

**Can South Africa's employment targets be met
in the context of the global economic crisis?**

Dr. Miriam Altman

Executive Director, CPEG, HSRC

May 2009

Human Sciences Research Council

May 2009

Acknowledgements

This paper is a contribution to the HSRC employment scenarios and the dti's 'employment in the critical path' programme for the EE cluster. This sim to to identify innovative approaches to putting employment centre-stage of development strategy. We are grateful to the HSRC and the dti for their financial support and to the DST for its contribution in the first round of employment scenarios.

The comments and information provided by the IDC, the Presidency, and the Departments of Agriculture, Education, Labour and Public Works is also gratefully acknowledged.

Produced by: Dr. Miriam Altman
Contact: Dr Miriam Altman
Executive Director, CPEG
E-mail: maltman@hsrc.ac.za
Tel: +27 12 302 2402

Table of Contents

EXECUTIVE SUMMARY	4
1. INTRODUCTION	6
2. EMPLOYMENT, SECTORS AND POVERTY	8
2.1. EMPLOYMENT & UNEMPLOYMENT.....	8
2.2. ELEMENTS OF SCENARIOS: CATEGORISING THE ROLE OF DIFFERENT SECTORS....	11
2.3. THE LINK BETWEEN EMPLOYMENT & POVERTY.....	17
3. REVISING EMPLOYMENT SCENARIOS IN THE CONTEXT OF THE GLOBAL ECONOMIC CRISIS	20
3.1. POTENTIAL IMPACT OF THE GEC.....	20
3.2. REVISED EMPLOYMENT SCENARIOS.....	22
4. ACHIEVING EMPLOYMENT TARGETS WITH SPECIAL INTERVENTIONS – A RE-LOOK AT SCENARIO 2	26
5. CONCLUDING REMARKS	31
APPENDIX 1 – TABLES	34
APPENDIX 2 – MAIN CONCLUSIONS FROM 2007 SCENARIOS	42

Tables

TABLE 1 - AVERAGE GDP GROWTH IN 3 SCENARIOS - TO 2014 & 2024	23
TABLE 2 – EMPLOYMENT SCENARIOS TO 2014	24
TABLE 3 – OPPORTUNITIES CREATED BY SPECIAL INTERVENTIONS	31
TABLE 4 – TARGETS TO REDUCE UNEMPLOYMENT BY 2014 & 2024	34
TABLE 5 - EMPLOYMENT GROWTH ASSUMPTIONS IN EACH 2014 SCENARIO	35
TABLE 6 - EMPLOYMENT SCENARIOS TO 2024	36
TABLE 7 - EMPLOYMENT GROWTH ASSUMPTIONS IN EACH 2024 SCENARIO	37
TABLE 8 – DISTRIBUTION OF EMPLOYMENT IN THREE SCENARIOS IN 2024	38
TABLE 9 - THE DISTRIBUTION OF FORMAL SECTOR EARNINGS BY SECTOR, 2004.....	39
TABLE 10 - AVERAGE WAGES UNDER DIFFERENT SCENARIOS IN 2024	39
TABLE 11 - EMPLOYMENT ELASTICITIES AND GROWTH - 2014 AND 2024	40
TABLE 12 - INITIAL ESTIMATES OF SCENARIO BUDGET IMPLICATIONS	41

Figures

FIGURE 1 - EMPLOYMENT SCENARIOS, WITHOUT SPECIAL INTERVENTIONS.....	23
FIGURE 2 - SCENARIO 2, COMPARED TO EMPLOYMENT TARGET	30
FIGURE 3 – SCENARIO 2, WITH SPECIAL INTERVENTIONS	30

Executive Summary

These scenarios produced for this paper are revised from the 2007 version to take into account the possible impact of the global economic crisis (GEC) on employment and poverty. They suggest feasible story lines along which the economy could move from 2004 to 2014 and onward to 2024.

Much was learned from the 2007 scenarios, the main learning from that project is offered in Appendix 2. These findings still hold, and give guidance to the longer term development path. The conclusions below focus on what might be different as a result of the GEC.

There are many wild-cards dealt by the GEC. These include:

- How far employment and growth rates might fall
- The pattern of recovery over the coming five years, whether it will be “V”, “U”, “W” or “L” shaped.
- The extent that policy can influence demand and growth over this period.
- The extent that special interventions to mitigate the GEC impacts can be meaningfully implemented without taking the economy off course to a longer term structural trajectory.

There is no correct answer to these unknowns. We specifically cannot say how employment and incomes might be affected. It is nevertheless important to plan around these uncertainties to mitigate the worst impacts.

It is important to remember that South Africa’s problem of unemployment, poverty and exclusion are not caused by the GEC. There was already an effort in place to make sense of how to move onto a higher structural path that would be more labour absorbing and inclusive. This is a long term agenda, and it is critical that policy makers keep their eye on that ultimate objective.

The social impact of the GEC will have a very different impact by income class. A large part of the population is so marginalised, that their main immediate concern would simply be to ensure social grants are available. The key issues that might cause most concern include:

- Existing workers who lose their jobs will be badly affected. The majority of households have only one worker. If 250,000 net employment was lost, this could affect at least 1 million people in the short run. This situation likely to start bouncing back within 2 years.
- The emerging working and middle classes could be undermined where houses are lost and pensions devalued.

- Young school leavers, especially between the ages of 18 and 24, will be worst affected. Currently, there is less than a 50/50 chance of finding employment and is likely to deteriorate dramatically over the coming years. This poses a very serious social and economic challenge. This situation leaves the majority of young people long-term unemployed and alienated.

Long term objectives might be affected by:

- The potential loss of capacity in dynamic industries, thereby undermining future growth and decent work opportunities.
- Potential difficulties in raising funds through tax or debt to meet major commitments in social and economic infrastructure or social spending. In addition, the likely increase in public debt could constrain social expenditure in future.

This paper puts forward three employment scenarios that take into account the potential effect of the global economic crisis. These project economic growth rates averaging 2.5% (“L-shaped recovery”), 3.3% (“U”-shaped recovery) and 4.5% (“V” shaped recovery) between 2004 and 2014. The all assume the existing policy environment, albeit with different levels of success in implementation. All of these scenarios show a very large shortfall in meeting the objective of halving unemployment, unless massive public works programmes are put in place. For example, in Scenario 2, with an average of 3.3% growth, approximately half of all new jobs over the decade (2.4 m) would be created by public works at a cost of approximately R 58 bn in 2014. This is unlikely to transpire, as it is a very large portion of the budget, taken away from other critical commitments such as social infrastructure, grants, service delivery and economic infrastructure.

Therefore, we re-evaluated Scenario 2 to see how special interventions might still enable the achievement of the all-important unemployment target. The interventions are all being discussed, and require either the implementation of a programme that is on the drawing board, or an expansion in an existing one. These interventions focus on creating or saving jobs in the market, stimulating jobs in the non-profit sector, creating jobs in the public sector, expanding public special employment programmes, and in providing much larger numbers of full-time learning opportunities for qualifying school leavers. If the package proposed in this set of interventions were implemented, approximately 782,000 public works jobs would be needed at a cost of R16.8bn in 2014, or about 2.3% of the budget in that year. This is considerably larger than the current programme, but significantly less than without special interventions. All these proposals are in the planning, budgeting and/or implementation phase. They require urgent evaluation, and if practical, urgent implementation. It should become clear that even at a lower rate of growth, halving unemployment by 2014 is still achievable.

1. Introduction

The SA Government adopted a target of halving unemployment and poverty between 2004 and 2014. This seems a worthwhile interim target on the way to achieving a more inclusive society and economy. The HSRC established an employment scenarios project to identify what these targets might mean, and to visualise how they might be reached.

At the highest level, we propose that halving unemployment would mean that the official rate of unemployment would be reduced from 26% in Sept 2004 to 13% in 2014. We further propose that this should be sustainable so that the unemployment rate is quartered to 6.5% by 2024. To work out the implications for employment growth, we estimated how fast the labour force might grow between 2004, 2014 and 2024. We estimate that strict unemployment could be halved if 5 million net new jobs were created between 2004 and 2014.

The first employment scenarios paper produced in 2007 sketched three main scenarios. The first scenario looked at what would happen if employment grew approximately in the same proportions as it has over the past 5 to 8 years, but with an average GDP growth rate slowing down to an average of 3% pa. This scenario required substantial intervention by EPWP – without it, unemployment only fell to 28% in 2014 and 26.7% in 2024. Scenario 2 showed what would happen if GDP growth averaged 4.5% pa, with exports leaning toward minerals-based industries and a relatively large proportion of employment created in lower paying inward-oriented industries. Scenario 3 had a larger proportion of employment in higher paying traded goods and services. Initially, the focus was on halving unemployment by 2014. This poses some limitations on the exercise, since the implications of any scenario may only really become evident over a longer period of time. These become clearer when these paths are extended to 2024.

The scenarios are updated in this paper to take into account the potentially dramatic impact of the global economic crisis (GEC). A straight path from historical to future employment figures will no longer be relevant, and therefore need to be interrogated. There is little doubt that employment growth will be affected for at least a few years, and could be affected for a decade. There is absolutely no certainty about the length of the downturn, as there are no true historical guiding experiences – only approximations. Scenarios are most useful in a period like this. Economic modelling and forecasting are less reliable in a period like this for a number of reasons. First, standard economic models generally assume variations within a status quo – that is, *ceteris paribus* – all things being equal. Second, economic models therefore tend to work within a range of possibilities and assume certain relationships. For example, a currency depreciation should make a country's exports more attractive, but not when most trading partners are also in decline. Third, the process of adjustment is built into a model's specifications, and yet the process of adjustment in this period will certainly be different to the norm. Finally, the economic situation is changing from

week to week and requires understanding of how conditions might play out, rather than specific figures that are bound to mislead.

In this context, the employment scenarios should help to visualise how employment and incomes might play out in the medium and longer term. This is critically important in the SA context, where the aim is not simply to get back on track, but rather to move onto a higher structural plain.

In the context of the GEC, it is going to be critical to consider special interventions to mitigate possible impacts. In our 2007 scenarios, we looked at how different interventions might contribute to achieving a 3% to 6% growth rate. 2014 is around the corner now, and the likely average growth rate is very unlikely to exceed the range of 2.5% to 4.5% over the decade. Average growth may be influenced on the margins. The key wild cards are:

- How far employment and growth rates might fall and the pattern of recovery over the coming five years.
- The extent that policy can influence demand and growth over this period.
- The extent that special interventions to mitigate the GEC impacts can be meaningfully implemented without taking the economy off course to a longer term structural trajectory.

The combination of unemployment and working poverty is a special challenge in SA. Households who lose a worker can be badly affected, potentially losing not only income but also homes. The fall in the value of pensions could badly affect incomes of the working class. On the other hand, finding a job can have important poverty reducing impacts, but do not necessarily pull a family out of poverty. In 2004, about 48% and 65% of working people respectively earned less than R 1,000 and R 2,500 per month – these people are called ‘working poor’. The paper concludes by looking at whether any of these scenarios help to reduce this problem.

This paper is organised as follows: section 2 offers background to new readers on the setting of targets for employment and unemployment, the contribution made by different kinds of sectors, and the link between poverty and employment.. Section 3 offers a revision to the 2007 scenarios, in the context of the global economic crisis. Three scenarios are offered, should economic growth average 2.5% or 3.3% or 4.5% pa. These scenarios are based on previous employment-growth relationships, plus existing policies. Section 4 asks what might happen if special additional interventions were implemented in a context where the economy grew by an average of 3.3% pa between 2004 and 2014. This offers a vision as to how unemployment might be halved, even at that lower growth rate. Section 5 concludes.

2. Employment, sectors and poverty

2.1. Employment & Unemployment

Government has identified targets of halving unemployment and poverty by 2014. The precise meaning of these targets is not specified. But their identification offers policy-makers and stakeholders something to focus their minds on. Before these were specified, we simply spoke vaguely about reducing unemployment and poverty. Given the depth of South Africa's unemployment and poverty, halving their rates seems meaningful enough as a target. It does not appear that anyone is necessarily critiquing the targets; instead, the question seems to be whether and how they might actually be achieved. For these scenarios, it is assumed that Government will reach its objective, whether through market based or public sector based jobs.

Halving unemployment could improve the standard of life considerably. But even then, South Africa's unemployment rate would still be considered extremely high by global standards. An unemployment rate of 4% to 6% is seen by most economists as a 'full employment rate': at this rate of unemployment, a large proportion of unemployed are either voluntarily so, or are between jobs. South Africa's unemployment rate is extremely high by global standards¹.

So 2014 should be seen as an interim rather than a final target – we want to see unemployment halved, and then continue to fall to even lower rates. What would be socially and economically acceptable rates of unemployment that would constitute our ultimate target? By when should we seek to achieve them? For this paper, targets to 2024 assume the 2014 target is reached, and then looks at surpassing this with the objective of reaching full employment. For SA, this might involve an unemployment rate of 6.5%.

Government has not specified an *employment growth target*. It is assumed that the employment target is one that is consistent with that for reducing unemployment.

Reducing unemployment and expanding employment do not necessarily involve precisely the same policy complements. Reducing unemployment depends not only on job creation, but also considerably on the pace of labour force growth. Targeting unemployment is tricky, since labour force growth is likely to be an ever-changing phenomenon in South Africa, depending on the policy toward HIV, immigration, emigration and signalling. Signalling is perhaps the biggest quandary: the more successfully the economy creates jobs, the stronger the signal for migration into South

¹ The 'world average' is about 6%, but almost all regions have unemployment rates above that. The lowest unemployment rates are found in North America, South Asia and East Asia. Unemployment rates of around 10% are found in Latin America and Sub-Saharan Africa.

Africa and to the cities, and for previously discouraged adults to enter the labour force to look for work. So successful employment creation could actually make the unemployment reduction objective more elusive.

Employment targets and employment policy focus on how jobs might be created. Labour market policy may feature insofar as we are worried that the right skills complement could hinder economic expansion. But policy to stimulate labour demand is primarily concerned with economic growth and how that growth absorbs labour. Employment policy may also seek to make up for shortfalls in market-based job creation by generating public-oriented employment – for example, through social services or public works schemes.

It would make sense to set targets for *both* employment growth and unemployment reduction. The unemployment rate is a ratio that is continually shifting and whose measurement is not yet sufficiently reliable. Moreover, as noted, rising employment can actually contribute to a rising rate of unemployment. Therefore, the unemployment rate is worth tracking, but may not offer sufficient reflection of underlying rates of economic activity amongst the working-age population.

Broad bands for employment creation and unemployment reduction form the backdrop to this employment scenario-building. At best, it offers basic parameters that enable us to hold up any one policy or phenomenon to see how significantly it might contribute to changing employment and unemployment conditions.

The scenarios are framed around achieving the following targets for reducing unemployment to 2014 and 2024:

- If unemployment is halved between 2004 and 2014, the unemployment rate would need to fall from about 26% to 13%. The ultimate target will be 6.5% by 2024.
- These scenarios assume that by 2014, the labour force participation rate rises to about 58%, up from about 56% in 2004/5. The working age population (aged 15 – 65) grows by about 1.15% pa. The labour force grows by about 2.4% pa or about 345,000 people pa. This rate may seem high to many experts who focus on population growth rates to estimate how the labour force might grow. However, there are many other dynamics to take into account. The reasoning is explained in Box – 1 and more detail is laid out in Table 4 in the appendix.
- By 2024, the labour force participation rate reaches about 62.5%. This would mean that the working age population (age 15 -65) grows by 1.05% pa, but the labour force grows more rapidly by 2.2% pa. See Box -1.

To reach 13% unemployment by 2014, and 6.5% unemployment by 2024 the following rates of employment creation will be needed:

- To halve the strict unemployment rate to 13% by 2014, about 5 - million net new jobs would have to be created between 2004 and 2014. This is about 500,000 net new jobs per annum. To take the unemployment rate to 6.5% by 2024, a further 440,000 net new jobs would be needed per annum between 2014 and 2024.

The specific assumptions and labour market outcomes are found in Table 4.

Box 1 – What might affect labour force growth?

There are two main explanations for a slowing growth in the labour force. First, the rate of population growth has been falling partly due to demographic change and partly due to HIV/AIDS. The impact of demographic change will become particularly felt in the long run, as we approach 2024. Second, a large portion of the younger female workforce is infected by HIV: about 33% of all women between the ages of 25 - 29 and ¼ of those between the ages of 30-34 years (Shisana et al, xx). The roll-out of anti-retrovirals and other supportive health and anti-poverty measures will hopefully lead to HIV becoming a chronic disease, rather than a fatal one. If these policies don't succeed in keeping the HIV infected workforce active, the labour force will shrink dramatically, and poverty will rise with more people depending on fewer wage earners.

However, these scenarios assume that the labour force grows more rapidly than at present, despite current ill-health and slowing population growth. Other factors could counteract these effects.

First and foremost, success in expanding job opportunities will itself attract more people into the labour force. In particular, participation of the African working age population in the labour force is still quite low by global standards. Only 50% of Africans between the ages of 15 - 65 participated in the labour force in 2004, compared to an average of 64% for other race groups. This is partly explained by the much higher unemployment rates experienced by Africans and therefore greater discouragement (Sept LFS 2004). Geography, education, and networks affect race groups disproportionately. For example, in 2003, the labour force participation rate was only 41.6% in the rural areas, as compared to 63.5% in the urban areas (Sept LFS 2003). Currently, the cost: benefit of job search is extremely high. However, as the chance of finding work rises, it is likely that more Africans will enter the labour force, with the probability that their participation rates will edge up closer to the average for other groups.

Second, immigration from surrounding states is also likely to intensify in response to higher growth rates. There is very little certainty about the participation of foreign labour in South Africa, particularly where people enter either illegally or on a non-work related visa. Apart from South Africa, there are about 24 million people in the regional labour force - this includes Lesotho, Botswana, Namibia, Mozambique, Swaziland, Zambia, Zimbabwe and Malawi. Unemployment rates in most of these countries are extremely high, mostly above 20% (ILO-KILM and CIA Factbook). If only 5% of their labour force moved to South Africa, this would expand the SA labour force by 1.2 million people. Due to the economic crisis in Zimbabwe, there is evidence that about 2 million workers left for other countries between 2001 and 2006, likely to SA, the UK, Botswana and elsewhere. Nigeria and Congo have about 64 million people in their labour force. It is unlikely that large proportions will move to South Africa, due to distance and cultural differences. However, the faster SA grows, the more pulling power there will be. In terms of their impact, immigrants are more likely to be working rather than unemployed, if only due to the high investment associated with moving to SA. It is probable that most regional immigrants would be involved in small enterprises.

2.2. Elements of scenarios: categorising the role of different sectors

There are certain broad sectors that should feature in any employment scenario. These include those aimed at poverty alleviation, the public service, ‘follower’ services (mostly private sector non-traded services such as retail) and dynamic goods and services production (such as manufacturing, financial sector or tourism).

2.2.1. Resource-based sectors

The resource-based sectors, especially agriculture and mining, are unlikely to be major sources of employment. For decades, employment has been falling in these industries.

The official statistics can be a little misleading. For example, the household surveys show a drop in commercial agricultural employment by about 4% per annum between 2000 and 2005 to about 650,000 workers. The specialist agricultural censuses and surveys run by StatsSA find that commercial agricultural employment may be stagnant at about 800,000 to 900,000 workers. As recently as 1995, there may have been about 1.2 million people in commercial agriculture, accounting for about 14% of total formal employment. By 2005, it accounted for about 7% to 10% of formal employment. This transition is not unusual in the development process, but it did take place too rapidly in a labour surplus economy. Potential employment creation in agriculture is an emotive issue, but whether it could create large numbers of jobs needs to be evaluated. Certainly some major policy shifts would be required. Aliber et al (2007) consider possible employment creation that could arise under ten different agrarian reform scenarios in ‘former white RSA’ and “former homelands”, reviewing five different ownership and scales of operation (eg smallholder, subsistence, commercial, etc). Depending on the intensity of land use and ownership size, Aliber et al (2007) propose that agricultural employment would most likely rise or fall by about 100,000 jobs.

Mining employment has progressively fallen since the 1980s. According to the censuses done by the Department of Minerals and Energy, there were about 600,000 workers in 1995, dropping to about 440,000 by 2004. Employment seems to have stabilised since then. The expansion of commodity-related exports mainly depends on global demand, as well as how conducive local conditions are. The paper by Baartjes et al (2007) reviews potential employment in mining to 2024. Surprisingly, they find that mining employment could rise taking into account potential gains and losses in gold, platinum, diamonds, coal and other industrial minerals. The outcome depends considerably on potential expansion in platinum. By 2014, they estimate that employment could at worst stagnate, and at best expand by 200,000 jobs reaching total employment of almost 650,000. By 2024, they foresee mining employment growing from a low of 500,000 to a high of 740,000.

Although commercial agriculture has become more skill intensive, it is an extremely low paid industry. By comparison, mining is quite a high paying industry, with a large percentage of the workforce unionised.

2.2.2. *Dynamic goods and services*

“Dynamic” goods and services refers to sectors that could deliver to growing global markets, can have substantial linkages into the local economy, and promote learning. In a developing country context, they are often newer industries that require some stimulation to get them moving and to encourage the formation of clusters. This category includes industries such as manufacturing, financial and business services, or high-value agriculture. In 2004, these sectors accounted for 26% of total employment or 36% of formal sector employment.

Any society benefits when a larger proportion of jobs are created in dynamic sectors. Dynamic tradable goods and services are more sustainable and beneficial sources of job creation because they: (see Berry 2007)

- Tend to experience rising terms of trade, relative to commodities.
- Have stronger multiplier/spread effects.
- Can have stronger learning effects.
- Ultimately rely less on public expenditure. Even if there are initial or ongoing support mechanisms, these activities do not rely completely and indefinitely on state procurement. This reliance is dangerous, since a downturn in state revenues will generally result in a cutting of these programmes.
- Pay higher wages, as shown in Table 8, partly because there is room for substantial productivity improvements, which in turn create space for real wage growth.

In the first instance, these sectors can be distinguished as:

- a. Labour-absorbing goods and services (business services, apparel, furniture, agro-processing, capital equipment, metal fabrication, etc.).
- b. Capital- or skill-intensive goods and services (e.g. finance, medical, beverages, non-ferrous metals, chemicals, etc.).

Typically, manufacturing is seen as the driver of growth, and as an important source of non-traditional exports that should displace resources over the course of development. However, services are increasingly playing an important role in trade as well. The role it is playing is not merely facilitating, as in transport services. Services industries are expanding autonomously in global trade, and in themselves generating backward linkages into manufacturing. For example, the award of a construction contract may encourage demand for the contractor’s home country construction inputs.

Currently, the strongest export sectors are the capital-intensive minerals-related sectors such as iron and steel, basic chemicals and non-ferrous metals. Although mining exports have fallen, minerals-related exports expanded dramatically in the 1990s. Capital-intensive, resource-based exports in metals, minerals and chemicals account for over 50% of South Africa’s exports. Capital-intensive resource-based manufacturing employs up to 150,000 people. Even taking into account employment multipliers, growth in these sectors are unlikely to be really important contributors to

ultimate employment growth. But their output and export growth influence ultimate employment outcomes substantially. This is partly because these sectors are important attractors of total investment and infrastructure spending. More importantly, their weighting in South Africa's export profile means that a global commodity boom can have the impact of appreciating the Rand and discouraging labour-intensive traded sectors.

An employment scenario that relies on commodity-related traded goods and very low productivity services will lead to (or entrench) an extremely dualistic society.

The extent to which employment growth is linked to the production of dynamic goods and services is the big outstanding question. It is the most uncertain aspect of any economic strategy, particularly in terms of how to promote know-how and induce the required investment. It may also require those decisions that impose market-related trade-offs; alternatively, the trade-offs might be less than imagined, if there is a willingness to undergo short- to medium-term adjustments.

It is well known that manufacturing is generally an important ingredient in the development process; Prof Bob Rowthorn of the University of Cambridge has shown that as countries become richer, manufacturing output may continue growing, but the share of manufacturing employment will begin falling. Dr. Gabriel Palma, also at the University of Cambridge, has shown that over the years, the share of manufacturing in total employment begins falling at ever lower levels of per capita income. This is partly explained by global technology diffusion. Countries dominated by minerals exports have a lower share of manufacturing employment than do non-minerals exporters at any level of per capita income. However, some countries, such as Indonesia and Malaysia have broken out of this pattern, and have managed to achieve higher proportions of manufacturing employment.

Currently, there are few countries generating manufacturing employment growth of more than 2% pa. Some of the very successful manufacturing industries are not creating net new employment at all. This explains why manufacturing is becoming a smaller share of total employment in so many countries. The absolute maximum that could be expected from South African manufacturing is that it generates 150,000 to 400,000 net new jobs between 2004 and 2014. This range should enable the setting of reasonable expectations for what it can and cannot do.

Having a higher proportion of manufacturing is not necessarily a guarantee of higher growth rates. Prof Jaime Ros of the University of Notre Dame shows that Mexico managed to achieve high manufacturing export growth *without achieving export-led growth*. This is explained by the role of the maquila in generating large numbers of jobs in low skill assembly activities, without any promotion of the development of capabilities. Therefore the usual reasoning for why manufacturing promotes growth – for example, learning and linkages – would not apply. Prof Al Berry (2007) argues that Malaysia may have a similar problem albeit less extreme, in having promoted electronics assembly without having developed deeper capabilities.

If South Africa is to generate substantial new employment in 'dynamic industries', some new approach is going to be required that identifies market opportunities that have growth inducing properties such as learning and linkages. The scope for

investigation will need to broaden out past manufacturing, particularly to services sectors that could have similar properties.

The elements or instruments to be considered in a policy package, most of which are already identified within Asgisa and Government's Programme of Action, might be as follows:

1. At the most basic level, it is inarguable that interventions to underpin economy-wide efficiencies are essential, especially in basic services that are biased to labour-absorbing dynamic trade. This might happen through improvements in the pricing, quality and efficiency of rail, ports or air transport.
2. The value and stability of the currency is an important consideration in veering the economy towards either traded or non-traded sectors. Investment in extractive industry and resources may continue despite exchange rate risk. An overvalued currency will favour non-traded sectors (such as retail) and greater import dependence. An undervalued currency might promote a shift toward tradables, both in discouraging imports and encouraging exports. But this is only likely to be seen if policy is implemented over time so that businesses see it as credible enough to make major investment decisions. Exchange rates have an important employment bias that is often overlooked. Labour is a 'non-tradable' and so labour intensive tradables are especially affected by exchange rate movements²
3. There may be generalised price incentives that raise the profitability and reduce the risk of expanding non-traditional dynamic products. Some of these policies include R&D allowances, incentives for foreign direct investment, investment in critical infrastructure, etc. There are a small number of successful countries that did not depreciate their currency, such as Ireland. Those countries managed to attract substantial foreign direct investment, partly attracted with substantial investment-related infrastructure and market access arrangements.
4. There may be policies to promote more small and medium-sized (SME) business. This is sometimes seen as one way to intensify labour absorption, since SMEs are known to employ more people per Rand invested. However, SMEs also pay about 10% to 30% less than the larger firms (see Woolard and Woolard, 2006). Aside from the obvious SME support services, the expansion of small firms has been stimulated through targeted public and private procurement (e.g. Korea, Japan and Brazil), and through targeted incentives (e.g. R&D incentives in Finland are only offered to SMEs).
5. There is considerable debate about the relative merits of strong sector-specific support programmes. All countries that have forcefully intervened to promote

² For example, Profs Jaime Ros and Roberto Frenkel have done important research showing the relationship between unemployment and exchange rates in Argentina, Brazil, Mexico and Chile. They found a very strong correlation between an appreciation and unemployment rates, albeit with a two year lag. Significantly, they found that an appreciation could overwhelm the positive impact of growth on unemployment. That is, even in the presence of GDP growth, a change in the unemployment rate could be correlated to changes in the exchange rate.

specific sectors have had both success and failures. The higher growth economies were those that managed to succeed in some of these experiments to establish non-traditional activities. A strong stomach is needed for these interventions because they will inevitably be expensive to begin with, with outcomes uncertain for long periods of time. To what extent is there willingness to emulate the effort and cost of the MIDP or the investment in tourism?

2.2.3. 'Follower services' in the formal economy

Some activities are really spin-offs from other activities and from growing incomes. This includes activities like retail, wholesale, restaurants, fuel attendants, motor vehicle repair or construction. This is an increasingly important source of employment growth in South Africa and globally, as shown by the 10 international case studies being prepared by Prof Al Berry for the HSRC (with some interim results presented in Berry, 2007). These sectors tend to pay low wages, partly because there is less potential for productivity growth. This explains why they still have labour absorptive capacity. They can impact on growth mainly through their simple expansion: that is they mostly have potential to contribute to "extensive growth".

These types of sectors accounted for about 24% of total South African employment in 2004, or 35% of formal employment. This is already quite substantial by global standards. It has grown dramatically in recent years, partly in response to falling interest rates and lower price of imported consumer goods. But how much more could it grow? These sectors are poorly understood in development thinking, and so this question is very difficult to answer.

Construction can be an important source of employment growth. Its growth depends critically on both public and private sector demand. In part, its continued expansion relies on the ability of supplier industries to provide inputs efficiently. There is also potential to expand into exports, but this will only have an impact on employment if South African workers are built into supply contracts, as is done by Korea and China.

These sectors are often implicitly treated as "trickle-down" opportunities. They are the linkages that arise with growth. However, their activity can be stimulated in a variety of ways. First, they expand if consumer demand is stimulated. Second, they can be supported through business support measures. Third, although it is not sufficiently recognised, there is room to stimulate productivity improvements, the identification of new market niches and technologies. It is also not sufficiently recognised that even these sectors are traded internationally, whether South Africans go overseas to provide the service (eg construction) or foreigners come to South Africa (eg hospitality, health, repair, shopping, hairdressing, etc). Recognising the potential in changing the character of these sectors could open new opportunities for both jobs and growth that SA urgently needs.

2.2.4. The public service

The public service can play an important role in job creation and in underpinning low skill wages. In South Africa, the public service has also been important as a first recruiter of black graduates. There is no specific size that the public sector should be. Some less-developed economies may have a larger civil service which is an important

source of formal employment – almost akin to a social insurance policy in countries that lack sufficient sources of stable employment (e.g. see Rodrik, 2000). In some countries it is used as a way of absorbing graduates and of reducing social tensions. The figures vary depending on the source, but it could be said that the public service in Latin America and East Asia respectively accounts for about 14% and 11% of the labour force. These figures are much higher when taken in proportion to the non-agricultural labour force, rising to 18% and 20% respectively.

It is, however, perhaps surprising that industrialised countries have, on average, higher proportions of their labour force employed in the public service (about 17%) (Marinakas, 1994; Rodrik, 2000). Economies such as Sweden or Norway that have strong welfare states employ a large proportion (more than 30%) of the formal workforce (Hammouya, 1999), and at some points in time this has been an explicit or implicit part of their employment solution.

South Africa's public service is smaller: it employs about 9% of the labour force, about 10% of the non-agricultural labour force and accounts for about 18% of formal employment. In South Africa, public employment contracted in the 1990s (it was previously equal to 15% of the labour force in 1995), and has been stagnant in the 2000s.

The choice to expand public employment is a purely administrative or political choice.

From a budgeting perspective only, it involves the decisions about the proportion of the budget to be spent on personnel, and the way this spending will be allocated between salaries and new hires (see Hassen & Altman, 2007). Between 2004 and 2014, personnel spending might rise by GDP x 1.25, and by the GDP growth rate over 2014 – 2024³. Perhaps half of that spending accrues to new hires and the other half to salary increases. So, if GDP grows by 6% pa, spending on new hires between 2004 and 2014 will increase by $6.0\% \times 1.25 \times 0.5 = 3.5\%$. The number of new personnel to be hired then depends on the skill intensity or composition of those to be hired.

2.2.5. Poverty alleviation

No matter how successful employment policy is, it is quite certain that severe unemployment and under-employment will persist. The problem has simply become too big for market-based solutions to solve the problem within the next 10 to 20 years. The 'problem' includes both severe unemployment and very low levels of remuneration from market-based employment. Therefore, it is certain that the continued expansion of the system of grants, and much more convincing expansion of extremely low productivity, non-market services such as EPWP-type projects in

³ The MTEF puts forward plans to expand public spending by GDP x 1.5, and personnel spending expands by GDP x 1.4. However, this expansion relative to GDP growth is likely to be maintained for a limited number of years.

government construction, care, self-help projects and survivalist activities, will be essential to any employment and poverty policy.

The expansion of very low productivity non-market services is an administrative decision, such as social sector expanded public works projects. Currently, it is estimated that about 330,000 people may work in expanded public works related projects (September LFS, 2006). The main questions include: How much should be spent on these services? What are the positive and negative labour market effects? Is there a willingness to invest deeply in administrative capability in localities, community-based organisations, etc. to enable the required reach?

The expansion of very low productivity market services is more complicated, as it is not an administrative decision. These activities include self-help survivalist informal activity. Much more convincing intervention will be needed to stimulate low productivity, market-oriented, essentially non-traded services (e.g. taxis, informal retail, hairdressing, etc.). Their expansion is constrained, not only by internal constraints (e.g. lack of finance or skill) but also by market concentration. Little is known about how the more marginalised parts of sectors grow relative to their larger counterparts (e.g., how might informal retail grow as shopping malls penetrate the townships?). Presumably some combination of demand side (e.g. incentive packages to workers, etc.) and/or supply side measures (e.g. low interest loans, etc.) could be considered. It is worth noting that, despite being more labour intensive, informal activity has grown more slowly than formal activity since at least 2000.

2.3. The link between employment & poverty

How might falling unemployment impact on poverty?

The income earned from employment will be important, particularly since the aim is to reduce unemployment *and* poverty. Strengthening broad-based economic participation can be the best way to ensure a more equal distribution of income. This requires, not only low rates of unemployment, but also rising income earned from work. In other words, some path is needed that would create jobs *and* also enable real wage growth in a way that is supportive of long run economic expansion.

The type of jobs that are created matters a great deal. The official definition of 'employment' is not very onerous. The official employment measure groups high flying finance executives with someone scratching out a marginal part-time existence in the informal sector.

One will generally find that capital and/or skill intensive sectors pay higher wages for the same skill level than labour intensive sectors. So, an office cleaner is likely to be paid more in the mining, chemicals or finance, than they will in the agriculture, clothing or restaurants. This is clearly shown in Table 8.

In South Africa, earnings from employment and self-employment are low relative to the cost of living. The Labour Force Survey shows that about 65% of all workers earned less than R2,500 per month in 2004, and 39% earned less than R1,000 per month. Low earners are not only found in the informal sector: just over half of formal

sector workers earned less than R 2,500 per month. Low earners in the formal sector are not only found in low level jobs: about two-thirds of craft workers and plant and machinery operators earned R2,500 per month or less. What does this mean for poverty? There is no official poverty line, but the National Treasury recently released a discussion paper suggesting that it might initially be set at the equivalent of R 430 per person per month in 2006 Rand. About 50% of the population would fall below this level. What if the unemployment problem were virtually resolved and fell from about 25% to 13% to 6.5%? Most of us assume that this would dig deeply into the poverty problem.

If unemployment fell to 13%, the distribution of employment remained the same and households depended only on wages, there is little doubt that incomes would rise. Per capita expenditure in poor households would probably increase by between 60% and 120% depending on the starting expenditure. *However, 35% of the population might still fall under the poverty line.*⁴ If unemployment fell to 6.5%, incomes would rise by between 72% and 132% depending on the starting expenditure, but still 33% would fall below the poverty line.

Much would depend on the rate of real wage growth. Average wages for low and semi skilled workers have been stagnant or falling over the past decade, according to a recent HSRC study (Woolard & Woolard, 2006). This trend could continue in a context of high unemployment and the likelihood that a large portion of jobs will be created in domestically-oriented services, the informal sector and public works.

Insofar as market-determined wages don't sufficiently contribute to some minimum livelihood, it would be the job of the state to address this. Some balance is needed that does not create a disincentive to employ, but that also enables working people to assemble an acceptable standard of living. There are a number of ways this can be done.

The first approach involves raising the value of people's private earnings. For example, the National Treasury has made important moves over the past few years to progressively eliminate personal income tax on those who earn R 43,000 or less. This has received little popular attention, but is one of the most obvious policies to pursue: that is, at the very least not to tax the poor unnecessarily. More difficult is reducing the cost of living, particularly in relation to food prices, housing, transport, finance, education and health.

⁴ The link between poverty and employment drawn in these scenarios is based on preliminary modelling. The IES (2000) data is used to determine the number of people in each expenditure decile who are employed, unemployed or not working. Earnings are inflated to 2004 Rand. The proportion of people working and in each expenditure decile is approximately matched to the LFS 2004 to ensure alignment. Social grant contributions by expenditure decile are calculated from the GHS (2005). It is assumed that the social grants expanded by 100% between the 2000 and 2005. In these calculations, the labour force participation rates are not altered. The scenarios do not calculate the impact of 2014 or 2024 scenarios. Instead they ask what would be the impact on poverty if unemployment had been halved or quartered in 2004.

A second option involves raising minimum wages. Real wages in sectors that absorb large numbers of low skill workers are likely to be relatively stagnant in a context of high unemployment. Moreover, those sectors tend to have less union organisation.⁵ There are already minimum wages set by the Department of Labour for a wide range of sectors such as contract cleaning, wholesale & retail, private security and clothing, domestic and agricultural workers. There is much debate about the impact of this legislation: does this legislation slow down the rate of low skill job creation? Do the benefits of minimum standards outweigh any possible dampening of labour demand? There is little empirical evidence to prove the case either way. Some preliminary modelling shows that, if unemployment were halved the poverty rate would fall to 35% without minimums: *with the minimums, expenditure could rise by 110% to 440% depending on the starting expenditure, the proportion of people falling below the poverty line would be reduced to 30%*. If unemployment were quartered, expenditure might rise by 124% to 480% depending on the starting expenditure, but still 30% of the population would fall below the poverty line.

Another option involves raising incomes through social grants. The South African state has dramatically expanded its system of grants in the 2000s. There has been some concern that this may cause 'welfare dependency'. However, as noted, even if the vast majority of grant recipients found jobs, it is probable that they would still qualify for their grant. A long term commitment to social grants may be a necessary part of ensuring that households can assemble a minimum livelihood, even if unemployment fell dramatically. For example, *preliminary modelling shows that if unemployment were halved or quartered, the application of minimum wages plus grants as currently available would bring the poverty rate down to 25%. If unemployment were quartered, and there were minimum wages plus grants, 15% of the population would be below the poverty line.*

Naturally, another way of addressing poverty rates is by reducing the cost of living. This could involve interventions such as lower cost retail for the poor, cheaper commuter transport, lower and stable prices for food, as well as reduced cost pressures in relation to services like health, education or funerals.

It is perhaps worth noting the limitations of a poverty line. The poverty line can be crude in that it we want to see how incomes are improving: these scenarios show that incomes improve dramatically when unemployment is lower. The poverty line simply offers a marker which tells us what proportion of the population has achieved some minimum income. On the other hand, people who earn more than R 430 per month per person are still extremely poor. With current dependency ratios, R 430 is just slightly more than the MDG target of \$2 per day which is a ghastly thought in a middle income country cost structure.

⁵ It is possible that real wages might rise if the unemployment rate were substantially lower. However, there is substantial global evidence, even in contexts of low unemployment, of wages in non-traded services not rising in relation to sector output or productivity growth. For example, see Palma (xxx) and Ros (xxx).

3. Revising employment scenarios in the context of the global economic crisis

3.1. Potential impact of the GEC

There are many unknowns in SA's economic and social future. Three employment scenarios were produced in 2007. Even then, it was not clear precisely which structural path would unfold. Scenarios should take one beyond the sometimes obfuscation of immediate numbers. For example, it is not yet possible to effectively differentiate between structural change and movements in the business cycle. Hence, an improvement in employment figures may simply reflect a cyclical upswing, and not necessarily a long term trend. When GDP growth reaches 5%, it is not clear whether the next step is 6%, or whether it will again fall back to 4%.

Then there are the “wild cards” dealt by the global economic crisis, of which five come to mind:

- The length and depth of the global economic crisis and the expected period of recovery, especially in SA's main trading partners
- The extent that the SA economy will be affected by the GEC
- How SA employment might respond to these changes in demand conditions.
- The extent that policy can influence demand and growth over this period.
- The extent that special interventions to mitigate the GEC impacts can be meaningfully implemented without taking the economy off course to a longer term structural trajectory.

The length of the global downturn is uncertain, and will likely affect countries in different ways, depending on their proximity to the banking crisis epi-centre, their financial exposure, and their dependence on trade. Reinhart and Rogoff (2009) review all banking crises in developed and developing countries since the late 1880s. They calculate the time and loss of value from the onset of the banking crises to the trough. They do not look at recovery, nor at the experience of the countries affected by these crises (ie they look only at the countries that had the banking crisis). They find that the period from crisis to trough is remarkably similar across time and countries. GDP per capita is the quickest to recover – where the average time from crisis to trough is 1.9 years, and the country with the banking crisis experiencing a decline of 9.3%. Real housing prices required 6 years to reach bottom, with a loss of 35% in value, while equity prices reached the trough after 3.4 years, losing 55% of its value. The average cumulative increase in public debt was 86%, in the 3 years following the onset of a banking crisis. The experience of unemployment is the only

variable that differs dramatically across countries experiencing banking crises. The average period from crisis to trough was 4.8 years, with an average 7% rise in unemployment. The experience of rising unemployment was especially pronounced in developed economies and in Latin America, and not felt much in Asia. The evidence therefore shows that the length of time from crisis to inflection can be 3 to 5 years, and therefore full recovery can take up to a decade. As noted, this reviews countries at the centre of the crisis, not those who merely experience reverberations. It is difficult to say precisely how the current crisis will play out. Reinhart and Rogoff (2008) may simply be pointing to the time required for markets to respond to the downturn and then to the stimulus promoting an upturn.

The views on the period of recovery can be characterised into four camps:

- Those who believe there will be a “V-shaped” recovery. This is the most common way that markets bounce back in usual times, and some financial analysts look for “green shoots” to show this. It is also the most common way of thinking about the recovery. As an example, Barclays (2009) argue that there are signs that demand is exceeding production, and assuming that working capital becomes more readily available, production will begin to rise again.
- Those who believe there will be a “U-shaped” recovery, where there will be a gradual but meaningful return, albeit over a lengthy process. This is the evidence shown by Reinhart and Rogoff, which shows that the market takes a specified amount of time to respond to banking crises.
- Those who believe there will be an “L-shaped” recovery, with the dramatic loss in asset value, output and employment, a bottoming out, and a very slow progression from there. This is a view put forward by Roubini, with the aftermath of Japan’s banking crisis as the best (or only) historical example.
- Those who believe there will be a “W” shaped recovery. This is a quietly emerging view which sees a bumpy recovery. The response to excess demand of the “V” shaped believers might be experienced for a period, making people believe a recovery is on its way. However, Moola (2009) argues that “there is a risk that such relief proves temporary, as the second-round effects of tumbling profits and rising unemployment squeeze investment and consumer spending”.

It is important to remember that South Africa’s problem of unemployment, poverty and exclusion are not caused by the GEC. There was already an effort in place to make sense of how to move onto a higher structural path that would be more labour absorbing and inclusive. This is a long term agenda, and it is critical that policy makers keep their eye on that ultimate prize.

The social impact of the GEC will have a very different impact by income class. A large part of the population is so marginalised, that their main immediate concern would simply be to ensure social grants are available. The key issues that might cause most concern include:

- Existing workers who lose their jobs will be badly affected. The majority of households have only one worker. If 250,000 net employment was lost, this could affect at least 1 million people in the short run. This situation likely to start bouncing back within 2 years.
- The emerging working and middle classes could be undermined where houses are lost and pensions devalued.
- Young school leavers, especially between the ages of 18 and 24, will be worst affected. Currently, there is less than a 50/50 chance of finding employment and is likely to deteriorate dramatically over the coming years. This poses a very serious social and economic challenge. This situation leaves the majority of young people long-term unemployed and alienated.

Long term objectives might be affected by:

- The potential loss of capacity in dynamic industries, thereby undermining future growth and decent work opportunities.
- Potential difficulties in raising funds through tax or debt to meet major commitments in social and economic infrastructure or social spending. In addition, the likely increase in public debt could constrain social expenditure in future.

3.2. Revised employment scenarios

The employment scenarios developed in 2007 have been revised in the context of the global economic crisis. It is still assumed that halving unemployment is a top objective. The scenarios presented are not at all unrealistic. The period to 2004 to 2014 is treated differently to 2015 – 2024, as much depends on SA's response to the GEC.

Employment and industry in South Africa is highly diversified, so changes over a 10-year period do not look so dramatic. Changes in employment are more likely to happen progressively across a large number of sectors. The real impact of any particular path is seen in the 20 year scenario. These scenarios compare 3 trajectories between 2004 – 2014 and then onwards to 2024.

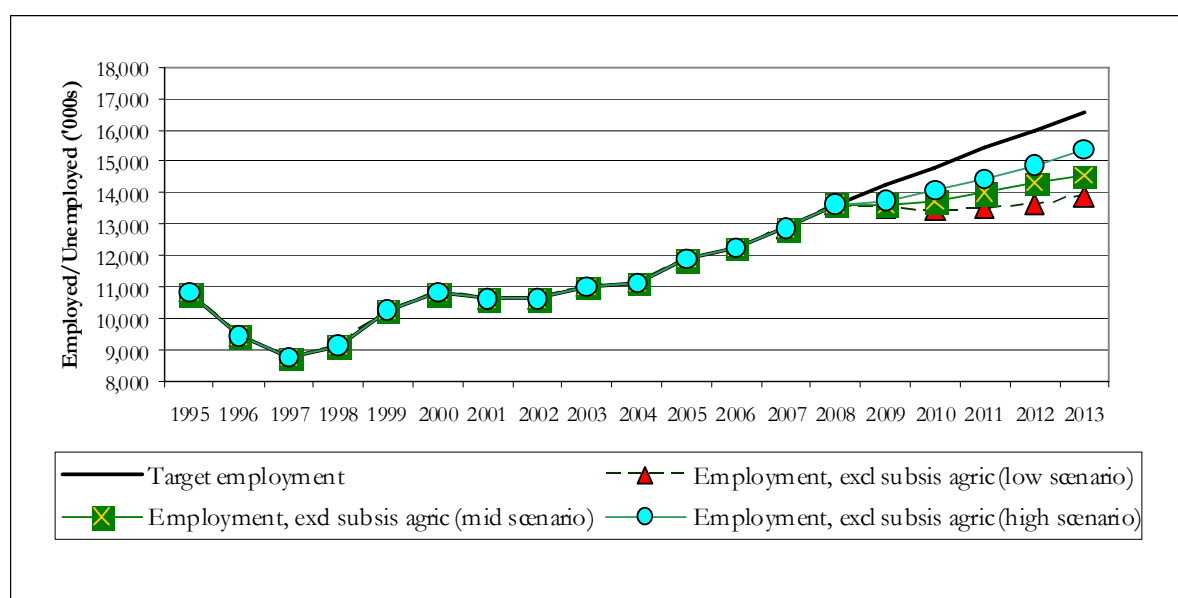
Three growth paths are presented in Table 1. In scenario 1, the growth process is derailed – with negative growth in 2009 and 2010, and then rising to 2% by 2013/4. The average annual growth rate between 2004 and 2014 is 2.5%, and then rises to an average of 3% pa in 2014 – 2024. This is the “L-shaped” recovery. In scenario 2, the growth rate slows to 0% in 2009 and 1% in 2010, but then returns to 3% by 2012. The average GDP growth rate would be 3.3% over the first decade, rising to an annual average of 4.5% in the second decade. This represents a “U-shaped” recovery, and brings SA back to its minerals-based path. Scenario 3 has GDP growth

dipping to 1.2% in 2009, returning to 3% in 2010 and rising past 4% from 2011⁶. The average annual GDP growth rate between 2004 and 2014 would be 4.5% and this would rise to an average of 6% between 2015 and 2024. In this scenario, the economy experiences a “V-shaped” recovery, and moves onto a higher structural path.

Table 1 - Average GDP growth in 3 scenarios - to 2014 & 2024

	Scenario 1	Scenario 2	Scenario 3
2004 - 2014	Growth derailed	Slow recovery	Bounce back
Avg GDP growth	2.5%	3.3%	4.5%
2015 - 2024		Return to primary commodity path as now: Resource-linked exports & high domestic orientation in employment	Move to manufactures & services trade path: more employment from traded sectors
Avg GDP growth	3.0%	4.5%	6.0%

Figure 1 - Employment scenarios, without special interventions



⁶ The average growth rate in Scenario 3 is essentially the forecast proposed by National Treasury’s February 2009 Budget.

Table 2 – Employment Scenarios to 2014

Sectors	Employment in 2004	Employment in 2014		
		Scenario 1 - swept away	scenario 2 - slow recovery	scenario 3 - bounce back
Agriculture	650,000	650,000	650,000	650,000
Mining	425,000	404,323	493,230	544,036
Manufacturing	1,500,000	1,500,000	1,656,933	1,740,811
Leader & high paid services (eg finance, transport)	1,563,000	1,813,925	1,905,288	2,204,766
Follower services (eg retail, personal services)	1,915,000	2,701,297	2,701,297	2,834,668
Construction & utilities	620,000	1,009,915	1,110,326	1,219,634
Informal sector & domestic work & subsis agric; less EPWP	2,815,000	3,348,286	3,465,260	3,592,905
Public sector, private social services & parastatals	1,800,000	2,207,857	2,264,838	2,396,808
EPWP-type jobs - construction	220,000	370,000	370,000	220,000
EPWP-type jobs - community care	120,000	2,582,549	1,970,981	1,184,524
Total	11,628,000	16,588,152	16,588,152	16,588,152
Unemployment rate	25.6%	13.0%	13.0%	13.0%
Unemployment rate, without EPWP	27.8%	28.5%	25.3%	20.4%

To halve unemployment, about 5 -million net new jobs would be created between 2004 and 2014. This is an average employment growth of about 4.3% p.a. If the aim were to quarter unemployment to 6.5% by 2024, about 9.3 million net new jobs will be needed over the 20 year period. Remembering that the aim is to halve or quarter *both* unemployment and poverty, the scenarios need to consider not only the number of jobs created, but also their quality. Because poverty is the target, wages or remuneration will be used as the measure of job quality (and not enjoyment, personal fulfilment, safety, standards and so forth).

The different growth trajectories are translated into employment outcomes. These are presented in Figure 1, Table 2 and Table 6. Table 8 presents the distribution of employment in 2004 and compares that to three possible scenarios in 2024. The rate of job creation at any particular rate of economic growth is presented in Table 11.

In the period from 2004 – 2014 it is assumed that there is a very strong commitment to hiring in the public service that is particularly realised in the second half of the decade. When the average GDP growth rate is 2.5%, 3.3% and 4.5% pa, it is assumed that budgets for public employment rise by 4.25%, 4.95% and 6% respectively. Thereafter, expenditure on public personnel expands at the same rate as GDP growth. The relationship to GDP is important since the cost of expanding public employment

weighs more heavily as tax revenue falls. We assume that Government maintains a commitment to expanding service delivery and in bolstering employment through the economic downturn.

The essence of the three scenarios is as follows:

In **Scenario 1**, there is an “L-shaped” recovery, with the growth path of the early 2000s derailed. The average economic growth rate for 2004 to 2014 is 2.5% pa. The efforts to implement infrastructure improvements are slow to contribute to the need industrial productivity, which in turn slow down potential employment growth. Slow implementation of infrastructure programmes dampens potential growth and construction employment falls. Mining and agriculture infrastructure needs, especially in water and roads, do not materialise, thereby causing job losses. The expansion in the public service is implemented without concomitant productivity improvements, thereby also weighing down on potential growth and employment creation, as well as not meeting delivery targets. Working poverty becomes an even larger problem than it is today. The vast majority of market related jobs are found in low paid domestically oriented services. More than half of all jobs needed to halve unemployment are found in EPWP. This becomes unsustainable, with 2.9 million people working in EPWP opportunities equivalent to 17% of working people, at a cost of R59 billion per annum. Without EPWP, unemployment would sit at 28.5% in 2014.

At the other extreme, **Scenario 3**, presents a “V-shaped” recovery, with an average economic growth rate of 4.5% pa between 2004 and 2014. There is considerably more success in moving towards world class network infrastructure in transport, water, telecommunications and energy, through carefully implemented infrastructure and organisational improvements. Home Affairs enables the importation of high skilled personnel where needed. The Dept of Foreign Affairs, IMC and the dti join hands effectively to raise South Africa’s commercial presence in key markets – our trading partners and potential sources of investment. Dynamic industries are thereby stimulated. While SA slows for a period, its global stance improves considerably relative to many other emerging markets and becomes a more choice investment destination than previously. The ground is laid to promote global service industry hubs for civil construction and for financial services. A growing number of jobs are created in traded sectors, and the productivity growth experienced there enables higher wages to be paid. While working poverty is not yet reduced, there is a benefit that many more people are working. To ensure that unemployment is halved by 2014, government finds it must still invest heavily in EPWP. Approximately 1.3 million people work in EPWP in 2014 at a cost of R27 bn. If they had not been given this opportunity, the unemployment rate would have been 20.4%.

4. Achieving employment targets with special interventions – a re-look at Scenario 2

The scenarios put forward thus far mostly vary in relation to the fate of global markets, and implementation of Government's long term plans especially in respect of infrastructure and industrial change. They assume no new special interventions to intensify employment specifically, other than those to raise the general rate of growth. The low or high scenarios depend substantially on whether these intentions are realised. EPWP was treated as a 'fall back': any shortfall in meeting unemployment targets would be the responsibility of the EPWP and related programmes.

As a result of the global economic crisis and other domestic factors, "all things being equal" will not sufficiently address the unemployment problem. Even in the best scenario, unemployment would stand at 20.4% unless 1.4 m EPWP jobs were created annually. In Scenario 2, unemployment would be 25.3%, higher than it is today, unless 2.4 m EPWP opportunities were created. These EPWP figures reach absurd proportions, which would be fiscally and practically unsustainable. It would mean that half of all net job creation over a decade was found in EPWP.

EPWP was treated as a rather crude fall-back position in the HSRC's 2007 scenarios. Below, alternative ways of intensifying low skill employment are proposed, in ways that could be more sustainable. The potential impact on employment to 2014 is explored and presented in Figure 2 and Table 3. For simplicity, only the impact on the Scenario 2 is considered.

The special interventions focus on reducing avoidable job losses, increasing potential job creation and slowing labour market entry. The proposals are mostly linked to longer term intentions. The impact of these programmes will be greater, the more they are linked to market-related interventions, improvements in public service delivery, water and environmental improvements and human resource development.

The opportunities proposed in Table 3 are additional to those that would have happened anyway, had the economy grown at an average 3.3% and had government's existing programmes been implemented as before.

Private sector employment

The most important programmes would be implemented in the private sector. The short-term employment impact is only half of what can be done in the public sector. However, the private sector interventions are more sustainable. Most opportunities in the public sector need to be funded in every year. Without funding, they disappear. Private sector opportunities do not need funding support every year, and multiply over the years.

The scenarios look at the impact of the following programmes on the employment outcomes in Scenario 2:

- Slowing avoidable retrenchments: programmes to avoid retrenchment in companies that are experiencing short term challenges due to the global economic crisis could include support from the UIF for short time, workplace challenge type programmes, setting up retrenched workers as suppliers to replace imports, etc. We estimate this could impact on 40,000 jobs being saved.
- Special funds for distressed firms: companies experiencing temporary set backs due to the global economic crisis can be helped with bridging finance. The IDC has established a programme to support these companies if they can prove they were not already in distress, and if they can show a plan to re-orient their business to ensure future success. We estimate this could impact on saving approximately 20,000 jobs.
- Local procurement: here the weighting for local procurement is higher in the BEE codes. We estimate this could generate approximately 15,000 new jobs annually.
- 30 day payments: the proposals by government to commit to paying suppliers within 30 days are implemented. This could be a joint commitment by large corporations, parastatals and government. Potentially, this could contribute an additional 15,000 jobs annually.
- Small scale agricultural production: approximately 2.5 million households are involved in household agricultural production, $\frac{3}{4}$ of which is found in Limpopo, Eastern Cape and KZN. In fact, a large proportion of these households are found in only a few municipalities. With more support (extension, seeds, land access, water, implements, market access), at least some of these producers could expand to produce a surplus. Given the current concentration of households, programmes could target these few areas to achieve most of the target. We propose this programme could initially reach 50,000 producers, rising to 350,000 by 2014.

Many of the public sector job creation opportunities could focus on the approximately 500,000 school leavers. This would have an extremely important impact on their future economic participation, and on social cohesion. The public sector programmes could include:

Channelling school leavers into further education and training opportunities

The first approach involves pulling 80,000 rising to 600,000 young people out of the labour market, into further education and training (FET) and other full time skills development programmes. This reduces the need for job creation in any one year, while improving employability of youth. This has the impact of reducing the employment target prior to 2014. This is shown through a comparison of Figure 2

and Figure 3. This is absolutely critical, since it is very likely that the unemployment rate of school leavers could ratchet up to 70 or 80% without special interventions due to the economic slowdown. The figures presented in Table 3 are approximately 60% of the targets proposed by the Department of Education in its December 2008 National Plan for FET Colleges. This is not intended to call into question the DOE plan. It is simply to envisage a 'conservative estimate' of what might be possible given the major challenges that might be faced in rolling out its plan. In fact, the DOE objective is to ensure that more than one-million people are in FET colleges by 2014, as compared to the current 400,000 enrolled. The DOE shows that FET enrolments as a percentage of the population are about one-fifth of that found in developed countries and are about half what they should be in relation to the 16 – 29 age cohort. The plans, recapitalisation programmes, quality assurance and budgeting processes are all well underway.

Public Employment Programmes

In a context of such deep structural misalignments, and then the addition of a global slowdown, Government will necessarily be the most important contributor to special employment programmes. The drawback to public employment is that it is not sustainable without annual commitments. It does not grow on itself in the way that market interventions can. However, if done well, it can contribute to service delivery and human capital development. It is also much more certain: the result of market interventions is always uncertain, whereas public employment is administrative choice. While there are a number of programmes and departments that could contribute to public employment schemes, they can essentially be summarised into four main areas, as described below. As before, we are only considering additions to job creation that might not otherwise have happened in the context of a 3.3% GDP growth rate and policies as implemented to date.

- ***Semi skill employment in the public sector:*** employment in the public sector has tended towards higher skill occupations. The planned expansions will continue in this vein, albeit focused on personnel at the coal face such as nurses, police, teachers and social workers. Alternative divisions of labour that break down functions that could be done by non-degreed staff could generate more employment for similar expenditure, whilst potentially improving service delivery. The Department of Social Development is training auxiliary social workers, as an example. Other examples could include: clerks who register births, do stocktaking, and prepare docketts; community based care-givers, etc. We estimate this could generate an additional 25,000, rising to 50,000 opportunities annually.
- ***Youth transitional jobs:*** the public sector is an important source of first employment for school leavers in many countries. This used to be the case in SA, but is no longer. A youth transitional jobs programme would offer young people a first work opportunity for 12 months. We estimate this could generate 25,000 rising to 75,000 opportunities annually.
- ***State and NPO employment incentive:*** under the rubric of EPWP phase 2, an ambitious employment incentive has been approved and budgeted for

over the MTEF. This incentive is meant to pay R 50 per day to applicants to work on projects led by provinces, municipalities or non-profit organisations. This will decentralise decision making and it is hoped will expand people reached through the EPWP more rapidly. The NPO incentive is currently a smaller part of the programme and still needs to be designed. However, it should ultimately make a large employment contribution as non-profit organisations tend to be under-funded and generally need more capacity. The budget for the employment incentive (excluding provision for administrative costs) in 2009/10 is R434 mn, rising to R2.2 bn in 2011/12. It is possible that in future, the employment incentive could become the biggest EPWP budget items. We estimate this could generate 30,000 rising to 270,000 opportunities annually.

- **Expanded public works and other special employment programmes:** if the opportunities listed above were implemented, the pressure to expand EPWP would be less. Instead of needing more than 2 m opportunities as in the original Scenario 2, the requirement could fall to an additional 512,000 opportunities by 2014.

EPWP (including the incentive) might cost about R 15.8 billion by 2013/14, instead of R45bn as envisaged without special interventions. This is shown in Table 12. This would be about 2.7% of non-interest spending by government in that year. It is still a substantial bill, but begins to move into a more realistic range.

The current proposals by the Department of Public Works could come closer to achieving these targets than previous commitments. However, more will be needed. For example, the DPW EPWP job creation targets for 2013/14 are 684,783 full time equivalents. There were about 120,000 to 150,000 FTEs (but over 300,000 EPWP participants) in 2007/8. Above this, we estimate that an additional 215,000 FTEs (335,000 FTEs in total) opportunities should be created, rising to an additional 782,000 (810,000 FTEs in total) by 2013/4.

Figure 2 - Scenario 2, compared to employment target

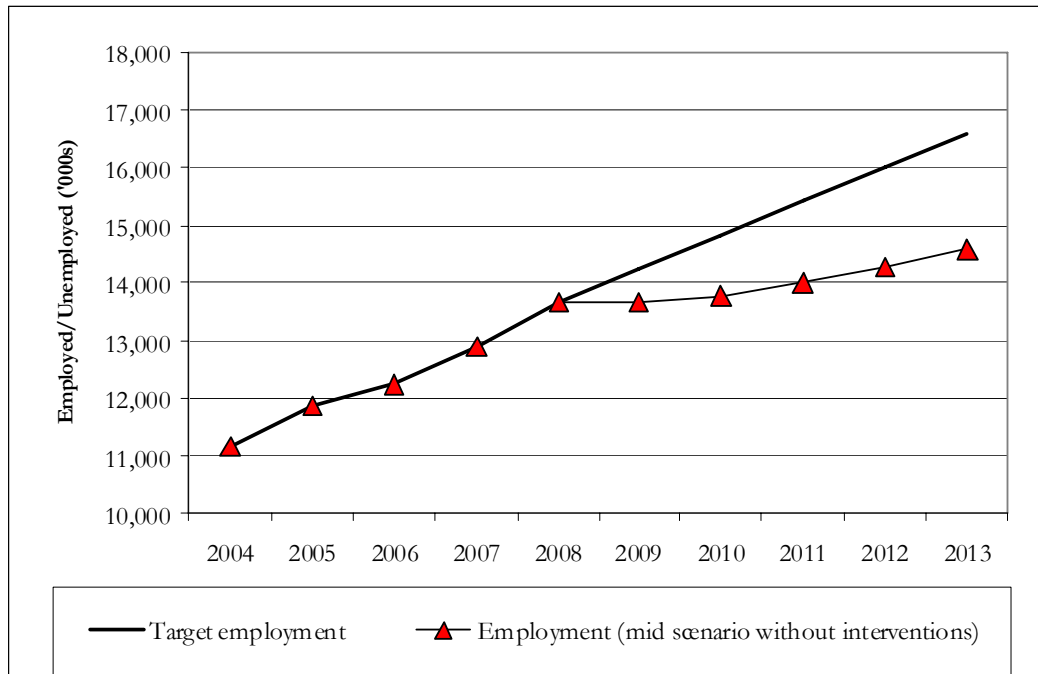


Figure 3 – Scenario 2, with special interventions

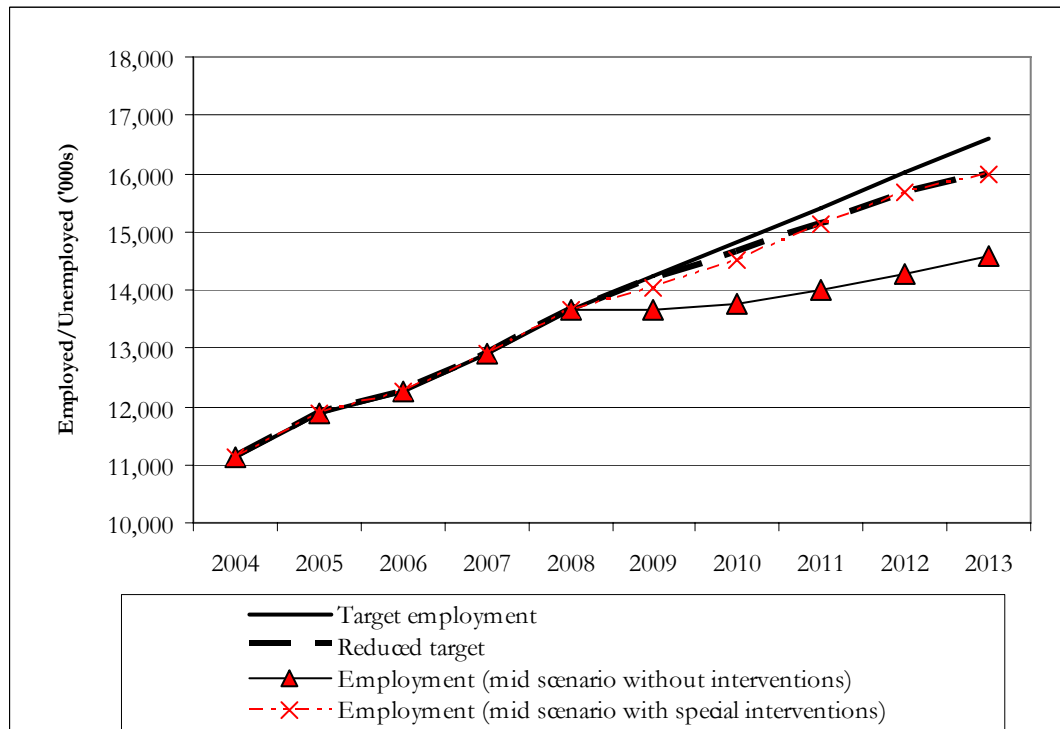


Table 3 – Opportunities created by special interventions

Options						
		2009	2010	2011	2012	2013
Reducing pressure on the labour market ('000s)						
Govt	Expanding FET opportunities, esp for 17 – 24 year olds	80	176	291	330	600
Jobs available, additional to ones that would have otherwise existed ('000s)						
Govt						
	semi-skill public sector	25	50	50	50	50
	transitional jobs	25	50	75	75	75
	State & NPO employment incentive	30	75	138	193	270
	EPWP	185	370	555	663	512
	subtotal	265	545	818	981	907
Market	slowing avoidable retrenchment	25	40	40	40	40
	special funds for distressed firm re-alignment (IDC, etc)	5	15	15	15	15
	small scale agric prod'n	50	125	200	275	350
	local procurement	15	25	35	45	55
	30 day payment	15	20	25	30	35
	subtotal	110	225	315	405	495
Total additional due to special interventions		375	770	1,133	1,386	1,402
Notes:						
Public sector opportunities are not additive, while market based ones are.						
FET and skills opportunities pull people out of the labour market. To be conservative in the scenario building, the figures above are 60% of the DoE targets put forward in the 2008 National Plan for FET Colleges in SA.						

5. Concluding remarks

These scenarios were revised from the 2007 version to take into account the possible impact of the global economic crisis (GEC) on employment and poverty. They suggest feasible story lines along which the economy could move from 2004 to 2014 and onward to 2024.

Much was learned from the 2007 scenarios, the main learning from that project is offered in Appendix 2. These findings still hold, and give guidance to the longer term development path. The conclusions below focus on what might be different as a result of the GEC.

There are many wild-cards dealt by the GEC. These include:

- How far employment and growth rates might fall
- The pattern of recovery over the coming five years, whether it will be “V”, “U”, “W” or “L” shaped.
- The extent that policy can influence demand and growth over this period.
- The extent that special interventions to mitigate the GEC impacts can be meaningfully implemented without taking the economy off course to a longer term structural trajectory.

There is no correct answer to these unknowns. We specifically cannot say how employment and incomes might be affected. It is nevertheless important to plan around these uncertainties to mitigate the worst impacts.

It is important to remember that South Africa’s problem of unemployment, poverty and exclusion are not caused by the GEC. There was already an effort in place to make sense of how to move onto a higher structural path that would be more labour absorbing and inclusive. This is a long term agenda, and it is critical that policy makers keep their eye on that ultimate objective.

The social impact of the GEC will have a very different impact by income class. A large part of the population is so marginalised, that their main immediate concern would simply be to ensure social grants are available. The key issues that might cause most concern include:

- Existing workers who lose their jobs will be badly affected. The majority of households have only one worker. If 250,000 net employment was lost, this could affect at least 1 million people in the short run. This situation likely to start bouncing back within 2 years.
- The emerging working and middle classes could be undermined where houses are lost and pensions devalued.
- Young school leavers, especially between the ages of 18 and 24, will be worst affected. Currently, there is less than a 50/50 chance of finding employment and is likely to deteriorate dramatically over the coming years. This poses a very serious social and economic challenge. This situation leaves the majority of young people long-term unemployed and alienated.

Long term objectives might be affected by:

- The potential loss of capacity in dynamic industries, thereby undermining future growth and decent work opportunities.
- Potential difficulties in raising funds through tax or debt to meet major commitments in social and economic infrastructure or social spending. In addition, the likely increase in public debt could constrain social expenditure in future.

This paper revised three employment outcomes that take into account the potential effect of the global economic crisis. These project economic growth rates averaging

2.5% (“L-shaped recovery), 3.3% (“U”-shaped recovery) and 4.5% (“V” shaped recovery) between 2004 and 2014. They all assume the existing policy environment, albeit with different levels of success in implementation. All of these scenarios show a very large shortfall in meeting the objective of halving unemployment, unless massive public works programmes are put in place. For example, in Scenario 2, with an average of 3.3% growth, approximately half of all new jobs over the decade (2.4 m) would be created by public works at a cost of approximately R 58 bn in 2014. This is unlikely to transpire, as it is a very large portion of the budget, taken away from other critical commitments such as social infrastructure, grants, service delivery and economic infrastructure.

Therefore, we re-evaluated Scenario 2 to see how special interventions might still enable the achievement of the all-important unemployment target. The interventions are all being discussed, and require either the implementation of a programme that is on the drawing board, or an expansion in an existing one. These interventions focus on creating or saving jobs in the market, stimulating jobs in the non-profit sector, creating jobs in the public sector, expanding public special employment programmes, and in providing much larger numbers of full-time learning opportunities for qualifying school leavers. If the package proposed in this set of interventions were implemented, approximately 782,000 public works jobs would be needed at a cost of R16.8bn in 2014, or about 2.3% of the budget in that year. This is considerably larger than the current programme, but significantly less than without special interventions. All these proposals are in the planning, budgeting and/or implementation phase. They require urgent evaluation, and if practical, urgent implementation. It should become clear that even at a lower rate of growth, halving unemployment by 2014 is still achievable.

Appendix 1 – Tables

Table 4 – Targets to reduce unemployment by 2014 & 2024

	2004	2014		2024	
		Low	High	Low	High
		1% WAP growth; 56% LFPR	1.3% WAP growth; 60% LFPR	1% WAP growth; 60% LFPR	1.15% WAP growth; 64% LFPR
Working age population (15-65) (grows 1% pa)	29,304	32,370	33,344	34,808	36,834
Unemployed (strict)	4,009	2,357	2,601	1,380	1,532
Unemployed (broad)	7,966	4,474	4,609	2,450	2,583
Labour force growth pa	1.5%	1.6%	2.8%	1.8%	2.5%
Labour force (strict)	15,637	18,127	20,007	21,233	23,574
Labour force (broad)	19,594	22,011	22,674	24,018	25,415
Target unemployment rate (strict)	25.6%	13.0%	13.0%	6.5%	6.5%
Target unemployment rate (broad)	40.7%	20.3%	20.3%	10.2%	10.2%
Labour force participation rate (strict)	53.4%	56.0%	60.0%	61.0%	64.0%
Labour force participation rate (broad)	66.9%	68.0%	68.0%	69.0%	69.0%
Total employment	11,628				
Target employment to halve strict unemployment		15,771	17,406	19,853	22,041
Target employment to broad strict unemployment		17,537	18,065	21,568	22,832
Rate of average annual job creation needed		3.6%	5.0%	3.5%	4.5%
Source: September Labour Force Surveys, Statistics South Africa					
Note: "2004 labour force growth" is for 2001 - 2005, chosen because the labour force participation rates were the same in those years					

Table 5 - Employment growth assumptions in each 2014 scenario

Categories	Scenario 1	Scenario 2	Scenario 3
Agriculture	-1.0%	0.0%	0.0%
Mining	-0.5%	1.5%	2.5%
Manufacturing	0.0%	1.0%	1.5%
Leader & high paid services (eg finance, transport)	1.5%	2.0%	3.5%
Follower services (eg retail, personal services)	3.5%	3.5%	4.0%
Construction & utilities	5.0%	6.0%	7.0%
Informal sector & dom work & subsis agric; less EPWP	1.8%	2.1%	2.5%
Public sector, private social services & parastatals	2.1%	2.3%	2.9%
EPWP-type jobs - construction	+150,000	+150,000	0%
EPWP-type jobs - community care	residual	residual	residual

Table 6 - Employment scenarios to 2024

Sectors	Employment in 2004	Employment in 2024		
		Scenario 1: slow down	Scenario 2: high domestic orientation	Scenario 3: More employment from traded sectors "MF&S"
Agriculture	650,000	588,437	650,000	650,000
Mining	425,000	384,652	555,718	625,183
Manufacturing	1,500,000	1,561,092	1,894,709	2,339,505
Leader & high paid services (eg finance, transport)	1,563,000	2,211,165	2,687,597	3,358,966
Follower services (eg retail, personal services)	1,915,000	3,773,789	4,195,031	4,360,208
Construction & utilities	620,000	788,944	787,131	952,776
Informal sector & dom work & subsis agric; less EPWP	2,815,000	3,943,632	4,182,902	4,422,860
Public sector, private social services & parastatals	1,800,000	2,571,066	2,836,953	3,221,310
EPWP-type jobs - construction	220,000	370,000	370,000	-
EPWP-type jobs - community care	120,000	4,754,324	2,787,059	1,016,293
Total	11,628,000	20,947,100	20,947,100	20,947,100
Unemployment rate	25.6%	6.5%	6.5%	6.5%
Unemployment rate, without additional public service & EPWP	27.8%	29.4%	20.6%	11.0%

Table 7 - Employment growth assumptions in each 2024 scenario

Categories	Scenario 1	Scenario 2	Scenario 3
Agriculture	-1.0%	0.0%	0.0%
Mining	-0.5%	1.2%	1.4%
Manufacturing	0.4%	1.35%	3.0%
Leader & high paid services (eg finance, transport)	2.0%	3.5%	4.3%
Follower services (eg retail, personal services)	3.4%	4.5%	4.2%
Construction & utilities	-2.5%	-3.5%	-2.5%
Informal sector & dom work & subsis agric; less EPWP	1.65%	1.9%	2.1%
Public sector, private social services & parastatals	1.4%	2.1%	2.8%
EPWP-type jobs - construction	+150,000	+150,000	-220,000
EPWP-type jobs - community care	residual	residual	residual

Table 8 – Distribution of employment in three scenarios in 2024

Sectors	2004	2024		
	Current	Scenario 1	Scenario 2	Scenario 3
		Growth derailed	Slow recovery and return of primary commodity path as now: Resource-linked exports & high domestic orientation in employment	Bounce back and move to manufactures & services trade path: more employment from traded sectors
Mining & agriculture	9.2%	4.6%	5.8%	6.1%
Manufacturing	12.9%	7.5%	9.0%	11.2%
'Dynamic services'	13.4%	10.6%	12.8%	16.0%
Follower services & construction	21.8%	21.8%	23.8%	25.0%
Public sector & private social services	15.5%	12.3%	13.5%	15.4%
IFS & EPWP	27.1%	43.3%	35.0%	26.4%
Total	100.0%	100.0%		100.0%
			77.2%	
% SERVICES/FS	69.6%	78.7%	13.9%	76.6%
% MANUF/FS	17.7%	13.1%	5.8%	15.2%

Table 9 - The distribution of formal sector earnings by sector, 2004

Sector	Wages earned per month		
	1-1000	1000 - 2500	2500 +
Agriculture, hunting, forestry and fishing	85.2%	4.7%	10.1%
Community, social and personal services	20.4%	10.7%	68.9%
Construction	58.0%	22.2%	19.8%
Financial intermediation, insurance, real estate and business	30.0%	15.5%	54.5%
Manufacturing	38.0%	23.6%	38.3%
Mining and quarrying	10.1%	32.6%	57.4%
Private households	95.7%	3.4%	0.9%
Transport, storage and communication	28.3%	16.7%	55.1%
Wholesale and retail trade	56.0%	17.3%	26.7%

Source: LFS, Sept 2004

Table 10 - Average wages under different scenarios in 2024

Remuneration per month	2004 ⁽¹⁾	2024		
		Scenario 1 slow down	Scenario 2: domestic orientation ⁽²⁾	Scenario 3: dynamic products in trade orientation ⁽²⁾
<R1000	47.9%	59.9%	54.2%	47.9%
R1000 – R2500	17.9%	13.8%	15.6%	17.4%
>R2500	34.0%	26.6%	30.4%	34.8%

Notes:

(1) With the exception of EPWP, each sector has some proportion of workers in any income category. In EPWP, all workers earned less than R 1,000 pm in 2004. These proportions are drawn from the LFS, 2004.

(2) The proportions of people in any income category in Scenario 1 and 2 differ depending on how much employment in that sector grows.

Table 11 - Employment elasticities and growth - 2014 and 2024

Scenarios - 2014						
		Non agricultural private formal sector		Informal sector		
	real GDP growth	employment elasticity	employment growth - 2004-14	employment elasticity	employment growth - 2004-14	GDP growth 2004 -14
Scenario 1: Swept away	2.5%	0.70	1.19	0.70	1.19	1.28
Scenario 2: Slow recovery	3.3%	0.70	1.26	0.63	1.23	1.38
Scenario 3: Bounce back	4.5%	0.70	1.36	0.55	1.28	1.55

Scenarios 2024

		Non agricultural private formal sector		Informal sector		
	real GDP growth 2015 - 2024	employment elasticity	employment growth, 2004 - 24	Employment elasticity	employment growth - 2004-24	GDP growth - 2004 - 24
Scenario 1: Growth slows	3.0%	0.72	1.24	0.55	1.18	1.72
Scenario 2: Successful primary commodity	4.5%	0.68	1.35	0.50	1.25	2.15
Scenario 3: Successful manufacturing & services exporter.	6.0%	0.64	1.46	0.35	1.23	2.78

Notes:

Non-agricultural private formal sector excludes construction and utilities, private social and community services.

Between 2000 – 2005, the Labour Force Survey shows that formal, non-agricultural, private sector employment grew by about 0.72 % for every 1% in GDP. The informal sector, excluding subsistence agriculture, grew by 0.55% for every 1% in GDP. These ratios (or employment elasticities) are used as a basis for calculating how employment might grow in these sections of the economy. The ratio of employment: GDP growth is seen to fall slightly at higher rates of GDP growth.

It is worth noting that, according to the ILO (KILM 19), these employment elasticities are extremely high by global standards. Sub-Saharan Africa have the highest employment elasticities, but also below-average rates of economic growth. The elasticities found in all other regions range from 0.1 in Eastern Europe to 0.42 in South-East Asia.

It may seem counter-intuitive that the informal sector would grow more slowly than the formal as it is more labour intensive. However, these ratios show that the informal sector may be less responsive (than the formal sector) to growth in South Africa. This might be explained by a number of factors: for example, informal retail, which is the largest informal sub-sector, relies heavily on inputs from the formal sector. It often sells items in smaller batches, but that are more expensive per unit. Growing demand may enable people to buy the cheaper but larger batches of goods. Moreover, some formal retail stores offer credit, not available through the informal sector.

Table 12 - Initial estimates of scenario budget implications

	2006/7	2013/4 (1)			
GDP growth rate		2.5%	3.3%	3.3% with special interventions	4.5%
Non-interest spending (R bn)	R 473.8	R 587.7	R 628.8	R 628.8	R 695.0
<i>less</i> Personnel expend (Rbn)	R 172.3	R 230.6	R 241.6	R 241.6	R 260.4
Non-personnel expenditure	R 301.5	R 357.1	R 387.1	R 387.1	R 434.6
<i>less</i> EPWP (2)	R 2.7	R 59.4	R 45.3	R 15.2	R 27.2
Remaining amount available for other public spending	R 298.8	R 297.7	R 341.8	R 371.9	R 407.4
Number of EPWP jobs (mn)		3.0	2.3	0.782	1.4
(1) 2013/4 amounts are in 2006 Rand					
(2) Expenditure on EPWP in 2006/7 is author's estimate. It includes only labour and admin costs, and not cost of infrastructure					

Appendix 2 – Main conclusions from 2007 scenarios

The central conclusions from the 2007 employment scenarios project include those outlined below. None of these conclusions change in the current context.

- There are two complementary ways of ensuring that the benefits of growth are broadly shared: through the composition of industrial growth and through the way that private and social incomes are distributed.
- The composition of employment matters a great deal. High productivity (usually traded) sectors tend to pay more than low productivity sectors, even for the same skill or occupation, as shown in Table 10. The more people working in higher paying tradables sectors, the more households will be able to depend on wage income for their livelihoods.
- Although productivity improvements have been important drivers of accelerated growth in recent years, the benefits have not translated into earnings for low skill workers. That is, low skill employment expanded dramatically, but wages did not.
- It is well known that manufacturing is generally an important ingredient in the development process. However, as countries become richer, manufacturing output may continue growing, but the share of manufacturing employment begins to fall. Each decade, the share of manufacturing in total employment begins falling at ever lower levels of per capita income. This is partly explained by global technology diffusion. Countries dominated by minerals exports also have a lower share of manufacturing employment than do non-minerals exporters at any level of per capita income. However, some countries, such as Indonesia and Malaysia have broken out of this pattern, and have managed to achieve higher proportions of manufacturing employment.
- Currently, there are few countries generating manufacturing employment growth in excess of 2% pa. Some of the very successful manufacturing industries are not creating net new employment at all. This explains why manufacturing is becoming a smaller share of total employment in so many countries. The absolute maximum that could be expected from South African manufacturing is perhaps 150,000 to 400,000 net new jobs between 2004 and 2014.
- Having a higher proportion of manufacturing is not necessarily a guarantee of higher growth rates. Prof Jaime Ros of the University of Notre Dame shows that Mexico managed to achieve high manufacturing export growth *without achieving export-led growth*. This is explained by the role of the maquila in generating large numbers of jobs in low skill assembly activities, without any promotion of the development of capabilities. Therefore the usual reasoning for why manufacturing promotes growth – for example, learning and linkages – would not apply. Prof Al Berry argues that Malaysia may have a similar problem albeit less extreme, in having promoted electronics assembly without having developed deeper capabilities.

- In a set of 11 case studies of economies that managed to accelerate and sustain high growth rates, the majority implemented some combination of a devaluation to boost exports, investments in key network services, and strong market access arrangements. Chile had the strongest market orientation in the group, but even it invested heavily in R&D to initiate new industries and devalued its currency for a period.
- To achieve shared growth through wage income, industrial policy *must* apply itself to enabling the expansion of newer industries that have the same growth-inducing properties normally associated with manufacturing. The most likely source of both growth-inducing and employment-creating industries will be found in services. New ways of thinking about how to stimulate these sectors will be required, as will strategies to identify ways of promoting backward linkages into manufacturing. The study by Fiona Tregenna on the linkages between services and manufacturing shows how strong the pulling power of services can be. However, the more creative work will be found in the realm of business strategy, and in identifying new promotional industrial policy levers. South Africa cannot afford to miss opportunities where it has existing capabilities in a receptive global economy. Some of these are identified in the companion case study by Sandy Lowitt on the construction sector.
- All of our research shows that there will be no “silver bullet”. No one intervention will generate “a million jobs”. We have done a myriad of sector studies and each one offers up potential in the range of 20,000 to 250,000 net new jobs. Often we feel disappointed that yet again we have only identified a small opportunity. This mindset needs to change. Employment will arise as a result of deeper linkages in the South African economy. Employment expands as an organic process as one thing leads to the other. The diversity in the South African economy is a strength – it takes awhile to build, but it is also harder to destroy and so rolls through shocks with less trauma.
- While sector interventions will be important, a recognition that employment is likely to arise from many different, perhaps as yet unknown activities heightens the importance of improving the general business environment. Economic policy may have more impact on employment if efforts were first and foremost concentrated on reducing the risk/reward of investing in newer activities.
- Government has committed to reducing volatility in exchange rates and ensuring it is competitive, and at improving price and quality of utilities and network industries. These will be critically important to creating more bias that is favourable to labour absorbing traded goods and services. The scenarios in this paper draw out three very different but real possibilities for how slower or faster progress in achieving these targets could impact on the character of employment creation.
- Some of the other levers available to government that will become increasingly important in the promotion of newer industries include: easing the movement of people in and out of South Africa, more supportive R&D incentives for services industries, and more emphasis on services trade arrangements enabling market access and movement of people.

- It is surprising that the informal economy is so small in the context of such high unemployment. This may be explained by two factors. First, the regulatory environment is conducive to formality. In some countries, such as Brazil, the regulatory environment is highly pernicious and firms actively seek to avoid registration. In SA, tax rates are relatively low, there are flexible forms of registration and taxation, and urban regulations may make it relatively more difficult to operate as an informal entity. Second, in addition to the barriers caused by lack of access to capital or skills, high crime rates, or entrepreneurial skills, there are also barriers associated with market structure. The formal economy is very sophisticated and has penetrated deeply into poor household consumption. Moreover, there are few production linkages in the informal economy: most informal retailers repackage goods bought from the formal sector. Although the informal sector is more labour intensive, informal employment is growing more slowly than formal employment. Therefore it is very hard to say how informal activity might expand or contract in relation to general economic growth.
- Even at relatively high rates of economic growth, the commitment to halving unemployment will require substantial direct job creation by government. The higher the rate of growth, the more the public service can expand. The lower the rate of growth, the more government will have to devote resources to public works schemes.
- Between 2004 and 2024, public sector employment could grow by about half the GDP growth rate. So, if GDP grows by 6%, public employment could grow by 3% pa. The precise rate of growth will depend on the skills distribution and the allocation of public personnel spending between new hires and salary increases. Service delivery is the main purpose of expanding public employment. However, in the context of high unemployment, public employment can also play an important labour market role.
- Government has committed itself to halving unemployment and poverty by 2014. Even if unemployment is halved, it is probable that social grants will be needed, in the context of low wages. An effective employment/poverty reduction package is likely to include some combination of improved service delivery, reduced prices for goods and services bought by the poor, access to a garden, as well as social grants. This along with improved education, skills and active labour market policies will be investigated in the next round of employment scenarios.