governance: The Case of Rwanda

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Abstract

This paper analyzes whether Rwandan economic growth is creating jobs. The World Bank's Job Generation and Growth Decomposition (JoGGs) tool reveals some interesting insights into the relationship between economic growth and job creation in Rwanda. Rwanda's growth profile for the period 2011-14 was job-creating; there was a 9.12 per cent change in per capita value added thanks to an increase in the employment rate. In addition, we also analyze the role of governance, particularly policies targeted at creating jobs. As seen from international organizations' reports, Rwanda has been improving and performing well in all governance indicators. Various government policies in favor of employment have been initiated and implemented including the National Employment Program that came up with different initiatives to promote employment; investment facilities as indicated by a good ranking in Doing Business reports are improving and so is access to finance. These have all created a business climate that attracts investments and fosters new enterprise creation that further boosts employment opportunities. As a result, there has been a remarkable increase (24.4 per cent) in the number of establishments accompanied by new jobs that increased by 34 per cent between 2011 and 2014. This can be linked to government policies implemented in that period. This makes us attribute job creating growth in Rwanda to good governance.

Keywords: Economic growth, job creation, governance.

JEL Classification Codes: E61; G38; J08;

1. Introduction

There have been growing concerns with 'jobless growth' (or economic growth that has not led to the creation of new jobs) as a major obstacle in the poor benefitting from the positive growth performance experienced by many countries. Today, jobless growth has emerged as a global phenomenon. In its outlook on the 2015 global agenda, the World Economic Forum (WEF) reported that deepening income inequalities and persistent jobless growth were two of the most pressing challenges currently confronting mankind.

In Rwanda's case economic growth has remained high, averaging around 8 per cent over the last two decades (MINECOFIN, 2017). This may be attributed to a number of factors including adequate economic policies; improving the investment climate and attracting foreign direct investments; improving the quality of the labor force through universal primary and secondary education; completely eliminating red tape in the business environment in order to reduce the cost of doing business; political stability; and economic diversification. All these were a result of a visionary leadership committed to finding durable solutions, including job creation to Rwanda's problems. The role of the government in addressing youth employment is very important as it provides an enabling environment for the youth to succeed and supports young entrepreneurs with proper skills.

There is consensus that economic growth is a basic and indispensable but not a sufficient condition to address high unemployment rates and poverty. It is recognized that only countries that have sustained economic growth accompanied by good policies have successfully created jobs and reduced poverty. Recently some countries have experienced periods of economic growth that did not translate into equivalent employment gains. Good political, social and economic policies have helped in increasing incomes and faster growth rates which have boosted job creation. A study by Grindle (2005) concluded that it is easy to understand how good governance boosts investments, improves government credibility and political stability and controls corruption which in turn lead to employment and the development of a nation.

The main objective of our study is to assess whether high economic growth in Rwanda has been job creating or jobless and link this outcome to governance through policy initiatives.

Two studies on economic growth and job creation in Rwanda have been done by the World Bank (2008) with data from the Integrated Household Living Conditions Survey (EICV1-EICV2) and Malunda (2013) with data from EICV2-EICV3. The World Bank's study concluded that there was jobless growth while the study by Malunda concluded that there was meagre job creating growth. Our study uses the same methodology as used in these two studies but extends the sample to use more recent data from EICV4.

2. Overview of the Rwandan economy

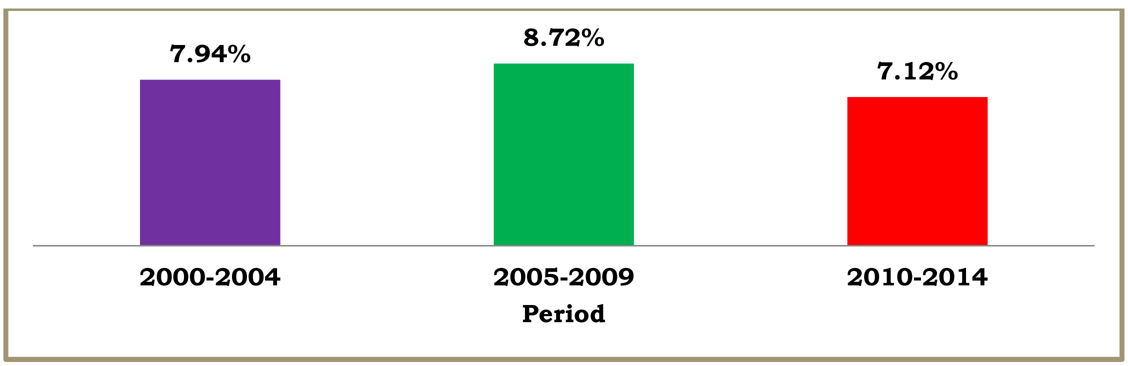
2.1 Economic growth

Two decades after the tragic genocide against the Tutsis in 1994, Rwanda has achieved and maintained high and inclusive economic growth. The government is devoted to attaining sustained economic growth coupled with employment opportunities for its people.

Rwanda has made notable progress in this time in different aspects including steady progress on structural transformation, high and inclusive growth, reduced poverty and gender inequalities and building an attractive business environment. This has been reinforced by strong macroeconomic policy management characterized by strategic public investments in growth-enhancing infrastructure, maintaining low inflation and taking measures to bolster domestic revenue mobilization. Growth in the last two decades averaged 8 per cent, driven by agriculture, services and industry sectors that contributed about 33 per cent, 47 per cent and 15 per cent of the total GDP respectively (BNR, 2014).

Various others factors led to sustained economic growth including implementation of structural reforms which pushed Rwanda up in the ranking of the world's top performers in the World Bank's Ease of Doing Business Index in 2010, the first sub-Saharan Africa country to achieve this distinction; there have also been sustained investments by the government which are expected to drive output growth in the coming years along with sound macroeconomic management and a robust fiscal discipline (MINECOFIN, 2014).

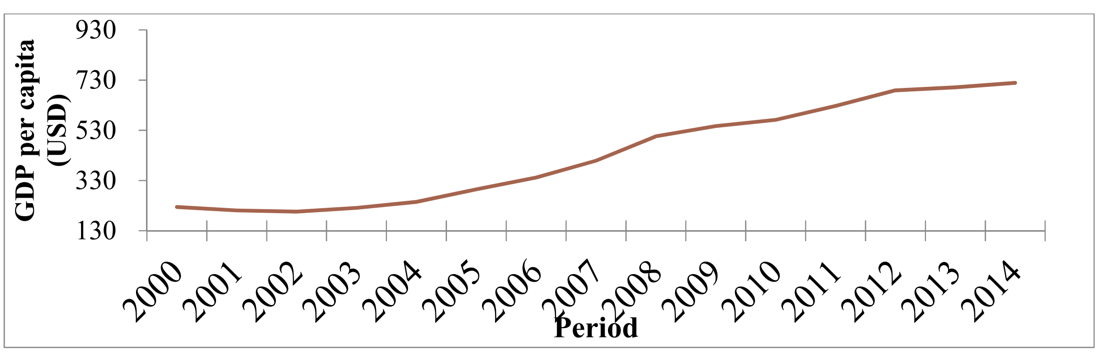
Figure 1: Average real GDP growth rate



Source: Authors' calculations using National Institute of Statistics of Rwanda (NISR) data.

GDP per capita increased from less than US$ 200 in 1994 to US$ 719 in 2014 (Figures 1 and 2). As a main measurement of the standard of living in different economies high per capita growth is linked to improvements in the living conditions of the Rwandan population.

Figure 2: GDP per capita 2000-14 (in US$)



Source: Authors' calculations using NISR data.

2.2.1 Labor market and poverty status

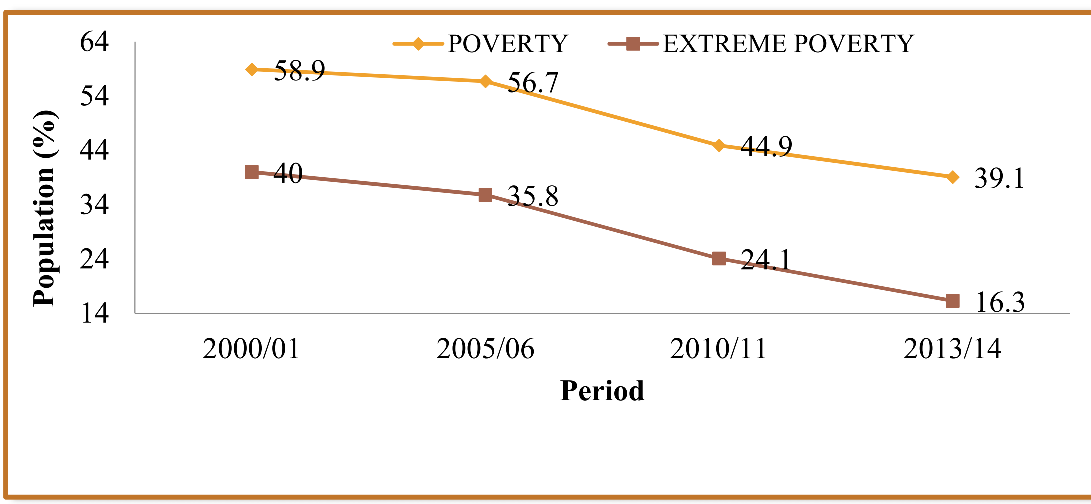
In the aftermath of the 1994 genocide against the Tutsi, the labor sector was one of the most affected. Major challenges in this important area of the national economy included limited employment opportunities leading to high unemployment and under-employment levels especially among the youth; high illiteracy rates; and under-representation of women in wage-earning jobs.

To face this challenge, Rwanda adopted various policies and programs such as Vision 2020 to address economic and developmental issues that the country was facing. Crucial for achieving Vision 2020 was improving education policies which are largely linked to economic development and labor policies. The labor market was to be increased through creating opportunities and enabling at least 7million (out of a projected 13 million) Rwandans access to off-farm jobs (MINECOFIN, 2000)

According to a survey conducted by the National institute of Statistics of Rwanda (NISR, 2014), about 250, 000 people graduated from poverty each year between 2011 and 2014. Using the 2014 poverty line, poverty reduced by 6.9 per cent between 2011 and 2014 representing a reduction of 2.3 per cent per year. The findings of the survey confirm that economic growth between 2011 and 2014 was pro-poor. Close to 60 per cent of this poverty reduction is attributed to growth while about 40 per cent was due to wealth redistribution from wealthy households to poorer ones.

The NISR report (2014) indicates that while overall poverty reduced, 17.4 per cent of the households that were poor in 2011 were not poor in 2014 and 10.4 per cent that were not poor in 2011 had descended into poverty by 2014 due to illnesses, loss of family members and poor harvests due to droughts and floods. Poverty reduction was driven by a combination of improved agriculture incomes, off-farm job creation, reduction in household sizes and public and private transfers (Figure 3).

Figure 3: Poverty status (in percentage)



Source: Authors' calculations using NISR (2016) data.

2.3 Governance and political developments

Rwanda continues to make significant progress in governance. Its World Governance Indicators (WGIs) show a positive trend with significant progress in rule of law, regulatory quality and taking anti-corruption measures. It is among the top-5 most improved African countries and is one of the two countries that have registered consistent overall governance improvements since 2000. Progress in anti-corruption measures is reflected in the Corruption Perception Index (CPI), with Rwanda's place being 49 (among 177 countries) in 2013. Under its zero tolerance policy on corruption, Rwanda is now ranked the 4th least corrupt country in sub-Saharan Africa (SSA).

Rwanda made considerable progress in streamlining an enabling business environment and improved its Doing Business rankings from 52 in 2012 to 32 in 2013. Although retaining the third place in SSA, recognizing its insufficient infrastructure and low secondary and university enrolment rates the Competitiveness Index of the World Economic Forum downgraded Rwanda from the 63rd (2012) to the 66th (2013) position. Service delivery in public and private sectors remains a concern. The Rwanda Governance Board's assessments highlight inadequate problem solving skills and poor customer service care as the main challenges in providing improved service delivery especially at the local government level.

3. Literature review

The current phenomenon of 'jobless growth' witnessed across several developing economies poses far-reaching challenges to the age-old economic assumption of GDP growth directly resulting in an increase in employment. Okun's (1962) pioneering and seminal contribution provides some evidence in this regard. In his study on the relationship between a country's unemployment rate and the economic growth rate, he found a positive relationship between output and employment. According to Okun's law, to achieve a 1 per cent decline in the unemployment rate, real GDP must grow by approximately 2 per cent. However, economic realities have since evolved and experiences show that in many developing countries economic growth has not necessarily been associated with job creation.

A strand of literature shows that the phenomenon of jobless growth is persistent in many countries (Melamed et al., 2011). Aryeetey et al., (2007) contend that in Ghana policies narrowly focused on achieving macroeconomic stability and accelerated growth without adequate employment led to jobless growth. Jobless growth has also been visible in recent times in India (Mehta et al., 2011) and it also exists in Latin America (Jemio et al., 2006).

Recent studies on Africa show that the continent's rapid growth over the last decade has so far not been able to create significant employment opportunities. Ancharaz (2010) concludes that growth in many African countries has been driven largely by commodity exports which do not necessarily translate into higher employment levels.

The World Bank (2005) in its study of 14 countries noted that only three countries which experienced pro-poor growth achieved more labor-intensive growth. In another country-specific study on eight Central and Eastern European Countries (CEE) employment was completely de-linked from output mostly in medium- and low-skilled sectors (Onaran 2008).

Bbaale's (2013) study on Uganda for the period 2006-11 concluded that its economic growth was jobless, showing that 36 per cent change in per capita value added emerged from a decrease in the employment rate.

There is consensus about the role played by governance or leadership in terms of policies and institutions in the socioeconomic development of countries though it is not the only input. Robust institutions include an effective administrative and civil service, responsible legislature, an independent judiciary, a vibrant private sector and a responsible press. Good leadership is also important for successful policy implementation, mobilization of the people towards the same developmental objectives and building consensus for policies through the politics of convergence and not divergence. According to the World Bank, successful sustained economic growth and development strategies and dynamics require an economic component dealing with which models of growth and development work best and right policies to support growth models; an institutional component dealing with the question of knowing which institutions enhance and facilitate economic growth and development and how those institutions come into existence and become stronger; and a component that deals with the politics of growth showing how countries deal with issues such as inequalities that are created by growth. These elements clearly indicate that good governance or good leadership involves seizing opportunities created by the dynamics of a political economy to institute changes in strategy, structure and direction (Brady and Spence, 2010).

4. Methodology

In recent years the World Bank has developed the Job Generation and Growth Decomposition (JoGGs) tool to link changes in employment, output per worker and the population structure at the aggregate and sectoral levels (the World Bank, 2010). Using Shapley decompositions, the methodology decomposes growth in GDP per capita in two consecutive periods in its employment, productivity and demographic components to disentangle the sources of output per worker growth. The JoGGs tool is an Excel based macro-spreadsheet that allows users to input their data and get all the decomposition results and tables.

The aim of this methodology is to understand how growth is linked to changes in employment, output per worker and the population structure at the aggregate level and by sectors. Additionally, the methodology helps decompose the sources of output per worker growth into total factor productivity (TFP) growth, movement of employment from one sector to another or changes in the capital-labor ratio.

There are several techniques for decomposing changes in GDP and attributing them to each component (employment, output per worker, capital and TFP) or to each sector as a share of total observed growth.

Our methodology uses the Shapley decomposition which is a simple additive method that links changes in a particular component to changes in total per capita GDP by taking into account the relative size of the sector or component and the magnitude of the change.

As per standard theory, the growth in per capita GDP is decomposed into changes in the employment rate, changes in output per worker and demographic changes as:

$$(1) \qquad \frac{Y}{N} = \frac{Y}{E}\frac{E}{A}\frac{A}{N}$$

or

$$(2) \qquad y = \omega * e * a$$

where, Y is total value added, E is total employment, A is the total population of working age and N is total population. Consequently, Y/E=ω is a productivity measure, E/A is a measure of the employment rate (that is, the share of working age population that is employed) and A/N is the share of the working age population in the total population. Further, ω, *e*, and a refer to labor productivity, employment rate and share of the labor force in the total population respectively. The summation of the growth in ω, e and a refers to the total change in GDP per capita. Thus, if $\overline{\omega}$,$\overline{e}$ and $\overline{a}$ denote the fraction of growth linked to each component then the growth rate of an economy can be expressed as:

$$(3) \qquad \frac{\Delta y}{y} = \overline{\omega}\frac{\Delta y}{y} + \overline{e}\frac{\Delta y}{y} + \overline{a}\frac{\Delta y}{y}$$

and total growth as:

$$(4) \qquad \Delta y = \overline{\omega} * \Delta y + \overline{e} * \Delta y + \overline{a} * \Delta y$$

where, $\overline{\omega} * \Delta y$ refers to the contribution of output per worker to the growth in output per capita while the employment rate e and the share of the working age population a remain fixed.

Similarly, $\overline{e} * \Delta y$ refers to employment's contribution to growth in output per capita while the productivity parameter ω and the share of the working age population a remain fixed. Finally, $\overline{a} * \Delta y$ refers to the contribution of demographic changes to growth in output per capita while the first two components remain fixed.

5. Empirical results

As mentioned earlier, two studies have been conducted on Rwanda using the World Bank's JoGGs tool. The World Bank's study covering the period 2000-06 and Malunda's study covering 2006-11 use data from EICV1-EICV2 and EICV2-EICV3 respectively. The findings of these studies show that Rwanda stepped from jobless growth in 2000-06 to meagre job creating growth in 2006-11.

We used the same methodology but covered the most recent data from EICV4. This helped us capture any recent changes in job creation and their impact on economic growth. As conditions have been improving over time we anticipated more job creating growth in Rwanda. Different policies were implemented in the last 10 years to attract more foreign investors, facilitate private investments and support the establishment of businesses for youth and women.

Table 1 presents the main data used for the aggregate decomposition: Output, employment and population, as well as employment share, output per worker and the share of the working age population.

Table 1: Employment, Output, Productivity and Population in Rwanda (2011-14)

	2011	2014	% change
GDP (value added, billion FRW)	3,588	4,426	23.3
Total population	10,942,950	11,342,000	3.6
Total working age population	5,887,514	6,400,000	8.7
Total number of employed	4,961,000	5,479,000	10.4
GDP (value added) per capita	327,882	390,187	19.0
Output per worker	723,241	807,720	11.7
Employment rate	84.3	85.6	1.6
Share of working age population of	53.8	56.4	2.6

Source: The JoGGs decomposition tool using data from NISR and the World Development Indicators (WDIs).

As indicated in Table 1, Rwanda registered a growth rate of 19 per cent in per capital value added for the whole period. This growth was accompanied by an increase in output per worker, employment rate and an increase in the share of working age population of 11.7 per cent, 1.6 per cent and 2.6 per cent respectively.

This growth was accompanied by an increase in output per worker by 11.7 per cent, the employment rate increased by 1.6 per cent and the increase in the share of working age population was 2.6 per cent. The total number of employed increased by 10.4 per cent during the period but this was offset by a simultaneous increase in the number of new entrants in labor market. Table 2 gives the findings on job generation and growth decomposition to analyze whether Rwandan growth was either jobless or job creating during the period 2011-2014.

Table 2: Decomposition of aggregate growth in per capita

	2011 FRW	% total change in per capita value added growth
Total growth in per capita GDP (value added)	62,304.581	100
Growth linked to output per worker	39,549.112	63.48
Growth linked to changes in the employment rate	5,682.447	9.12

Growth linked to changes in the share of working age population	17,073.021	27.40

Source: The JoGGs decomposition tool with data from NISR and WDI.

As indicated in Table 2, 9.12 per cent of the change in per capita value added was linked to an increase in the employment rate, indicating that between 2011 and 2014 economic growth in Rwanda became more job creating than before as compared to the two previous studies. Our results show that changes in productivity or output per worker were the most important contributor to the change in per capita GDP growth in Rwanda accounting for 63.5 per cent. The results also show that 27.4 per cent of the change in per capita value added is linked to changes in the structure of the population while 9.12 per cent is linked to changes in the employment rate.

Comparison of current results with the findings of previous studies

The progress in job generating growth is shown in Table 3 which compares our findings to those of the other two studies conducted on Rwanda. The findings show that Rwanda stepped from jobless growth (2000-06) to meagre job creating growth (2006-11) and to a more improved job generating growth in 2011-14.

Table 3: Decomposition of Growth in per capita Value Added

	Per cent of total change in per capita value added growth		
	2000-06	2006-11	2011-14
Total growth in per capita GDP (value added)	100	100	100
Growth linked to output per worker	122	101.94	63.48
Growth linked to changes in employment rate	-36	0.89	9.12
Growth linked to changes in the share of the working age population	14	-2.82	27.40

Source: Authors' design with figures from the three studies.

With reference to a consensus about the impact of leadership in the link between economic growth and job creation, countries with transparency, zero tolerance for corruption, political stability, accountability and mobilization of the people towards the same developmental objectives and both foreign and domestic investments are expected to increase and create more jobs.

The World Bank's report shows that the Government of Rwanda has emphasized strengthening good governance as a precondition for poverty reduction and development as it recognizes that the country's institutions of governance exert an influence on stability, prosperity and the well-being of its citizens. It has implemented different policies that foster entrepreneurship while nurturing a more skilled workforce and promoting private sector investments. It facilitates and gives incentives to both local and foreign investors to help them make their businesses more profitable and thus create more jobs.

The World Bank ranks countries on different aspects related to governance and Rwanda has been performing well. Based on the World Governance Indicators (WGIs) developed by the World Bank Table 4 gives Rwanda's ranking in 2015.

Table 4: Rwanda's ranking in the World Bank's indicators of good governance

Indicator	Ranking		
	World	Africa	East Africa
Control of corruption	46th	4th	1st
Regulatory quality	75th	4th	1st
Rule of law	75th	7th	1st
Government effectiveness	90th	7th	1st
Political stability	105th	13th	1st

Source: theglobaleconomy.com; the World Bank (govindicators.org).

In its Second Economic Development and Poverty Reduction Strategy (EDPRS 2) Rwanda set a vision to have half of its workforce employed in off-farm activities by 2020 and it called for the creation of 200,000 off-farm jobs per year. The findings of the EICV4 survey show that in 2014 the capacity of the Rwandan economy to create off-farm jobs was 146,000 jobs per year (NEP, 2014). To achieve this objective, the Government of Rwanda has implemented different policies and programs including the National Employment Program and it is also focusing on improving business conditions.

The Government of Rwanda decided to establish the National Employment Program (NEP), to optimize the impact of employment interventions with the following key objectives:

- Creating sufficient jobs that are adequately remunerative and sustainable across the economy;
- Equipping the workforce with vital skills and an attitude for increased productivity that are needed for private sector growth; and
- Providing a national framework for coordinating all employment and related initiatives and activities in the public and private sectors and in civil society.

NEP has been and is still implementing several interventions to facilitate the creation of jobs. The government is targeting 65 per cent of the learners to be enrolled in technical and vocational education and training (TVET) schools. It has therefore targeted skill training through TVETs. There has also been a shift towards the creation of incentives for investments in youth by private employers to scale up apprenticeships, internships and on-the-job training. During the last few years TVET has been an important component of Rwanda's policy to end poverty. After the reforms in 2008, TVET is getting increased attention from the government, the private sector and international donors. Developing a necessary supply of skills for a productively employed population has called for coordination with other sectors to ensure that education and skill development is practically applicable to the labor market.

Project-based learning through all levels of education; career focused courses in secondary schools, TVET and higher education; rapid response training responding to investor demands for specific skills, enhancement of career services and guidance, intensification of part-time and distance learning; and operationalization of sector skills councils serving as platforms to adapt skill development to the specific needs of the private sector, increased productive internships and apprenticeships have all been brought to the fore.

For enterprises to increase investments in capital and technology through accessible and affordable finance, the government has ensured increased access to finance and technical training for household enterprises and MSMEs and scaled up MSME financing through BDF products including a SME guarantee (up to 75 per cent), grants to youth and women and quasi- equity finance; and proximity business advisory (BDA) services and provision of start-up toolkits to youth graduating from vocational training and apprenticeship.

The government is committed to establishing various community centers that specialize in processing dairy products, banana wine and Irish potatoes through public-private partnership arrangements where the district / cooperatives provide the land and building and the Government of Rwanda through MINICOM provides technology, equips the centers with appropriate equipment and technologies and ensures that effective management systems are in place.

Integrated craft production centers (ICPCs-Agakiriro) are being operationalized with the aim of establishing standardized and modern business centers to accommodate local craftsmen and artisans including TVET graduates and facilitating them to up-grade their skills and embrace innovations in all districts.

Other government initiatives such as the electricity access rollout program (EARP) are feeding into the creation of new commercial activities that need energy in the country trade centers.

The World Bank's (2017) Doing Business report sheds light on how easy or difficult it is for a local entrepreneur to open and run a small to medium-sized business when complying with relevant regulations. It measures and tracks changes in regulations affecting 11 areas in the life cycle of a business: starting a business, dealing with construction permits, getting electricity, registering the property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency and labor market regulations.

Rwanda has been very active since 2008-09 and has made remarkable progress for which it has been acknowledged as among the top reformers in improving its business environment.

As shown in the table below, Rwanda has moved forward six places between 2016 and 2017 in the World Bank report of doing business in various countries, which is an indication of effort by the government of Rwanda to attract both domestic and foreign investors.

Table 5: Top 5 African countries

Country	Ranking in 2016	Ranking 2017	Change in rank
Mauritius	32	49	17
Rwanda	62	56	6
Morocco	68	75	7
Botswana	71	72	1
South Africa	74	73	1

Source: The World Bank (2017).

Rwanda now has a fully functional electronic portal that combines company registration, information on tax obligations and duties and value added tax registration, saving entrepreneurs two days on average and eliminating too many interactions with government officials.

The link between good performance and job creation is straightforward in the Doing Business reports. With various facilities in business, investors and new entrepreneurs are motivated to boost their activities, hence generating employment opportunities.

The Government of Rwanda has made heavy investments in hard infrastructure and in enhancing the private sector's capacity to innovate. Such a big push by the government has created strong incentives for the private sector to increase its investment rates.

Given the role of financial inclusion and access to finance in business development and job creation, the Government of Rwanda has taken an initiative of establishing savings and credit cooperatives in each administrative sector (UMURENGE SACCOs) that reach more people at a lower cost and lend small loan amounts with limited requirements. Its implementation started in September 2009. To date there are more than 416 UMURENGE SACCOs across the country with more than 2.4 million members. These SACCOs have reduced unemployment by creating jobs in different positions such as accountants, managers, loan officers, cashiers and recovery officers. The money that they borrow is used as investment by small and medium investors who in turn provide jobs in due course (RCAAFR, 2015).

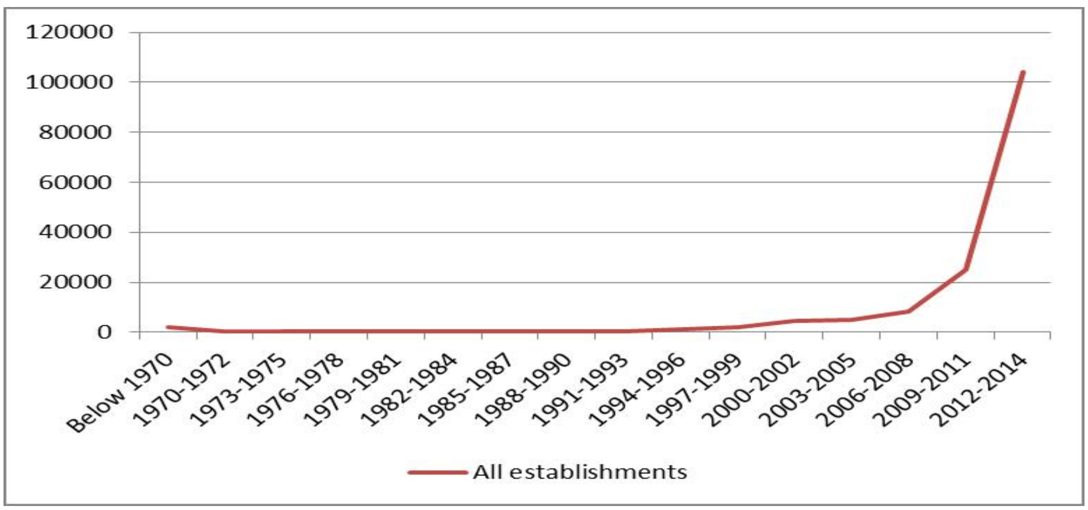
UMURENGE SACCOs were established as a government initiative specifically aimed at increasing the accessibility of financial services to Rwandan citizens because banks and other financial institutions were more concentrated in urban areas whilst a majority of the Rwandan population lives in rural areas. Besides, banks and other financial institutions were not able to provide financial services that were ideal for serving the poor. According to FinScope's (2012) findings, 22 per cent of the Rwandan adults were UMURENGE SACCO members and 91 per cent of the adults lived within a 5-km radius of an UMURENGE SACCO. The percentage of adults that was served by non-bank formal institutions but not by commercial banks increased from 7 per cent in 2008 to 19 per cent in 2012.

The findings of Finscope (2016) show that financial exclusion dropped by 17 percentage points between 2012 and 2016, with 89 per cent of the Rwandan adults having or using financial products or mechanisms. The survey confirmed that this increase in formal inclusion was caused by an uptake of products offered by non-bank formal financial institutions (such as mobile money and UMURENGE SACCOs).

The Government of Rwanda has also put in place a guarantee fund, the Business Development Fund (BDF) that provides guarantees and grants to farmers and other businesses, particularly those who face challenges in accessing loans from commercial banks. The fund gives up to 75 per cent loans to women and youth and 50 per cent to other clients. These policies have significantly contributed to an increase in access to finance which in turn has contributed to the creation of new businesses or expanding already operating businesses consequently leading to employment promotion.

The Establishment Census conducted by NISR reported in 2014 that these national policies had enabled the creation of new establishments and expansion of already existing ones along with employment generation. The survey also showed that some establishments had entered the market in 1995 onwards but they achieved more development in terms of business and job creation in recent years (Figure 4).

Figure 4: Evolution of establishments in Rwanda



Source: Establishment Census, NISR (2014).

A comparison of the 2011 and 2014 establishment censuses shows that there was a growth of 24.4 per cent in the number of private and business oriented mixed establishments in the three-year period.

It is observed that a number of establishments have been created since 2008 which proves the role of government policies and programs in promoting investments. In these censuses, establishments are classified according to size which is determined based on the number of workers. The following four categories of establishments have been defined: Micro (1-3 workers), small (4-30 workers), medium (4-30 workers) and large (100 workers and more) (Table 6).

An increase in the number of establishments was observed in all categories with more increase in large establishments (102.9 per cent) followed by small establishments (28.2 per cent), micro (24.1 per cent) and medium sized establishments (19 per cent).

Table 6: Changes in establishment size (2011-14)

Size	Count		Percentage change
	2011	2014	
Total	119,270	148,376	24.4
Micro (1-3 workers)	111,204	138,039	24.1
Small (4-30 workers)	7,479	9,585	28.2
Medium (31-100 workers)	453	539	19.0
Large (100+ workers)	105	213	102.9

Source: National Institute of statistics of Rwanda, 2014

The increase in the number of establishments was accompanied by an increase in job creation due to the availability of new employment opportunities. Table 7 shows employment changes according to economic activities. In total, the increase in employment size (34.9 per cent) exceeded the increase in the number of establishments during the period under study (24.4 per cent). There was an increase in jobs in all categories with the percentage change ranging from 24.6 per cent for small establishments to 55.3 per cent for large establishments. Employment increased the most in large and micro establishments at 55.3 and 32.8 per cent respectively, while the increase was 24.6 per cent and 28.3 per cent in small and medium establishments respectively.

Table7: Employment changes in establishments (from 2011 to 2014)

Size	Count		Percentage change
	2011	2014	
Total	264,648	355,883	34.5
Micro (1-3 workers)	140,295	186,357	32.8
Small (4-30 workers)	57,909	72,153	24.6
Medium (31-100 workers)	21,539	27,624	28.3
Large (100+workers)	44,905	69,749	55.3

Source: National institute of Statistics of Rwanda, 2014.

5. Summary and Conclusion

Rwanda has achieved high economic growth in the two last decades averaging around 8 per cent. This paper analyzed whether that high economic growth was job creating or jobless and further examined the role of the leadership in job creation.

Two other studies have been conducted on Rwanda's growth profile by the World Bank covering the period 2000-06 and by Malunda covering 2006-11 using the World Bank's JoGGs tool. The findings of these two studies show that Rwanda stepped from jobless growth in 2000-06 to meagre job creating growth 2006-11 using data from EICV1-EICV2 and EICV2-EICV3 respectively.

Using the same methodology, we reassessed the relationship between economic growth and employment in Rwanda for the period 2011-14 covering the most recent data from

EICV4. Our findings reveal interesting insights about the relationship between the two. Given that there was a 9.12 per cent change in per capita value added because of an increase in the employment rate it can be said that Rwanda's growth profile for the period 2011-14 was job creating.

In addition, we analyzed the role of governance, particularly policies in job creation. We analyzed some of the government's policies in favor of employment including the National Employment Program that came up with different initiatives to promote employment, investment facilities and access to finance which were a result of the creation of savings and credit cooperatives in each administrative entity (UMURENGE SAACOs). All these created a business climate that attracted investments and fostered the creation of new enterprises that boosted employment opportunities.

UMURENGE SACCOs contributed to an increase in access to financial services particularly among the rural population. To date, 91 per cent adults live within a 5-km radius of an UMURENGE SACCO and 89 per cent of Rwandan adults have or use financial products or mechanisms due to the uptake in the products offered by non-bank formal financial institutions (such as mobile money and UMURENGE SACCOs). These SACCOs have reduced unemployment by creating jobs in different positions such as accountants, managers, loan officers, cashiers and recovery officers. The money borrowed is used for investment by small and medium investors who in turn provide jobs in due course.

There was a remarkable increase (24.4 per cent) in the number of establishments accompanied by new jobs that increased by 34 per cent between 2011 and 2014. As compared to the previous period, there was also a significant increase in the number of establishments created and expanded in the period when the government's policies were initiated and implemented.

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