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Unemployment and Entrepreneurship in South Africa: Challenges of the Increasing Joblessness

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ABSTRACT

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Although South Africa consistently registered positive real economic growth rates, as high as 5% in certain years since the demise of apartheid in 1994, this has not been accompanied by a significant increase in employment. In South Africa, poverty, inequality and rising unemployment are worrying concerns to policy-makers, firms and individuals. South Africa spends about a fifth of its national budget on education and the pass rate at matric level is rising, while the number of students attending institutions of higher learning is also increasing over the years. One would expect that if individuals in a society are educated, there is a greater probability for them to get employment and thus their employability prospects should be high in a growing economy. However, the South African economy is unable to generate sufficient job opportunities to a rising population that has a greater access to education now than before. A large proportion of the population in South Africa, especially among the youth, is unemployed. Youth unemployment (15-24 age group) stands at 48% (Stats SA, 2010). The labour force participation rate in South Africa is 54.7% (Stats SA, 2012). The total number of unemployed people increased from 4.3m in (January –March) 2011 to 4.5m in (January –March) 2012. The country's current (March 2012) unemployment rate is 25.2% (Stats SA, 2012), and if one takes into account the discouraged worker effect, the unemployment rate is well above 30%. The discouraged worker group, individuals who give up search for employment, reflects a deep structural nature of unemployment in South Africa.

Government has put in place various measures and strategies to boost economic growth and employment creation. These include the growth, employment and redistribution policy (GEAR), Black Economic Empowerment (BEE) and the National Empowerment Fund (NEF), SMME support institutions, Small Enterprise Development Agency (SEDA), National Youth Development Agency (NYDA), the expanded public works program (EPWP), the New Growth Path (NGP) strategy and National Development Plan (NDP). Despite all these policy interventions, the problem of employment is apparently not getting any better.

Stimulating entrepreneurship through the creation and expansion of small ventures is critical to narrow income inequalities, and generate employment and output expansion in the country. Against this background, this paper examines whether entrepreneurship within a positive economic growth scenario can make a difference to the challenge of job creation in South Africa. The paper initially examines the link between economic growth and employment growth in South Africa post 1994, with a view to establish the employment growth elasticity for the period 1994-2010. It then examines the association between entrepreneurship, as reflected by the Global Entrepreneurship Monitor's reports on early stage entrepreneurship activity rate and economic growth over the period 2001-2010. The third section examines the SMME entrepreneurial environment in South Africa. More jobs can be created, especially in the private sector, when there is a favourable environment that encourages entrepreneurs to

enter or expand the business arena and grow the demand for labour. The last section presents some policy recommendations towards enhancing employment creation and small business entrepreneurship in South Africa. Preliminary results indicate that the employment elasticity of economic growth is positive but rather low, while there is a positive association between entrepreneurial activity and employment. Linking real GDP growth to employment, the regression analysis indicates that the marginal employment effect is positive. But when other exogenous factors are taken into account, employment falls, contributing to increasing joblessness.

Topic area: Economics of entrepreneurship interfacing with entrepreneurial growth and performance, with reference to employment at the macro level.

Key words: Small business, job creation, entrepreneurship, employment and economic growth. (Method: quantitative and qualitative).

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Unemployment and Entrepreneurship in South Africa: Challenges of the Increasing Joblessness

1. Introduction

South Africa experienced positive economic growth rates for 17 years in the post-apartheid period. It registered an average growth rate of 3.5% over the period 1994-2008, negative 1.7 % in 2009, and an average of 3% in 2010 and 2011 (SARB, 2012). Despite these positive growth rates, employment has not increased significantly. The recent downturn in economic conditions in Europe, South Africa's major export destinations, has had an adverse impact on South Africa's export performance. Its exports to the European Union decreased from an average of 35% of total exports to less than 25% in 2011. In the first four months of 2012, the country's exports to Europe decreased by almost 3% relative to the first four months of 2011. On the other hand, with South Africa as being part of BRICS, the country's major export destination is Asia. South Africa's exports to Emerging Asia, which includes China, India, Taiwan and Indonesia, have increased from 7% in 2005 to 28% in 2011 (Lings, 2012). Despite these trends in exports and growth, unemployment remains one of the biggest economic challenges facing South Africa. Economic growth, generally regarded as a major creator of employment, is not able to create sufficient employment opportunities to absorb the rising annual number job seekers.

On an expanded basis, South Africa's current unemployment rate, which includes the discouraged work seekers, is close to 40% (The Economist, 20/10/12: 23) although the 'official' unemployment rate is about 25.2% in 2012 (SARB, 2012). However, in 1994 the unemployment rate was much lower at 20%. Discouraged work seekers increased from 1.1 million to 1.5 million in 2009 to 2.2 million in 2011 and to 2.3 million in March 2012, while unemployment increased from 4.21 million in 2009 to 4.52 million in March 2012 (SARB, 2012).

The post-apartheid government has put in place various strategies to meeting the challenge of job creation. These include the growth, employment and redistribution strategy (GEAR), the Umsombuvu Youth Agency, SMME development institutions, National Skills Fund, the Sector Education and Training Authorities (SETAs), National Empowerment Fund, Accelerated and Shared Growth Initiative of South Africa (ASGISA), the Small Enterprise Development Agency (SEDA), the New Growth Path (NGP) and National Development Plan (NDP). Despite all these initiatives, South Africa's low growth and 'stubbornly' high unemployment rates are a development concern, together with other issues, such as inflation, budget deficits, high levels of crime and corruption, poor service delivery, growing social stresses and increasing income inequalities and poverty.

Increasingly there are signs of disillusionment among individuals, as unemployment among the poorer community remains extremely high. Sparked by labour unrest that recently saw 34 miners death in Marikana in August 2012 and apparent weakening ability of the government to address pressing socioeconomic problems and worsening investment conditions, the credit agency, Moody's cut South Africa's sovereign rating in September 2012 (The Economist, 20/10/12: 22). After 18 years of post-apartheid democracy, many individuals are asking, "where are the promised (decent) jobs?" contributing to a "better life" for all in South Africa.

Encouragingly, in his 2011 and 2012's State of Nation address, President Zuma raised hopes, highlighting the government's commitment to, *inter alia*, reducing poverty and

unemployment. He announced several new initiatives to boost job creation, such as a R9-billion jobs fund, R20 billion in tax allowances to investment projects, business expansion, and upgrades in the manufacturing sector. These measures are largely in line with the government NGP strategy. It aims for the creation of five million new jobs by 2020 and reducing unemployment to 15%, with some policy focus on infrastructure development, agriculture, mining and beneficiation, manufacturing, green economy and tourism. The Minister of Finance stressed in his 2012 budget “Reducing unemployment is the centerpiece of our approach to reducing poverty” (Gordhan, 2012: 32).

Against this background, this paper examines South Africa's problem of high unemployment despite economic growth. It consists of four sections. The first examines South Africa's economic growth rate performance against a background of unemployment in the period 1994-2010. The second discusses real GDP within the context of employment growth, and presents a marginal employment effect regression analysis. The third examines who are the unemployed, the causes of poor employment in relation to growth performance and the entrepreneurial environmental conditions in the country. The final section uses correlation and regression analyses to examine the relationship between entrepreneurship rate, real GDP per capita and unemployment, and shows how stimulation of entrepreneurship can enhance employment creation in South Africa.

2. Recent Economic Growth and Unemployment Rates in South Africa

South Africa registered an average annual rate of 2.7% over the period 1994-2000, (Table 1). Accordingly, real GDP per capita increased from R28 536 in 1994 to R36 591 in 2010 (SARB, March 2011). The country experienced an even better average growth rate of 5% during the period 2004-2007. Thereafter, economic growth responded positively to the stimulus from public sector infrastructure investment, especially in roads, stadia, the Gautrain project and improvements of airports in anticipation of the 2010 Soccer World Cup. As a result, expanded unemployment declined from 37% in 2003 to 29.3% in 2008. Economic growth was accompanied by an increase of 1.8 million jobs from 2004 to 2007, but thereafter employment growth was not high or stable. Unemployment (narrow definition) has consistently been over 20% over the 1994-2010 period (Table 1), and broad unemployment ranged from 31% to 41.8%, over the same period.

Table 1: South Africa's Unemployment and Real GDP 1994 – 2010.

Year	Real GDP %	Real GDP <i>per capita</i> Rand	Unemployment %
1994	3.2	28536	20
1995	3.1	28815	17.6
1996	4.3	29431	21
1997	2.6	29582	22.9
1998	0.5	29116	26.1
1999	2.4	29187	23.3
2000	4.2	29792	25.8
2001	2.7	30024	29.4
2002	3.7	30581	30.5
2003	3.1	30992	28.2
2004	4.9	31946	26.2
2005	5.0	33176	26.7

2006	5.3	34586	25.5
2007	5.1	36073	24.3
2008	3.1	36942	22.9
2009	-1.7	35936	24
2010	2.9	36668	23.3

Source: SARB Quarterly Bulletins; Statistics SA Surveys

As table 2 indicates, in comparison to 2008, there has been a substantial fall in employment in 2010, particularly in manufacturing, construction, transport and mining sectors, which tend to be high labour-absorption industries. Manufacturing employment, for example, decreased from 1.27 million to 1.16 million over the 2008-2010 periods (Table 2). While some jobs are being added, this is not at a pace sufficient to replace the jobs lost up until early 2010, let alone cater for the rising number of new entrants to the labour market.

Table 2: Employment in Formal non-agricultural Industries (Thousands)

Activities	Total Employment 2008: 4th Quarter	Total Employment 2009: 4th Quarter	Total Employment 2010: 4th Quarter
Mining and quarrying	518	488	503
Manufacturing	1275	1185	1166
Electricity, gas and water	59	56	58
Construction	474	415	400
Wholesale and retail trade	1747	1665	1683
Transport and communication	366	359	357
Financial and business services	1914	1796	1822
Community, social and personal services	2159	2199	2267
TOTAL	8512	8163	8256

Source: SARB Report, May 2011

The long-term employment trend indicates that unemployment (expanded) rates increased from 6.7% in 1960 to 8.4% in 1980 (Loots, 1998), to 36.5% in 2011, and to nearly 40% in 2012 (The Economist, 2012). This implies that the employment scarcity rate (percentage of workers without formal employment) is on the rise. In effect, the labour absorption rate, i.e. the proportion of the working age population that was employed decreased from 43.7 in 2009 to 40.8 in 2011 (Stats SA, 2011; SARB, 2012). Similarly, the labour force participation rate decreased from 57.1 in 2009 to 54.4 in 2011 (Table 3), while youth unemployment (15-24 age group) increased from 48.1% in 2009 to 50.5% in 2010, and further to 51.6% in March 2012 (SARB, 2012)

Table 3: Unemployment and Labour Force Indicators (Thousands)

	2009	2010	2011	March 2012
Labour Force	17 670	17 393	17 662	17 948
Employed	13 456	13 061	13 265	13 422
-Formal sector (non-agric)	9 453	9 123	9 367	9509
-Informal sector (non-agric)	2 129	2 159	2 172	2106
Agriculture	687	639	614	656
Private Households	1187	1140	1113	1151
Unemployed	4 215	4332	4397	4526
Unemployed rate (%)	23.9	24.9	24.9	25.2
Youth Unemployed (%)	48.1	50.5	49.8	51.6
Absorption rate (%)	43.7	40.9	40.8	40.9

Source: SARB Annual Report, 2012

Between 2009 and 2010 or 2011, more employment seems to have been created in the informal sector rather than in the formal sector, thus widening income inequality and the gap between the first and the second economy. Indeed, South Africa's Gini coefficient, reflecting income inequality, has increased from 0.57 in 1992 to 0.63 in 2009 (du Toit and van Tonder, 2009: 15; The Economist, 2012). The jobs created by the informal sector are of a low value-adding nature relative to those of formal sector. However, recently, even the informal and the agriculture sectors have been shedding jobs. Informal sector employment decreased from 2.15 million in 2010 to 2.10 million in March 2012 (Table 3), a loss of about 50 000 jobs (Stats SA, 2011; SARB, 2012). On the other hand, the loss in private sector employment was mirrored by an increase in the share of public sector employment from 21.6% to 23.6% between the third quarter of 2008 and first quarter of 2010, and by another 0.2% in 2011 (SARB, March 2011 and September 2012).

2.1 The GDP-Employment Ratio

The relation of unemployment with GDP can be assessed more accurately when the change in GDP is linked to the change in employment, which is done in Table 4 below. This is an indication of the responsiveness of employment to changes in economic growth. South Africa's growth has not been neutral, but rather labour displacing in certain years during the period 2000-2010. Labour displacement relative to the country's GDP appears to have been at -1.6 in 2001 and 2010, but labour absorption improved in most other years, except for 2009. The change in the labour employment index ranged from 3.2% (2008) to 19.4% (2002), and the GDP-employment ratio has been positive, the highest in 2008, with a figure of 0.968 (Table 4). However, the last two years thereafter have seen the gains of the past wiped away as the 0.968 figure fell to 0.315 in 2009, and became negative in 2010, reflecting that the decline in employment growth outpaces real GDP growth from 2008 onwards.

Table 4: Labour Employment, Capital Labour Ratio and GDP/Employment Ratio: 2000-2010

Year	Average Capital Labour Ratio in Rand	Labour Employment Index	Change <i>per cent</i>	Ratio of GDP growth (g_y) to Employment Growth (g_l)
2000	166016	100	-	-
2001	164042	98.4	-1.6	-1.68
2002	162147	117.8	19.4	0.190
2003	161034	135.1	17.3	0.179
2004	161080	140.7	5.6	0.875
2005	162677	150.2	9.5	0.526
2006	165442	167.1	16.9	0.313
2007	169077	175.8	8.7	0.586
2008	174922	179	3.2	0.968
2009	181581	173.6	-5.4	0.315
2010	186631	172	-1.6	-0.57

Source: SARB Quarterly Bulletins.

Output expansion with a less than proportionate increase in the labour force (in Table 4 note the years 2002, 2006, 2009 and 2010, for example) may reflect an increase in capital input and total factor productivity. Indeed, the average capital-labour ratio increased from R166016 in 2000 to R186631 in 2010 (Table 4), reflecting a rising capital intensity in production (SARB, March 2010).

Except for the year 2008, the ratio of GDP growth to employment growth has been far less than one, reflecting that South Africa's job creation performance against GDP has been rather weak for most years during the period 2002-2010. Many of the unemployed perhaps end up in the informal economy. During the years 2000-2005, on average 21 *per cent* of the employed were engaged in the impoverished informal sector (Burger and Yu, 2006). This reinforces the point that the employment elasticity of economic growth is rather low in South Africa.

3. South Africa's Real GDP, Investment and Marginal Employment Effect

According to Keynesian theory, investment is critical to economic growth and development of a nation. However, new growth models emphasize entrepreneurship, institutions, good governance and human capital as critical to economic growth (Lucas, 2009; Romer, 1994; Barro and Sala-i-Martin, 1995; Rodrik, 2000 and Grindle, 2004).

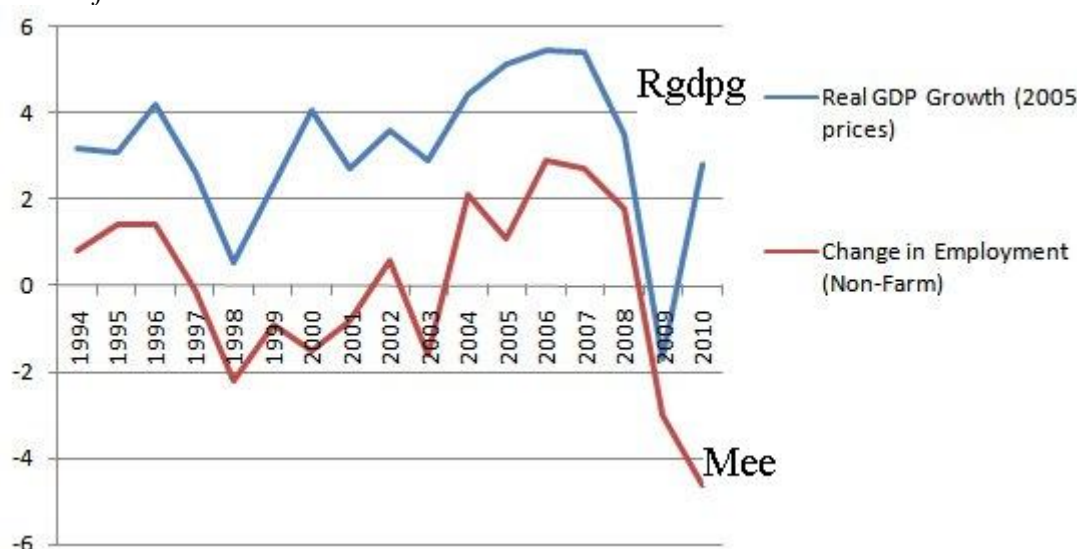
South Africa technically entered into a recession in 2009, after 17 years of continuous expansion, (real GDP contracting by 1.7% in 2008 (SARB, March 2011), and the pace of growth in real gross capital fixed capital formation slowed. Investment, as an injection in the traditional Keynesian sense, should raise income, output and employment. In order to enhance *investment and growth*, it is necessary to have an improved saving record. However, gross saving as a ratio of GDP actually decreased from 16.8 in 1994 to 16.5 in 2010, and to 15.2 in March 2012 (SARB, 2012). At the household level, saving in relation to disposable income decreased from 2.8% in 1994 to -0.3% (borrowing) in 2010, and edged to -0.3% in

2011, clearly reflecting some household stress. In effect, the ratio of household debt to disposable income increased from 56.5 in 1994 to 78.2 in 2010 (SARB, March 2011), but receded to 76.4 in 2011 (SARB, 2012). As economic growth is partly demand driven, the household debt and lack of saving no doubt impact on aggregate spending and job creation.

3.1 Marginal Employment Effect

Using data for the time period 1994 to 2010 on real GDP growth (2005 prices) and the change in employment other than agriculture, a simple regression relationship is used to examine the effect of a one *per cent* rise in real GDP growth on employment. The data used for these two variables are plotted in Figure 1 below.

Figure 1: Endogenous Real GDP Growth (blue or upper curve and labels in the figure and Rgdpg in the statistical analysis) and the Change in Employment or Marginal Employment Effect (the red or lower curve and labels in the figure and Mee in the statistical analysis) in South Africa: 1994-2010.



Economic growth absorbs some labour, but structural factors militate against complete labour absorption, with some workers engaging in a search process. While some are discouraged and give up search; others join in the queue of unemployed, though some may be in receipt of state grants.

These workers should be re-absorbed into productive activities once the real economy grows. The regression analysis attempts to find the size of the link between growth and employment.

Table 5: Non-Spurious Regression Results Linking Endogenous Real GDP Growth (Rgdpg) to the Marginal Employment Effect (Mee) in South Africa: 1994-2010.

STATISTICS FOR THE DATA IN FIGURE 1				
Variable	Mean	Minimum	Maximum	Standard Deviation
<i>Rgdpg</i>	3.193468	-1.696	5.452339	1.77105
<i>Mee</i>	0.005882	-4.6	2.9	2.102817

REGRESSION RESULTS FOR THE DATA IN FIGURE 1
$Mee = -2.6770 + 0.8401 Rgdp$ $t\text{-values } (-3.41) \quad (3.89)$ $R\text{-squared} = 0.5006$

The simple regression analysis of the growth and employment, using data (Figure 1), covering the period 1994-2010, produces the following estimated relationship:

$$Mee = -2.6770 + 0.8401 Rgdp.$$

The marginal impact of growth on employment is positive at 0.8401. But for the overall impact of growth rising by one *per cent*, the other exogenous factors need to be included. Taking this into account, when growth rises by one *per cent*, the employment falls by 1.84 *per cent* (from Table 5, one adds -2.6770 to + 0.8401) when all factors affecting growth are considered. This effect can also be seen in Figure 1 above, in 1999, 2003 and most spectacularly in 2010 where the economy is robust but the employment response is weak and negative.

Clearly, in recent years, local conditions in the labour market, coupled with a weak recovery in world markets, is depressing employment growth in South Africa. If the labour market in a typical sector adds 5000 jobs, say for each one *per cent* of real GDP growth, under normal circumstances, then these results suggests that, for an open economy with inflexible labour markets, crime and corruption, HIV/Aids effects and structural changes in the South African economy (all examined in the Section below), economy wide employment *falls* (by about 9250 jobs).

4. Who are the unemployed?

The unemployment rate varies across provinces, within the population group and over time. Unemployment among Africans increased from 27.7% in 2005 to 28.2% in 2009, while that of the White decreased from 5.4% to 4.7% over the same period (Table 6). In the first quarter of 2011, for example, the unemployment rate of the Black, Coloured, Asian and White population group was 29, 22.6, 11.7 and 5.9 respectively (Stats SA, 2011).

Table 6: Unemployment Rate (per cent) in South Africa by Population Group: 2005-2009 and Quarter1- 2011

Group	2005	2006	2007	2008	2009	Q1:2011
Black African	27.7	26.3	25.8	27.0	28.2	29
Coloured	22.1	20.7	22.4	18.9	20.3	22.6
Indian/Asian	15.4	9.4	10.1	12.0	11.9	11.7
White	5.4	5.0	4.3	4.2	4.7	5.9
SA	23.8	22.6	22.3	22.9	24.0	25.7

Source: Statistics SA, 2010 and 2011; SARB, 2012

Unemployment is more prevalent among the youth (15-14 age group), who are the future leaders and innovators of our society. Youth unemployment increased from 48.1% in 2009 to 51.6% in March 2012 (Table 3).

It is often argued that a constraint to economic growth is the lack of skills. Unemployment among people who are skilled and educated is also on the rise, from 7.4% in 2005 to 8.4% in 2009 (Stats SA, 2010). There were 600 000 unemployed graduates in South Africa in 2012, although only 15% of students who enroll for a degree graduate (Fin Week, 2002). This could raise a question of the quality of education and a mismatch between skills possessed by many individuals and the skills requirements of the current labour market. According to the World Economic Forum, South Africa ranks 132nd out of 144 countries for its primary education and 143rd in science and maths. To the extent that there is a mismatch between a limited demand for labour from firms and employers in need of certain skills and an excess supply of labour with other skills that do not match those in demand, there would inevitably be an increasing number of individuals that cannot be absorbed in the job market and hence resulting in unemployment.

Although South Africa spends about 21% of its national budget (2012) on education, it seems that we are not getting the desired results, partly owing to high dropout or failure rates and a small proportion of our matriculants being absorbed into tertiary education. Of the 658 142 applications received by South Africa's 23 universities in 2012, only 162 929 could be admitted (Fin Week, 2012). It seems that the rising unemployment can partly be explained by a supply-deficiency that is a shortage of factories and firms as well as relevant human skills, for labour to work with in the modern economy. Clearly, as unemployment dwarfs employment opportunities, it is important to understand and describe other major factors underpinning this rising joblessness in an attempt to suggest ways to enhance job creation.

5. Challenges of the Increasing Joblessness

Various factors account for the rising numbers of workers who are jobless. A few are mentioned below.

5.1 Globalization and labour legislation

South Africa's integration with the global world, after the demise of apartheid, impacted adversely on the country's labour market, as the resulting export growth did not strengthen the labour absorption capacity enough to significantly reduce unemployment. South African firms have had to rationalize and re-engineer activities to improve productivity to meet international competition, and this has been at the cost of low-skilled jobs (Edwards, 2001; Bhorat and Hodge, 1999).

Additionally, the high labour cost and lack of flexibility in the labour market is also a contributing factor to low absorption. Investors are worried about labour laws and strikes (The Economist, 2012). The current difficult labour legislation in South Africa, along with the rigidity of the employment index at 52 (a value of 0 is less rigid) makes it difficult for firms to hire and fire workers (World Bank, 2006). The 2012 Global Competitive Index (GCI) further confirms that South Africa falls short in labour-related areas. Out of 142 countries, South Africa ranks 95 in labour market efficiency, 139 in hiring and firing and 138 in flexibility of wage determination.

The average labour cost in the manufacturing sector in South Africa is more than twice higher than that of its major trading partners, such as China, India, Malaysia and Brazil (Paton, 2011), impacting adversely on the country's competitiveness. Rodrik (2006) argues that the weakness of the export-oriented manufacturing, in particular, has deprived the country from growth opportunities and job creation at the low end of the skill distribution.

In situations where wages are rigid, the impact of regulatory 'shocks' show up in unemployment as firms are unable to adjust wages downward to meet competitive pressures.

5.2 Structural change

Structural change implies a shift of productive and employment activities across sectors of the economy over time as the progress of economic development changes. Rodrik (2006) and Sharp (2012) identified three trends in the South African economy that contribute to dampen the demand for low skilled workers and to unemployment. These are:

- substitution towards skilled workers within each economic activity,
- structural change away from low-skill intensive parts of economy, especially from tradables to services;
- Production techniques becoming progressively more capital intensive within the tradable or manufacturing sector.

Over the past three years, wages in South Africa have increased annually, on average, by 11.5 %, while the economy's labour intensity decreased by 8%. It now takes 36% fewer workers to produce a given unit of output in South Africa than it did in 1960 (Sharp, 2012).

Formal employment in manufacturing has declined from 1.6 million in 1990 to 1.2 in 2008 (and, to 1.15 million in 2011). Employment in agriculture declined from 1.2 million in 2000 to 871 260 in 2008, and employment in mining declined from 521 379 to 474 007 over the same period, clearly indicating a structural change (Stats SA, 2008).

If real wages are permitted to fall, the unskilled labour may price themselves into jobs. This may be a politically sensitive issue in view of rising poverty and the role of trade unions in the new democratic government. However, millions of households that receive generous grants from the government may view paid employment and social grants as substitutes at the margin.

5.3 Crime

South Africa experiences some 50 murders and 99 reported rapes everyday (The Economist, 4/7/09: 38). The crime situation has branded the country as a high risk investment destination. A recent study indicates that over half of South Africa's small businesses were victims of crime and about a quarter were reluctant to expand or employ more labour; at least a fifth of their annual turnover is lost to crime through direct and indirect costs (Benjamin, 2008). For every business that closes, because of crime, at least six jobs are lost (Geldenhuys, 2008). And in 2008 the SBP (2008) report for the Presidency points out that crime seems to hit the poorest and the most successful entrepreneurs hardest – a particularly unfortunate pattern for

growth and development. According to the 2012 GCI, South Africa ranks 136 out of 142 economies on crime.

While South Africa is failing to attract substantial labour-intensive FDI, it is also losing on human capital, as people with marketable and entrepreneurial ability to create jobs, leave for other safer destinations. This brain drain acts as a brake on economic growth and slow growth raises the fear of further increases in unemployment and poverty.

5.4 HIV/Aids and state grants

HIV prevalence has a significant negative effect on the growth rate of per capita GDP in Sub-Saharan Africa (Lovasz and Schipp, 2009: 245). South Africa has one of the highest absolute numbers of HIV infections in the world (Thurlow, Gow and George, 2009). According to Statistics SA, in 2009 the estimated number of people living with HIV is about 5.21 million.

Against this background of a high HIV labour force and burdensome labour legislation, machines and subcontractors are rapidly replacing permanent staff, while many firms are “casualing” their labour, finding that the only way to cope is by employing fewer people and by hiring casual labour through labour brokers.

Many who suffer from HIV/Aids are receiving state grants, discouraging them from working. According to the Minister of Finance, in 2011 almost 15 million people are receiving social grants (Budget Speech, 2011), while the number of taxpayers is around 6 million. Many people rely on state for hand-outs rather than earn an income as an employee or work hard by starting up a business as a small or emerging entrepreneur. It is thus no surprise that according to Stats SA’s recent labour force survey, there was 19 million people unemployed or not economically in March 2012, while only 13.4 million people of working age were formally and informally employed in the first quarter of 2012 (SARB, 2012), of which only 1.1 million were self-employed. But in 2001, there were 2.2 million in this self-employed category, showing a clear reduction in the entrepreneurial base, upon which hinges job creation and economic growth.

6. Entrepreneurship

Research by the Harvard Group (2008) suggests that South Africa has the potential of increasing formal employment by 50% if there are suitable changes in labour policies. An ideal labour policy requires a more flexible approach to that gives room for employment creation and new businesses. However, proposed amendments to labour law (Labour Relations Act) with stiff penalties on employers may be unfriendly to employment creation. It should be remembered that legislation per se does not create employment; it is value-adding entrepreneurial actions that create jobs.

Entrepreneurship, through the creation and expansion of firms, is vital to employment creation, economic expansion and growth in real GDP per head. A long-term solution to South Africa's unemployment and growth problem lies in the consolidation of existing entrepreneurship and in the stimulation of a new entrepreneurial class based on SMMEs, including the informal sector. South Africa’s SMMEs contribute to over 45% of the country’s GDP and just over 50% of the employment opportunities (Herrington, 2012). It is

only through the vigorous exercise of SMME entrepreneurship, underpinned by millions of viable and lasting enterprises that we can create millions of sustainable jobs and economic growth.

But in South Africa, although according to the 2012 World Bank's 'Doing Business report', the ease of doing business is remarkable, ranking 35th out of 183 countries, the level of entrepreneurship as measured by the GEM's Total Early-stage Entrepreneurial Activity (TEA) index is not sufficiently robust. For its stage of economic development, it is expected that South Africa would have an entrepreneurial rate of almost 13% rather than a rate of 5.9% in 2009 (Herrington, 2011).

6.1 Entrepreneurship, TEA, Unemployment and Real GDP Per Capita

According to GEM reports, South Africa's TEA rate was at 9.4 in 2001 and was even lower, at 8.9, in 2010 (Herrington, 2011). The average TEA rate for 2001-2005 was 6.14, and 6.6 for 2006-2010. In 2011, the TEA rate was low at 9.1, below the average figure (14) of other 54 participating efficiency-driven countries. The problem of low entrepreneurship in South Africa is related to education and training, access to finance, cultural and social norm, and government regulation (Herrington, 2011; 2012).

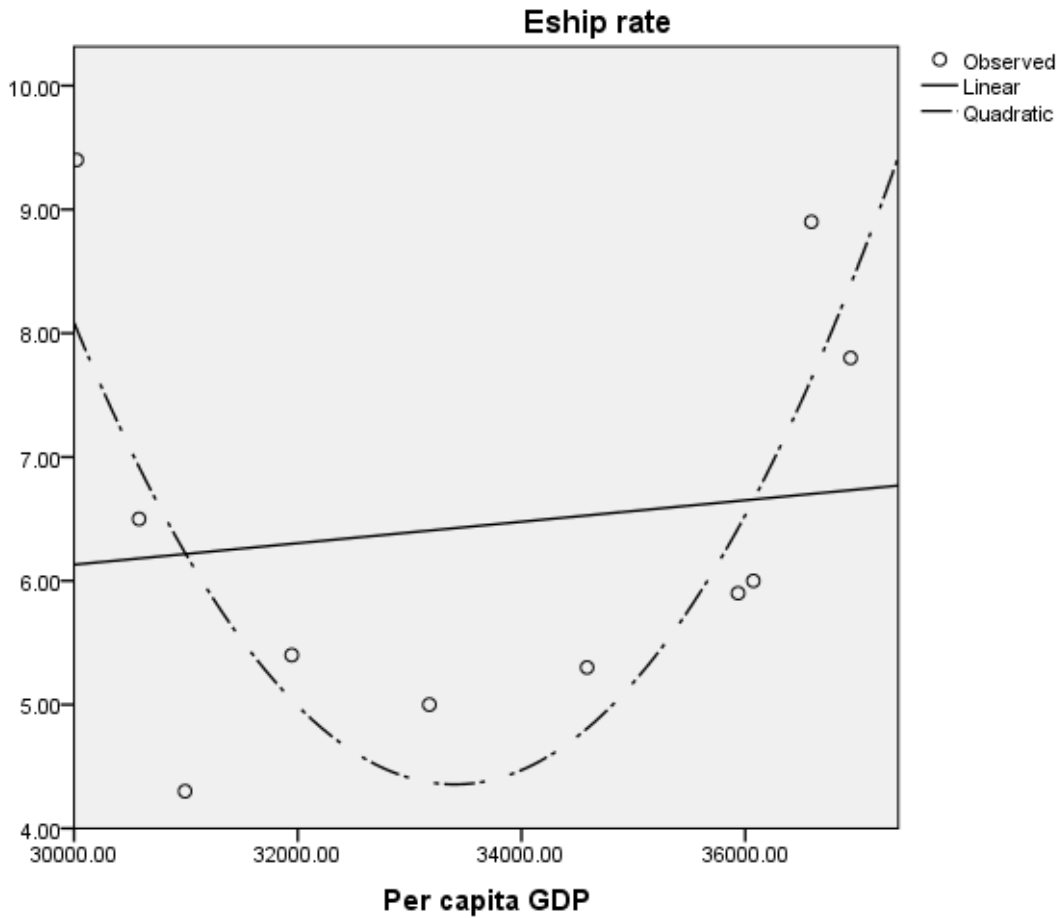
Examining the association between unemployment and entrepreneurship (TEA) over the period 2001-2010, a negative correlation was found, ($r = -0.101$), suggesting that as the entrepreneurship rate increases, unemployment decreases. But the relationship was not significant. However, a quadratic relationship between entrepreneurship rates and real GDP per head over the period 2001 - 2010, is found to be highly significant (Table 7), with an R-Square of 0.648 ($p = 0.026$, $F = 6.47$) and a mild positive linear trend, and a pronounced upward slope with the rising segment of the curve beyond real per capita GDP R34000, as indicated in the figure 2 below.

Table 7: Entrepreneurship and Real GDP per capita- Model Summary and Parameter Estimates

Equation	Model Summary					Parameter Estimates		
	R Square	F	df1	df2	Sig.	Constant	b1	b2
Linear	.018	.150	1	8	.708	3.530	8.670E-5	
Quadratic	.649	6.472	2	7	.026	363.819	-.022	3.222E-7

The independent variable is Per capita GDP; dependent variable: Entrepreneurship (TEA) rate.

Figure 2: Relationship between Entrepreneurship Rate and Real GDP/capita in South Africa: 2001-2010



Further, a strong and significantly negative correlation is found to exist between unemployment outcome and per capita Real GDP for the same period ($r = -0.958$; $p=0.001$). The regression analysis shows that real GDP per capita is a highly significant predictor of unemployment, with an adjusted R-square of 0.907 and a beta coefficient of -0.001 (Table 8). This indicates that as per capita increases by one unit, unemployment decreases by 0.001 unit, other things assuming to remain constant. Therefore, with the effective practice of entrepreneurship, economic growth rates improve, and consequently real GDP per head increases, which in turn decreases unemployment.

Table 8: Regression Summary Results Unemployment and Real Per capita GDP: 2001-2010

Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	57.577	3.351		17.183	.000		
Per capita GDP	-.001	.000	-.958	-9.421	.000	1.000	1.000

a. Dependent Variable: Unemployment rate

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.958 ^a	.917	.907	.79482

a. Predictors: (Constant), Per capita GDP

b. Dependent Variable: Unemployment rate

6.2 Policy Suggestions

From the above, it becomes clear that unemployment, entrepreneurship and GDP are closely and significantly related. It is important to recognise that it is the spirit of entrepreneurship that brings labour and capital together to create employment in a productive enterprise that in turn contributes to economic growth. In implementing the ASGISA policy and New Growth Plan, the government is adopting a ‘big push’ approach to promoting entrepreneurship, particularly with regard to manufacturing, agriculture, tourism sector and building up small businesses to bridge the gap between formal and informal economies.

Clem Sunter (2011) argues that we need to take informal businesses and create a bridge to graduate them to the formal sector. He further adds decent work means decent business; accordingly, to create more jobs, the government should optimize conditions for small businesses to grow. In Sunter’s words “To create new jobs, you have to provide an environment which is conducive for entrepreneurs to establish new businesses; and then encourage them to grow their one-person operations to become formal companies employing a fair number of people” (News24.com columnist Clem Sunter, in a piece entitled Zilleville dated 25/5/2011).

A macroeconomic environment that is generally friendly to labour intensive investment would generate spillover growth effects, as firms and entrepreneurs are more likely to invest productively, create jobs, and contribute to output and poverty reduction. The current government’s thinking about a developmental state that will use state interventionist measures through BEE procurement, market access, training, licensing and financial support to assist small and medium enterprises, as well as a possible wage subsidy for hiring young or inexperienced labour and reduced regulations for small business are very encouraging to entrepreneurship. It is thus no surprise that entrepreneurs in South Africa complain that the spirit of entrepreneurship and climate for innovation are threatened by the spreading weeds of government regulations and taxation (Dhlomo, 2012).

However, the intangibles are equally important for entrepreneurship and job creation: these hinge on strengthening law and order, enforcing property rights, reducing red tape, improving the governance of institutions and service delivery, and improving the “need to achievement” motivation (termed N-Ach in the literature) of individuals so that they are encouraged to seek or create work for themselves rather than depend on a culture of entitlement. N-Ach is found to be positively associated with employment creation and business expansions as well as business formations (Mahadea, 1994). Individuals who are low in N-Ach are to be appropriately mentored. Mike Herrington (2012), the Executive Director of Global

Entrepreneurship Monitor in South Africa, also suggests that small firms in need assistance. This is not necessarily in the form of finance, but through mentorship from experienced business practitioners who have previously taken the entrepreneurial route, build up successful ventures and understand the needs of small business entrepreneurs.

Stringent labour legislation in South Africa set against a background of an abundant pool of unskilled labour, is considered by some investors to be troublesome and prohibitive. The private sector can be a key driver of employment if it has the latitude of employing whomsoever, based on merit and if it has the flexibility of retrenching non-performing labour at ease. According to Grant Thornton's Global Dynamism Index developed by the Economist Intelligence Unit, South Africa ranks 39th (out of 50 countries) for business operating environment, and 49th for labour and human capital (Nagar, 2012). This ranking compares equally with World Economic Forum's rankings of SA for hiring and firing rigidity and significant tensions in labour-business relations. It is thus imperative that unemployed individuals have the opportunity to accept flexible wage employment should they desire it. South Africa needs to take on the "foxy" route to succeed economically and achieve a sustained growth, through which jobs can be created (Illbury and Sunter, 2007; Parsons, 2009: 194-195). The "foxy" route entails, *inter alia*:

- Improving the educational and training capabilities of actual and potential South African labour, and maintaining a high standard compatible with market and entrepreneurial orientations in a more rapidly knowledge-based and transforming environment. The youth has to be equipped with business skills and talents that are relevant to the demands of the labour market and students are to be encouraged to become entrepreneurs.
- A stronger work ethic, a strong competition-enhancing government, with minimum regulations, low taxation and the removal of corruption.
- Meeting the needs and addressing the concerns of investors and entrepreneurs.
- Better labour-employer relationships without overlooking pockets of excellence, innovation, research and development, and a good governance *delivery state*.
- Expanded public works programmes and infrastructural development projects with labour absorbing propensities.

To some extent, some of these measures may be in place, but much more can be done. Some employment may be created through public expenditure, as the government is committed to spending on R73 billion over the next three years on expanded public works' programmes.

Extending the role of the state in the very short term as a response to job creation may be desirable. However, one questions the effectiveness of a bigger government that crowds out the private wealth-creating sector amid a climate of slow global expansion. Already, the government in South Africa is running an estimated budget deficit as high as 4.6% of GDP in 2012/13. The public sector borrowing requirement to finance the gap between expenditure and expected revenue is estimated at 7% of GDP in fiscal year 2012/13. As a result the public debt increases further. Total foreign debt of South Africa increased from R691 249 million in 2010 to 910 008 million in first quarter 2012 (SARB, 2012). Against this

background, debt servicing cost is likely to rise significantly. The public sector wage bill, that presently represents 40 per cent of consolidated non-interest state expenditure, increased by 100 per cent over the last five years (Budget Speech, 2011). Who will foot the future bill of rising public debt? As the minister of finance, Praveen Gordhan, states South Africa needs to look beyond the short term through the encouragement of entrepreneurship.

7. Conclusion

Undertaking the challenge of South Africa's low economic growth and worsening unemployment is a difficult task. There is no "quick fix" solution to the slow growth and high levels of joblessness, as the South African economy is related to the global economy. Our regression results show that economic growth translates into significant employment gains, but various factors identified here mitigate against labour absorption. However, entrepreneurship is found to be significantly related to gains in real GDP per capita, and as real capita GDP improves, this impact on reducing unemployment, other factors assuming to remain constant. A sound environment conducive to labour absorption and business entrepreneurship is critical for national prosperity. There may be some cause for cautious optimism as the government pins its hopes on the New Development Plan and an enlightened leadership, implementing a state oriented development framework. Whether these changes are likely to generate massive job creation in 2012 and beyond is uncertain. But what is certain is that legislation does not create employment. The higher the degree of regulation in a country, the higher its unemployment rate tends to be (Barker, 2006).

In contrast, any economy can destroy jobs through high levels of crime, corruption, poor governance, excessive regulation and poor service delivery. The fires of entrepreneurship are best stoked in an investment-friendly with labour market flexibility, and crime-free environment, where encouragement for entrepreneurs comes from a respect for property rights, high levels of saving and investment, improving education and training, and steady gains in productivity as well as equality of opportunity. Public works programmes, the New Growth Path and fiscal intervention may help at best in the short term. We in South Africa cannot afford excessive government spending or deficits for long with a downgrade in sovereign credit rating. What is critically required is an expanding entrepreneurial spirit. Without the energy and drive of entrepreneurs, the growing number of jobless will have little hope.

References

- Barker (2006): *The South African Labour Market: Critical Issues for Renaissance*, J. L. van Schaik Publishers, Pretoria.
- Barro, R. J. and Sa-I-Martin, X. (1995): *Economic Growth*, McGraw-Hill, New York.
- Benjamin, C. (2008): South Africa: Crime crippling small business, *Business Day*, 17 July 2008.
- Bhorat, H. and Hodge, J. (1999): Decomposing Shifts in Labour Demand in South Africa. *The South African Journal of Economics*, Volume 67 (3): 348-380.

Burger, R. and Yu, D. (2006): Wage Trends in Post-apartheid South Africa: Constructing an Earnings Series from Household Survey Data, *Labour Market Frontiers*, October 2006: 1-8

Dhlomo, E. (2012): Cherish the Real Entrepreneurs, in *Natal Witness*, 12 Oct.

du Toit, C. and van Tonder, J. (2009): South Africa's economic performance: can we do better? In, *Zumanomics*, editors, R. Parsons, Jacana, Auckland Park, South Africa.

Edwards, L. (2001): Globalization and the Skills Bias of Occupational Employment in South Africa, *South African Journal of Economics*, Volume 68 (1): 40-71.

Gordhan P. (2012): Budget Speech, National Treasury, Pretoria.

Gordhan P. (2011): Budget Speech, National Treasury, Pretoria.

Geldenhuys, H. (2008): Armed attacks in the rest of the country as crime spreads beyond Gauteng, *Sunday Times* 13/1/08.

GEM (2010): South African Global Entrepreneurship Report 2010, available from Internet <http://www.slideshare.net/THINKBIGBEBIG/the-gem-report-2010>, accessed 10 November, 2012.

Grindle, M. (2004): Good enough Governance: Poverty Reduction and Reform in Developing Countries, *Governance*, Volume 17, October, 2004.

Harvard Group (2008): Final Recommendations of the International Panel on Growth, accessed at www.treasury.gov.za.

Herrington, M. (2012): African Entrepreneurship Lacking!, *Business Brief*, Oct/Nov, Vol 17(5): 14.

Herrington, M. (2011): Entrepreneurship: How can Obstacles be overcome?, in *Advocates for Change* (edited by M. Mbeki), Picador Africa, Johannesburg.

Illbury C. and Sunter, C. (2007): Socrates and the FOX: A strategic Dialogue, Human Rousseau and Tafelburg, Cape Town.

Lings, K. (2012): South African Exporters Remain Vulnerable to a European Recession, *Stanlib Stanpoint*, Vol 2 (Third Quarter): 5-6.

Loots, E. (1998): Job Creation and Economic Growth. *The South African Journal of Economics*, Volume 66 (3): 319- 336.

Lovasz, E. and Schipp, B. (2009): The Impact of HIV/AIDS on Economic Growth in Sub-Saharan Africa, *South African Journal of Economics*, Volume. 77 (2): 245-256.

Lucas, R. E. (2009): Ideas and Growth, *Economica*, Volume 76 (1): 1-19.

Mahadea, D. (2003): Employment and Growth in South Africa: Hope or Despair? *South Africa Journal of Economics*, Volume 71 (1): 21-48.

Nagar, D. (2012): Data suggests SA still Struggling to Recover from Recession, in *Natal Witness*, 9 Oct.

Parsons, R. (2009): *Zumanomics: Which Way to Shared Prosperity in South Africa?*, Jacana, Sunnyside.

Rodrik, D. (2006): Understanding South Africa's Economic Puzzles, Centre for International Development Working Paper, Harvard University, August.

Rodrik, D. (2000): Institutions for High-Quality Growth: What they are and how to acquire them. The National Bureau for Economic Research, Cambridge, U.K.

Romer, P. M. (1994): The Origins of Endogenous Growth, *Journal of Economic Perspectives*, Vol 98 (1): 3-22.

SARB (2012): The South African Reserve Bank Annual Economic Report 2012, Pretoria.

SARB (2012): The South African Reserve Bank Quarterly Bulletin, September 2012, Pretoria, No 265.

SARB (2011): The South African Reserve Bank Monetary Policy Review, May 2011, Pretoria.

SARB (2011): The South African Reserve Bank Quarterly Bulletins, Pretoria, No. 259 (March).

SARB (2009): The South African Reserve Bank Quarterly Bulletins, Pretoria, No. 251-252 (March/June).

SARB (2008): The South African Reserve Bank Quarterly Bulletins, Pretoria, No. 248-250 (December)

SBP (2008): The Impact of Crime on Small Business in South Africa, A study commissioned by the South African Presidency, SBP, 79 Oxford Road, Saxonwold, Johannesburg, South Africa.

Sharp, L. (2012). Labour Law Amendments: Punishing Penalties Proposed!, Business Brief, Oct/Nov 2012, Vol 17 (5): 62-63.

Statistics SA (2008): Quarterly Employment Statistics, June 2008. Statistics South Africa, Pretoria.

Statistics SA (2011): Quarterly Employment Statistics, March 2011. Statistics South Africa, Pretoria.

Sunday Tribune (2002): Aid Deaths Burst the Beer Sales Bubble, 14/4/02: 5.

Sunter, C. (2011): Leadership, April 2011.

Sunter, C. (2011); What Zilleville needs to do, *Natal Witness*, 25/5/11.

The Economist (2012): Over the Rainbow, 20 October: 22-24.

The Economist (2009): On the goal for 2010. 4/7/09: 38.

The Economist (2001): Business and AIDS: The Worst Way to lose Talent. 10/2/01:75.

The Economist (2001): South Africa survey, 24/2/01.

Thurlow, J., Gow, J. and George, G. (2009): HIV/AIDS, growth and poverty in Kwazulu-Natal and South Africa, Journal of International Aids Society, Volume 12: 12.

World Bank (2006): *World Bank Indicators*, Washington D.C.

World Bank (2009): *Doing Business 2010: Reforming Through Difficult Times*, Washington D.C.