DISCUSSION PAPER FOR PUBLIC COMMENT

National Treasury

Confronting youth unemployment: policy options for South Africa

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Confronting youth unemployment: policy options for South Africa

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Introduction

South Africa has an acute problem of youth unemployment that requires a multi-pronged strategy to raise employment and support inclusion and social cohesion. High youth unemployment means young people are not acquiring the skills or experience needed to drive the economy forward. This inhibits the country's economic development and imposes a larger burden on the state to provide social assistance. The salient facts about youth employment can be summarised as follows[1]:

- About 42 per cent of young people under the age of 30 are unemployed compared with less than 17 per cent of adults over 30.
- Only 1 in 8 working age adults under 25 years of age have a job compared with 40 per cent in most emerging economies.
- Employment of 18 to 24 year olds has fallen by more than 20 per cent (320 000) since December 2008.
- Unemployed young people tend to be less skilled and inexperienced – almost 86 per cent do not have formal further or tertiary education, while two-thirds have never worked.

Why are young people unemployed?

There are a number of explanations why young people are unemployed, these include

- Employers look for skills and experience; they regard unskilled, inexperienced jobseekers as a risky investment.
- Education is not a substitute for skills. Schooling is not a reliable signal of capabilities, and low school quality feeds into poor workplace learning capacity.
- Given the uncertainty about the potential of school leavers, employers consider entry-level wages to be too high relative to the risk of hiring these inexperienced workers.

A multi-pronged strategy to reduce youth unemployment

The New Growth Path calls on the state to provide bold, imaginative and effective strategies to create the millions of new jobs that South Africans need. This requires a combination of initiatives that require direct state involvement, private sector partnerships, as well as the mobilisation of civil society to take a proactive interest in addressing the problems presented by unemployment. To this end, the outcomes-based approach that has been adopted by government identifies the need to develop a multi-pronged strategy to tackle youth unemployment.

[1] Quarterly Labour Force Survey for the third quarter of 2010 published by Statistics South Africa.

Policy options to support youth employment will provide an additional lever for government to create jobs and will not be limited to any particular sector. In certain areas, such as tourism, the New Growth Path already identifies opportunities for youth. These include improving training, as well as identifying employment and entrepreneurial opportunities for youth.

Summary of process to develop the multi-pronged strategy to tackle youth unemployment

Developing a multi-pronged strategy to tackle youth unemployment is a priority in government's programme of action for 2011/12. Activities that will contribute to developing the multi-pronged strategy include:

- Reviewing the legislative environment.
- Identifying the desirable scope and budgetary requirements, of youth brigades and other forms of public employment.
- Conducting a trial of the youth employment subsidy.
- Improving education performance and skills development in the schooling and further education system.
- Improving the public employment services available to the youth to aid matching of skills, job search, career guidance and counselling, skills development and job placement.
- Establishing a monitoring system with regular reports on progress.
- Strengthening relationships with the NYDA and other youth services agencies.

Addressing youth unemployment requires both short- and long-term measures that encompass increasing demand for labour, improving education and skills, and labour market interventions that improve the employability of young people. This paper highlights various policy options that are available to government but focuses mainly on the youth wage subsidy.

The gap between productivity and real wages for young workers is an important constraint to job creation. Skills deficiencies contribute to this gap and make education and skills development a priority for government.

Education interventions need to raise the quality of basic and higher education, re-engage drop-outs with the education system and provide an environment that cultivates academic, technical and vocational skills. These interventions will take time to implement and have an effect, particularly given current pass rates and the number of young South Africans that do not complete Grade 12. In the interim, government needs policies that actively integrate young people into the labour market.

South Africa has a range of labour market policies that can help lower youth unemployment. These focus on improving the employability of the youth (through existing education policies and skills development via the learnership incentive) or provide direct public sector employment through EPWP. These approaches should be complemented by a youth employment subsidy.

Employers would be able to claim the learnership incentive in addition to any youth employment subsidy if they provide formal training to subsidised workers. Other approaches could be investigated to link the subsidy to job readiness, job search assistance or other forms of training and skills development.

The motivation for a youth employment subsidy

It is important to recognise that in an environment where young people have little work experience and the costs of firing and hiring new staff can be high, firms will tend to hire fewer young people than they should. Demand for young people to work in firms is low.

A youth employment subsidy aims to address this.

- First, the subsidy reduces the financial costs or risk associated with not knowing the productivity of the person to be employed.
- Second, the youth employment subsidy could help to make the training of young workers more affordable to employers, particularly smaller employers.
- Third, the subsidy may encourage more active job-search because youths believe that are able to find work.

In summary, a youth employment subsidy lowers the relative cost of hiring a young person (while leaving the wage the employee receives unaffected) and therefore increases demand for young workers.

An additional benefit is that the work experience and training gained during the period of subsidised work will improve longer-term employment prospects. Getting that first job is important. Young unemployed people who have some work experience are over three times more likely to find a job than young people have none.

Design, implementation, cost and job creation

The proposed youth employment subsidy is to be implemented from 1 April 2012. It will run through the Pay as You Earn (PAYE) system operated by the South African Revenue Service (SARS).

The subsidy will be subject to an initial implementation period of three years with detailed monitoring and reporting on a quarterly basis. Continuation of the subsidy and design changes will depend on a full impact evaluation, with appropriate job creation and cost per job criteria.

The subsidy will be available for young and less skilled people aged between 18 and 29 years old earning below the personal income tax threshold. It will be available for a maximum of two years and have a maximum value of R12 000. This is approximately half of the average income of a formal-sector worker aged 18 to 29 years old and eligible for the subsidy.

It is estimated that the youth employment subsidy will subsidise 423 000 new jobs for young and less skilled people aged between 18 and 29 years old. The youth employment subsidy is expected to cost R5 billion in tax expenditure over three years. Net new job creation is estimated to be 178 000 jobs at a cost per job of R28 000.[2]

The 18 to 29 age range targets the group with the highest unemployment rate that would benefit most from exposure to the labour market – in this group the majority have never worked before and exit rates out of unemployment are low.

Way forward

The publication of this discussion paper will initiate a process of public consultation regarding options available to the state to increase the number of youths in employment. The consultation process will include:

- Discussions within the Economic Sectors and Employment Cluster of the youth employment subsidy as part of the multi-pronged strategy to tackle youth unemployment
- Initiation of discussions on the youth employment subsidy and other proposals through the Nedlac process to gather further inputs from social partners
- Final proposals made to Cabinet

Submission of comments

[2] Given that firms would have employed a number of young workers over the next three years without the subsidy, the total number of workers subsidised will be larger than the job creation that occurs as a result of the youth employment subsidy.

Members of the public are invited to provide commentary on the positions advocated in this paper. Written comments should be submitted to the following email: ria@treasury.gov.za 30 April 2011. For further information, contact Jabulani Sikhakhane on 012 315 5944.

Confronting youth unemployment: policy options for South Africa

Discussion paper

1. Introduction

The persistently high rate of unemployment in South Africa is one of the most pressing socio-economic challenges facing government. Only two in five working age adults in South Africa (those aged 15 to 64 years old) have a job and more than 4 million people – 24 per cent of the workforce – are currently unemployed.

For South Africa to become more inclusive, many more people need to be provided with the opportunity to work and make a productive contribution to the economy and society. Unemployment not only represents foregone output today and a waste of potentially productive resources, but it can also have a negative effect on future output. Employment is not only about earning an income – it also promotes dignity, independence, achievement and innovation. The unemployed do not acquire the skills or experience needed to drive the economy forward, which in turn inhibits the country's economic development and imposes a larger burden on the state to provide social assistance. In addition, unemployment is associated with social problems such as poverty, crime, violence, a loss of morale, social degradation and political disengagement (Kingdon & Knight, 2000; Levinsohn, 2008).

No single policy offers the solution; what is needed is a sustained period of accelerated and inclusive economic growth and a comprehensive set of short-term and long-term policy reforms and initiatives.

Young people are particularly disadvantaged in the labour market. The problem of youth unemployment in South Africa is acute and has worsened significantly over the last two years as a result of the recession. Employment of 18 to 24 year olds fell by more than 20 per cent (320 000) between December 2008 and December 2010, compared with an overall decline of 6.4 per cent. The unemployment rate among those under the age of 25 years old is about 50 per cent, accounting for 30 per cent of total unemployment. Including those aged 25 to 29 years old adds another million to the unemployed. Unemployed young people tend to be unskilled and inexperienced. Almost 86 per cent of unemployed youths did not stay in school beyond Grade 12, while two-thirds have never worked. Inexperience is a particular drag on employment prospects and can explain some of the implicit age discrimination in the labour market.

A better educated and more highly skilled workforce is the most pressing long-term priority for the economy. Government is implementing a number of interventions to improve the quality of education, reduce the number of drop-outs, and expand further education and training. These include measures to improve literacy and numeracy (including the introduction of national assessments at Grades 3 and 6), increase the number of quality passes in maths and science, and encourage the National Curriculum to offer vocational education options for young South Africans in order to reduce drop-out rates after Grade 9. These interventions will be critical for improved education and skills development and will need to be evaluated to ensure they are having the desired impact.

Education interventions to rectify skills shortages require time to implement and even longer to have an effect, particularly given the large number of young South Africans who start school but fail to complete Grade 12. Until these improvements are made, those that drop out from school and school leavers who do not pursue further education and training will struggle to be absorbed into the labour market. In response, South Africa needs to introduce labour market policies, initiatives and incentives that strengthen demand for young workers as soon as possible. This discussion paper outlines a number of policy options and interventions aimed at confronting the challenge of high youth unemployment. These include training programmes to improve skills, private sector incentive schemes that include employment subsidies but also incentives for entrepreneurs and new firm start-ups; direct public sector employment creation, and

employment services and sanctions that aim to improve job readiness and the efficiency of job search and matching procedures.

By themselves, labour market policies cannot end unemployment in South Africa. To create more jobs, it is critical for the economy to achieve more rapid, sustained and inclusive growth. Strong economic growth between 2003 and 2008 helped to create more than 2 million jobs and lowered the unemployment rate from 27.1 per cent in 2003 to 21.9 per cent in 2008. Employment scenarios conducted by the National Treasury suggest that the moderate recovery projected in the *2011 Budget Review* may only create 1.7 million jobs over the next five years. Without accelerated and sustained economic growth and a high employment-absorptive capacity of that growth, unemployment is likely to remain high. However, there is scope for interventions to accelerate this process by mitigating some of the impediments to job creation.

There exists considerable evidence that young people are disadvantaged in the labour market. The shortfalls in the education system constrain the prospects of young people, leaving them ill-equipped for the workplace, in many cases without basic competencies. Young people also lack work experience, which provides critical on-the-job learning and training; contact with the job market; and the potential to develop networks (an important factor in improving employment prospects). Experience is vital: a young person with some work experience is in a far better situation than one without.[3] Together, these contribute to a gap between entry-level real wages and productivity, which is particularly large for young entry-level workers and deters firms from hiring young workers whose productivity they cannot adequately assess.

The policy options discussed in this paper all have merit and should contribute to a multi-pronged approach to reducing youth unemployment. We argue that South Africa's inadequate labour demand, the large gap between real wages and productivity for young people, and the fundamental role that work experience plays in improving young people's employment prospects require interventions on both the supply and demand side of the labour market. This document focuses on one such measure, a youth employment subsidy. A separate document will be prepared on other youth employment measures, once finalised by departments.

A youth employment subsidy will not, in itself, solve unemployment among young South Africans. It is however a useful measure that will assist young, inexperienced workers gain work experience, access decent jobs in the formal sector and improve their employment prospects in the long run. By lowering the relative cost of employing young and less skilled workers, the youth employment subsidy aims to narrow the gap between entry-level real wages and productivity for young people, thereby reducing the riskiness associated with hiring and stimulating job creation. The experience and on-the-job training gained while working will increase productivity making young workers viable labour for the firm after the subsidy expires or improves their long-term employment prospects elsewhere.

This discussion paper proposes a youth employment subsidy supported with possible complementary interventions and provides some initial estimates for its impact and cost. Overall we project that a youth employment subsidy could subsidise more than 423 000 new jobs for less-skilled young people over three years, at a cost of R5 billion in tax expenditure, with net job creation of 178 000. This would make an important contribution to creating decent jobs for young people and alleviating youth unemployment.

The paper is structured as follows. Section 2 argues that higher employment is an imperative for creating a more inclusive economy and society before Section 3 introduces the challenge of youth unemployment in South Africa. Section 4 discusses policy options to confront youth unemployment while Section 5 discusses employment incentives and subsidies more generally and the international evidence. Section 6 argues why the introduction of a youth employment subsidy should be a policy priority before we outline how such a subsidy may work for South Africa in Section 7, including possible indirect effects, unintended consequences and design issues. Section 8 provides the conclusion. In the annex we provide more detail around the proposal including pertinent design, operational and administrative issues, and detail on the estimates regarding the potential cost and impact of such a policy.

[3] We find that a young person with work experience is almost three times more likely to find a job than one with none.

2. Higher employment for greater inclusion

The importance of a job lies not only in the income that is earned and the skills that are acquired, but also in the intangible and invaluable benefits it provides including dignity, independence, accomplishment and freedom. Inclusion requires that people have the opportunity to work and make a productive contribution to the economy and society, whatever their race, age, gender, and educational background. Too few, particularly among the young and the less skilled, have this opportunity currently.

For South Africa to become more inclusive, more people need to work. The most obvious example of insiders and outsiders in the economy is between those that have jobs and those that are unemployed and non-economically active. South Africa faces the harsh reality that not enough people work. Out of a population of some 50 million people, there are only 13.1 million employed. Poverty, inequality and social inequities stem from the exclusion of the majority from the labour market. Higher employment and economic participation would help make progress in reducing poverty and income inequality in South Africa.

The labour market plays a dominant role in driving income inequality in South Africa. While wage income accounts for 70 per cent of total income, it makes an 85 per cent contribution to income inequality (Leibbrandt et al, 2009). This partly reflects inequality within wage earners, as skills-biased technical change has accelerated the demand for high-skill workers and high-skill wages at a faster pace than for the lower-skilled, but also factors in the role of low labour force participation and employment rates in the economy. At least a third of wage inequality is due to the large share of households that have no workers and no wage income. This is particularly important for the bottom 10 per cent of households where 80 per cent of households have no workers, only 10 per cent are employed and the unemployment rate is almost 70 per cent. Pervasive unemployment is the primary explanation for why many of these households find themselves at the bottom of the income distribution.

For those at the bottom of the income distribution there is a growing dependence on social assistance from the state. The share of income going to the bottom 10 per cent of the income distribution that is accounted for by government grants has risen from 15 per cent in 1993 to 73 per cent in 2008 (Leibbrandt et al, 2009). While this has played an important role in lowering poverty, social grants have not had an impact on income inequality. Furthermore, social grants do not address inclusion in the same way that job creation does because they do not provide the opportunity to actively participate in the economy.

When considered in this way, inclusion is perhaps best captured and measured by the employment ratio or absorption rate – the share of the working age population that have jobs.

South Africa's employment ratio is currently 40.8 per cent; this means that just two-out-of-five working age South Africans (aged between 15 and 64) has a job. The employment ratio is very low by international standards, and compares with 65 per cent in Brazil, 71 per cent in China, 55 per cent in India and an average of 56 per cent across emerging markets.

Decomposing the employment ratio between youths and adults, it can be seen that the adult employment ratio in South Africa (53.5 per cent) is eight percentage points below the emerging market average (62 per cent) but higher than in Poland, Hungary, and Turkey. The youth employment ratio for 15 to 24 year olds in South Africa is currently just 12.5 per cent, meaning that only one in eight young people have a job. This contrasts with a youth employment ratio higher than 40 per cent in many developing economies in Latin America and Asia.[4]

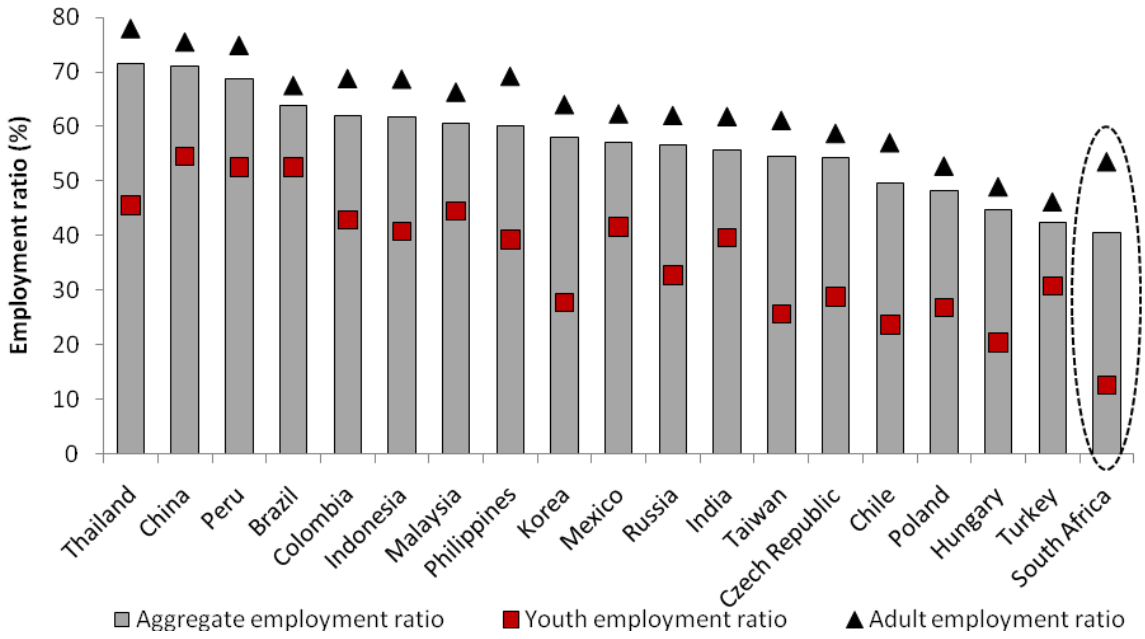
Youth unemployment in South Africa is compounded by very low participation rates, with just 24.4 per cent of young people participating in the labour market. Youth participation is naturally depressed by full-time education: 5.7 million young people are not working because they are in education or training.

[4] The average for a selection of emerging markets is 36 per cent (ILO Key Indicators of the Labour Market, 6th Ed.).

However, South Africa's participation rate remains far below the average for emerging markets (42 per cent). It is interesting that for the adult population (those over 25 years old) participation rates are just above the emerging-market average of 67 per cent.

If South Africa were to elevate the employment ratio to levels comparable with other emerging markets, it would bring millions more into the workforce and provide a significant boost to inclusion. Raising the aggregate employment ratio in South Africa to the emerging market average of 56 per cent requires employment to be 5 million higher than it is today. [5] Taking into account growth in the labour force, South Africa would have to create 9 million jobs over the next 10 years.

Figure 1: Youth and adult employment ratios in South Africa and selected emerging market economies [6]



Source: ILO (Key Indicators of the Labour Market, 6th Ed.), Statistics South Africa Quarterly Labour Force Survey, June 2010

[5] To achieve the average emerging market employment ratios for youth (36 per cent) and adult (62 per cent) requires job creation of an additional 2.4 million for young people and 1.9 million jobs for adults – together this would be 4.3 million jobs that would raise the overall employment ratio to 53.7 per cent.

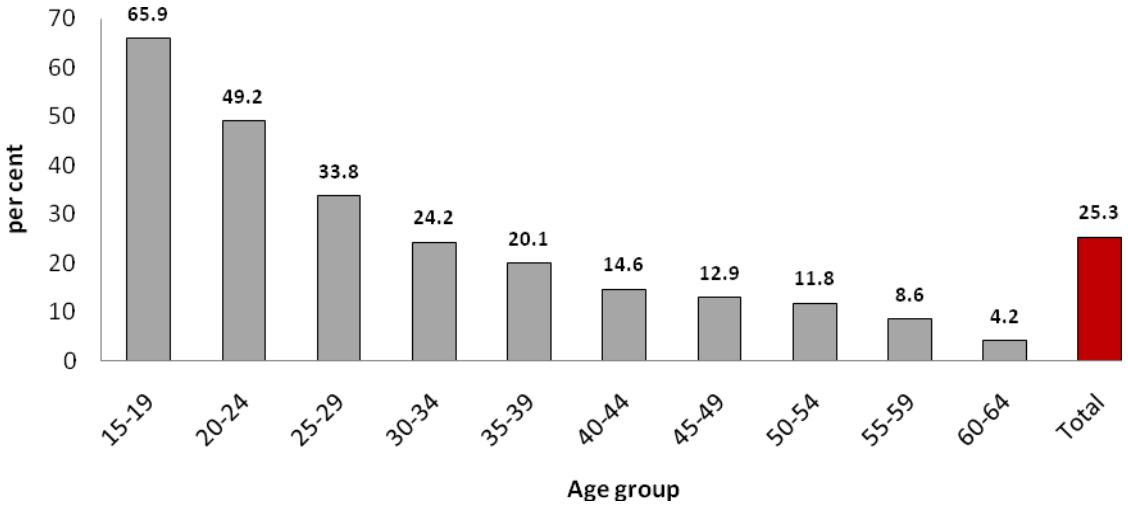
[6] The emerging markets chosen are from MSCI Barra list, which includes Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Korea, Malaysia, Mexico, Morocco, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, and Turkey.

3. An introduction to youth unemployment in South Africa

There are currently 4.1 million unemployed workers; one in four of those available to work do not have a job. About 2.8 million are long-term unemployed and a further 2.2 million are discouraged.[7] South Africa's unemployment rate of 24 per cent is among the highest in the world and rises to 32.4 per cent if discouraged workers are included. Despite making up just 0.5 per cent of the global labour force, South Africa accounts for 2 per cent of global unemployment.[8] Added to this, participation rates are low.

The employment challenge facing South Africa's youth is even greater. Using the country's definition of youth (15 to 34 years), about 3 million young people were unemployed in December 2010 and 1.3 million were discouraged. This translates into an unemployment rate of 34.5 per cent and represents 72 per cent of overall unemployment. Applying the International Labour Organisation's definition, which restricts "youth" to those aged between 15 and 24 years, the number of unemployed is more than 1.2 million (30 per cent of overall unemployment) with an unemployment rate of 49 per cent: one in every two people below the age of 25 looking for work is jobless.[9]

Figure 2: Unemployment rates are much higher for the youth (3Q 2010)



Source: Statistics South Africa Quarterly Labour Force Survey, September 2010

South Africa's young workers have been worst affected by the economy's first recession for 17 years. Employment of 15 to 24 year olds has contracted by about 22 per cent since the end of 2008, with some 355 000 young workers becoming unemployed. Young persons account for about 40 per cent of job losses between December 2008 and December 2010.

The ratio of youth to adult unemployment in South Africa is about 2.5 (i.e. the youth unemployment rate is two and half times larger than the adult unemployment rate). Cross-country comparisons indicate that this is broadly in line with other emerging markets (see below).[10] The relative magnitude of youth unemployment is therefore not an unusual characteristic of South Africa's labour market. What makes

[7] *Discouraged work-seekers* are persons who wanted to work but did not try to find work or start a business because they believed that there were no jobs available in the area, were unable to find jobs requiring their skills, or had lost hope of finding any kind of work. Persons in *long-term unemployment* are those individuals among the unemployed who are without work and trying to find a job or start a business for one year or more.

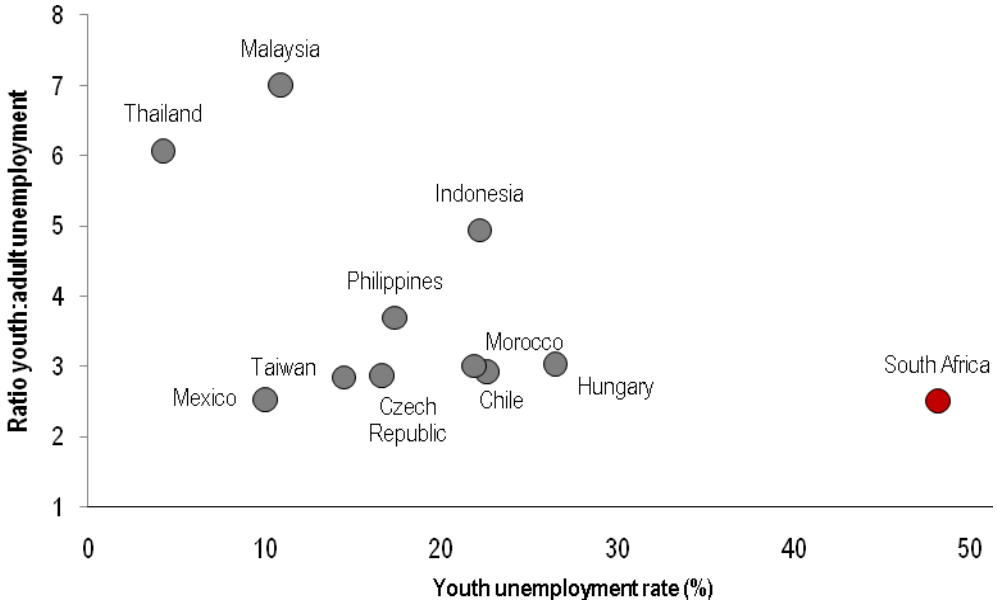
[8] This is based on estimates for 2010 from the ILO Global Employment Trends publication.

[9] The corresponding unemployment rate using the expanded definition is 44.6 per cent for 15 to 34 year olds and 61.1 per cent for 15 to 24 year olds. This rate has been subject to a large increase over the past 12 months, rising by almost ten percentage points.

10 The emerging markets chosen are from MSCI Barra list (see above).

South Africa an outlier from an international perspective is the absolute magnitude of youth unemployment.

Figure 3: Youth (15-24) to adult unemployment ratio compared with the youth unemployment rate in emerging markets[11]



Source: ILO (Key Indicators of the Labour Market, 6th Ed.), Statistics South Africa (QLFS, December 2009)

Calculating a measure of the 'intensity' of unemployment, which we define as the rate of unemployment weighted by the share of unemployment or labour force participation adjusted for education attendance, provides an approximate guide to where unemployment is most acute and identifies where policy efforts should be concentrated.[12] For example, the high unemployment rates of those aged 15 to 19 (64.8 per cent, see Figure 1) should be weighed against the fact that this age cohort only accounts for 5 per cent of the unemployed since many remain in full-time education. Applying these intensity concepts to South African data we find that youth unemployment is more severe than joblessness among adults.[13]

Table 1: The 'intensity' of unemployment, by age group

	Unemployment rate (%)	Share of unemployment (%)	Labour Force Participation Rate(%) (Adjusted for education and training attendance)	Unemployment Intensity (Weighted by employment share)	Unemployment Intensity (Weighted by adjsuted LFPR)
18-24	51.0	30.3	59.8	0.155	0.305
25-29	33.8	24.0	71.6	0.081	0.242
30-34	24.2	16.8	76.2	0.041	0.185
35-39	20.1	11.8	75.0	0.024	0.150
40-44	14.6	6.4	75.7	0.009	0.111
45-49	12.9	4.6	70.0	0.006	0.090
50-54	26.0	87.2	61.3	0.227	0.160
55-59	8.6	1.6	51.1	0.001	0.044
60-64	4.2	0.3	26.4	0.000	0.011

Source: Statistics South Africa Quarterly Labour Force Survey, September 2010

Why are the young so disadvantaged in the labour market? While the young unemployed are more educated than older cohorts (Figure 5), they do not appear to have the skills required by the economy,

[11] Most data is from 2009, except Malaysia (2008).
[12] Younger age cohorts have low participation rates because of educational attendance. To account for this downward bias in participation at younger ages we adjust for educational attendance when providing a labour force participation rate.
[13] This is certainly the case for 18 to 24 year olds and to a lesser extent for those aged 25 to 29 years old.

suggesting that schooling is not regarded as a reliable signal by employers.[14] This is illustrated by the very high unemployment rates, even for those with education to Grade 12.

Figure 4: Unemployment rates by age and education, (Q3 2010)

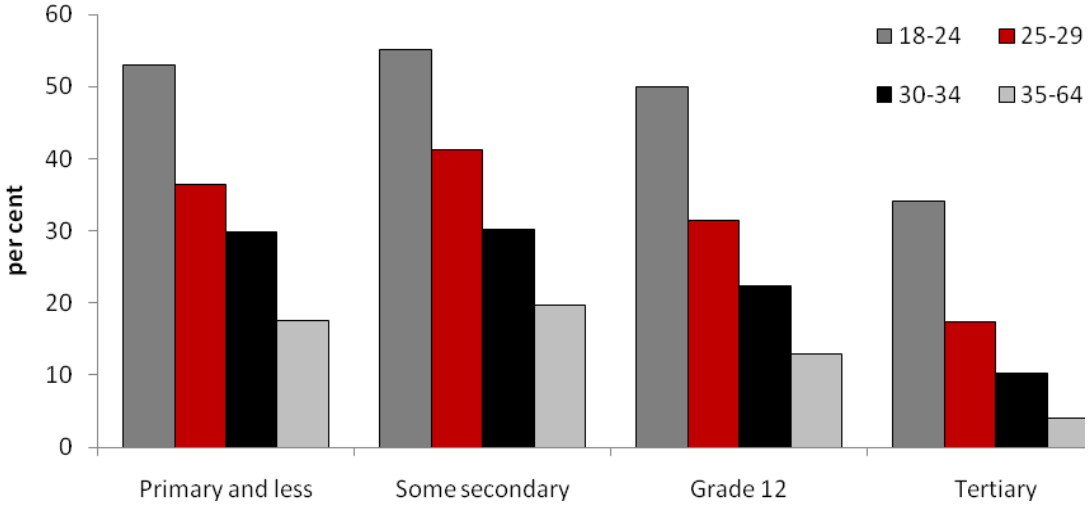
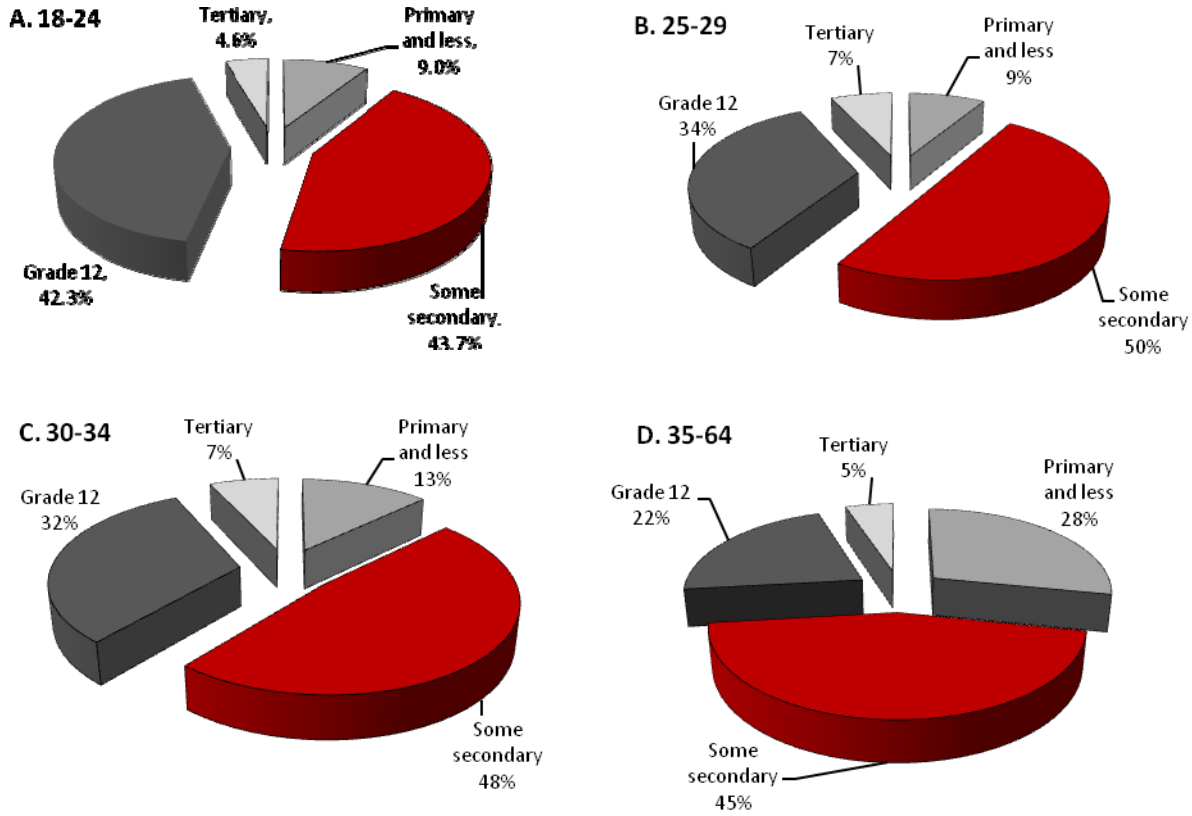


Figure 5: Share of unemployment by age and education, (Q3 2010)



Source: Statistics South Africa Quarterly Labour Force Survey, September 2010

Education is not a substitute for skills. Although most unemployed young people have some secondary schooling or have completed Grade 12, schooling is not a reliable signal of capabilities. Employment prospects are constrained by low teaching standards and high drop-out rates. Over the past five years, the

[14] About 40 to 45 per cent of the unemployed under the age of 35 have either completed secondary education or have a tertiary qualification. This falls to below 20 per cent for those older than 44 years.

continuation rate from Grade 11 to Grade 12 has averaged 67 per cent.[15] This implies that one-third of all Grade 11 students either drop out from secondary school or repeat Grade 11. A further 7-8 per cent of Grade 12 students fail to write the Matric exams each year. Combining these figures with the Matric pass rate, which was 67.8 per cent in 2010, illustrates the low rate of secondary school completion. Labour force data supports this, showing that only 44 per cent of working age individuals has completed secondary education.[16] Poor school quality feeds into low workplace learning capacity.

Exacerbating the skills issue, negotiated wages are a poor reflection of entry-level productivity. The interaction between productivity and real wages is a critical determinant of job creation and a gap between real wages and productivity undermines competitiveness, discourages businesses from hiring workers and pushes unemployment higher. Figure 6 indicates that unemployment rates across emerging economies are positively correlated with their ranking for how well pay reflects productivity. South Africa ranks 112th out of 139 countries in the World Economic Forum's *Global Competitiveness Report 2010/11* for this measure of labour market efficiency.[17] The gap between real wages and productivity is particularly high for young and lower-skilled workers, due to poor education, low skills and a lack of work experience, and contributes to the problem of youth unemployment, as companies are reluctant to increase hiring when they cannot adequately assess potential.

Figure 6: Unemployment rates and ranking for how well pay reflects productivity in emerging economies[18]

Source: ILO (Key Indicators of the Labour Market (KILM), 6th ed.), World Economic Forum, Global Competitiveness Report 2010/11

An important reason why joblessness is so high among the youth is that young people struggle to gain work experience, which is an important signal of ability to potential employers. This could explain the large number of young South Africans who are unemployed and the significant numbers who spend sustained periods without a job after leaving education.

[15] The continuation rate from Grade 11 to Grade 12 is taken by comparing the number of learners registered for Grade 12 and subtracting the number of learners registered for Grade 11 a year earlier. This approach is affected by unobserved factors such as grade repetition but is a useful indication of the high drop-out rate at this level of schooling.

[16] This uses data from adults older than 20 years old to exclude the majority of students still attending secondary school.

[17] This uses data from the World Economic Forum Global Competitiveness Report 2009/10 which asks a question in the Executive Opinion Survey about how well pay reflects productivity. A high ranking indicates that pay is a good reflection of productivity in the country, and vice versa for low rankings.

[18] Unemployment rates are for 2008

Within this context, South Africa's system of sectoral minimum wages may have contributed to the low levels of youth employment through pushing up the cost of entry-level workers. The potential effects of minimum wages on youth employment and unemployment rates have been examined in a number of international studies. The balance of this international empirical evidence suggests that high minimum wages can have a negative impact on youth employment by driving a wedge between youth labour costs and their expected productivity, thereby raising unemployment and discouraging some youth from entering the labour market (OECD, 2010).

Data from Andrew Levy shows that the average minimum wage across all sectors is about 62 per cent of the average formal sector wage (OECD, 2010). This is very high by international standards and far above the average in the OECD (37 per cent), which is already elevated compared to emerging and developing countries. Furthermore, whereas many countries differentiate minimum wages by age through the inclusion of sub-minima for youths, this is not the case for South Africa.[19] The minimum wage in South Africa therefore does not account for the lower productivity of younger workers. This exacerbates the implicit gap between entry-level wages and productivity, and hinders the hiring of younger workers.

Policy interventions to address the youth employment challenge need to concentrate on narrowing this gap between productivity and real wages for young workers in a sustainable manner, allowing young people to access decent employment in formal and well-regulated jobs. The next section considers a number of policy options available for doing so.

[19] Several OECD countries have sub-minima for younger workers. On average these sub-minima are 72% of the level of adult minimum wage and range from a low 40% in the Netherlands to 90% in France. They also tend to differ in their coverage, ranging from 15 years old to those under the age of 22.

4. Confronting youth unemployment: policy options

The magnitude of the youth employment challenge facing South Africa means it cannot be resolved by a single employment policy. A combination of interventions, or multi-pronged approach, is likely to offer the greatest potential for young people to gain decent work opportunities and alleviate youth unemployment. This discussion paper considers a range of potential labour market reforms with a special focus on a youth employment subsidy. However, there are a number of other important policy areas that require consideration, including economic growth and improvements in education.

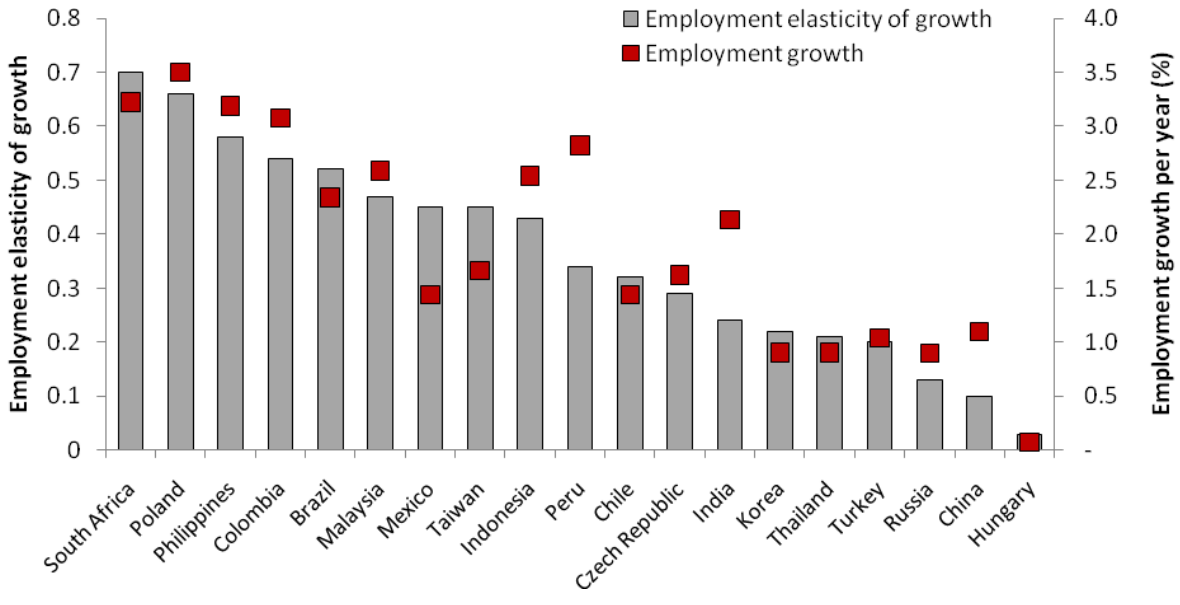
4.1 Economic Growth

Policies that support accelerated and sustained economic growth are important because a growing economy boosts labour demand and decent employment opportunities. South Africa created about 2 million jobs between 2003 and 2008 as GDP growth averaged about 4.9 per cent. Much of this job creation was concentrated in sectors that enjoyed rapid growth such as construction (13.9 per cent, 500 000 jobs) and finance (9.6 per cent, 520 000 jobs) with almost 90 per cent of the job creation in the formal sector.

Employment growth during this period was stronger than most emerging-market economies (including the BRIC group of Brazil, Russia, India and China) and economic growth was highly labour absorbing. The employment elasticity of growth, which measures the percentage change in employment for a one per cent rise in GDP, was 0.7, meaning that for every 1 per cent of GDP growth, employment expanded by 0.7 per cent.

The importance of economic growth for youth employment was also illustrated during this period of high growth as youth employment (15-24 years old) expanded at an annual rate of almost 6 per cent per year, faster than for any other age cohort.

Figure 7: Employment growth and the employment elasticity of growth, 2004-08



Source: ILO (Key Indicators of the Labour Market, 6th Ed.), Statistics South Africa

4.2 Education

Formal education is critical in determining the quality of labour market entrants. The deficiencies of the education system are a fundamental constraint on the quality of young workers looking for jobs and limit a young person's ability to find decent employment. Education data suggests that continuation rates from Grade 11 to completing secondary school are low and that the quality of schooling is poor.[20] International tests of literacy, maths and science indicate South Africa performs poorly.[21] Combined, these are a drag on youth employment because they lower the productivity of young workers entering the labour market and therefore contribute to the gap that exists between productivity and real wages. The evidence presented here shows that for those that achieve Grade 12 and above employment prospects and absorption rates improve with education. This emphasises the importance of getting more young people to achieve higher levels of academic or vocational schooling. Improved employment prospects are particularly evident for those attaining some level of tertiary education but through-put from high school to tertiary schooling is low. Currently just one-fifth of those taking the senior certificate examination (and 12 per cent of those starting Grade 11) have grades that are good enough to access tertiary education. These factors illustrate the need to curb drop-out rates and improve the overall quality of the education system.

The best outcome would be an improved education system that reduces drop-out rates before Grade 12 and channels more students into tertiary education. This is a long-term priority of government and is included in the outcomes indicators for the Department of Basic Education. Policies to address quality issues include a focus on improving literacy and numeracy (including the introduction of national assessments at Grades 3, 6 and 9) and increasing the number of quality passes in maths and science.[22] In addition there is a significant role for *second-chance* programmes. Second-chance programmes aim to strengthen the employment prospects for unemployed, low-educated youth and to motivate their re-entry into education. These programmes target early school leavers (those that have dropped out of secondary school) and young adults who have not gone on to further education or vocational training programmes. There is relatively little evidence for these programmes regarding their impact and effectiveness but a Danish programme has reported positive short-run increases in employment and a decline in unemployment rates due to the significant transition from unemployment to schooling.[23]

There are a number of second chance initiatives within South Africa. One strategy to assist those who have dropped out of school before completing Grade 12 is that the previous curriculum's Grade 12 examinations will continue to be set until 2014 to allow these candidates to complete that qualification.[24] The National Youth Development Agency (NYDA) also has a National Senior Certificate Second Chance Project that targets young people who failed four subjects or fewer in 2008 and 2009. This initiative offered tuition and learner support to help students pass the National Senior Certificate examinations in 2010.[25]

4.3 Labour market policies

There is a wide range of labour market policies that can help address youth unemployment. Such programmes aim to increase the demand for labour in relation to labour supply, as well as improve the

[20] Education Statistics in South Africa (various years), Education Management and Information Statistics, available at www.education.gov.za.

[21] The International Education Authority's Progress in International Reading and Literacy Study (PIRLS, 2006) and Third International Mathematics and Science Study (TIMSS, 1996-98) shows South Africa is among the worst performers.

[22] Improving numeracy and literacy levels entails the provision of learner and teacher support materials, support to educators in the class as well as the introduction of a national assessment of Grades 3 and 6 literacy and numeracy to continually assess progress towards a target of 65% achievement for these two areas. Additional learner and teacher support in the areas of maths and science is concentrated on the Dinaledi schools – 400 high schools in disadvantaged areas where the focus is to increase the number of quality passes in maths and science. The Quality Learning and Teaching Campaign, launched in October 2008, seeks to commit various role-players (teachers; parents; support staff; learners; and the communities served by schools) to advance the goal of improved education quality. In the case of teachers, this is a commitment to "be on time, well-prepared for all my lessons, teach for at least seven hours every school day and improve my own skills and knowledge". All teacher unions have committed their support to the campaign.

[23] Evidence for the US JOBSTART programme provides a less positive picture with insignificant effects on employment prospects and high cost.

[24] In 2008/09 education statistics show that about 8% of students dropped out without completing Grade 12

[25] The National Youth Development Agency (NYDA) coordinates youth policy and youth interventions in South Africa across a number of areas including education and skills development, economic participation and information services.

employability of the youth. These so-called active labour market policies (ALMPs) focus on job creation and include: *training programmes* that aim to enhance skills and raise human capital; *private sector incentive schemes*, which include wage subsidies but also incentives for entrepreneurs and new firm start-ups; *direct public sector employment creation*, *employment services and sanctions* that aim to increase the efficiency of job search and matching procedures; and finally *comprehensive approaches* that combine a number of these policies.

4.3.1 Training programmes

Training programmes are intended to alleviate skills shortages in the economy. They are aimed at enhancing productivity and employability of participants and enhancing human capital through improving skills, in this case for young job-seekers, while simultaneously fulfilling the needs of labour demand. Internationally they are the most widely used labour market intervention and are often split into those designed to develop basic skills necessary for job readiness (numeracy and literacy, language courses, basic computer courses) and sector or industry specific vocational training programmes (advanced computer courses or specific technical training).

Training interventions in other countries tend to be supported by the public sector and are often directly provided by government; however, private sector participation is also common, particularly in Latin America. Close co-operation and dialogue between the public and private sectors helps ensure that training needs are demand-driven. The share of ALMP spending on training programmes tends to be quite high. For example, training programmes accounted for one-quarter of all expenditure on ALMPs in OECD countries between 1998 and 2007. Empirical evidence from many training programmes suggests skills-training has a somewhat lower incidence of positive employment impact than other ALMPs (World Bank, 2007) or that the effect is mixed (Kluve, 2006). However, evidence collected by the World Bank's Youth Employment Inventory indicates better effects from training in transitional and developing economies than in advanced economies. It is estimated that training in transitional and developing economies improves employment prospects by between 6 per cent and 57 per cent, with female and lower-educated individuals experiencing the highest gains.

The new National Skills Development Strategy (NSDS) guides skills development in South Africa and seeks to ensure that the labour market is better able to cope with developmental challenges such as poverty, inequality and unemployment through responsive education and training. The NSDS is implemented by the National Skills Fund (NSF) and the Sector Education and Training Authorities (SETAs). Twenty-five SETAs were established in 2000, of which 23 were re-established in 2005. With effect from 1 April 2011, 27 SETAs will be established due to the merger of some sectors within SETAs and the establishment of new SETAs.

The principal training mechanisms are learnerships and apprenticeships, which were established to fast track the development of employees, offer current and potential employees opportunities to acquire accredited qualifications, and serve as an entry point for young people into jobs. Learnerships are vocational and educational training programmes with a theoretical and work-based component which are aligned to the national qualification system.[26] In 2009/10 there were 51 607 learners enrolled on learnership programmes. A tax allowance is paid to employers that use learnerships or apprenticeships. Currently there is a maximum tax allowance of R30 000 on inception/registration and a further maximum allowance of R30 000 on completion of training.[27] Originally there was a higher allowance for learners who were unemployed at enrolment (so-called 18.2 learners) than for learners employed at enrolment (18.1 learners). [28] The learnership incentive operates as a type of employment subsidy since it lowers the cost of employing jobless individuals.

[26] Two types of learnerships exist: employers can offer learnerships to their own staff (18.1 learners) or recruit unemployed individual (18.2 learners).

[27] Learners with a disability are eligible for a maximum allowance of R50 000 for commencement and R50 000 on completion of the learnership or apprenticeship.

[28] The tax incentive for registering unemployed learners was higher than for employed learners, although this discrepancy was removed in 2009/10.

SETA performance has been uneven. A 2008 review by the Development Policy Research Unit (DPRU) at the University of Cape Town found that the skills development system suffers from weak reporting requirements, underdeveloped capacity, lack of effective management, and inadequate monitoring and evaluation that limit the ability of the SETAs to serve as primary vehicles for skills development. The SETAs now fall under the authority of the Department of Higher Education and Training (DHET), who have announced reforms to the system to make it more effective and accountable. The proposed extension to the learnership and apprenticeship tax incentive will continue to support training and employment. Analysis of the current scheme will allow improvement both in targeting youth and maximising job creation. There are lessons to be learned from the implementation of the learnership incentive.

Interrogation of available data and analysis of the learnership scheme (HSRC, 2008) provides some insight into who benefits from the incentive and the extent to which current skills development policies are directed towards the youth. The HSRC's database of learners shows that the majority of learners were previously unemployed – 57 per cent of learners in NSDS I and 69 per cent in the first two years of NSDS II. In addition, learners tend to be younger with the majority (59 per cent) aged under 30. The motivation for young people enrolling on a learnership qualification highlights the importance of improving skills and gaining work experience, which is a primary focus of the proposed youth employment subsidy. Data from the Human Sciences Research Council suggests that the learnership scheme is relatively successful in creating employment. Data from 2005/06 shows that 57 per cent of previously unemployed learners found jobs after completing the learnership. It is hard to compare this number with a counterfactual to provide an estimate for net job creation – the number of unemployed who would have been employed without the learnership – but it is likely that the 57 per cent overstates the true impact on employment.

Most learners enrol for intermediate skills development (approximately 70 per cent enrol for NQF level 4), with the majority being matriculants.[29] Salaries of 18.2 unemployed learners who find a job after completing the learnership are relatively high, with approximately half earning a salary of between R3 000 to R 5000 per month in 2005/06. This was above the personal income tax threshold of R35 000 in 2005/06. Together, these findings suggest that the learnership scheme does not cater for individuals at the lower end of the skills (and earnings) distribution where many young unemployed job-seekers are located. The size distribution of firms employing 18.2 learners shows that it is primarily medium and large firms that give jobs to unemployed learners, with 73 per cent going to large firms (150+ employees) and 17 per cent going to "medium" sized firms (50-149 workers). This suggests smaller firms, which are a particularly fertile ground for job creation among young people, are largely excluded from formal skills development.[30] This possibly reflects the administrative burdens frequently mentioned within the context of the learnership scheme and also the fact that small firms that do not pay the levy are reliant on the SETA board to approve funding for skills programmes.[31]

Other examples of training programmes in South Africa include the recently established Training of Unemployed Persons programme which is being run by the Department of Labour. A pilot programme with MERSETA (the SETA in the manufacturing and engineering sectors) is tailored directly to the needs of manufacturing companies and provides specific vocational training for candidates selected from the UIF database. The current participants have all been guaranteed employment upon completion.

Vocational training is also being pursued more aggressively through the education system with the National Curriculum (Vocational) (NC(V)) offered by FET Colleges as a viable alternative to the FET academic programme offered by schools. This is supported by a recruitment drive by the DHET, provincial departments, FET Colleges and the National Student Financial Aid Scheme (which administers the FET bursaries) to attract more learners to the skills-focused FET Colleges. Targeted interventions by the DHET

[29] The HSRC database finds 83 per cent of learners who enroll for NQF level 4 or below are matriculants.

[30] Micro-data available from the QLFS shows more than half of all young people work for firms with fewer than 50 workers.

[31] Smaller firms with payrolls less than R500 000 per annum do not pay the skills development levy and must apply for funding from the discretionary grant scheme.

have improved learner performance and raised the pass rate from 23 per cent of those who wrote in 2007 to 59.7 per cent in 2009. This is a key strategy for reducing the drop-out rate after Grade 9.[32]

4.3.2 Direct public sector employment creation

Public works programmes tend to be run by governments and target the most disadvantaged workers with the aim of keeping them in contact with the labour market and mitigating the depreciation of human capital during periods of unemployment. Approximately 9 per cent of ALMP spending in OECD countries was devoted to public sector direct job creation. In general, public works programmes have little effect on self-sustaining job creation; there is evidence that direct job creation by the government has an insignificant or even negative impact on an individual's probability of finding employment (Kluve, 2006).

South Africa's Expanded Public Works programme (EPWP) comprises a range of short-to-medium term programmes aimed at providing short-term jobs and training for the unemployed.[33] It is a national programme covering all spheres of government and state-owned enterprises. In its first phase the EPWP created 1.6 million short-term jobs. The success of the programme was, however, diluted by the limited duration of jobs, lack of training, and low labour intensity that increased the cost per job created. There is also little evidence that participating in EPWP projects improves a participant's subsequent transition to formal private sector employment. The second phase began in 2009 and is designed to increase both job duration and labour intensity of projects. It will remain a valuable short-term measure to mitigate unemployment and poverty.

Overall expenditure is budgeted at about R73 billion over the next three years. The programme has created about 1 million short-term jobs since the beginning of the second phase in April 2009, and targets the creation of nearly 800 000 short-term jobs of 104 days average duration in 2011/12. About 440 000 of these will be in infrastructure projects, such as provincial road maintenance. The community works programme, introduced in 2009, has grown rapidly and employed about 81 000 persons in part-time jobs by the end of 2010.

One policy option that has close links to public works is the idea of a National Youth Service or Youth Corps. The Department for Economic Development (EDD) raised the possibility of a programme to provide an opportunity for young people who have left school and who struggle to find employment, to take part in a period of public service. In the process they gain skills, experience of service provision as well as earn an allowance.

The broad aim would be to provide work experience to young people up to the age of 30 or 35 for a period of 12 months, and assist them to become employable. Young participants could be exposed during the period of service to extensive vocational training, career counseling, and placement (where possible) in full-time jobs. It would have three components: skills acquisition; service to the community; and internships within industry to provide job seekers with direct work experience. The public service component would include services not currently provided through the state in areas such as adult literacy, green economy campaigns, and rural development.

4.3.3 Employment services to improve job search and job matching and sanctions

Services and sanctions are measures aimed at improving job-search efficiency and the job-matching process in the labour market. Job-search assistance services include job-search courses, job clubs, vocational guidance, counselling and monitoring, while sanctions are included to discourage non-compliance with job search requirements. Although there are private services, public employment services (PES) are dominant and primarily target the disadvantaged and the long-term unemployed. Sanctions tend

[32] Learner performance during the first two years of the NC(V) programmes was very poor (20 per cent of students dropped out even before they wrote exams and many students struggled with the maths or maths literacy in particular, and so did not pass). The DHET has introduced various measures to improve performance, including the provision of additional training to all maths and maths literacy lecturers; providing maths and maths literacy workbooks; having students complete a placement test to ensure that they enrol for the most appropriate course; and providing academic support to all who need it.

[33] The training component was explicitly mentioned in phase I.

to take the form of a reduction in unemployment benefits and are imposed if monitored job-search behaviour is not sufficient or if a work seeker refuses an acceptable job offer. Kluve (2006) argues that these measures can be an effective means of reducing unemployment in a cost-effective manner with both job-search assistance and sanctions found to have a positive effect on employment and re-employment rates.

As part of its Public Employment Services, the Department of Labour offers an employer service, which aims to register vacancies and provide information on scarce skills, as well as to respond to companies in distress. Registration and placement services focus on the registration of work seekers, retrenched workers, training opportunities and work vacancies. These services are available to employers, job seekers and the unemployed through access points at local labour offices. The Department of Labour is considering the viability of a placement subsidy or placement support package, which could play an important role in assisting job seekers and providing a focus for the activities of the employment service.

The NYDA also provides a number of services that aim to facilitate the job search and match jobs to the requirements of young work seekers. These include:

- *The Graduate Development Programme (GDP)* and *Job Preparation Programme (JPP)* aim to enhance the employability of jobless graduates and matriculants by providing job preparation (e.g. work related life skills, computer literacy, CV preparation, interview readiness, etc.) and job development support that helps young people find work placements.
- The *National Youth Service* assists unemployed youth to acquire skills while providing community services. Young people acquire accredited technical skills, life skills and work experience as well as linkage to exit opportunities.
- The *Jobs & Opportunity Seekers (Jobs)* and *Graduate Database* links unemployed young people (especially unemployed graduates) to job opportunities. A database has been established which provides an online job-linking service which employers can use to find staff and on to which work seekers can load their CVs. The programme will now also start to focus on placing matriculants. The database is increasingly used by SETAs and companies to source learners for learnerships.
- *Youth Advisory Centres (YACs)* are walk-in centres established within communities by the NYDA (UYF) or in partnership with municipalities. They are one-stop service centres where young people can access all NYDA (UYF) products and services including career counselling.

4.3.4 Employment subsidies[34]

Wage or employment subsidies are incentives that aim to accelerate job creation and raise employment. They form a central feature of labour market policies in many countries through lowering the cost of labour to an employer or raising the wage a worker receives. This stimulates job creation and higher employment. Through assisting the unemployed into formal, well-regulated employment, employment subsidies also contribute toward the creation of decent jobs.

The majority of OECD countries have some form of job subsidy, recruitment incentive or policies to reduce non-wage labour costs (see Annex B). France, Germany, Spain and the United Kingdom have all implemented new measures over the last two years.[35] Several middle income countries have also adopted wage subsidies as a result of rising unemployment during the global economic crisis including Chile,

[34] A more detailed discussion of employment subsidies is presented later in the paper and possible operational, administration and design issues are presented in depth in Annex A.

[35] France reduced employer social security contributions for firms with fewer than 10 employees hiring new low-wage workers in 2009. Germany reduced employee and employer contributions to the unemployment insurance system. Spain reduced employer social contributions for the first two years of employment for unemployed people with children who move to full-time permanent contracts and social security contributions for youth or disabled workers who start up a business. In the United Kingdom, companies receive £2 500 for hiring workers who have been unemployed for more than six months.

Korea, Mexico, the Slovak Republic and Turkey.[36] In the cases of Chile and Turkey, these have been specifically targeted towards younger workers.

There are various forms of wage subsidy. They can be provided to employers to raise labour demand by reducing the cost of labour (employer-side subsidies) or given to employees to promote labour supply through increasing the returns to employment and hence improving the incentives to work (employee-side subsidies).[37] The subsidy can be a direct transfer, a reduction of or exemption from social security contributions, or paid as an income tax credit. It can be provided to those already employed or to new hires.

Many micro-level studies at the individual (labour-supply side) level find evidence that wage subsidies are successful in increasing the employment, or re-employment, prospects of the unemployed. The World Bank's Youth Employment Inventory (2007) argues that "wage subsidies have been particularly successful in improving short-term employment outcomes in transition economies, while having mixed outcomes in industrialised countries". There is also evidence that wage or employment subsidies have long-term dynamic effects through improving the permanent employability of participants. In Australia it has been estimated that the youth subsidy improved employment prospects by at least 20 per cent up to 26 months after the subsidy expired.

Employment subsidies are appealing because they target job creation directly unlike indirect measures improving the quality of workers entering the labour market. This is important since deficient labour demand is one of the main problems facing the youth. The high rate of youth unemployment in South Africa suggests that demand for young workers is insufficient and cannot absorb the rising number of job-seekers entering the labour market. These features of the labour market indicate that an incentive scheme such as an employment subsidy that encourages firms to hire young workers is appropriate for South Africa and has a high potential to create decent jobs. Employment subsidies operating through the tax system (as is part of the proposal outlined later) can also rapidly reach a scale that cannot be achieved by targeted administrative schemes generating much greater potential for employment growth.

4.3.5 Entrepreneurship schemes

Entrepreneurship schemes promote skills in young people with the objective of creating and managing sustainable and efficient businesses capable of providing permanent jobs and employment growth. These often include the provision of micro-credit and start-up loans to support new firm creation. Other general government policies that encourage competition and reduce red tape and administrative burdens will also support entrepreneurship by removing impediments to the creation of new firms. While initial programmes tend to be implemented solely by government, international experience has shown they tend to attract private sector and non-government financing and implementation.

Although few entrepreneurial schemes have been systematically evaluated, the World Bank argues that these measures tend to produce significantly positive short-term effects on the employment probabilities of young participants. These programmes are, however, often subject to high drop-out rates and a high failure rate of the businesses created if participants are not well selected (World Bank, 2007).

In South Africa, the NYDA runs a number of entrepreneurship programmes for the country's youth. These include entrepreneurship education to young people both in and out of school; business development support in the form of business planning, marketing and branding; linkages to procurement opportunities

[36] Mexico introduced a temporary reduction in employer social security contributions and a deferred payment of up to 50 percent of contributions. Chile introduced an employment subsidy for the hiring of those aged 18 to 24 years while Korea is providing wage subsidies to SMEs for new hires, interns, as well as those that convert from irregular to regular jobs.

[37] Employee-side subsidies supplement the earnings of recipients and, when targeted at low wage workers, have both employment and distributional or equity objectives. By raising the returns to work, employee-side wage subsidies increase the incentive to work and expand the labour supply. Employment is boosted because the earnings supplement allows market wages to decline for low wage workers, inducing labour demand.

for young entrepreneurs to act as distributing agents for medium and large enterprises; as well as the provision of micro, small and medium finance for business start-ups.[38]

Consolidating and strengthening small business financial and advisory support, drawing on both public and private sector capacity, should contribute to more rapid growth of employment opportunities in this sector.

4.3.6 Comprehensive labour market policies

Finally, there are many examples of countries adopting comprehensive active labour market programmes that implement two or more of the ALMPs outlined above. The World Bank's Youth Employment Inventory identifies comprehensive approaches to labour market policy around the world. These comprehensive approaches tend to involve job and life skills training, apprenticeship and/or entrepreneurship schemes, information, counselling, placement, financial incentives and other support.

Latin American and Caribbean economies have favoured a comprehensive approach with multi-service interventions through the *Jóvenes* programmes, which integrates classroom training and work experience in basic and specific trades as well as life skills, job search assistance, counselling and information. The *Jóvenes* model was first implemented in Chile in 1991 and subsequently in Venezuela, Argentina, Paraguay, Peru, Colombia, Panama and the Dominican Republic and has been "largely, although not always, successful in improving job placement and earnings" (World Bank, 2007). Evaluations of the net impact of comprehensive programmes show that the majority (62 per cent) report a positive net impact on employment (World Bank, 2007).[39] There were also positive effects on earnings in Argentina, the Dominican Republic and Chile.

Within OECD countries the effectiveness of comprehensive approaches has been less favourable. There is some evidence that these work better in Anglo-Saxon countries suggesting that the institutional framework and more flexible labour market regulations support these types of interventions. The New Deal in the United Kingdom has been shown to have positive effects on labour market outcomes and to be the most cost-effective comprehensive approach in the OECD (see Box 1).

In the case of several comprehensive interventions, excessive costs have limited the positive net gains and highlighted the importance of cost-sharing mechanisms between the public and private sectors, particularly when providing on-the-job training. Evidence from Latin America highlights the role of wage subsidies or tax exemptions in raising private sector involvement. A further risk to these types of programmes relates to the coordination problems that can result in delays in service delivery. Ensuring that appropriate institutional capacity exists is therefore critical for such interventions to be successful.

The outline of South Africa's ALMPs suggests that many facets of a comprehensive approach (skills development, public employment services) either exist or are being developed. There is therefore scope for tailoring existing policies and leveraging existing institutions in order to pursue a comprehensive active labour market policy.

4.3.7 Spending on Active Labour Market Policies

Within the OECD, overall spending on ALMPs is relatively high, particularly in Denmark, Belgium, Sweden and the Netherlands, where public expenditure on ALMPs exceeds 1 per cent of GDP. Expenditure on employment subsidies is also highest in these economies. In developing countries, expenditure on ALMPs tends to be much lower due to fiscal constraints.

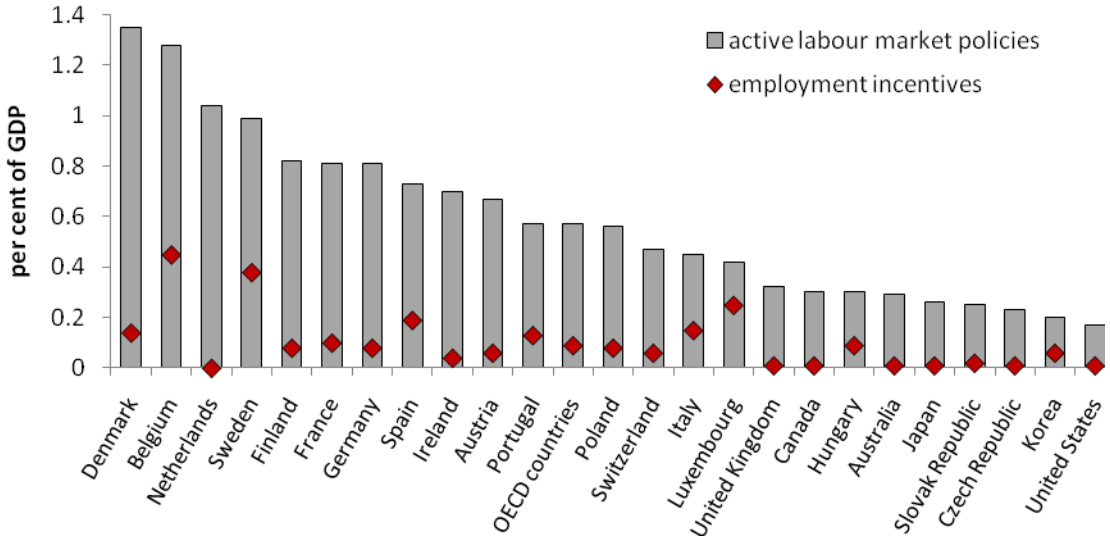
[38] It is estimated that about 7 000 loans, amounting to R23 million were disbursed to microfinance enterprises and that more than 4 000 business support vouchers have been issued to young entrepreneurs to allow them to access key business support services such as business plan development and tendering support.

[39] In Argentina there was a 10 per cent increase in the employment probability of adult women, while in Chile the probability increased by 21 percentage points in Chile as a result of the programme with largest gains to youth less than 21 years old and women.

Expenditure data for South Africa shows that spending is concentrated on direct job creation efforts through the EPWP (about 81 per cent) and skills development via the NSF and learnership programme (about 17 per cent). Spending on public employment services and private sector incentives is very low as a share of GDP.

The *2011 Budget* provides further details on the Jobs Fund which will allocate R9 billion allocated over the next three years to co-finance employment innovative public employment initiatives and projects with self-sustaining potential. The fund will request proposals from both the public and private-sector. It is an "open-architecture" fund which will support a wide-range of projects. Projects that demonstrate the potential for cost-effective job creation and efficient service delivery will be taken to scale and implemented nationally.

Figure 8: Public spending on active labour market policies in OECD countries (% of GDP), 2008



Source: OECD

Box 1 – The United Kingdom's New Deal for Youth Employment

In response to the high incidence of youth unemployment, the British government implemented the New Deal for Youth Employment in April 1998 to assist young people between the ages of 18 and 24 years old who had been on Job Seekers Assistance for six months. It is an employer-based subsidy but is considered to be a "comprehensive intervention" because it provides for a number of possible paths for participants. These are:

a. A four month "Gateway" period where the unemployed youth is provided with a personal job search councillor that assists him/her in the job search.

b. If unsubsidised employment is not found after the four months "Gateway" period the participant must enter into one of the following programmes otherwise unemployment insurance benefits would be lost. They are:

   i. One year of subsidised full time education or training programmes;
   ii. Continue searching for subsidised employment. The subsidy to the employer is provided for six months at a rate of £60 per week or £240 per month. The employer is obliged to provide one day of training or education per week over the six month period. This is designed to contribute towards an accredited qualification with an additional subsidy of £750 provided for any training given over the six month period;
   iii. Six months of employment in the voluntary sector[40] with a wage or an allowance equal to unemployment benefits plus £400. The voluntary sector employment option provides work experience to participants while working at non-profit organisations in their communities; or
   iv. Employment within the Environmental Task Force (ETF) (public sector employment) with a wage or an allowance equal to unemployment benefits plus £400. All placements within the ETF are aimed at improving the environment in ways determined by local councils.

c. Local employment offices play a central role in guiding participants in the job search process. This program combines various elements from a wage subsidy, to a training component, to job search assistance as well as public employment.

Bell, Blundell & van Reenen (1999) found that by January 1999, ten months after implementation, 40 per cent of the 108 000 youths who had passed through the "Gateway" phase had moved into unsubsidised employment, 13 per cent into subsidised employment, 30 per cent into full time education and training, 9 per cent into voluntary employment and 8 per cent were employed by the Environmental Task Force.

5. Employment subsidies

Employment subsidies can be general or targeted towards specific groups. General or broad subsidies cover everyone without particular targeting criteria. An example is subsidies paid to those employing all workers in low-paid jobs with the intention of incentivising job creation among low wage workers. The breadth of coverage, however, creates significant windfalls for employers who already employ these types of worker or would have hired them in any case. As a result, such interventions are viewed as less effective.

The objective of a targeted subsidy is to improve the employment prospects and opportunities for a particular group. It does this by reducing the costs of employing the targeted group relative to other groups, making them more attractive for firms to hire them. To select the workers eligible for the subsidy, targeting relies on observable information – such as age, gender, location or duration of unemployment. Many targeted wage subsidy programmes implemented elsewhere focus on disadvantaged or vulnerable workers such as the young, low skilled or long-term unemployed. Restricting eligibility to specific groups will also tend to reduce the scope for windfalls and create more jobs per rand spent.

Wage subsidies can also take a number of forms: a subsidy can be applied to all workers (a general subsidy), to net changes in employment (a marginal or incremental subsidy), or to gross flows into employment arising from new hires or layoffs. General employer-side wage subsidies are for the total employment of the firm. They lower the total wage bill, reduce total labour costs and encourage higher employment. However, there are considerable windfall gains to employers since the subsidy is given to existing workers. Marginal or incremental subsidies are based on net changes in employment and therefore reduce windfall effects and are more cost-effective than general wage subsidies. The most common marginal subsidy is a targeted recruitment or hiring subsidy that only pays a subsidy for newly hired workers.[41] This provides opportunities for the unemployed to gain work experience but raises concerns that it induces higher turnover and disproportionately benefits sectors with high turnover rates.

For administrative and operational simplicity, and to minimise the potentially deleterious effects of fraud, employment subsidies tend to focus on formal and well-regulated sectors of the economy that can be closely monitored. In doing so, employment subsidies can make a significant contribution toward decent job creation.

How does an employment subsidy create jobs?

A firm's demand for workers depends on many factors. These include relative wages, the technology used in production, and substitution patterns between labour types and capital. An employment subsidy reduces the cost of labour while leaving the wage the employee receives unaffected. A fall in the relative cost of labour stimulates job creation and higher employment (see Box 2). There is an additional scale effect as declining labour costs can pass through into lower product prices and higher demand (Katz, 1998). Over time, this will increase a firm's scale of production and therefore provide an additional boost to employment, though this depends on broader industry structures and competitiveness considerations (Aghion et al, 2008). Targeted wage subsidies also alter the relative wages between those who are eligible for the subsidy and those that are ineligible. This can create substitution between targeted groups and other workers with similar labour market prospects, but who are ineligible for the programme.

Many micro studies looking at the effects on individuals find evidence that employment subsidies are successful in increasing the employment, or re-employment, probabilities of the unemployed. However, in designing employment subsidies there are several indirect effects and unintended consequences that can limit net employment gains in the short term. These include deadweight loss, substitution and displacement effects, and stigma effects.

- *Deadweight loss* from an employment subsidy occurs when a subsidy is paid to unemployed persons that would have been hired without the subsidy. Deadweight loss is higher for general wage subsidies because targeted or marginal/incremental subsidies place limits on eligibility.
- *Substitution effects* occur with targeted employment subsidies if firms are induced to replace unsubsidised workers, who do not belong to the target group, with subsidised workers. The extent to which substitution will occur depends on how demand for subsidised and unsubsidised workers changes as a result of the subsidy and the ease with which substitution can take place.
- *Displacement effects* happen when a firm with subsidised workers increases output, and displaces output among firms that do not have subsidised workers. As a result the subsidy potentially crowds out employment elsewhere.
- Subsidies that are provided to specific groups can also impose a *stigma effect* on participants. If targeting is based on socio-demographic characteristics, employers may have a negative perception of the target group, limiting interest in and the impact of the subsidy programme.

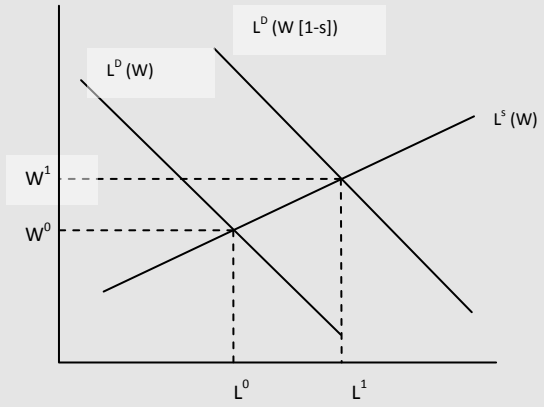
The design of an employment subsidy should aim to minimise these distortions, in particular deadweight costs and potential substitution effects, to maximise job creation.

Box 2: A technical explanation for why an employment subsidy increases job creation

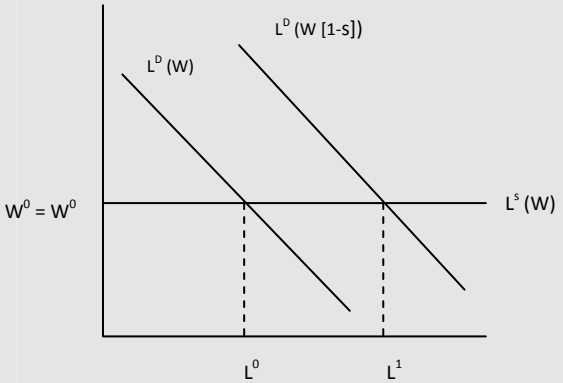
Employment subsidies reduce the cost of labour relative to other inputs, providing an incentive for firms to use more labour because it is subsidised. At the individual firm level, the employment subsidy reduces the cost of labour and causes a shift down the labour demand curve. Aggregating these individual firm responses to the wage subsidy, we observe the aggregate labour demand curve for the economy as a whole (L^D below) shift right. There is an additional scale effect outlined above provides further impetus to this increase in labour demand.

The mechanics of an employer-side subsidy on aggregate labour demand and the aggregate labour market are shown in the diagrams below. The labour demand curve shifts from $L^D(W)$ to $L^D(W[1\text{-}s])$ as a result of the subsidy. The effect on wages and employment will depend on how labour demand and labour supply respond to a change in wages.[42] In the general case (panel A), where the labour supply curve is upward sloping, the effects on wages and employment will depend on the relative elasticity of labour demand and labour supply but the subsidy is effectively shared between the worker and the firm with wages rising to W^1 and employment increasing to L^1. In the extreme case, where the wage level is effectively fixed due to the existence of high levels of unemployment, the labour supply curve is horizontal (i.e. labour supply is infinitely elastic). In this case, the subsidy does not affect the wages of employees but will have a larger impact on employment as the increase in labour demand is not limited by rising wages.

Panel A: The general case



Panel B: The extreme case



In Denmark several mechanisms were included to prevent substitution effects (Rotger & Arendt, 2010). In particular:

- The hiring of a subsidised employee had to imply a net increase in the firm's normal employment. This meant that the firm's normal ordinary employment cannot be reduced in relation to the hiring of a subsidised worker, where the "normal" level of ordinary employment was defined as the average of ordinary employment in the three months preceding the hiring of a subsidised worker and the same three months of the previous year

- A second mechanism was that the subsidy programme established upper bounds on the firm's subsidised employment in relation to normal ordinary employment, with firms with 1-5 employees eligible to employ one subsidised worker, firms with 6-50 employees eligible to hire one subsidised worker per five ordinary employees, and firms with more than 50 employees could hire one subsidised worker for every ten ordinary employees.

- Finally, firms require the approval of the employees' representative to hire a subsidised worker.

The OECD argues "that it may be possible to raise net employment gains by wage subsidies by 20 to 30 per cent or more through effective targeting to specific disadvantaged groups and by closely monitoring behaviours of employers in order to prevent possible abuse of the subsidies" (Lee, 2005). Concerns around deadweight loss and substitution effects may also be overstated; new evidence from Denmark using firm-level data shows "that hiring a subsidised employee has on average no deadweight loss nor direct substitution effects at employer level" (Rotger & Arendt, 2010).[43]

In addition to creating short-term employment, temporary wage subsidies can also have long-term dynamic effects through improving the permanent employability of participants. In an analysis of the Australian Special Youth Employment Training Programme (SYETP) during the late 1980s, Richardson (1998) finds that the average probability of having a job 8 to 13 months after the subsidy expired increased by 26 per cent and remained about 20 per cent higher between 14 and 26 months after subsidy expiry, with larger effects for disadvantaged and younger workers. Richardson concludes that "wage subsidies do far more than provide a brief period of employment. Instead they appear to offer a lasting improvement in employment prospects, both through the retention of initially subsidised jobs, and through improved employability once the initial job breaks up". The long-term performance of any wage subsidy will depend on these longer-term effects and how productivity and employability are enhanced.

Findings for employment subsidy programmes across the OECD (Lee, 2005) provide some design lessons:

- Employment subsidies in the private sector are more effective than direct job creation in the public sector in helping the unemployed return to normal employment
- Employment subsidy programmes need to be carefully targeted and controlled
- Long-term effects need to be measured in order to accurately evaluate performance
- Employment subsidies combined with training would be more effective.

Box* 3 - *Poland: Intervention Works Programme

The World Bank's *Global Inventory of Interventions to Support Young Workers* (2007) suggests that the Polish Intervention Works Programme generated positive employment outcomes in a cost effective manner. Implemented during in the 1990s after a sharp rise in unemployment, the Polish intervention paid wage and social insurance costs for up to six months for an amount up to the level of unemployment compensation. The programme also provided incentives to employers to retain workers after the end of subsidy (150 per cent of national average wage and social costs) for an additional six month period. The subsidy targeted all unemployed individuals; however the average age of participants was 23 years. The number of participants increased from 106 852 in 1990 to 195 443 in 1994, before declining to 141 962 in 1996.

Evaluations of the Polish programme find a positive impact on employment but a slightly negative impact on earnings for those younger than 30 years old (O'Leary, 1998). Almost 60 per cent of the participants were retained as regular employees by the employer after government funding of the programme ended, and it is estimated to have increased the probability of ever finding a normal job by 26 percentage points. Overall, the programme increased re-employment by 15.6 per cent in non-subsidised employment and by 13.1 per cent in any kind of employment (including subsidised).

Table 2: International evidence of wage incentives and employment subsidies

Country	Implementation period	Programme name and description	Target group	Evaluation

Argentina	1998-2000	**Proempleo Experiment:** Wage subsidy combined with specialised training	Poor households and low income workers	Galasso, Ravallion & Salvia (2001): • Positive impact on private sector employment • Subsidy voucher raises employment by 6.1% • Subsidy voucher plus training results in an increase in employment rate of 7.5% • Employer take-up low due to the cost involved of registering a worker. • Substitution effects were limited due to cost of severance pay if regular worker was fired.
Australia	1976-1985	**Special Youth Employment Training Program:** Wage subsidy with little emphasis on training	15-24 year olds	Richardson (1998): • SYETP had large and significant effect on subsequent employability • Increased probability of having a job sometime between 8 and 13 months after expiry by 26% had • Increased probability of having a job sometime between 14 and 26 months after expiry by 20%
Belgium	1990	**Employment Plan:** Subsidises social insurance contributions.	Long-term unemployed.	Cockx & Gobel (2005): • Positive impact on employment duration. • Policy decreased transition rate from employment to non-employment in first year, with no significant effect in the second year.
Belgium	2000	**Rosetta Plan (First Job Agreement programme):** Subsidies, on-the-job training and recruitment.	Young people	Nicaise (2001): •Positive effects on job placement. •85-90% still had jobs in the early months after the first job agreement.
Colombia	2002-2006	**Program de Apoyo Directo al Empleo (PADE):** Provision of wage subsidy to small, micro and medium sized firms.	• Disadvantaged workers • Other target groups: working mothers, the disabled and ex-combatants	Ministry of Social Protection (2004): • Subsidy value and duration sufficient to serve as an incentive. • Qualifications of workers in these lower income groups did not impact on the willingness of firms to hire them. • Administrative problems encountered.
Czech Republic	1991	**Socially Purposeful Jobs:** Wage subsidy with repayment if employment did not last 2 years	Job seekers from Labour Office register	Leetmaa et al (2003): • 9% net increase in employment . Wilson & Fretwell (1999): • Positive impact on initial employment, no impact on current employment , impact on current earnings found to be negative
Denmark	2005	**Act on an Active Employment Effort:** Subsidy of approximately 50% of the wage	The long-term unemployed or those at risk of long-term unemployment	Rotger & Arendt (2010) • Use of subsidy has a significant positive effect on subsidised firm's employment. • Subsidised employment creates about 0.5 ordinary jobs in the subsidised firm at the start of the subsidy period and rises over time. • Hiring a subsidised worker on average has no deadweight loss or direct substitution effect at the firm level.
Germany	1998-2003	**EGZ:** Direct wage subsidy	Hard-to-place workers	Jaenich & Stephan (2007): • EGZ accounted for only 2.6% of all unemployment exits in 2004. • Evaluation after 3 years: 25-42% of the subsidy beneficiaries (previously unemployed) would not have been in regular employment. • Short-term training measures also improved labour market prospects
Country	**Implementation period**	**Programme name and description**	**Target group**	**Evaluation**
Poland	mid 1990s	**Intervention Works Programme:** Subsidised wage and social insurance costs.	All unemployed persons, youth not specific focus.	O'Leary (1998): • Positive impact on employment • Slight negative impact on earnings for those <30 years. • 59.7% of the program participants were retained

				after end of programme.
Slovakia	1997	**Socially purposeful jobs (SPJ):** Wage subsidy for the employment of target group	Disadvantaged jobseekers, to the age of 25 or over the age of 50 and the long term unemployed.	Van Ours (2000): • SPJ have a negative effect on the job-finding rate.
Sweden	1992	**Youth Practice:** Provided employment subsidy	Unemployed young people below the age of 25	Larson (2000): • Zero or negative effect on earnings, employment probabilities, and probability of entering education in the short run. • Long run effect mainly zero or slightly positive. Larson (2003) • Negative employment and income effects of the programme 1 year after the programme started.
Turkey	2004 and 2005	**Law 5084 and 5350:** Regionally targeted employment subsidies.	All low income provinces with a per capita GDP of less $1500 (2001 prices)	Betcherman & Daysal (2009): •Estimated registered employment gains of 5-13% under Law 5084 and 11 -15% on Law 5350.
Turkey	May-08	**Law 5763:** Subsidisation of private employer's unemployment insurance contribution	Youth (18-29 years) and woman	Betcherman & Daysal (2009): • Initial evaluations indicate 142,000 estimated new jobs; 166,000 new jobs for the youth, 19,000 jobs for adult woman and a loss of 43,000 jobs for adult males.
United Kingdom	1998	**New Deal for Youth Employment:** Comprehensive approach including subsidised employment (see Box 2)	Youth (18-24)	Van Reenen (2003): • Programme had significant impact in moving young people into jobs. • Young unemployed men are about 20% more likely to find jobs each month. • Social benefits appear to outweigh its social costs
United States	1979 -1994	**Targeted Jobs Tax Credit (TJTC):** Tax credit to employers A voucher to the target group, entitled the employer to the credit if the person was hired.	Economically disadvantaged youths	Katz (1996): • Modest but positive employment effects on economically disadvantaged young adults. • Reduction in employer wage cost by approximately 15% for the typical participant in a job of six months duration in the early 1990s.
United States	1977 -1978	**New Jobs Tax Credit (NJTC):** Non-categorical employment subsidy in the form of a tax credit	No specific target group	Bishop (1981): • Estimates of an increase in employment in retail and construction from 150,000 to 670,000, or an economy-wide employment increase of 0.2 to 0.8 per cent.

6. Policy priorities: the argument for a youth employment subsidy

The discussion of policy options to alleviate youth unemployment illustrates that there are many possible interventions available to government. Policies and proposals for confronting youth unemployment should be guided by the underlying issues that explain why youth employment is so low. In the preceding analysis we highlighted the large gap between productivity and entry-level wages for young workers and argue that this is an important constraint to job creation. The skills mismatch, which contributes to this gap between real wages and productivity, makes education and skills development a long-term priority of government and an imperative for alleviating youth unemployment. It is critical for interventions to raise the quality of basic and higher education, re-engage drop-outs with the education system and provide an environment that cultivates not only academic but also technical and vocational skills development. Education interventions to rectify these skills issues will take time to implement and have an effect, particularly given the number of young South Africans that start, but do not complete, secondary education.

School leavers will continue to have difficulty being absorbed into the labour market if labour demand is weak, especially as employers cannot adequately judge a young person's productivity and suitability for the job. The Growth Commission, which was tasked to provide the best understanding about the policies and strategies that underlie rapid and sustained economic growth and poverty reduction, acknowledges the importance of education and upgrading skills for employment growth but also highlights the considerable benefits from boosting labour demand.

> "It is also not uncommon in policy debates in developing countries to hear that the problem is on the supply side: it is a matter of weaknesses in the labour force, not the weakness of labour demand. The underemployed population lack skills, the argument goes, therefore the solution is to train them. The aim is to upgrade labour supply, rather than stimulating labour demand. There is a certain theoretical sense in which this argument is true. In principle, if workers were sufficiently educated and heavily trained, they would be worth the cost of hiring them, even with the full panoply of benefits and wages that prevail in the formal sector. But it is difficult, not to say extremely expensive, to upgrade the skills of workers before finding employment for them, partly because workers learn so much on the job. Thus, while there is no disagreement about the need for education and human capital investment, as a matter of strategy in many countries, this supply-side approach will often not be sufficient." (Spence *et al.*, 2008, Chapter 2, page 46)

A youth employment subsidy aims to address a number of the causes of youth unemployment.

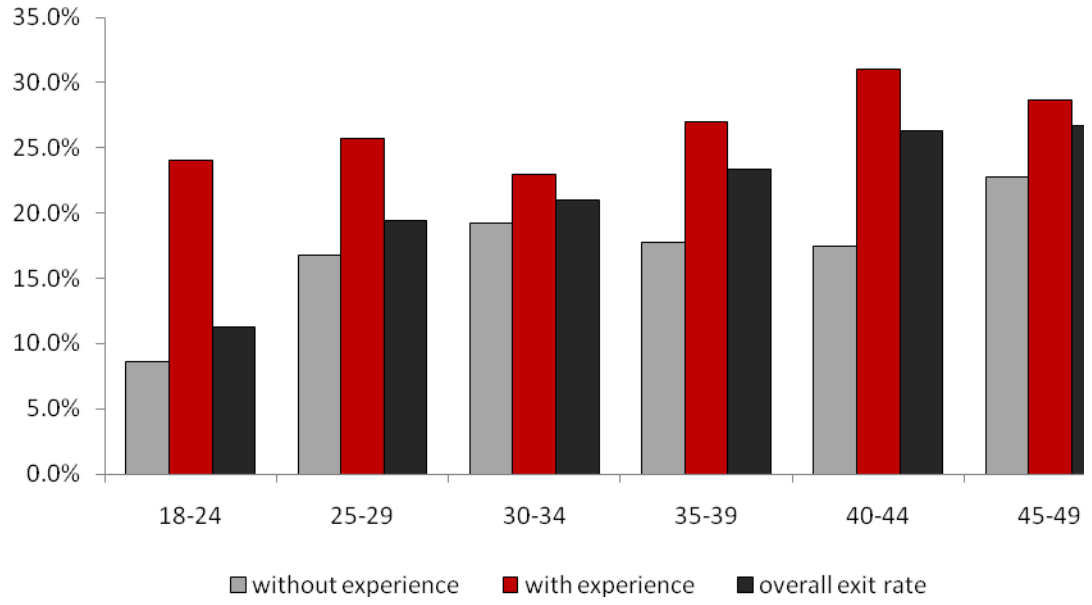
- First, the subsidy compensates employers for taking on young employees when the productivity of the new hire is unknown. In this case, the subsidy acts to offset the costs or risk associated with this information problem – allowing firms to identify high productivity workers at a lower cost. Those individuals, who are retained and now have work experience, are thus marked as high productivity workers and thus can more easily access other decent formal sector jobs.[44]
- Secondly, the youth employment subsidy could offset the costs associated with skills development and improving workers' productivity by making the training of young workers more affordable to employers. Training in job- or firm-specific skills would also improve the employability of young people and raise their probability of future employment.
- Thirdly, the wage subsidy may encourage active job-search behaviour because youths believe that they will be able to find work.

A youth wage subsidy is aimed at providing young, inexperienced workers with decent work and experience of the formal labour market. It is this experience, combined with on-the-job training, that will contribute towards narrowing over time the presumed gap between real wages and productivity. This will make the young subsidised worker attractive to the firm after the subsidy expires and help them to be hired on normal or ordinary terms after the subsidy expires, either at their current firm or elsewhere.

Experience plays a fundamental role in determining employment prospects; evidence shows that the unemployed who have worked before are far more likely to find jobs. This is certainly the case for South Africa. Panel data, which allows us to track individuals over time, shows that just over 1 in 10 unemployed 18 to 24 year olds find a job over a six-month period – an exit rate of about 11 per cent.[45] The transition rate from unemployment increases with age, rising to 19.4 per cent for those aged 25 to 29 years old and reaches about 1 in 4 for the unemployed older than 30.

More detailed investigation reveals that most of this age discrimination (against the young) is eliminated if we account for an individual's work experience. Transition rates by age are much closer for the unemployed with experience than those without. For example, the exit rate for 18 to 24 year olds with experience is 24 per cent, indicating that almost 1 in 4 youths that have work experience find a job six months later, compared with a high of 31 per cent for 40 to 44 year olds. The exit rate for youths *without* any experience is just 8.6 per cent. One explanation why the overall transition rate of youths out of unemployment is so high is that so few young people gain experience of the job market (two-thirds of 18 to 24 year olds have never worked before). Through increasing the number of young people gaining work experience, and all the benefits that result from on-the-job training, the youth employment subsidy could have a significant effect on improving the job prospects of the country's unemployed youth.

Figure 9: Exit rates from unemployment with experience and without experience[46]



Source: Statistics South Africa, Labour Force Survey panel data

Current labour market policies in South Africa concentrate on skills development and direct public employment initiatives supported through the expanded public works programme. There is little engagement of the private sector. However, the vast majority of young workers are employed in the private sector; this is particularly the case for low and semi-skilled workers. More than 86 per cent of 18 to 24 year olds work in the private sector, which rises to more than 90 per cent for low and semi-skilled young formal sector workers.[47] For those older than 35 years, about two-thirds work for private enterprises.

The magnitude of the youth employment challenge, and the pressing need to stimulate labour demand, means the private sector has a critical role in accelerating employment growth. This makes an incentive directed towards private sector job creation a necessary pillar of government's employment policy.

A youth employment subsidy focuses on stimulating labour demand while leveraging the fundamental role work experience and on-the-job training provide for employment prospects. This could be done in isolation but there are a number of interventions which could supplement an employment subsidy and potentially

improve its effectiveness. Evaluations of employment subsidy programmes, for example, have highlighted that these subsidies are often more effective when combined with training.

A youth employment subsidy should be complemented by training, skills development and job search assistance. For example, employers would be able to claim the learnership incentive in addition to any youth employment subsidy if they provide formal training to subsidised workers. Work experience and on-the-job learning will be important channels through which informal training can take place and the availability of the learnership means there exists government support for formal training and development where needed. However, the design of any potential employment subsidy may not want to mandate training alongside the subsidy since additional administrative burdens on employers may discourage take-up of the subsidy and reduce the number of unemployed young people gaining vital work experience. This is more likely to be the case for smaller businesses, where informal on-the-job training may be more frequent than formal training. In addition, available analysis from the learnership incentive suggests small firms are largely excluded, which should dissuade the tying of a youth employment subsidy to the learnership incentive. These findings suggest a better designed training programme or incentive may be necessary to allow smaller firms to undertake more formal training.

An alternative would be to link the subsidy with a training voucher going to the employee to be used for formal training. This approach would provide a direct link between subsidy recipients and support for training but remove the administrative burden from firms. This could potentially be administered either by the Labour Centres or the FET Colleges through a voucher system. A subsidy design could also consider administering something similar to the 'Training of Unemployed Persons' programme presently being piloted by MERSETA in partnership with DoL and the UIF.

Other services could also be included in the design to improve the effectiveness of the subsidy. Job readiness programs such as language training and personal skills are important not only to prepare high risk candidates but could also be used to bolster the reputation of the wage subsidy program. In addition to training, participants may require job search assistance to help find the right employer. In some countries "Job services" played a key role in wage subsidy proposals. In Australia's JOBSTART project, for example, the majority of jobs found by jobseekers were a result of an employer registering a vacancy with the CES (Community Empowerment Service). Some researchers argue that job search assistance programmes are essential, as the target group, in this case the youth, has generally never worked before, and lack the experience and resources to look for work.

The design of the youth employment subsidy could include a job-search assistance element through the use of the employment services system at the Department of Labour's labour centres. The employment services function is tailored to provide job-matching services: an employer can register his/her vacancy and the unemployed person can register as a job seeker. Other services include career counselling and referrals to skills intervention programmes. An extension to the subsidy design could require potential employees to register at these centres. The centres would first, however, need to build capacity and demonstrate their effectiveness to ensure they complement rather than impose an onerous burden on firms wanting to take advantage of the employment subsidy and give jobs to young people.

7. A youth employment subsidy for South Africa

One of the reasons for high youth unemployment in South Africa is that young people struggle to gain work experience, which is an important signal of ability to potential employers. This could explain the large number of young South Africans who are unemployed and the significant numbers who spend sustained periods without a job after leaving education. The transition analysis in Section 4 supports this and showed that unemployed young people *with experience* are almost three times more likely to find a job that those without. Work experience matters.

Evidence from the International Growth Advisory Panel (IGAP), which comprised local and international experts, also found that an individual is likely to remain employed once they have found a job, despite the high degree of churn in the South African labour market. This underscores the importance of young people finding their first job and informed the IGAP recommendation that South Africa should introduce a targeted wage subsidy for newly matriculated youths, combined with a probation period during which employers could easily dismiss non-performing workers (Levinsohn, 2008)(see Box 4). The latter recommendation was a response to concerns that part of the costs associated with the 'riskiness' of youth is a firm's inability to dismiss low productivity workers which lowers overall employment creation for the youth.

Box 4 - The International Growth Advisory Panel (IGAP) wage subsidy proposal

Proposed operation of a targeted wage subsidy:

- Target group: eligible to all 18 year old South Africans who leave school.
- Mechanism: subsidy card (similar to a credit card) containing demographic information such as name and id number as well as the subsidy amount onto which a uniform subsidy is loaded.
- The subsidy is only available for the payment of wages in a registered firm.
- The value of the subsidy: R5 000 (for an individual earning around the minimum wage the subsidy will comprise up to 50% of the wage, at higher wages the subsidy rate will be lower).
- Duration: minimum of six months with a maximum determined by the individual's wage.
- Drawdown: when a person takes up a formal sector job in a registered firm, the proportion of eligible wages will be withdrawn from the subsidy value on the card.
- Administration: the individual to receive the subsidy from the government with the employer paying the difference between the actual wage and subsidy amount. Or, the employer pays the entire wage and claims the subsidy back.
- The subsidy would be portable. Any unused subsidy when an individual leaves a job stays with the individual and is available to the next employer.
- The subsidy will not expire and should be adjusted for inflation.
- A probationary period during which the wage subsidy beneficiary can be dismissed at the discretion of the employer. The period is proposed to span 10 weeks.
- There is no recommendation regarding which government agency which should administer the system.

Aspects to consider in the design phase:

- Destructive churning: Abuse of the unconstrained dismissal period in which firms only keep subsidised workers for the duration of the dismissal period and then hires new eligible workers.
- Substitution of non-targeted workers for subsidy recipient workers.
- Stigmatisation of wage subsidy recipients if employers see these workers as less desirable potential employees ('flawed goods').
- If the target population is school leavers, individuals in school may decide to leave the schooling system to take up employment.
- Fraud in the system should be prevented and addressed during the implementation the design phase.

Note: Subsidy value of R5 000 based on a wage of R9 000 per year at the 20th percentile for those employed with Matric or less (LFS 2005).

Source: Levinsohn, 2008

The magnitude of the employment challenge in South Africa, particularly among its youth, suggests that an employment subsidy is an appropriate policy intervention to boost labour demand. The proposed youth employment subsidy would lower the costs to employers of hiring young workers, stimulating employment creation and improve young people's access to decent jobs in important, well-regulated and potentially rapidly growing sectors of the economy, such as agriculture and manufacturing, albeit at relatively low pay levels upon entry. The work experience gained because of the subsidy would be invaluable, improving a young person's probability of finding a job even if they were to become unemployed after the subsidy expires.

Interventions to assist younger workers in finding a job will also help prevent long-term unemployment. There is considerable evidence that an individual is unemployed in the current period, they are likely to be unemployed in the next period as well. This can be because unemployment today is a signal of low education, low experience or other characteristics that limit employment prospects (motivation, attitude etc.) or because being unemployed today actually raises the probability of being unemployed in the next period. This can be because discouragement and demoralisation from periods of unemployment result in reduced search efforts, the decay of human capital over time and stigma effects.[48] All of these factors can contribute to long-term unemployment becoming permanent and support the need for intervening with younger workers to avert the dangers of persistent unemployment.

The indirect effects/unintended consequences of a youth employment subsidy

The economic arguments for introducing a youth employment subsidy are compelling, but the indirect effects and unintended consequences mentioned earlier require consideration when designing such a policy. We argue, however, that the impact of some of these effects will be limited.

The most frequently voiced concern is that there would be substitution of the targeted younger workers eligible for the subsidy for older (currently employed) workers who are not. Substitution of new young workers for those already employed is unlikely to be substantial in the South African context. Young, inexperienced individuals are not substitutes for experienced workers. There is little business sense behind replacing good experienced workers who have demonstrated their productivity and value to a firm with an inexperienced, young worker whose productivity is unknown simply to gain a temporary benefit. In addition, regulations around the dismissal of existing workers establish a legal framework that prevents this kind of substitution from occurring.

The timing of the youth employment subsidy, as South Africa enters its economic recovery, will also limit such replacement. New hires tend to be delayed during the upswing of the cycle (as evident in the current labour market data) and as such introducing the youth employment subsidy during the economic recovery is more likely to accelerate new hiring than result in replacement.[49] Indeed, the employment of older, experienced workers in some industrial settings might rise to provide on-the-job training and supervision to an expanded number of young inexperienced workers hired as a result of the subsidy.

The design, outlined in the annex, indicates that young workers who are already employed would also be eligible for the subsidy. This removes another potential source of substitution and the incentive to replace existing young workers for the unemployed youth. It will, however, raise the deadweight costs during the first two years of the policy as existing young workers receive the subsidy. Deadweight costs are a feature of any subsidy. The magnitude of the employment challenge in South Africa suggests that temporarily high deadweight costs may be an acceptable cost of stimulating youth employment.

A more likely indirect effect of the subsidy would be that firms recruiting new hires may substitute young work seekers who are eligible for the subsidy for older, unsubsidised and unemployed individuals looking for a job. It is likely that there will be some substitution of this kind. However, it is not clear whether this is a "bad" outcome, indeed the targeting is aimed at raising the employment of younger workers without experience who arguably have the worst labour market prospects in South Africa. The transition analysis

shows that work experience largely eliminates the disadvantage of being young: the young unemployed are almost as likely to find a job as older unemployed individuals *if* they have some work experience. The issue is that most young unemployed workers lack experience. The youth employment subsidy will contribute towards correcting this imbalance.

A further concern around substitution or replacement is destructive churning – the process whereby subsidised workers are "let go" at the end of the subsidy period and replaced by a different subsidised worker. This is mitigated by a number of factors. The most direct explanation is given by Levinsohn (2008), who states that "it's lousy business to fire good workers". If a young subsidised worker proves they are a good hire during the subsidised period of employment, then it makes little sense to replace them just because an employer can find another subsidised worker.

The design outlined later proposes a subsidy that runs for two years. This gives any subsidised worker ample opportunity to develop skills and improve their productivity such that they are viable prospects for the firm when no longer subsidised at the end of two years. Secondly, Levinson (2008) argues that a firm incurs some training costs when hiring a new worker and it makes little sense to re-incur this expense if the workforce is continually rotated. Thirdly, even if the young worker were to lose their job at the end of the subsidised period they have gained both skills and work experience. Transition analysis supports this.

A further concern relates to the issue of stigmatisation. There is evidence that this can happen, particularly from experience in the United States with wage subsidies to disadvantaged groups (Katz, 1996) but is unlikely in South Africa, where the proposed policy would be available to all young workers (subject to an earnings threshold).

Another unintended consequence might be that a youth employment subsidy induces young people to leave school for a subsidised job rather than remain in the education system. It is possible that, at the margin, a targeted wage subsidy may induce some students to leave education sooner than would occur. However, it seems unlikely that this would happen on a large scale. As discussed in the following section on design, a young person will be eligible for the subsidy into their mid-20s, allowing them to continue with their education and still be eligible for the subsidy later. In addition, the fact that the subsidy is not given directly to the unemployed youths limits the tangible benefit thereof, which in turn reduces the risk of individuals leaving school prematurely.

The final issue worth mentioning here is fraud and the potential that fraudulent behaviour can rapidly escalate the costs of the policy. Principal among these concerns is the creation of fictitious employers and/or fictitious employees to abuse the system and benefit from subsidy payments.[50] Inserting the correct checks and balances within the operational and administrative systems and providing adequate criminal penalties to deter fraudulent behaviour will be important features of the policy's design.

It is important to ensure that any proposed subsidy design passes the constitutional test of fairness and non-discrimination. While a youth wage subsidy does discriminate on the basis of age, it does so in order to rectify the significant disadvantages that young people face in the labour market. In focusing on low income youth, the subsidy can also act as a mechanism to pursue both job creation and income redistribution. Within the realm of labour relations, there are similar arguments one could raise to those that underpin why affirmative action is not discrimination.

In alleviating youth unemployment, the subsidy would also serve an important social purpose in helping to reduce crime, improve health, and encourage social cohesion. It would also contribute towards a more highly skilled workforce.

Design, operational and administrative issues around a youth employment subsidy

What might a youth employment subsidy look like? It is proposed that the youth employment subsidy be available for new hires aged 18 to 29 years old for a period of two years and for existing workers aged 18 to 24 years old for a period of one year. The youth employment subsidy is targeted towards young, inexperienced South Africans but defining the target age group is difficult and must be based on sound rationale. Both the upper and lower age thresholds will be contentious.

We outline some high level details for the proposed youth employment subsidy below. The annex provides a more detailed analysis and appraisal of pertinent operational, administrative and design issues including eligibility conditions and the subsidy's value, duration and profile.

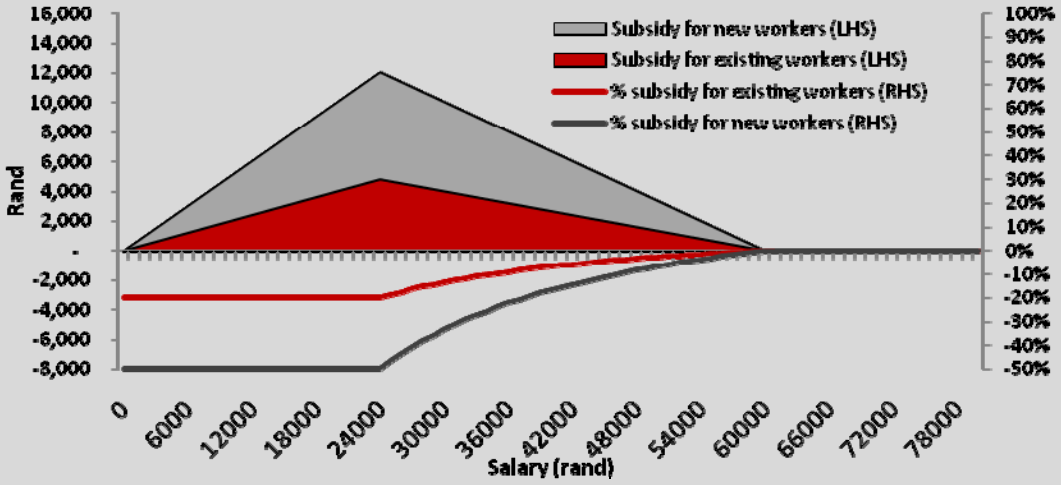
Administrative simplicity needs to be a guiding principle for the design of the subsidy. In a previous discussion paper, National Treasury argued that "in order for employer-side subsidies to be effective, they must be relatively generous and administratively simple, with limited costs borne by the employer" (National Treasury, 2007).

Box 5: The proposed design of the youth employment subsidy

The subsidy value, profile and design we use to estimate the cost and impact of the youth employment subsidy has the following features, these are shown graphically below (Figure 1)

- Existing workers aged between 18 and 24 years old are eligible for the subsidy if they earn below the assumed personal income tax threshold of R60 000 in 2011/12. For these workers the subsidy value amounts to 20% if the person is earning less than R24 000 per year – a maximum of R6 000 for workers earning R24 000 – before tapering to zero at R60 000. These exiting workers are eligible to be subsidised for 12 months.
- New workers aged between 18 and 29 years old are also eligible for the subsidy if they earn below the assumed personal income tax threshold of R60 000. However, for new workers, the subsidy value amounts to 50% in the first year if the person is earning less than R24 000 per year – a maximum of R12 000 for workers earning R24 000 – before once again tapering to zero at R60 000. In the second year, these workers are treated as existing workers and are eligible for the subsidy as outlined above.

Figure 1: Subsidy profile – value and % – for new and existing young workers qualifying for the subsidy



A lower age threshold of 18 is supported by the argument that long-term unemployment can quickly turn into permanent unemployment. As such, it is important to provide support to those that drop out of high school or fail Grade 12, or to those that pass Grade 12 but decide not to continue with education, to limit the risk these people face of long periods of unemployment. The upper age threshold is set at 29 years because unemployment rates are much higher, exit rates out of unemployment lower, and the majority of have never worked before. It is also worth considering that five years after the subsidy is introduced, all those people up to the age of 34 years would all have been eligible for the subsidy.

The motivation behind the two-year duration is the assumption that this timeframe would give young workers a long enough spell of employment to provide them with the skills and experience needed to narrow/eliminate the gap between real wages and productivity and improve their labour market prospects once the subsidy expires. Limiting the duration of the subsidy is consistent with the argument that lack of experience is a critical deterrent for firms to take on young, inexperienced workers. Once this experience is gained, there should be less need to subsidise the cost of labour for young workers. There are a number of duration options worth exploring.

The proposal focuses on subsidising lower income young workers, in particular those below the personal income tax threshold. The income threshold will help ensure the employment subsidy targets decent jobs and is fair since it Government does not want to subsidise relatively high-earning individuals.

It is proposed that the youth employment subsidy will be implemented in early 2012. This timeframe places a constraint on what is feasible from an operational perspective. Most pertinent is how the subsidy will be administered. It is not feasible to develop a completely new operational platform to administer the subsidy. It is a distinct advantage that the youth employment subsidy will be able to use the existing SARS operated administrative platform. This administrative platform will be important to minimise fraud.

Analysing the potential impact of a youth employment subsidy suggests it has the potential to create a large number of jobs for young people in South Africa. Initial calculations suggest that up to 423 000 new subsidised formal sector decent jobs for young people could be created over three years (this is gross job creation) at a cost of R5 billion in tax expenditure with the assistance of the employment subsidy (more detail is provided in the annex). This considerable employment growth (equal to more than a sixth of all unemployed 18 to 29 year olds) and would represent an important contribution towards alleviating youth unemployment. We estimate net new job creation, which excludes youth jobs that would be created in the absence of the subsidy, to be about 178 000 new jobs.

The youth employment subsidy is relatively cost effective in terms of job creation, with the cost of gross job creation being approximately R12 000 per job and the cost of net job creation at about R28 000 per job. We estimate that approximately three quarters of the net job creation that takes place as a result of the youth employment subsidy would be sustainable. The subsidy therefore results in sustainable job creation of about 133 000 jobs for young people at a cost per job of R37 000. Leveraging complementary policies to support the youth employment subsidy could accelerate youth job creation even further.

Table 3: Estimated cost, job creation and cost per job of the youth employment subsidy over three years

Tax expenditure (R million)	
Total	4980
... on existing workers aged 18 to 24 years	1352
... on new workers aged 18 to 29 years	3152
Job creation (000s)	
Gross job creation	423
Net job creation	178
Sustainable job creation	133
Cost per job (R)	
Gross	11800
Net	27900
Sustainable	37400

Government will need to know whether the proposed policy intervention is having the desired effects on job creation, employment and the youth labour market. As a result, it is critical to establish a credible and effective means of evaluating the youth employment subsidy to ascertain the policy's success and cost effectiveness. A major weakness identified in the wage subsidy literature is the limited evaluation of these programmes to determine their effectiveness. Establishing this framework for evaluation prior to any proposed policy being implemented should form an important design feature of the youth employment subsidy.

To ensure the youth employment subsidy achieves its objectives, the policy should be subject to an initial implementation period of three years. The policy design could then be re-visited after thorough evaluation and review taking into account job creation and cost per job criteria.

7. Conclusion

The employment challenge confronting South Africa is significant, with a quarter of the labour force unemployed. What is required is a comprehensive short-term and long-term reform agenda. To create jobs today South Africa needs much stronger labour demand, highlighting the imperative of achieving and sustaining accelerated and inclusive economic growth.

Within this bleak situation the problem of youth unemployment is acute; half of all 18 to 24 year olds are unemployed and their prospects of finding a job are much lower than for the older unemployed. Without experience, young people have little chance of becoming employed. This is an economic problem and a waste of potentially productive resources. Moreover, unemployment contributes to poverty, crime, violence, political disengagement and the weakening of social cohesion.

A policy response to youth unemployment is therefore imperative. The costs associated with delaying this response are large and include further depreciation of human capital and growing social problems.

This discussion paper considers some of the policy options for confronting and alleviating youth unemployment. There are a number of policies available and a comprehensive multi-pronged approach is needed. We argue that a youth employment subsidy that leverages other complementary interventions would be appropriate for South Africa, particularly given that labour demand is insufficient, work experience is critical and that the reforms to education and skills development will only improve the productivity of school-leavers in the longer term. Given the scale of the problem, and because 90 per cent of all unskilled and semi-skilled youth jobs are in private sector firms, engaging the private sector to create jobs for young people is a necessary pillar of this approach.

By lowering the relative cost of labour, the youth employment subsidy aims to narrow the gap between entry-level real wages and productivity for young people, thereby reducing the cost and riskiness of hiring young people and stimulating labour demand. The experience and on-the-job training gained while working will increase productivity and either makes young workers viable labour for the firm after the subsidy expires or improves their long-term employment prospects.

There are many issues around design, eligibility, cost and operation that need to be discussed and debated before a youth employment subsidy can be implemented. This paper introduces some of these issues and discusses them in more detail in the annex. Initial calculations suggest that a youth employment subsidy will subsidise 423 000 new youth jobs below the personal income tax threshold and create 178 000 net new jobs for young people over three years at a cost of R5 billion in tax expenditure. This would be an important and cost-effective contribution to lowering youth unemployment.

ANNEX A

A1. Operational and administrative issues

The proposed youth employment wage subsidy will be administered using the existing Pay As You Earn platform operated by the South African Revenue Service (SARS). SARS currently conducts a bi-annual reconciliation of employer and employee records, at which point they will be able to corroborate information on employers and employees claiming the subsidy. The SARS PAYE system will grant employers three options for claiming the youth employment subsidy:

- Employers pay the net balance of PAYE tax and subsidies every six months.
- Employers pay the net balance of PAYE tax and subsidies on a monthly basis and reconcile every six months.
- Collect PAYE tax as per usual, cash flow every six months and allow for a tax credit or rebate for the value of subsidies.

PAYE processes will be available for those employers that are registered for PAYE tax. For small firms that employ workers below the tax threshold there will not be any PAYE payments to SARS. In these cases the employer will still have to be registered for PAYE but the subsidy will operate as a cash payout rather than through the tax system.

The employment subsidy will apply to an employee's total remuneration. As such, fringe benefits and contributions will be included. In the case that the grant is made tax exempt in the hands of the employer, the provisions of ITA Section 23(n) determine that the subsidy portion of the wage cannot be included in the deductible amount of the wage bill of the employer.

The administrative platform will be important in minimising fraud. A particular concern would be the creation of fictional employers and employees to access the subsidy payments. As a result, there will need to be close monitoring of employer behaviour to prevent abuse. This suggests that it will be important to link the SARS administration of the subsidy with the Department of Labour's inspection services at an operational level and to establish appropriate legal measures to discourage and punish abuse of the subsidy.

A2. Design issues

There are a number of important features of the subsidy's design that will influence its outcomes. These include eligibility conditions to determine who receives the subsidy, the conditions of employment, the administrative burdens on employers, the duration, value and profile of the subsidy and the institutional capacity to administer the programme. The previous section indicates that using the existing SARS PAYE platform will help ensure that the youth employment subsidy is administered efficiently. It is to the other issues that we now turn.

In discussing the design of the youth employment subsidy it is also important to consider the trade-offs, including administrative simplicity, targeting, cost and the motivations for the policy.

A2.i. Eligibility conditions

a. Employers

i. Registered for PAYE

PAYE registration represents the first eligibility criteria for employers. The proposed subsidy will operate through the SARS PAYE platform and make PAYE registration a pre-requisite for accessing the subsidy.

ii. Type of business

All PAYE registered businesses will be eligible for the subsidy excluding central and provincial government.

iii. UIF registration

iv. Tax affairs in order

The employer's tax affairs (PAYE, CIT, VAT) must be in order.

Administrative simplicity should be an important feature of the subsidy's design. While it is critical that employers comply with the eligibility requirements, the subsidy should not impose undue administrative complexity and onerous burdens on employers since this will discourage take-up. For example, the Targeted Jobs Tax Credit (TJTC) programme in the United States imposed strict compliance requirements that may have resulted in low participation - Katz (1996) notes that "one possibility for low utilisation of the TJTC is regulatory burden".

b. Employees

i. South African bar-coded ID number

ii. Age

The proposed youth employment subsidy is targeted towards young, inexperienced South Africans but defining the target age group is difficult and must be based on sound rationale. Both the upper and lower age thresholds will be contentious.

It is proposed that the youth employment subsidy should be available for existing young workers aged between 18 and 24 years and new young workers aged between 18 and 29 years old, with eligibility commencing on the date of an individual's 18th birthday and ending on the last day of their 24th or 29th year. As mentioned earlier, it is also worth considering that after five years all those aged 18 to 34 years would all have been eligible for the subsidy.

The lower age threshold

In the case of the lower age threshold the concern is that if set too low the subsidy will provide a disincentive for young learners to stay in school and complete their high school education. Making the lower threshold effective at 18 will help limit the extent to which the subsidy encourages young people to drop out of high school to take advantage of the subsidy. At the margin, however, this may occur as those over 18 and still in education may have an incentive to look for work because the subsidy improves their chances of finding a job.[51]

An alternative would be to set the lower threshold at age 20. Raising the threshold to 20 would significantly reduce the possibility that young people eligible for the subsidy will still be in secondary education, but would also exclude 203 000 young people aged 18 and 19 years old who are currently unemployed. Returning to the argument that long-term unemployment can quickly turn into permanent unemployment, providing no support to those that drop-out from high school or fail Grade 12, or to those that pass Grade 12 but decide not to continue with education, could leave these people at risk of long periods of unemployment.

It would be possible to include educational criteria alongside age to determine eligibility. This could, for example, allow the subsidy to focus more specifically on creating jobs and raising employment prospects for young workers who have completed secondary education. Such criteria are more attractive when the education system schools a large proportion of

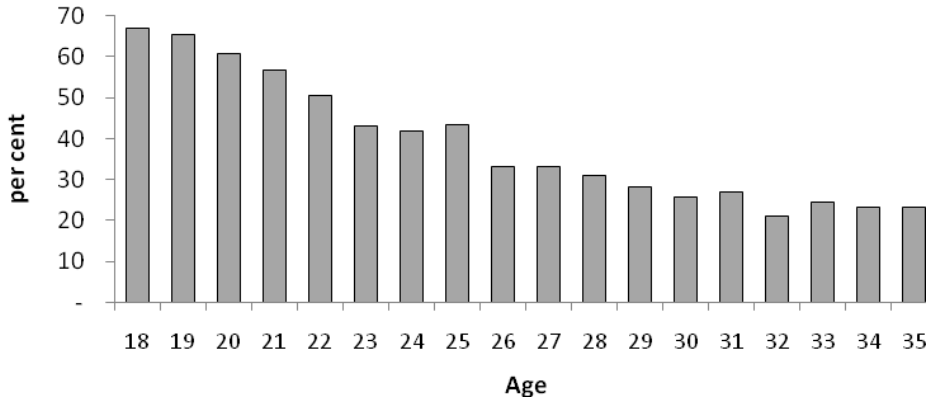
young learners to this level and where a senior certificate or equivalent is the default or base educational qualification. In South Africa, however, where the majority of unemployed workers have not completed secondary education, the education criteria would exclude a significant portion of the unemployed youth who did not complete secondary education. More than 1.2 million of the total number of unemployed 18 to 29 year olds (53.5 per cent) has not completed secondary education.

The upper age threshold

The upper age threshold is set at 29 years. This enables the youth employment subsidy to target a large segment of young people (almost 2.4 million) that are particularly disadvantaged in the labour market. For those under the age of 30, unemployment rates are much higher (figure A1), exit rates out of unemployment lower, and the majority have never worked before (figure A2).

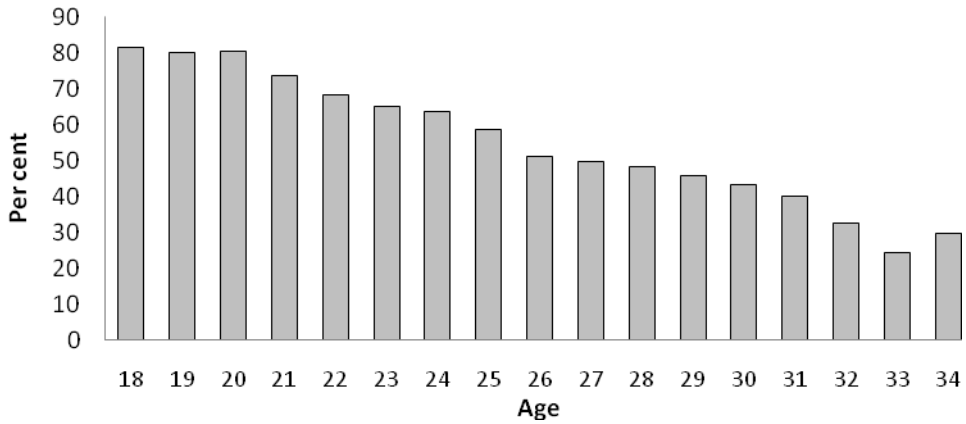
Analysing the unemployment rates by individual's age shows that the unemployment rate falls with age, from more than 60 per cent between the ages of 18 and 20 to less than 25 per cent for those in their early-30s. Falling unemployment reflects the fact that the probability of finding a job increases with age. This in part reflects differences in experience. While 59.1 per cent of unemployed young people aged between 18 and 29 have never worked (1.4 million), just 18.5 per cent of those above the age of 30 have never worked (350 000). This illustrates the relative disadvantage of young people in the labour market and suggests that it is this group who would benefit most from a youth employment subsidy and exposure to the labour market.

Figure A1: Unemployment rate, by age (Q3 2010)



Source: Statistics South Africa Quarterly Labour Force Survey, June 2010

Figure A2: Share of unemployed with no work experience, by age (Q3 2010)



Source: Statistics South Africa Quarterly Labour Force Survey, September 2010

Another consideration when defining the target age range is fiscal cost. The wider the age range eligible for the subsidy, the greater the cost to the fiscus. Our costing of policy options outlined later suggests that including an additional age cohort of eligible existing workers (e.g. 25 year olds) could add R400 million to the initial costs and an additional age cohort of new workers R150 million to running costs.

A2.ii. Employment conditions

a. Full-time employment

Only full-time workers will be eligible for the subsidy. Full-time is defined as 35 hours per week (ITA Sect 12e) on the PAYE platform.

b. Labour legislation

Labour inspections in terms of compliance and enforcement are an essential tool in ensuring the rights of young workers and the quality of working conditions. The legislative context for the youth employment subsidy should balance the protection of minimum standards for workers and the concept of regulated labour market flexibility. The proposed subsidy will be available for formal sector employment. This should result in job creation being concentrated in formal, well-regulated sectors, albeit at relatively low pay levels.

As an active labour market policy, the legislative design for the youth employment subsidy could be guided by the Sectoral Determination developed and implemented for the learnership incentives.[52] A Sectoral Determination prescribes the conditions of employment tailored to a specific sector. Since this subsidy cuts across all sectors, however, the implementation of a Sectoral Determination may require legislative amendments.

Eligibility for the subsidy will also require that the employee's wages do not infringe on the applicable sectoral minimum wage.

A2.iii. Subsidy duration

The proposal is for the subsidy to be available for a period of two years. The motivation for this is the assumption that two years would give young workers a long enough spell of employment to provide them with the skills and experience needed to narrow/eliminate the gap between real wages and productivity and improve their labour market prospects once the subsidy expires. Limiting the duration of the subsidy is consistent with the argument that lack of experience is a critical deterrent for firms to take on young, inexperienced workers. Once this experience is gained, there should be less need to subsidise the cost of labour for young workers. There are a number of duration options worth exploring.

a. Two years:

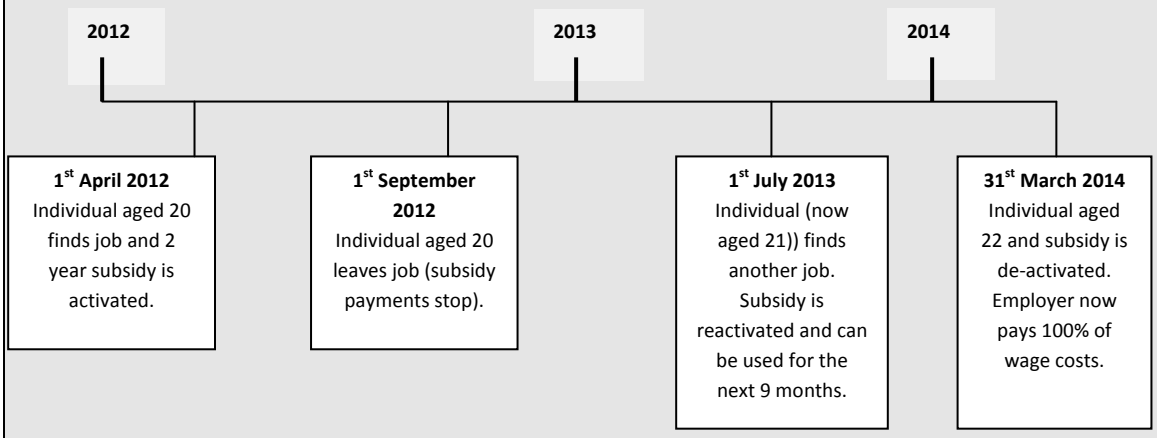
Introducing a temporary subsidy for two years, which is activated in the first month the subsidy is used by the employee, provides a well-targeted and temporary approach. After an employer claims the subsidy for a given employee, subsidies are available for that individual over the next two years (24 months). If the individual leaves their job they remain eligible for the subsidy with other employers until the subsidy expires after 24 months. Once the two years are over, the individual is no longer eligible for further subsidy payments, even if they are still under the age of 24.

An alternative to this system is for the employee to be eligible for the subsidy for a maximum of two years that could be spread out across the age range (18 to 24 years). The advantage of this option is that it does not penalise young workers who find a job, activate their subsidy but then become unemployed and cannot find another job for a long time. Under the option outlined above, if they do not find a job within two years of activating the subsidy, the rest of their subsidy would be foregone. From an administrative perspective, this would require active tracking of an

individual's employment history and knowledge of the number of subsidised months that previous employers have claimed for an employee. This is feasible through the SARS systems.

Box A1 – An example of a two year duration subsidy

In this hypothetical example an individual at age 20 finds a job and activates the subsidy. They are employed for six months at which time they become unemployed and the subsidy payments to the previous employer stop. After nine months of searching the individual finds another job. The subsidy is paid to the new employer for the next nine months before the two years is exhausted and the subsidy is deactivated. The individual is no longer eligible for subsidy payments.



b. No duration requirement (maximum coverage)

The subsidy is available for any employer of a new worker aged 18 to 29 with earnings below the threshold. It remains targeted and temporary, although the maximum duration rises to twelve years for an individual who finds a job on their 18th birthday. This is administratively much simpler because any 18 to 29 year-old would qualify, but it would impose greater costs on government.

One option to cap the cost of such a scheme would be to tie the value of the subsidy to the employee's age, with younger participants receiving larger subsidies than older workers.[53] This would disadvantage older youths who have little experience relative to younger youths because older youths qualify for a smaller subsidy. It would also add a layer of complexity to the design, since the subsidy value for each individual would change frequently. This option is also less linked to one of the fundamental arguments for introducing the temporary (two year) subsidy – that it is the initial disparity between productivity and entry-level pay, lack of work experience and inability to signal productivity that deter employers from hiring younger workers.

c. First job

Under a 'first job' option, employees would be eligible only if this were their first registered full-time job. Previous SARS PAYE information would be used to identify if a young person has worked in full-time employment before. Those that have worked and are unemployed would not qualify for the subsidy. Under this arrangement, the first employer would receive the employment subsidy, but subsequent employers would receive no benefit from hiring that young worker.

Such a scheme would incentivise employers to give young work seekers their first job and reduce the cost of the employment subsidy. Latest QLFS data shows that almost 60 per cent of 18-29 year olds have never worked, suggesting that the number eligible may fall by a 40 per cent.

In making the eligibility criteria stricter, the duration of the subsidy could either be kept to two years or extended, with its value gradually tapering after the first year. This would reduce the employer's incentive to substitute a worker who has exhausted their subsidy with a young person

who has yet to activate theirs. A difficulty with this design is that young people whose first job only lasts a short period are penalised.

d. Single job

A single job option would operate in a similar manner to the first job option but ignore the young worker's employment history. Under this option, young workers are eligible for an employment subsidy as long as they have not used the employment subsidy before. This arrangement does not exclude young people who have worked before and it would therefore be more costly than the first job option.

A2.iv. Subsidy value and profile

A higher subsidy value has a bigger impact on lowering the relative cost of labour, makes the proposed subsidy more appealing to employers by and is likely to stimulate more employment, but will add to the cost to government in terms of tax expenditure. The example outlined in this discussion document assumes a maximum subsidy value of R12 000. This is approximately half of the average income of a formal-sector worker aged 18 to 29 years old earning below the personal income tax threshold.

The subsidy value and profile we propose has the following features:

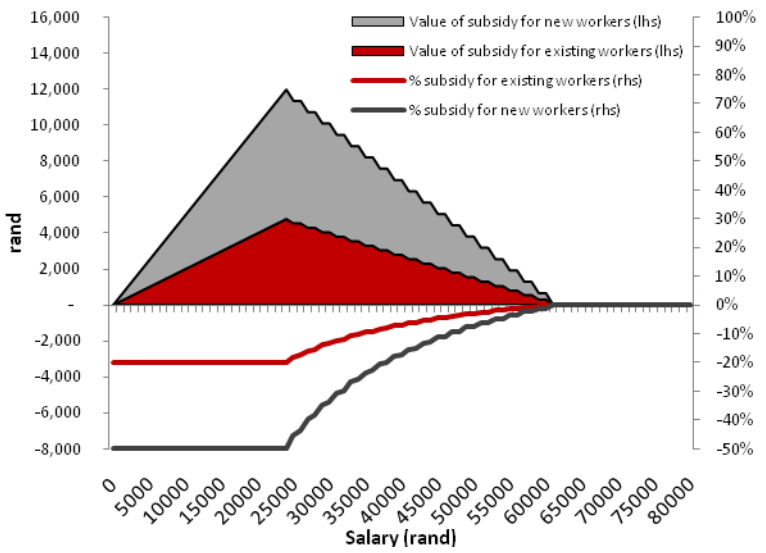
- Existing workers aged between 18 and 24 years old are eligible for the subsidy if they earn below the assumed personal income tax threshold of R60 000 in 2011/12. For these workers the subsidy value amounts to 20% if the person is earning less than R24 000 per year – a maximum of R6 000 for workers earning R24 000 – before tapering to zero at R60 000. These exiting workers are eligible to be subsidised for 12 months.
- New workers aged between 18 and 29 years old are also eligible for the subsidy if they earn below the assumed personal income tax threshold of R60 000. However, for new workers, the subsidy value amounts to 50% in the first year if the person is earning less than R24 000 per year – a maximum of R12 000 for workers earning R24 000 – before once again tapering to zero at R60 000. In the second year, these workers are treated as existing workers and are eligible for the subsidy as outlined above.

The subsidy design outlined above encourages the hiring of lower-skilled, lower wage young people since the effective subsidy is higher at lower income levels. The argument for tapering the subsidy to zero at the personal income tax threshold is on economic efficiency grounds. This allows the average subsidy as a percent of income to decline towards zero at higher income levels and prevents a *cliff edge* – where the subsidy suddenly value drops – from being created at the PIT threshold. A cliff edge distorts the income distribution, affects an employer's incentive to hire young workers around these income levels, and could create a low-income trap as employers are reluctant to raise wages above the PIT threshold to avoid forfeiting the subsidy. The perverse effects on employers' labour cost curves therefore militate against designs that have large cliff edges.

From an economic efficiency perspective, therefore, a smooth taper from the maximum value of R12 000 to zero at the PIT threshold is optimal. However, this implies that the subsidy value and rate changes for every R1 change in salary above R24 000. This would add considerable complexity; make the subsidy much more difficult to understand for employers and from an administrative perspective is not feasible.

As such the taper will have to occur in stages as the subsidy value steps down in increments between the maximum of R12 000 and zero. We propose that these increments be for every R2 000 increase in salary above R24 000, when the subsidy value peaks. This is shown in the diagram and table, below.

Figure A2.3: Subsidy profile – value and % – for new and existing young workers qualifying for the subsidy



Salary	Value of the subsidy	
	New workers	Existing workers
0 - 23999	50%	20%
24000 - 25999	11 370	4550
26000 - 27999	10 740	4300
28000 - 29999	10 110	4050
30000 - 31999	9 480	3800
32000 - 33999	8 850	3550
34000 - 35999	8 220	3300
36000 - 37999	7 590	3050
38000 - 39999	6 960	2800
40000 - 41999	6 330	2550
42000 - 43999	5 700	2300
44000 - 45999	5 070	2050
46000 - 47999	4 440	1800
48000 - 49999	3 810	1550
50000 - 51999	3 180	1300
52000 - 53999	2 550	1050
54000 - 55999	1 920	800
56000 - 57999	1 290	550
58000 - 59999	660	300
60000 -	0	0

The advantage of the proposed phase-out of the subsidy (a new worker will receive a maximum of a 50 per cent subsidy in the first year and a maximum of a 20 per cent subsidy in the second year) is that it gradually removes the subsidy as young workers gain experience. Gaining experience helps narrow the gap between their productivity and the entry-level wage and reduces the subsidy needed to compensate the employer for hiring young, inexperienced workers in the second year. Tapering the subsidy over time, for example by reducing the maximum subsidy in the second year to 20 per cent, reduces the sharp decline in subsidy value to the employer and the employer's "loss" from one year to the next.

A3. The potential impact of the youth employment subsidy

A number of papers have investigated the merits and consequences of introducing a general wage subsidy in South Africa through using Computable General Equilibrium (CGE) modelling (Go et al, 2009, Pauw & Edwards, 2009). This is a modelling approach that attempts to understand the economy-wide effects of a policy intervention and projects that as many as 723 708 jobs could be created at a cost of R23 billion (Pauw & Edwards, 2009). However, these models are for a general wage subsidy provided to all low-income workers. Costing the impact of a youth employment subsidy requires a different approach.

It is possible to break the impact of the youth employment subsidy according to four categories of workers: existing workers, part-time workers converting to full-time, formalisation of workers and new workers. This will allow estimates of the number of workers that will benefit from the subsidy (existing and new), the reduction in labour costs, and the costs of the subsidy.

The cost and impact depend on the design of the subsidy and assumptions around how changes to economic growth and wages affect employment, in particular, the following features will impact on our estimates:

- The profile of the subsidy and its maximum value,
- The age range eligible for the subsidy,
- Whether the subsidy is for existing workers as well as new workers,
- The conversion of part-time into full-time employment to access the subsidy
- The rate of formalisation as a result of the youth employment subsidy
- The *employment elasticity of growth* (the percentage change in employment for a 1% change in economic growth)
- The *wage elasticity* of employment (the percentage change in employment for a 1% change in wages)

The design we choose for our central estimates provides a one-year subsidy to existing workers aged 18 to 24 years old and earning below the personal income tax threshold (assumed to be R60 000 per year) and a two year subsidy for new workers aged between 18 and 29 years old. For new workers the first year subsidy is 50% of the wage up to R24 000 before tapering to zero. For existing workers, which includes the second year subsidy for 'new' workers, the subsidy is 20% of the wage up to R24 000 before tapering to zero.

Existing workers eligible for the subsidy

The proposed youth employment subsidy will be available for existing youth workers if the eligibility criteria are satisfied. Initial estimates were that up to 800 000 young workers would be eligible for the subsidy. Based on the current design proposals, it is projected that approximately 520 000 to 650 000 young workers aged 18 to 24 would be eligible.[54] This is about half of all 18 to 24 year olds working in South Africa and will comprise full-time workers who are eligible and a number of part-time workers whose employers will increase the number of hours they work in order to qualify for the subsidy.

Formalisation will raise the numbers of workers eligible for the subsidy

In addition to part-time work being converted to full-time work to take advantage of lower labour costs, some businesses and employers will be incentivised to formalise workers in order to make use of subsidy. Betcherman et. al. (2009) evaluate regionally targeted employment subsidies in Turkey, which were implemented to encourage investment and employment in low-income provinces, and find that the dominant effect of the subsidy was to encourage formalisation of firms and workers (through social security registrations) rather than boost total employment and economic activity.

Formalisation as a result of the subsidy would be a positive effect and consistent with government's aims to increase formalisation in the economy. However, the extent to which this would occur may be limited by two factors. First, other costs associated with becoming a formal sector business may outweigh the benefits from the wage subsidy and discourage formalisation (low take-up in Argentina's Proempleo experiment reflected the costs associated with registering formal workers). Secondly, the quantum of informal young workers is quite small and places a limit on the potential magnitude of formalisation. The QLFS estimates that about 18 per cent of 18 to 24 year olds work in the informal sector. This equates to 240 000 workers.

New workers as a result of a growing economy

The proposed youth employment subsidy aims to create jobs. If the economy grows, youth employment will rise. Over the period 2003 to 2008, employment of 18 to 29 year olds grew at an annual rate of about 6 per cent, expanding at a faster rate than GDP growth (5.0 per cent). The employment elasticity of growth for this group of young people was therefore approximately 1.2 meaning that on average for every percentage point of GDP growth over this period, employment of 18 to 29 year olds increased by 1.2 per cent. We use this employment elasticity to inform our projections for youth employment over the next three years.

Our estimates assume GDP growth that is consistent with National Treasury's forecast delivered in the *2010 Medium Term Budget Policy Statement*. Based on this, and assuming a slightly more conservative employment elasticity of growth of 1, we project that employment of young people below the PIT threshold increases by on average about 80 000 per year. A more protracted labour market recovery or lower employment elasticity may reduce the pace of this type of job creation.

This employment growth represents our baseline scenario since these workers would be hired irrespective of the employment subsidy but will nevertheless be eligible for the subsidy. This is what is typically considered the deadweight loss from a targeted wage subsidy.

New workers as a result of the employment subsidy

To estimate the increase in hiring as a result of the wage subsidy we need to understand how labour demand responds to a change in wages. This is the wage elasticity of labour demand and measures the change in employment for a 1 per cent change in the wage rate. There have been a number of studies investigating the wage elasticity of labour demand for South Africa (see box below) which suggest the economy-wide elasticity is within the range of -0.5 to -0.7. There are also estimates of the wage elasticity of labour demand for different skill levels (Fedderke, 2004), which suggests that unskilled labour responds significantly to a change in wages (-2.3) and implies that a youth employment subsidy targeted towards unskilled, inexperienced young workers could have large effect on job creation for these workers.

The magnitude of net employment gains will depend on the subsidy profile and the value of the subsidy since these dictate the magnitude by which the wage cost of young workers falls. In the initial year, the subsidy to existing workers will provide a sizeable reduction in the cost of employing lower income young workers; if all 18 and 24 year olds are eligible costs may fall by as much as 9.5 per cent.

The subsidy to new eligible workers lowers the cost of hiring young less skilled workers by about 23.5 per cent, applying our wage elasticity of -1.0 implies that the subsidy increases job creation by a similar magnitude.[55] The average subsidy paid to these new workers is calculated to be approximately R7 400 to R7 500. In the second year, these new workers will still be eligible for the subsidy, but one that is provided on the same terms as to existing workers. This is two-fifths of the subsidy during the first 12 months and therefore we would estimate the second year costs and impact on employment would be approximately 40 per cent of those outlined above.[56]

Box A2: The wage elasticity

The wage elasticity of employment (or price elasticity of labour demand) reflects the percentage change in employment that results from a one percentage point increase in wages. It is an important factor in our job creation estimates since it determines how declining wages translate into higher employment. There is a range estimates for South Africa's wage elasticity in the empirical literature including:

- Fallon & Lucas (1998) estimate an overall wage elasticity of -0.7
- Fedderke (2004) provides sector-level wage elasticities
  (Agriculture, forestry & fishing -0.38, Mining -2.20, Manufacturing -0.39, Electricity, gas & water -0.77, Wholesale & retail trade -1.28, Construction -0.97, Transport, storage & communications, -0.02, Finance & business services -0.5, Community services -1.05, Domestic household services -1.03, General government -0.15).
  Sector employment weighted average = -0.71
- Fedderke (2004) also provides estimates for the wage elasticity by skill level;
  Unskilled: -2.00 to -2.23, Skilled: -0.46, High-skilled: -0.65.
- Pauw (2009) suggests the following ranges for average wage elasticities are plausible
  Agriculture, mining and domestic service: -0.2 to -0.4; Manufacturing sectors: -0.5 to -0.8; Services: -0.6 to -0.9
  National equivalent average wage elasticity: -0.55

For the purposes of the costing we use the skill-level wage elasticity, assuming that all youth employees that earn less than R60 000 are either "unskilled" or "skilled" and weight the skill-level elasticities by the relative shares of low and medium-skilled youth employment in 2Q2010. This provides an overall youth wage elasticity of approximately -1.

Table A3.1: Estimated impact on employment and costs over three years

Option	Description	Jobs (000s)	Cost (R mn)	Cost/job (R)
Fixed Value	Subsidy = 50%*w up to R24 000, then fixed at R12 000 until PIT threshold	410	10 050	24 517
Step-up/ hold/taper	Subsidy = 50%*w up to R24 000, then subsidy = R12 000 between income of R24 000 and R36 000 before taper to zero at PIT threshold	395	8 610	21 808

Step-up/taper	Subsidy = 50%*w up to R24 000, then taper to zero at PIT threshold	380	7 420	19 532
Age dependent	Declining subsidy based on age	330	8 800	26 667

Cost effectiveness, deadweight loss and estimating the cost of sustainable job creation

The cost effectiveness of the subsidy should focus on the cost of sustainable job creation and the number of new youth jobs the subsidy creates in the long-run (net job creation).[57] Gross job creation represents all new young workers that are hired and are eligible for the subsidy. It will include firms that respond to faster economic growth by increasing capacity and expanding employment but benefit from the subsidy in any case. This overstates the true effect of the subsidy on employment creation, since a proportion of these new subsidised youth jobs do not reflect net job creation due to the youth employment subsidy – they would have occurred in its absence. The cost associated with these jobs can be termed as *deadweight loss*. We estimate that over three years this gross job creation will be 423 000 jobs. This corresponds to a cost per job R11 800.

Net job creation because of the youth employment subsidy is a combination of the employment created as a consequence of the production subsidy to existing workers and the youth employment subsidy to new workers. We estimate this to be about 178 000. This implies that about 58 per cent of the job creation would have taken place in any case. Even with taking this into account, the cost per job is relatively inexpensive at R27 908.[58] The current cost per job for a full time equivalent job

There is one further adjustment required to develop a more accurate estimate of the cost of sustainable job creation. This relates to the fact that not all young people who use the subsidy will remain employed after the subsidy expires. Having gained experience, particularly in the private sector, the probability that these young workers will stay employed is relatively high. Transition analysis from the International Growth Advisory Panel (IGAP) showed that employment persistence – the share of workers that have a job today and remain employed in six months time – is approximately 75% for 18 to 29 year olds. Applying this ratio to our net job creation numbers we estimate that the youth employment subsidy will create about 133 000 sustainable jobs, resulting in a cost per sustainable job of R37 353.

A4. Evaluating the youth employment subsidy: a primer

Government will need to know whether this policy intervention is having the desired effects on job creation, employment and the youth labour market. As a result, it is critical to establish a credible and effective means of evaluating the youth employment subsidy to ascertain the policy's success and cost effectiveness. A major weakness identified in the wage subsidy literature is the limited evaluation of these programmes to determine their effectiveness.

In its *Global Inventory of Interventions to Support Young Workers*, the World Bank sets out measures for the 'quality of intervention' (QOI) and 'quality of evaluation' (QOE).

Table A3.2: Measuring the quality of intervention (QOI)

QOI value	Description
0	Programme had negative or zero impact on labour market outcomes

1	Programme had positive impact on labour market outcomes but is not cost effective
2	Programme had positive impact on labour market outcomes and there is no evidence on costs
3	Programme has positive impact on labour market outcomes and is cost effective

Table A3.3: Measuring the quality of evaluation (QOE)

QOE value	Description
0	Programme has no evaluation information available on outcomes or impact
1	Evaluation includes basic information on the gross outcomes of the intervention (e.g. number of participants / young people who found a job after the intervention, improvement in earnings of participants) without considering net effects (i.e. there is no control group)
2	Evaluation includes estimate of net impact on employment and earnings in the labour market (using control groups to measure impact) but no cost-benefit analysis
3	Evaluation includes net impact plus cost-benefit analysis

The former is a measure of an intervention's effectiveness, while the latter is important for assessing the quality of the intervention. The QOI emphasises that interventions that have a positive effect on employment cannot be considered successful without being cost-effective, while the QOE places an emphasis on the net rather than gross impact.

The aim of the proposed youth employment subsidy is to create jobs for young people aged 18 to 29 years old. It must therefore create net employment for young South Africans – i.e. jobs that would not have been created in the absence of the policy. The focus on net employment effects places an emphasis on establishing a credible counterfactual (what would have happened in the youth labour market without the subsidy in place) and also on determining the long-run effects on employment. These could include:

1. Analysis of employment rates of the target group before and after the wage subsidy

   This is a quasi-experimental approach to estimate the impact of the youth employment subsidy by comparing the rate of employment before and after the introduction of the subsidy. The youth employment rate in 2011 acts as the control group and provides the counterfactual because at this point the subsidy does not exist. A difference-in-differences approach can be used to determine the effect of the youth employment subsidy on the youth employment rate. It is important to account for other factors that are likely to explain employment changes over this time as well, such as business cycle conditions and, in particular, the strength of economic growth.

2. Employment changes within the target group

   An alternative approach which can help control for exogenous factors is to compare the target group with other 18 to 29 year olds who are not eligible for the subsidy. These would be the youths who earn above the PIT threshold and therefore do not qualify for the subsidy. Our costing work suggests that about 40 per cent of 18 to 29 year old formal sector workers earn above the assumed PIT threshold and these would provide the counterfactual in this example. The gap in the before/after employment rates of target group youths with non-target group youths provides a difference-in-differences estimate of the impact of the youth employment subsidy.

The approaches outlined above attempt to estimate the size of the deadweight loss through establishing the counterfactual, i.e. those in the target group who would have been employed in the absence of the subsidy. It is also important to consider the substitution effect and try to estimate the extent to which unsubsidised workers have been substituted for subsidised workers. This could happen both through higher exit rates to

unemployment of older non-subsidised workers and lower employment rates of unemployed unsubsidised workers. Perhaps the most vulnerable workers to this effect are young unemployed individuals aged in the early-30s who are closest in age to the target group but not eligible for the subsidy. To estimate substitution effects, the evaluation must also assess whether employment rates change for unsubsidised workers after the subsidy is introduced.

Other useful measures to be monitored could include the duration of unemployment spells, the duration of job search, and the effectiveness of job match under the subsidy. Measuring the quality of jobs found by subsidised workers will also be important and consistent with government's prioritisation of decent work.

A more concrete outline of how to evaluate the youth employment subsidy will need to be developed during the subsidy's design. This will help to ensure the right information is collected by the SARS administrative systems allowing any evaluation to answer the key questions of whether the youth employment subsidy creates net employment and its effectiveness as measured by the cost per job.

To ensure the youth employment subsidy achieves its objectives, the policy should be subject to an initial implementation period of three years. The policy design could then be re-visited after thorough evaluation and review.

ANNEX B

Table B1: Wage subsidy programmes in OECD countries

	Job subsidies, recruitment incentives	Reductions in non-wage labour costs
Australia	x	
Austria		
Belgium		x
Canada	x	x
Chile	x	
Czech Republic		x
Denmark		
Finland		x
France	x	x
Germany		x
Greece	x	
Hungary	x	x
Ireland		
Italy		
Japan	x	x
Korea	x	
Luxembourg	x	
Mexico	x	x
Netherlands		
New Zealand		x
Norway		
Poland	x	x
Portugal	x	x
Slovak Republic	x	x
Spain	x	x
Sweden	x	x
Switzerland		
Turkey		x
United Kingdom	x	
United States	x	

Source: OECD

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