



South Africa Economic Update

Jobs and South Africa's Changing Demographics

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Foreword

Job creation is one of South Africa's most pressing challenges. The country is plagued by one of the highest levels of unemployment and economic inactivity for middle-income countries. More than one-third of its labor force is out of work or has stopped searching for jobs. The unemployment rate for young people is close to 50 percent, and many more of them are neither employed nor in the education system. In the coming decades, millions more young people will join the working age population and more jobs will have to be created if South Africa is to harness this demographic opportunity to accelerate growth and raise living standards. Without this South Africa risks facing a worsening economic situation of rising unemployment and greater dependency where those fortunate enough to work and the state will have to shoulder a greater burden. Job creation is at the heart of the Government's 2012 National Development Plan, which aims to create 11 million jobs by 2030. In an environment of slow economic growth, progress towards this goal has been painfully slow.

This seventh issue of the World Bank's Economic Update for South Africa focuses on the challenges posed by changing demographics and its implications for jobs and labor markets in South Africa. Its analyses center on how job creation, higher savings, and a sharper focus on improving the human capital of school leavers and the unemployed can create the enabling conditions for the

growing working-age population to spur growth and improve living standards. It underscores the importance of job-intensive growth and the need for the education and training system to produce a more skilled workforce better attuned to evolving labor market demands.

This and much more is discussed in greater detail in this report, which uses evidence-based analysis to draw its conclusions and recommendations. The report also presents recent economic developments in South Africa, where on-going power outages, difficult labor relations, and policy uncertainty have compounded external headwinds from lower commodity prices and slowing growth in China.

I sincerely hope that this report's findings promote informed dialogue and policy debate about the country's development priorities pertaining to job creation and economic inclusion in a context of major demographic changes.



Guang Zhe Chen
Country Director for Botswana,
Lesotho, Namibia, South Africa,
Swaziland, Zambia, and Zimbabwe
World Bank

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Catriona Purfield task lead the focus chapter, leading a team comprising: Lucilla Bruni (GSPDR), Syud Amer Ahmed (DECPCG), Marcio Jose Vargas da Cruz (DECPCG), William G. Battaile (GMFDR), and Fernando Im. Victor Sulla (GPVDR) and Mariam Lomaia (GSPDR) prepared box 1, Thomas Farole (GCJDR) and Claire Honore Hollweg (GTCDR) box 2 and Trimor Mici

(DECSN) box 3 in chapter 1. Gerard Kambou (DECPCG) and Fernando Im (GMFDR) prepared chapter 1 and Phindile Ngwenya (GMFDR) provided very able research assistance. Peer reviewers were Hans Lofgren, (DECPCG), Maryla Maliszewska (DECPCG), Delfin Go (Consultant), Syed Ejaz Ghani (GMFDR), Csilla Lakatos (DECPCG), and Thomas Moultrie (University of Cape Town). The report was prepared under the overall guidance and supervision of Asad Alam (Country Director, AFCSI) and Mark Roland Thomas (Practice Manager, GMFDR).

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Executive Summary

Global economic developments and prospects

Global growth hit a soft patch at the start of 2015. In the first quarter it slowed to 2.0 percent, quarter on quarter (q/q) annualized, from 2.3 percent in the fourth quarter of 2014. The slowdown was reflected in a decline in global manufacturing activity, on the back of weak industrial production and goods trade data, especially in large emerging markets.

Among high-income countries, economic activity is strengthening. Euro Area growth picked up to 1.6 percent in the first quarter of 2015 from 1.3 percent the previous quarter. Growth in Japan accelerated to 2.4 percent in the first quarter from 1.1 percent in the previous quarter. For the second quarter, despite the uncertainty surrounding Greece, the Euro Area Composite PMI in July remained close to a four-year high. Confidence indicators for the second quarter point to further improvements, while indicators in Japan also suggest continued, albeit moderate, growth.

In the United States, growth continues to strengthen. The economy contracted by 0.7 percent in the first quarter, reflecting the impact of temporary factors (bad weather, port disruptions), but recovered in the second quarter with real gross domestic product (GDP) expanding by 2.3 percent on the back of robust growth in household consumption. Job creation continued at an above-trend pace, and the unemployment rate declined to 5.3 percent in June, its lowest since 2008.

The sharp fall in oil prices since June 2014 continued to weigh on global inflation in the

first quarter of 2015. But in the second quarter this dampening impact started dissipating in a number of oil-importing countries. Long-term inflation expectations have recovered in both the Euro Area and the United States, moving closer to central bank targets.

After a rebound in March, gross capital flows to developing countries maintained their robust momentum in the second quarter of 2015. Capital inflows to developing countries averaged \$61 billion per month in the second quarter of 2015. The pick-up stemmed from a surge in international bond issuance, reflecting large corporate issues from East Asia and Latin America. But equity flows have fallen significantly due to a sharp drop in flows to China, mirroring the plunge of the Chinese stock market since mid-June.

Looking ahead, global activity should be supported by low commodity prices and generally still-benign financing conditions, even as U.S. monetary policy normalizes. According to the World Bank *Global Economic Prospects* of June 2015, global growth is projected to rise modestly to 2.8 percent in 2015 from 2.6 percent in 2014 with a further moderate pickup in 2016 and 2017 to more than 3.2 percent.

Growth in high-income countries is projected to average 2.0 percent in 2015 and average 2.3 percent in 2016 and 2017, up from 1.8 percent in 2014, driven largely by the United States and reflecting gradual strengthening in the Euro Area and Japan. Growth in the United States is expected to rise to 2.7 percent this year and 2.8 percent the next, from 2.4 percent in 2014. In the

Euro Area, growth is expected this year at 1.5 percent, up from 0.9 percent in 2014 with some modest strengthening in 2016. In Japan, it is projected to reach 1.1 percent in 2015, from zero growth in 2014.

By contrast, growth in developing countries is projected to slow this year as they adjust to lower commodity prices and tighter financing conditions ahead. Next year should see a slight recovery. Their aggregate growth is expected to be 4.4 percent in 2015, down from 4.6 percent in 2014, reflecting China's sustained slowdown. Growth in Sub-Saharan Africa is forecast to slow to 4.2 percent in 2015 and to around 4 percent in 2016 and 2017, from 4.6 percent in 2014, as low oil and mineral prices reduce growth in commodity-exporting African countries.

In South Africa, domestic factors continue to impede the recovery in economic growth. Labor unrest and electricity shortages held headline real GDP growth to just 1.5 percent in 2014, entrenching the moderation in economic activity evident since 2011. For the first time since 2009, aggregate economic growth fell short of population growth in 2014, reducing per capita real GDP by 0.4 percent to Rand 55,712 (\$6,800). Poverty and inequality rates are therefore likely to have stayed broadly unchanged from those recorded in the 2010/11 household expenditure survey where 21.7 percent of the population lived below the food poverty line (Rand 335 per capita per month) and the Gini coefficient of income inequality stood at 0.69.

Growth lost momentum in the first quarter of 2015. Real GDP expanded by 1.3 percent q/q seasonally adjusted annual rate (2.0 percent y/y), significantly below the 4.1 percent q/q growth rate registered in the final quarter of 2014, which was boosted by the recovery in output from the first half of 2014. Agriculture and manufacturing subtracted 0.7 percent from headline q/q growth, with mining and financial services the only two sectors making a significant contribution.

On a quarterly basis, growth decelerated in the primary sector largely due to the impact of a drought on maize production and moderation in the growth of mining output. After six quarters of steady growth, agricultural production contracted sharply (down 16.6 percent q/q) in the first quarter, subtracting 0.4 percentage points from

headline growth as maize production fell. After the prolonged strike in the platinum sector in the first half of 2014, mining production gathered momentum over the rest of 2014, with growth peaking at 15.2 percent q/q in the final quarter as producers sought to bring production back to pre-strike levels. Growth eased somewhat in the first quarter of 2015 to 10.2 percent q/q, reflecting in part lower mineral prices, but mining still contributed slightly more than half of total headline real GDP growth. Prospects for the mining sector in the second quarter are dim. In April and May, mining sector output shrank by 4.7 percent m/m seasonally adjusted in each month as lower commodity prices and power outages contributed to sharp contractions in coal, platinum group metals, and iron-ore production.

Activity in the secondary sector resumed its downward trajectory in the first quarter as electricity outages took over from strikes as the main check on manufacturing recovery. The rebound from strike-induced losses in manufacturing in the last quarter of 2014 proved short-lived. The sector contracted 2.4 percent q/q in the first quarter, subtracting 0.3 percentage points from headline q/q growth, as it struggled with more frequent power outages and falling external demand for steel. After five quarters of robust growth, construction activity also decelerated sharply in the first quarter. Manufacturing output shrank by 2.0 percent and 0.4 percent m/m seasonally adjusted in April and May, respectively, as severe power outages took their toll on production, suggesting that growth in this sector will remain weak in the second quarter.

Growth in the tertiary sector also moderated, despite a robust performance from the financial, real estate, and business services subsector. Overall sector growth edged down to 1.5 percent q/q in the first quarter, its slowest pace since the 2009 global financial crisis, reflecting a 0.8 percent q/q contraction in government services which last experienced a contraction of this severity in 2001. The key bright spot in the economy, and building on its strong performance in 2014, was the finance, real estate, and business services subsector: its growth rose to 3.8 percent q/q in the first quarter and contributed 0.7 percentage points to q/q headline

growth. Wholesale and retail trade recovered somewhat in the first quarter, yet continued to reflect weakness in private consumption demand.

The current environment of weak growth and confidence is making it difficult to tackle the triple challenges of high unemployment and fiscal and external imbalances. The current environment has not been favorable for any sharp pick up in job creation and the unemployment rate has remained high at 25 percent. On the fiscal front, the 2015 budget has targeted a gradual reduction in the budget deficit from 3.7 percent of GDP in 2014–15 to 2.5 percent of GDP by 2017–18 to help stabilize the debt burden. But achieving these targets in an environment of low economic growth and rising financial pressures at state-owned enterprises will be challenging. Headline inflation eased temporarily on the back of lower fuel prices. But with core inflation close to the upper end of the inflation target band and rand weakness increasing the risk of pass through to prices, the SARB has raised policy interest rates. The current account deficit remains wide and is largely funded by capital inflows.

Economic outlook

Real GDP growth is forecast at 2.0 percent in 2015, and to slowly strengthen to 2.4 percent in 2017. Agricultural growth is expected to be pulled down in the near term by the poor maize harvest, but finance and business services are set to grow robustly throughout the forecast period. But overall, growth in South Africa will remain largely below the average growth rate of 4.2 percent and 4.0 percent for Sub-Saharan Africa, in 2015 and 2016–2017, respectively.

Structural impediments will continue weighing heavily on growth. Power-supply bottlenecks are one of the main underlying factors in the downgraded revision of the growth outlook since the previous economic update. Relative to our forecast in the November 2014 Economic Update (Volume 6), real GDP growth has been revised down by 0.5 and 0.8 percentage points for 2015 and 2016, respectively. We expect some improvement in the electricity situation only toward the end of the forecast period as new power-generation capacity comes online.

These structural factors are reinforcing cyclical weakness in domestic demand. Household consumption is expected to grow only modestly. Lower oil prices provided only temporary relief to household budgets and headline inflation. The prospect of higher electricity tariffs and potentially higher pass-through of a more depreciated rand to domestic prices, will limit space for households to expand consumption. High unemployment and indebtedness, along with tightening credit standards, continue to weigh on consumer sentiment, while government consumption is subdued because of consolidation efforts.

Concerns over electricity supply and rising input and wage costs are being compounded by broader commodity price weakness as well as policy and regulatory uncertainty, and are likely to dampen the outlook for investment. Labor relations are expected to remain difficult in an environment of weak growth.

On the plus side, the recovery in advanced countries and still-robust growth in Sub-Saharan Africa should boost demand for South Africa's non-mineral exports. Still, the anticipated weakness in mineral demand and prices limit the overall improvement in the current account deficit, which is expected to stay elevated at around 5.0–5.2 percent of GDP over the medium term. Given the weak recovery, South Africa's output gap, put at 1.2 percent of potential growth in 2014, is projected to narrow only slowly toward the end of the forecast horizon.

Given the weak recovery, little progress is expected against the triple challenges of high unemployment, deep poverty, and wide inequality. Agricultural growth is relatively weak, while the extractives and metals sectors continue to struggle against lower minerals prices and rising production costs, causing further job losses in these sectors. With little change in growth drivers or their job intensity expected, unemployment is set to remain sticky and high. Extreme poverty may well remain broadly unchanged at its current level, reflecting the low rate of economic growth. Our forecasts do not foresee inequality narrowing either, because a high rate of joblessness means that the gap in incomes between the employed and unemployed persists. Growth in the consumption of the bottom 40 percent is seen flat at about 1 percent.

Downside risks to this already-weak economic outlook prevail. On the external side, they include a sharper than expected slowdown in the Chinese economy, bouts of risk aversion and financial-market volatility due to the normalization of U.S. monetary policy and faltering growth in the Euro Area amid uncertainty surrounding developments in Greece. China is still a major market for South African mineral exports, and Europe for manufactured exports, so a slowdown in either would reduce demand for South Africa's exports. The growing size of some regional markets may partly counter any hit from these markets. But South Africa's large current account deficit, financed heavily by volatile capital flows, makes the economy vulnerable to shifts in investor sentiment and shifting capital flows that could arise in the context of fall-out from the "lift-off" in interest rates in the United States.

On the domestic front, if labor relations do not improve or if power disruptions worsen, growth could well disappoint further. And if wage settlements continue to exceed inflation and productivity gains, competitiveness will erode, undermining the role of net exports in supporting the recovery.

While addressing power shortages will be critical to removing a key break on near-term growth, achieving the 5 percent growth target of the National Development Plan requires much more than that. South Africa needs urgently to boost growth to this level if it is to provide jobs for young workers, address its growing social tensions, and reduce its substantial poverty and inequality. Improved labor relations, matched by greater collaboration between the public and private sectors and policy certainty to improve the business environment, are fundamental to restoring confidence.

Jobs and South Africa's changing demographics

In South Africa, a lack of jobs has stymied its ability to capitalize on its demographic opportunity. Since 1994, the working-age population has expanded by more than 11 million. Job opportunities created were concentrated in services, but not in agriculture, manufacturing, and mining, which shed workers, with the result that total jobs created fell far short of the growing labor supply. Just

under one-third of the new entrants to the working-age cohort since 2000 found a job, and by mid-2015 only a little more than 40 percent of the working-age population were employed. Unemployment today is higher than it was at the end of apartheid. To the extent that unemployment lowers current and future earnings potential through the erosion of skills and human capital during periods of prolonged joblessness, lifetime earnings of workers are lower and the ability to generate savings is constrained. Savings as a share of GDP have fallen as the working-age population expanded. Real per capita income in 2014 was only 40 percent higher than in 1994, trailing the increases not only in East Asia but also in Latin America, two regions that experienced similar increases in share of the working age population as South Africa.

Our analysis focuses on how job creation, savings, and better human capital can improve enabling conditions for the growing working-age population to contribute to faster economic growth. As the "youth bulge" passes into working age, a country enters its "demographic window of opportunity," but a dividend does not materialize automatically. To realize the first demographic dividend, growth must be jobs intensive and the education system has to prepare graduates with the skills demanded by the labor market. Otherwise, a country risks a worsening economic situation with rising unemployment and increased dependency. The second dividend accrues when consumption rises more slowly than incomes and requires not only mechanisms to encourage saving but also productive investment in human capital (knowledge and skills) so labor productivity can improve and boost workers' earnings.

South Africa is in its demographic window of opportunity and will remain there for around 50 more years. Since 1994, its working-age population (15–64 years) has increased by 11 million. In the next 50 years, it will grow by another 9 million. Having such a high share of its population—68.3 percent at its peak in 2045—in its working prime presents a tremendous opportunity for the country to boost its growth and raise living standards. But it also presents tremendous challenges. In the next 15 years alone, the working-age population will expand by

280,000 a year. These people will have to find productive jobs if South Africa is to harvest the potential boost to growth and living standards before it faces the rising burden associated with a rapidly growing elderly.

To illustrate how a growing working age population has the potential to affect growth, incomes, poverty, and inequality, we contrast a business as usual scenario where current high rates of unemployment and low rates of job creation persist through 2030, to three other potential futures that evolve around creating a better enabling environment—one where more jobs are created, a second where greater job creation is accompanied by training to improve worker skills, and a third where job creation and better skills are accompanied by better education attainment by new entrants.

If unemployment and employment remain constant at current rates, South Africa sees only a very modest boost to growth and incomes from its rising working-age population. In the baseline scenario, real GDP growth averages 3.7 percent a year and growth in real per capita incomes averages 3.1 percent a year over 2015–30. The number of employed rises modestly from about 14.8 million workers in 2015 to 16.6 million by 2030. This implies that only about 40 percent of the 4.3 million increase in the working-age cohort over the next 15 years will find jobs. Moreover, the high rates of youth unemployment imply that the economy is not only forgoing the benefit of the labor supply growing faster than the overall population, but also missing the potential benefit that these new entrants have more years of schooling. Nor do incomes rise enough to create space for a sharp increase in savings: savings as a share of GDP rise modestly from 14.5 percent of GDP in 2015 to just under 18.5 percent by 2030.

The job creation scenario illustrates the necessity for strong job creation to employ the growing working-age population. Here, South Africa's unemployment rate converges with the upper middle-income country average of 5.8 percent by 2030 and the employment rate rises to about 54 percent. Labor productivity growth is positive but not as strong as in other emerging market economies. In this more optimistic future, growth is far more jobs intensive: the number of

people employed grows almost three times faster than in the business-as-usual case, with jobs growth averaging 2.2 percent a year. By 2030, 4.03 million more people are working than in the previous case and relative to 2015 some 5.8 million new jobs are created, which is more than enough to employ the new entrants and allow South Africa to make a significant dent in its unemployment rate.

But even with more jobs, the gains to growth and income from a growing working-age population appear relatively modest in South Africa because aging is offsetting some of the benefits. By 2030 the share of the population older than 65 will already have reached 8 percent, 2.25 percentage points more than today. This is limiting the scope for a potential second demographic dividend. Because the old draw down their savings faster than the working-age share of the population can increase national savings, the increase in the old-age dependency ratio, particularly after 2027, is high enough to limit the improvements in overall savings and the secondary boost to economic growth via greater investment. Total savings reach 19.5 percent of GDP by 2030, only about 1 percentage point of GDP higher than in the business-as-usual scenario.

Higher growth in labor productivity will need to accompany job creation if South Africa is to make greater strides in raising growth and incomes as the working-age population moves toward its peak. In the productivity-enhancing scenario, we examine how growth and income evolve if the decline in unemployment highlighted above is also accompanied by improved labor-productivity growth that could come about through better training and skills. Here, overall real GDP rises at an average rate of 5.3 percent a year, above the 5 percent target set in the National Development Plan (2012). The economy's size more than doubles between 2015 and 2030 and is one-quarter larger in 2030 than in the business-as-usual baseline case. In per capita terms, real GDP growth averages 4.7 percent a year and per capita incomes reach US\$12,558 by 2030. The increase in productivity helps offset some of the pressures on savings and growth from having a growing share of the population older than 65. Savings as a share of GDP is 20.8 percent of GDP in 2030, which allows South Africa to reap

a somewhat higher dividend from its large working-age population.

The impact of a growing working-age population on growth and incomes would be further enhanced by efforts to improve educational attainment and skills. In the third scenario, job creation and faster labor-productivity growth is accompanied by these efforts. In an accelerated educational-attainment scenario, overall real GDP and real GDP per capita rise at an average of 5.4 percent and 4.8 percent a year, respectively. Per capita incomes reach US\$12,766 and savings rise to 21 percent of GDP by 2030. The gain in the economy of higher educational attainment is understated by these numbers, because 15 years is not long enough for the full impact of these efforts on growth and incomes to fully materialize.

Extreme poverty—measured by the share of the population living on less than \$1.25 per day—could be virtually eliminated if South Africa could combine jobs creation with improvements in its labor productivity and educational attainment. In the business-as-usual baseline the share of the population living on less than \$1.25 (PPP adjusted) a day falls from 9.4 percent in 2011 to 2.7 percent in 2030. However, the extreme poverty rate falls to about 1 percent of the population in the most optimistic scenario. When measured at the \$2 a day poverty line, the poverty rate falls by almost three-quarters from 23.7 percent in 2011 to about 4 percent in 2030 in the most optimistic scenario.

Our analysis shows that more job-intensive growth would help tackle unemployment and create jobs for many new labor-force entrants in the coming 15 years, allowing South Africa to take the first step in harnessing its favorable demographics. But the analysis also shows that simply increasing the number of jobs will not be enough to allow South Africa to boost savings and derive the second demographic dividend. More job-intensive growth needs to be accompanied as a first priority by improving the quality of education so that better educated youth are entering the workforce. This needs to be complemented by efforts to improve the productivity of existing workers and the unemployed through better skills development and training. By creating a virtuous circle of job-intensive growth, improved productivity, and higher savings,

growth could accelerate to 5.4 percent a year and per capita incomes could double by 2030, which would virtually eliminate extreme poverty and begin to reduce inequality.

Changing the growth and jobs dynamics will require urgent action on several mutually reinforcing fronts. The government has already introduced an employment tax incentive to encourage firms to hire young workers. Through its Industrial Policy Action Plan, it is also offering incentives to promote potentially labor-intensive sectors like manufacturing and agriculture. Faster and deeper global and regional integration in trade in goods and services would bolster this effort. Nonetheless, low-cost, labor-intensive production is unlikely to be the main engine for job creation for South Africa, given how these sectors have shrunk over the past two decades. Policies also need to focus on developing services, small and medium firms, and household enterprises, including in the informal economy, as engines for job creation. Policies that improve the business environment, especially for small firms, could include reducing the burden of red tape, improving access to low-cost finance, and securing greater flexibility in labor-market regulations.

The greatest priority on the supply side is to improve levels of educational attainment in South Africa. Getting basic schooling right is the first step to ensuring that school leavers and graduates have the foundational skills necessary to function in the modern workplace. Educational attainment not only shapes employment opportunities, but also provides the foundation for further on-the-job learning and training. This will not be an easy task. South Africa has already achieved almost universal school attendance and the challenge now is to improve learning outcomes by better training and support of teachers.

Promoting skills, especially of the long-term unemployed, also calls for complementary efforts. Steps are being taken to scale up technical and vocational education and training opportunities. But access remains a challenge, especially for the young who lack a high school qualification, while the system continues to face problems of quality and institutional capacity in supplying the skills demanded by employers. To broaden

access, training opportunities should match the actual educational levels of young unemployed, while financial support for enrollees could help overcome the hurdles of high transport and living costs. Designing training programs in consultation and partnership

with the private sector will ensure that they are high quality and better geared to the needs of the labor market. Employers can also provide internships and other opportunities for practical training to help overcome new entrants' lack of work experience.

SECTION I

Recent Economic Developments

Global economic developments and prospects

Sources of global growth rotate as activity strengthens in high-income economies but slows in developing economies

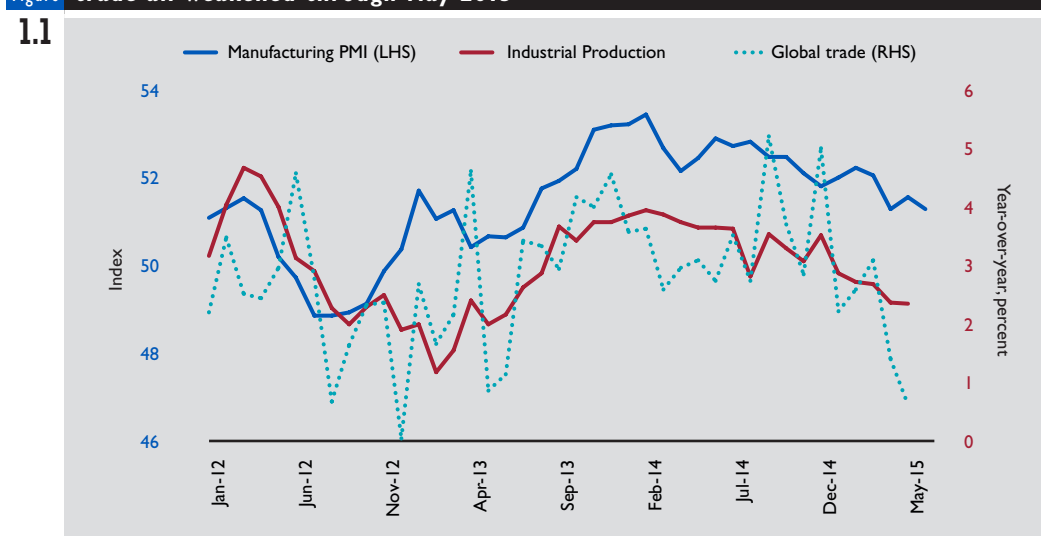
Global growth hit a soft patch at the start of 2015. In the first quarter it slowed to 2.0 percent, quarter on quarter (q/q) annualized, from 2.3 percent in the fourth quarter of 2014.¹ The slowdown was reflected in a decline in global manufacturing activity, on the back of weak industrial production and goods trade data (figure 1.1), especially in large emerging markets.

Among high-income countries, economic activity is strengthening. Euro Area growth picked up to 1.6 percent in the first quarter of

2015 from 1.3 percent the previous quarter, bolstered by a weakening euro, declining oil prices, and more accommodating financing conditions. Growth in Japan accelerated to 2.4 percent in the first quarter from 1.1 percent in the previous quarter, helped by a recovery in private consumption and investment. For the second quarter, despite the uncertainty surrounding Greece, the Euro Area Composite PMI in July remained close to a four-year high. Confidence indicators for the second quarter point to further improvements, while indicators in Japan also suggest continued, albeit moderate, growth.

In the United States, growth continues to strengthen. The economy contracted by 0.7 percent in the first quarter, reflecting the

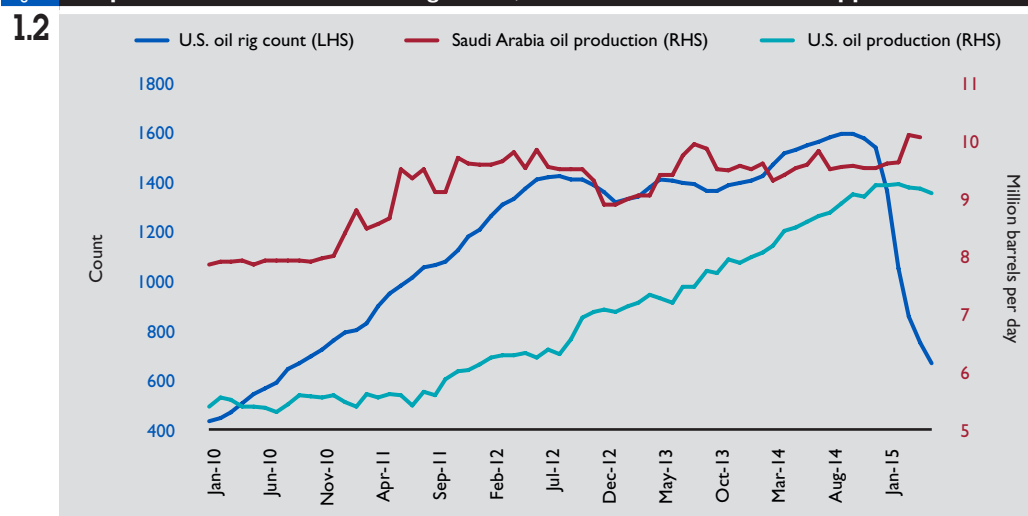
Figure 1.1 Global manufacturing purchasing managers' index, industrial production, and trade all weakened through May 2015



Source: World Bank, CPB, Haver Analytics.

Iron ore prices are forecast to decline by 46 percent in 2015

Figure 1.2 **Despite a decline in the U.S. rig count, oil markets remain oversupplied**



Source: World Bank Global Economic Prospects, June 2015, Baker Hughes, International Energy Agency.

impact of temporary factors (bad weather, port disruptions), but recovered in the second quarter with real GDP expanding by 2.3 percent on the back of robust growth in household consumption. Job creation continued at an above-trend pace, and the unemployment rate declined to 5.3 percent in June, its lowest since 2008.

In developing countries, economic growth continued to weaken, South Africa's key trading partners included. China's gross domestic product (GDP) grew by 7.0 percent in 2015Q2, up from 5.3 percent in the first quarter as stimulus measures supported activity. Reflecting the softening of growth in China relative to previous years, real GDP growth in the first quarter slowed in East Asia, including Indonesia, Malaysia, and Thailand. This weakness appears to have extended to the second quarter, where industrial production in several emerging-market countries struggled to gain pace (Indonesia, Malaysia) or turned negative (Brazil, the Russian Federation, the Republic of Korea, and Thailand), reflecting adjustment to lower commodity prices and weaker exports, as well as domestic factors.

Commodity prices will remain low but volatile

Over the second quarter, oil prices recovered from their January 2015 lows, but in July they weakened again and are now projected at an annual average of \$57 per barrel in 2015, compared to \$96 per barrel in 2014. Despite a decline in the U.S. oil-rig count (a measure

of future production) of 60 percent since the peak in October 2014, oil markets have remained oversupplied as U.S. oil production has adjusted only slowly, oil production by high-income oil producers rose modestly with new supply also expected from Iran, and inventories remained high (figure 1.2). Uncertainty on supply adjustments has increased price volatility since November 2014, but oil prices are expected to remain well below their 2013 levels over the next decade.

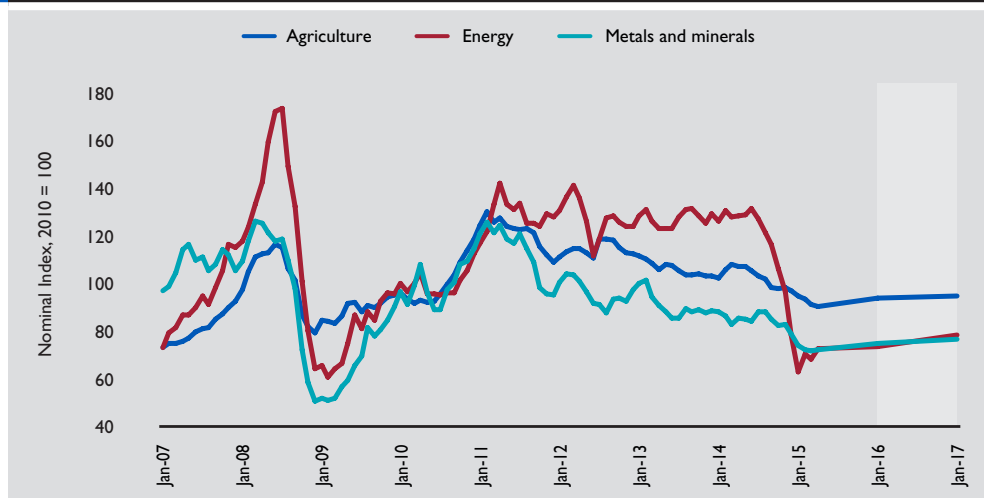
Weak global demand, U.S. dollar appreciation, and low oil prices have put pressure on non-oil commodity prices. Metals (including iron ore) and agricultural raw materials prices—among the commodities most sensitive to the business cycle—were at the end of June about 15 percent lower than a year earlier. Metals prices are now 43 percent below their February 2011 high and are projected to decline by 13 percent in 2015 relative to 2014, due to excess capacity and slowing demand in China. The largest decline is expected for iron ore (down 46 percent for 2015), reflecting new low-cost mining capacity (mainly in Australia) coming online in 2015 and 2016. Fertilizer prices (a key input to most agricultural commodities) and agricultural prices more widely are also expected to fall on weaker demand, ample supply, and reduced energy costs (figure 1.3).

The global inflation outlook is favorable

The sharp fall in oil prices since June 2014 continued to weigh on global inflation in

Figure 1.3 Global commodity prices are expected to remain soft

1.3



Source: World Bank Global Economic Prospects, June 2015.

Global growth is projected to rise modestly to 2.8 percent in 2015

the first quarter of 2015, with the proportion of countries with low inflation (or even deflation) unusually high. But in the second quarter this dampening impact started dissipating in a number of oil-importing countries. Long-term inflation expectations have recovered in both the Euro Area and the United States, moving closer to central bank targets.

Divergence in monetary policy persists. The European Central Bank launched in March its quantitative easing program with monthly asset purchases of €60 billion until at least September 2016, while the Bank of Japan maintained its commitment to aggressive policy easing. In contrast, the U.S. Federal Reserve is expected to start hiking policy interest rates, albeit gradually, in the second half of 2015. Notwithstanding the recent correction, expectations of divergent monetary policies have caused the U.S. dollar to appreciate significantly since mid-2014, leading to renewed pressure on emerging and frontier market currencies, and increased volatility in them. Yet despite these pressures, central banks in several large oil-importing developing countries were able to cut interest rates since the start of the year as inflation moved closer to policy targets, current account deficits narrowed, and growth remained soft.

Capital inflows to developing countries remain robust

After a rebound in March, gross capital flows to developing countries maintained their robust momentum in the second

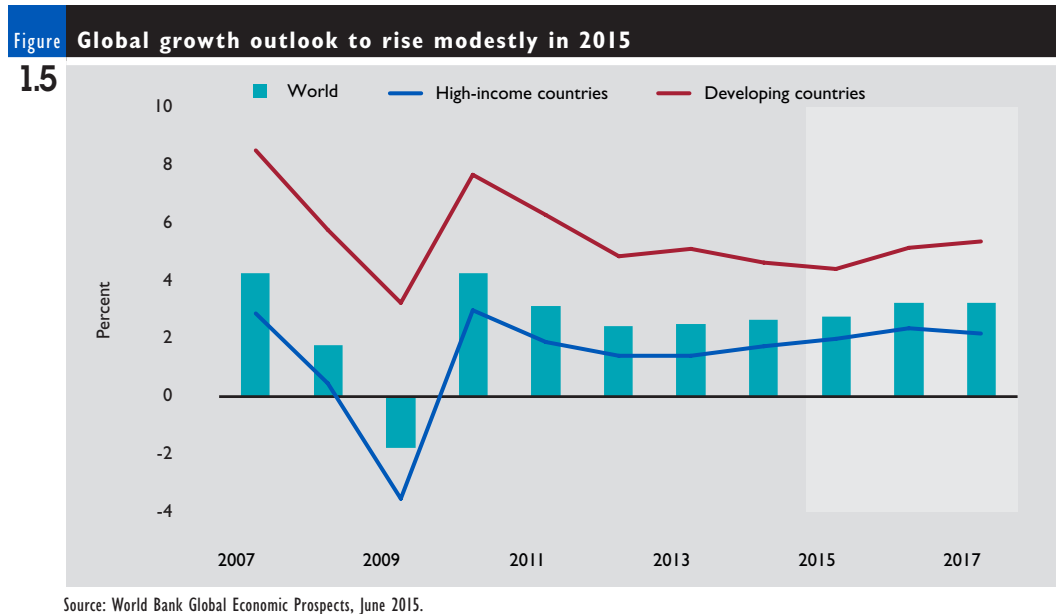
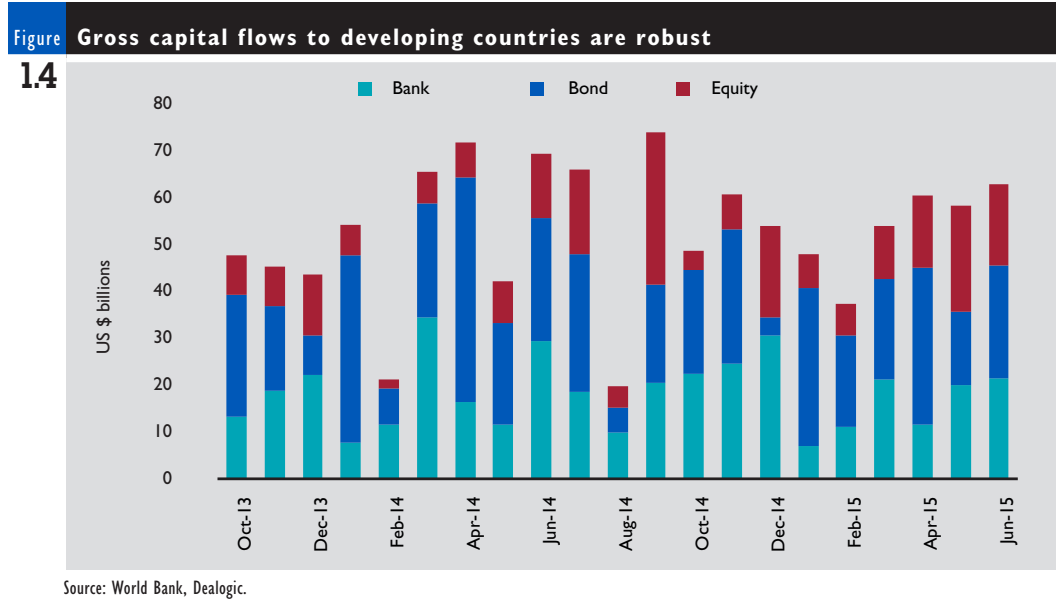
quarter of 2015 (figure 1.4). Capital inflows to developing countries averaged \$61 billion per month in the second quarter of 2015, stronger than the monthly average of \$46 billion in the first quarter. The pick-up stemmed from a surge in international bond issuance, reflecting large corporate issues from East Asia and Latin America. Syndicated bank lending recovered from weakness in the first four months of the year but equity flows have fallen significantly due to a sharp drop in flows to China, mirroring the plunge of the Chinese stock market since mid-June.

High-income countries are set to drive global growth in 2015

Looking ahead, global activity should be supported by low commodity prices and generally still-benign financing conditions, even as U.S. monetary policy normalizes. According to the World Bank *Global Economic Prospects* of June 2015, global growth is projected to rise modestly to 2.8 percent in 2015 from 2.6 percent in 2014 with a further moderate pickup in 2016 and 2017 to more than 3.2 percent (figure 1.5).

Growth in high-income countries is projected to average 2.0 percent in 2015 and average 2.3 percent in 2016 and 2017, up from 1.8 percent in 2014, driven largely by the United States and reflecting gradual strengthening in the Euro Area and Japan. Growth in the United States is expected to rise to 2.7 percent this year and 2.8 percent the next, from 2.4 percent in 2014. In the

Developing country growth is expected to slow to 4.4 percent in 2015



Euro Area, growth is expected this year at 1.5 percent, up from 0.9 percent in 2014 with some modest strengthening in 2016. In Japan, it is projected to reach 1.1 percent in 2015, from zero growth in 2014.

Developing countries will slow in 2015 before recovering slightly in 2016

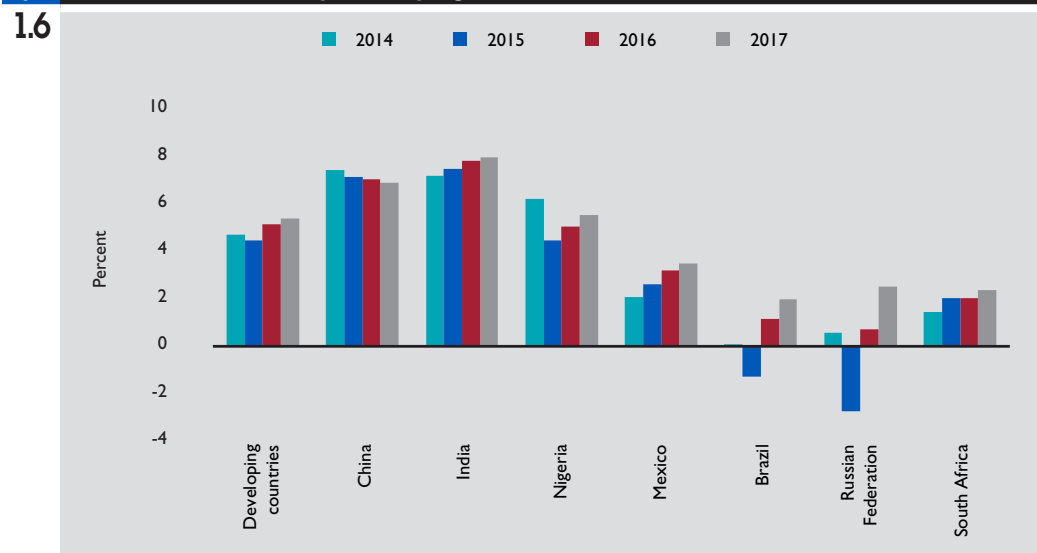
By contrast, growth in developing countries is projected to slow this year as they adjust to lower commodity prices and tighter financing conditions ahead. Next year should see a slight recovery. Their aggregate growth is expected to be 4.4 percent in 2015, down from 4.6 percent in 2014, reflecting China's sustained slowdown (figure 1.6). Growth in India, however, is expected to

continue accelerating, as lower oil prices help boost private consumption. Growth in Sub-Saharan Africa is forecast to slow to 4.2 percent in 2015 and to around 4 percent in 2016 and 2017, from 4.6 percent in 2014, as low oil and mineral prices reduce growth in commodity-exporting African countries.

Global risks have diminished but remain tilted to the downside

Some preexisting risks, especially of deflation in the Euro Area, have receded somewhat but new financial-stability and growth risks have emerged. Deteriorating prospects in some developing economies, especially commodity-exporting ones, are eroding their macroeconomic resilience. This, with the

Figure 1.6 Growth outlook in key developing countries



Source: World Bank Global Economic Prospects, June 2015.

Real GDP per capita in South Africa fell in 2014

possibility of volatility once U.S. monetary policy starts normalizing, is increasing the risk of financial stress. In addition, a continued broad-based dollar appreciation could slow the U.S. economy more than currently expected. If these downside risks materialize at the same time, they could severely disrupt developing-country financial markets and real economies.

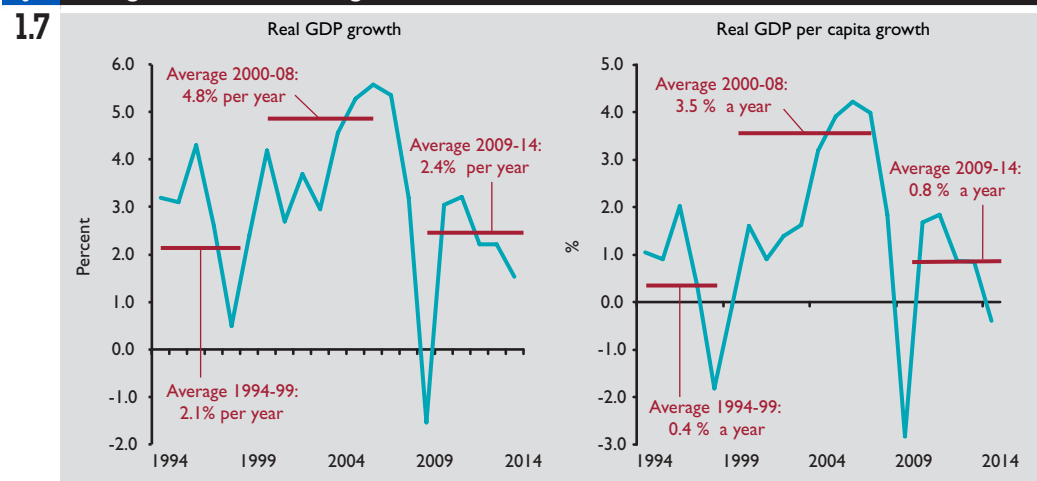
Recent trends in South Africa

Growth is stuck in low gear

Domestic factors continue to impede the recovery in economic growth in South Africa. Labor unrest and electricity shortages held headline real GDP growth to just 1.5 percent

in 2014, entrenching the moderation in economic activity evident since 2011 (figure 1.7, left panel). For the first time since 2009, aggregate economic growth fell short of population growth in 2014, reducing per capita real GDP by 0.4 percent (figure 1.7, right panel) to Rand 55,712 (\$6,800). Since the global financial crisis, South Africa's real GDP growth has fallen well short of the 5 percent target set in the 2012 National Development Plan. Poverty and inequality rates are therefore likely to have stayed broadly unchanged from those recorded in the 2010/11 household expenditure survey where 21.7 percent of the population lived below the food poverty line (Rand 335 per capita per month)² and the Gini coefficient of income inequality stood at 0.69.

Figure 1.7 GDP growth is stuttering



Source: Statistics South Africa.

Electricity outages replaced strikes as manufacturing's key constraint

Growth lost momentum in the first quarter of 2015. Real GDP expanded by 1.3 percent q/q seasonally adjusted annual rates³ (2.0 percent y/y), significantly below the 4.1 percent q/q growth rate registered in the final quarter of 2014, which was boosted by the recovery in output from the first half of 2014. Agriculture and manufacturing subtracted 0.7 percent from headline q/q growth, with mining and financial services the only two sectors making a significant contribution.

On a quarterly basis, growth decelerated in the primary sector largely due to the impact of a drought on maize production and moderation in the growth of mining output. Growth in the primary sector peaked at a four-quarter high of 13.3 percent in the fourth quarter of 2014 before sliding to 3.3 percent the following quarter (table 1.1). After six quarters of steady growth, agricultural production contracted sharply (down 16.6 percent q/q) in the first quarter, subtracting 0.4 percentage points from headline growth as maize production fell. After the prolonged strike in the platinum sector in the first half of 2014, mining production gathered momentum over the rest of 2014, with growth peaking at 15.2 percent q/q in the final quarter as producers sought to bring production back to pre-strike levels. Growth eased somewhat in the first quarter of 2015 to 10.2 percent q/q, reflecting in part lower mineral prices, but mining still contributed

slightly more than half of total headline real GDP growth. Prospects for the mining sector in the second quarter are dim. In April and May, mining sector output shrank by 4.7 percent m/m seasonally adjusted in each month as lower commodity prices and power outages contributed to sharp contractions in coal, platinum group metals, and iron-ore production.

Activity in the secondary sector resumed its downward trajectory in the first quarter as electricity outages took over from strikes as the main check on manufacturing recovery. The rebound from strike-induced losses in manufacturing in the last quarter of 2014 proved short-lived. The sector contracted 2.4 percent q/q in the first quarter, subtracting 0.3 percentage points from headline q/q growth, as it struggled with more frequent power outages and falling external demand for steel. After five quarters of robust growth, construction activity also decelerated sharply in the first quarter. Manufacturing output shrank by 2.0 percent and 0.4 percent m/m seasonally adjusted in April and May, respectively, as severe power outages took their toll on production, suggesting that growth in this sector will remain weak in the second quarter.

Growth in the tertiary sector also moderated, despite a robust performance from the financial, real estate, and business services subsector. Overall sector growth edged down to 1.5 percent q/q in the first

Table 1.1 GDP components

Sector	2011	2012	2013q1	2013q2	2013q3	2013q4	2013	2014q1	2014q2	2014q3	2014q4	2014	2015q1
GDP at market prices	3.2	2.2	1.4	3.7	1.2	5.1	2.2	-1.6	0.5	2.1	4.1	1.5	1.3
Primary sector	-0.3	-2.1	10.1	-3.7	10.2	14.8	3.4	-17.2	-1.0	5.2	13.3	0.0	3.3
Agriculture, forestry, and fishing	1.3	0.6	-2.9	-1.1	3.6	6.8	1.5	4.8	5.6	9.5	7.5	5.6	-16.6
Mining and quarrying	-0.7	-2.9	14.3	-4.5	12.3	17.2	4.0	-22.8	-3.0	3.9	15.2	-1.6	10.2
Secondary sector	2.3	1.6	-6.1	9.3	-4.3	8.2	0.9	-3.8	-2.5	-0.4	7.2	0.4	-1.4
Manufacturing	2.9	1.9	-7.8	11.7	-6.6	12.3	0.7	-6.4	-4.0	-1.0	9.5	0.0	-2.4
Electricity, gas, and water	1.4	-0.1	-4.8	3.0	1.9	-6.0	-0.6	0.2	-0.5	-1.1	0.3	-0.9	0.7
Construction	0.4	2.1	-0.8	5.1	0.6	3.6	2.7	3.7	2.1	2.2	3.5	2.9	0.8
Tertiary sector	3.8	3.1	2.4	3.2	2.1	2.7	2.5	1.7	1.9	2.4	1.8	2.1	1.5
Wholesale and retail trade, catering, and accommodations	3.8	3.6	0.9	2.2	0.3	1.8	1.9	1.5	-0.2	3.4	-0.3	1.3	1.2
Transport, storage, and communication	3.0	2.5	2.0	1.6	2.6	1.6	2.0	1.4	3.9	2.2	2.9	2.3	1.2
Finance, real estate, and business services	4.1	3.0	4.8	5.0	2.8	2.6	3.0	1.4	1.2	2.4	3.5	2.2	3.8
General government services	4.5	3.6	1.3	2.8	2.8	4.6	3.1	2.3	3.9	2.2	1.2	3.0	-0.8
Personal services	2.4	2.1	1.2	2.7	1.2	1.2	1.8	1.5	1.5	1.3	0.8	1.4	0.9

Source: Statistics South Africa.

quarter, its slowest pace since the 2009 global financial crisis, reflecting a 0.8 percent q/q contraction in government services which last experienced a contraction of this severity in 2001. The key bright spot in the economy, and building on its strong performance in 2014, was the finance, real estate, and business services subsector: its growth rose to 3.8 percent q/q in the first quarter and contributed 0.7 percentage points to q/q headline growth. Wholesale and retail trade recovered somewhat in the first quarter, yet continued to reflect weakness in private consumption demand.

From the demand side, final consumption continued to drive real GDP growth in 2014, contributing some 1.3 percentage points to headline growth. Consumption growth continued to strengthen in the first quarter of 2015 as household spending accelerated to 2.8 percent q/q on the back of lower fuel and food prices (table 1.2), adding 1.7 percentage points to headline growth. Yet high levels of household indebtedness, tightened credit, and high unemployment continued to sap consumer confidence, with household expenditures on durable goods moderating to just 1.1 percent q/q. Moreover, the boost to households

and consumption from lower fuel prices (with spending in non-durable goods picking up to 4.9 percent q/q in 2015Q1) is likely to have been short-lived, given the reversal in fuel prices and weaker rand in Q2 as well as the increases in the fuel levy and electricity tariffs since February 2015 (box 1.1). Tight fiscal space and continuing efforts by the government to contain costs also led to a contraction in general government consumption spending in the first quarter.

Growth in final consumption will likely remain modest in the second quarter. Retail sales were flat in April and expanded only modestly in May by 0.1 percent m/m. Consumer confidence deteriorated further in the second quarter of 2015. The Bureau of Economic Research (BER) consumer confidence index plunged from -4 in Q1 to -15 in Q2, even lower than the lowest point recorded in the 2009 global financial crisis. High household indebtedness (78.4 percent of disposable income in the first quarter of 2015) elevated joblessness (25 percent in the second quarter of 2015), and modest credit extension to households all contributed to deteriorating consumer sentiment and households' diminished willingness to spend.

Growth in the finance, real estate, and business services sector continued to gain momentum in the first quarter

Table 1.2 Aggregate demand components

1.2

Percent, seasonally adjusted annualized rate

Component	2011	2012	2013q1	2013q2	2013q3	2013q4	2013	2014q1	2014q2	2014q3	2014q4	2014	2015q1
Total final consumption	4.1	3.4	2.2	1.7	1.5	2.2	3.0	1.2	1.4	1.2	1.4	1.5	1.6
Final consumption expenditure by household (PCE)	4.9	3.4	1.9	1.9	1.8	1.7	2.9	1.0	1.0	1.1	1.6	1.4	2.8
Durable goods	15.9	11.2	7.2	7.6	7.4	6.6	9.0	4.8	3.4	4.0	5.3	5.3	1.1
Semidurable goods	5.9	5.9	4.3	4.1	4.6	5.2	5.3	1.9	1.8	2.8	3.3	3.2	3.3
Nondurable goods	4.4	3.0	2.1	1.9	0.0	1.4	1.5	0.8	0.9	-0.1	1.5	0.8	4.9
Services	3.0	1.6	-0.1	0.1	1.4	0.1	2.2	0.1	0.4	1.2	0.4	0.5	1.4
Final consumption expenditure by general government	1.7	3.4	3.1	1.0	0.7	3.5	3.3	1.7	2.4	1.4	1.0	1.9	-1.9
Gross fixed capital formation (investment)	5.7	3.6	9.2	9.8	9.7	4.8	7.6	-9.2	-5.4	2.4	2.6	-0.4	1.8
General government	12.7	-0.4	32.4	-10.1	4.6	29.6	11.6	8.7	9.8	7.4	5.9	10.3	5.1
Public corporations	0.8	2.9	-11.4	18.2	3.5	2.4	3.1	-0.6	-3.4	2.3	2.5	1.6	-0.6
Private business enterprises	5.8	4.8	11.1	12.7	12.7	0.4	8.1	-15.4	-9.6	1.2	1.7	-3.4	1.6
Change in inventories (R millions)	26,345	36,623	1,259	35,683	5,939	-35,321	1,890	-4,094	-950	2,858	3,770	396	8,812
Residual item (R millions)	-5,287	-279	-24,934	-28,120	-36,307	-60,291	-37,413	-55,859	-52,186	-43,417	-55,106	-51,642	-47,278
Gross domestic expenditure	4.9	3.9	-2.5	7.7	-1.9	-5.8	1.4	3.8	0.9	3.2	0.3	0.6	3.4
Exports of goods and services	4.3	0.1	24.0	-5.0	12.2	10.8	4.6	1.6	-15.7	8.6	22.7	2.6	8.3
Imports of goods and services	10.5	6.0	7.2	8.3	0.5	-23.5	1.8	21.7	-14.2	12.5	7.8	-0.5	15.8
Net exports (R millions)	-10,968	-60,346	-49,326	-78,059	-54,705	27,182	-38,727	-12,342	-15,431	-23,667	5,056	-11,596	-10,410
Gross domestic product	3.2	2.2	1.4	3.7	1.2	5.1	2.2	-1.6	0.5	2.1	4.1	1.5	1.3

Source: South African Reserve Bank.

Box How have fuel and electricity price changes affected households in South Africa?⁴

1.1

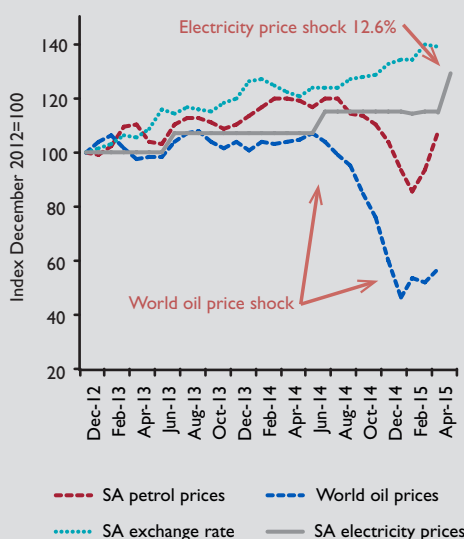
Lower oil prices and higher electricity tariffs are the two major price changes hitting South African consumers in 2015. In June 2014, the global oil price exceeded \$100/barrel but the slowdown in China and increased supply contributed to a 40 percent price drop, which was felt in South Africa from September 2014, although the rand's depreciation muted the price decline's impact. Domestic gasoline (petrol) prices fell 28 percent from peak (June 2014) to trough (February 2015)—but in Q2 almost fully reversed. Electricity tariffs rose 12.6 percent in April 2015 (box figure 1).

Household consumption patterns play a major role in how these price changes affect the poor.⁵ The oil-price shock cut prices for gasoline and related products, directly, but also fed through into prices of other goods and services that use fuel or electricity, indirectly. South African headline inflation fell sharply on lower fuel prices, but the prices of food and transportation hardly moved.

Fuel outlays account for almost 3.5 percent of average household consumption, electricity around 4 percent (box figure 2). But for extremely poor households (with individuals living on less than \$1.25 a day), fuel occupies less of the consumption basket (1.1 percent) and electricity more (5.7 percent). For the non-poor, fuel and electricity each comprise more than 4 percent of the basket. Thus the relatively better-off benefit more from the fall in gasoline prices. But the poor are left comparatively worse off by rising electricity tariffs.⁶

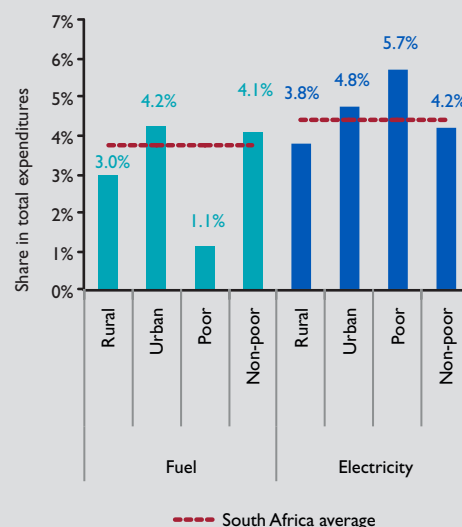
The indirect effect of the price changes depends on how households allocate their budget. Poorer households spend a larger share of their incomes on food and beverages (38.3 percent) and housing utilities (26 percent). Richer households spend more on health, transportation, and communication. This makes poorer households more vulnerable to price rises via the indirect channel, too.

Box figure 1. Key price changes



Source: Statistics South Africa, World Bank.

Box figure 2. Fuel and electricity outlays by household



Source: IES, 2010/11. World Bank calculations. Fuel component includes Motor car fuel, oil and grease, paraffin, petrol for household use, and diesel for households.

Investment contracted on an annual basis in 2014 in the wake of labor unrest, power shortages, and policy uncertainty. The rebound in gross fixed capital formation growth seen in the second half of 2014 was insufficient to offset the first-half weakness stemming from strikes in mining and manufacturing. Private-sector investment, which accounts for about two-thirds of all investment, subtracted about half a percentage point from headline real GDP growth in 2014. Investment remained

subdued in the first quarter of 2015, growing by just 1.8 percent q/q. On the external side, net exports made a small positive contribution to growth in 2014 as imports contracted. But in the first quarter of 2015, import growth again began to outpace export growth, net exports subtracted some 2.0 percentage points from headline growth, and the outlook for exports will continue to be challenging in Q2 given the continued decline in global minerals and metals prices.

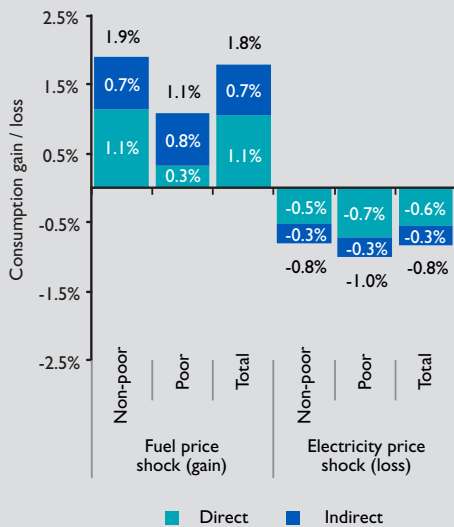
Box **How have fuel and electricity price changes affected households in South Africa?⁴**
(continued)

1.1

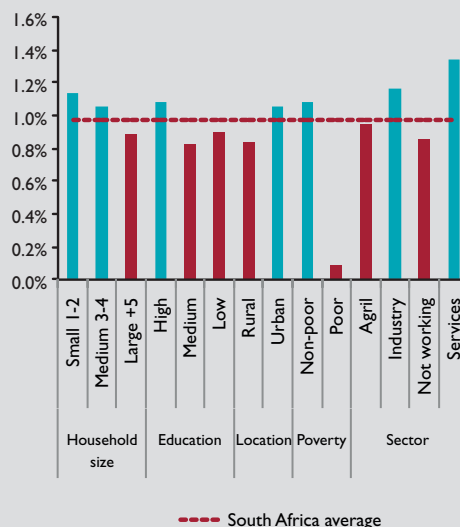
Using the changes in fuel and electricity prices through end-April 2015, we find that the net impact was that budgets of poor households were largely unchanged by the two price changes (box figure 3)—in that period lower fuel prices partly offset higher electricity prices. Across all households, the gains from lower fuel prices (1.8 percent) through the end of April were partially offset by the losses tied to higher electricity prices (–0.8 percent). The poor are disproportionately affected by higher electricity prices (absent changes in the free basic amount of electricity provided to poor households), which cost them 1 percent of their consumption and largely offset the temporary gain of 1.1 percent from lower fuel prices.⁷ Non-poor households gain by 1.1 percent when the net impact of both price changes is considered.

Box figure 4 illustrates how the net effects of the two price changes through the end of April impacted different types of households. It shows that the upper deciles (labeled non-poor in box figure 4) of the income distribution gained the most, along with small and medium households, workers in industry and services, the better educated, and those living in urban areas. But if the higher fuel levy is factored into the calculations, poor households are worse off.

Box figure 3. Impact of fuel and electricity price changes on household consumption



Box figure 4. Net impact on household consumption



Source: World Bank calculations using IES, 2010/11.

Electricity supply had risen by just 4.8 percent from its trough in 2009Q1 while real GDP expanded by twice that amount

Supply constraints are looming larger in capacity underutilization

The importance of growing supply impediments as a brake to growth can be gauged by the drivers of capacity underutilization and the relationship between electricity supply and real GDP. Manufacturing capacity underutilization worsened between the first quarters of 2008 and 2015 as total capacity utilization fell to 80.2 percent from 84.4 percent (figure 1.8). According to Statistics South Africa’s survey of capacity utilization by large manufacturing firms, enterprises cite “insufficient demand” as the main driver of capacity underutilization, reflecting weak domestic and external demand.

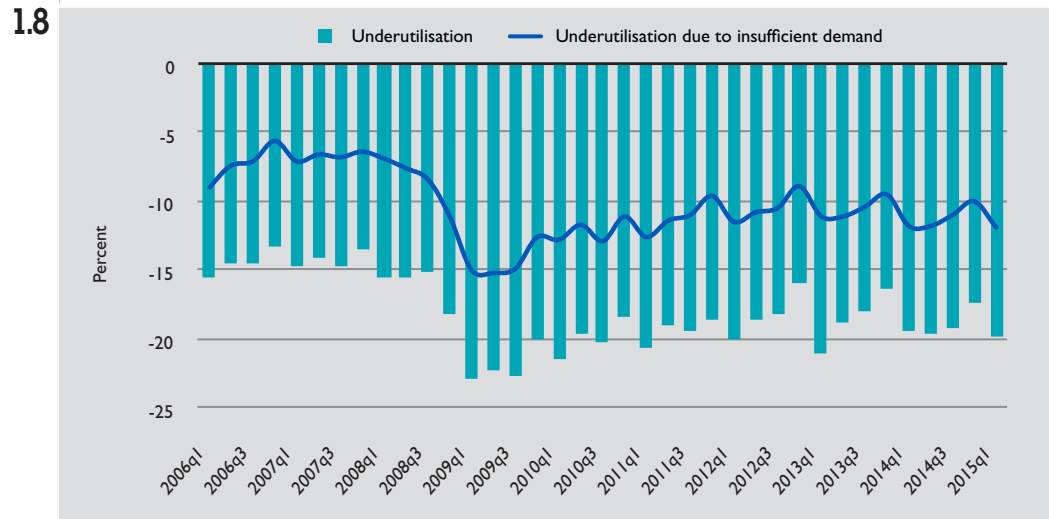
Supply shackles, however—capturing shortages of skilled labor, raw materials, and

other factors like fractious labor relations, maintenance downtime, and unreliability of power supply—have played a growing role. Figure 1.9 shows the widening gap between electricity supply and GDP. Electricity available for distribution has risen by just 4.8 percent from its trough in the first quarter of 2009 (when South Africa last experienced a severe power crisis) and the fourth quarter of 2014, while real GDP expanded by 14 percent, seasonally adjusted.

Power constraints, labor unrest, and policy uncertainty conspire to undermine business confidence, constraining investment and job creation. The Rand Merchant Bank/Bureau of Economic Research (RMB/BER) Business Confidence Index (BCI) has fluctuated around the neutral mark of 50, while the

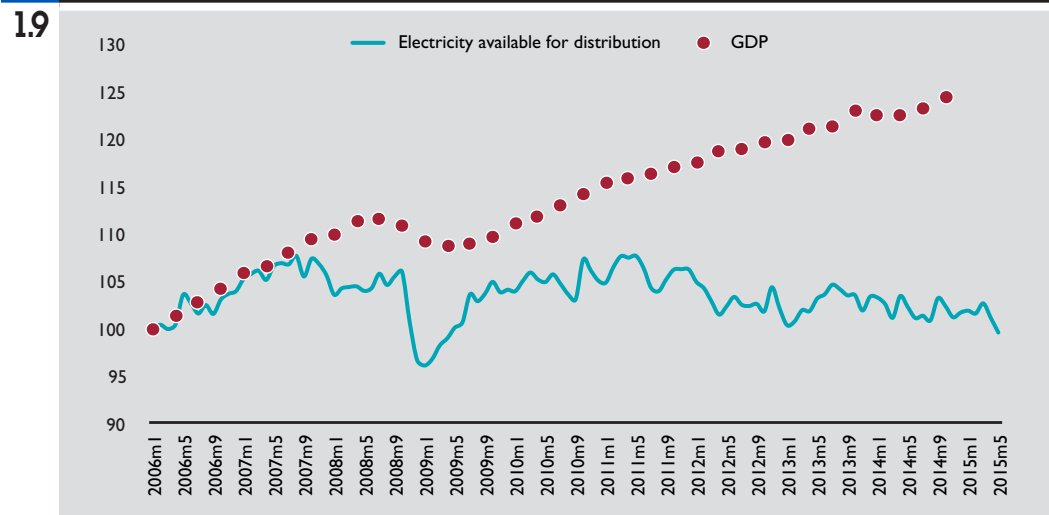
Power constraints, labor unrest, and policy uncertainty undermine business confidence

Figure 1.8 Total manufacturing capacity underutilization has deepened since early 2008



Source: Statistics South Africa.

Figure 1.9 The gap between electricity supply and GDP is growing (2006 = 100)



Source: Statistics South Africa.

South African Chamber of Commerce and Industry (SACCI) BCI points to a deteriorating business environment since 2011. The SACCI index average for the first 6 months of 2015 has been lower than the average for the preceding year.

In recent months, however, the manufacturing Purchasing Managers' Index (PMI) has strengthened. In June and July the Barclays manufacturing PMI unexpectedly improved to 51.4 seasonally adjusted, building on the gains seen in May. The sub-indexes for business activity and employment continued to strengthen. Improving

growth prospects in the Euro Area (a major market for South African manufactures) and rand weakness may have improved manufacturing's prospects. Yet load shedding, the prospect of future electricity tariff hikes, and volatility of the oil price and the rand still have a disproportionately larger impact on the energy-intensive manufacturing sector. Moreover, the price sub-index, having risen for four consecutive months, suggests rising input costs in manufacturing. In addition, the fact that the overall economy-wide PMI remains below the 50 mark suggests that business conditions overall remain weak.

Labor markets

Unemployment remains the key challenge facing South Africa

South Africa struggles to generate sufficient jobs to substantially lower its high levels of unemployment. Labor market indicators that had deteriorated substantially in the first quarter of 2015 showed some improvement in the second quarter. Unemployment had reached its highest level since 2008 in Q1, standing at 26.4 percent by the narrow measure and 33.9 percent by the broad measure, i.e., including discouraged workers (figure 1.10), but improved in Q2 to 25 percent and 32.9 percent, respectively.⁸ Quarter on quarter, the decline in the number of unemployed in the second

quarter was almost fully matched by a corresponding increase in the number of economically inactive and a fall in labor force participation.⁹ Employment increased by some 198,000 relative to Q1 and half of that increase reflecting the expansion of employment in community and social services.

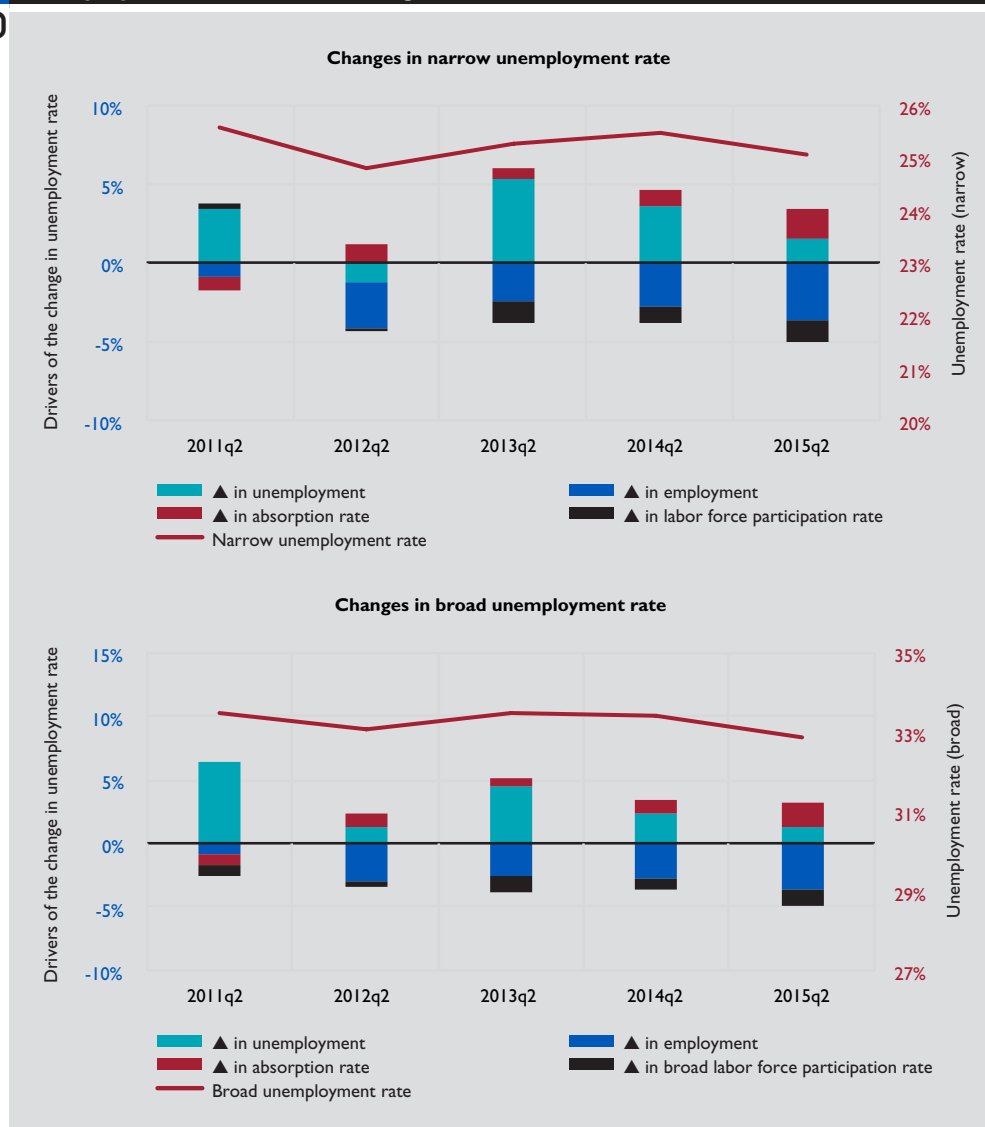
Nevertheless, the number of jobs generated continues to fall short of what is needed to employ South Africa's growing workforce (see section 2). Compared to a year ago, the number of jobs generated of more than half a million still falls short of what is needed to employ South Africa's large existing number of unemployed and the growing working-age population, which expanded by more than 600,000 in the past year. The rate of youth

19

Two-thirds of those unemployed have been unable to secure a job for more than a year

Figure 1.10 Unemployment trends are set negative

1.10



Source: Statistics South Africa, Quarterly Labour Force Survey (QLFS) 2011–2015 and World Bank calculations.

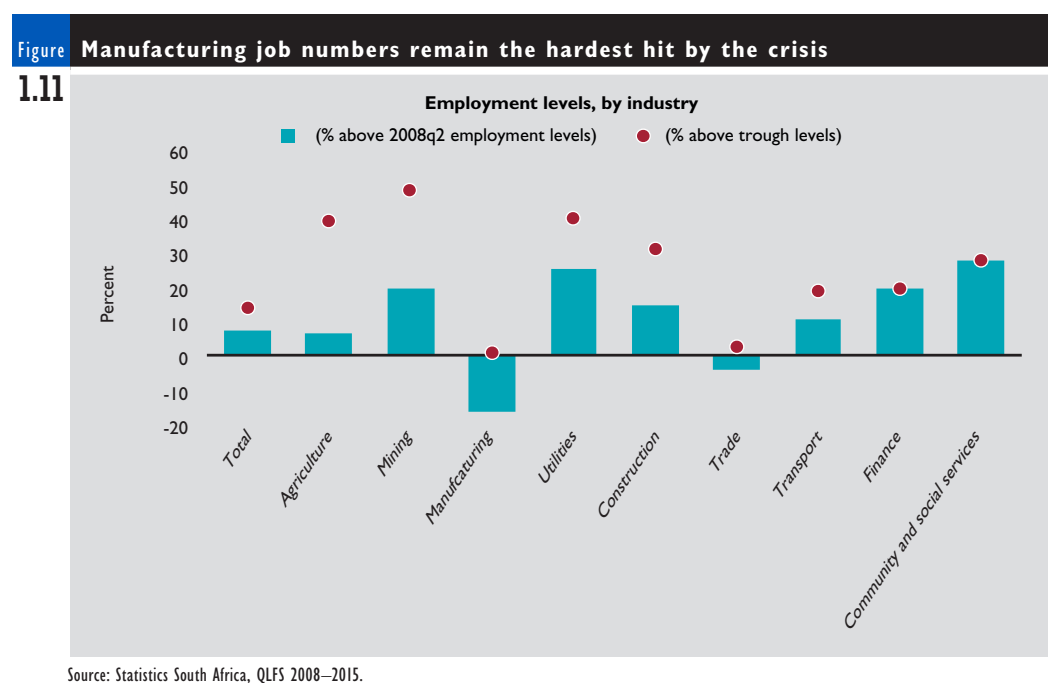
unemployment (for ages 15–24) stood at close to 50 percent at the end of Q2, and those without jobs for more than a year account for almost two-thirds of the unemployed.

The rise in the number of employed (198,000 q/q) was largely driven by gains in employment in services and construction. Community and social services (up 98,000), construction (up 79,000) and trade (up 73,000) posted the largest jobs gains. Finance (down 31,000), manufacturing (down 23,000), and agriculture (down 22,000) shed jobs. While total employment has risen above the pre-crisis level (by some 7.4 percent from the second quarter of 2008), manufacturing employment remained subdued in the second quarter of 2015 and is now some 16.3 percent below seven years earlier (figure 1.11). By the end of June 2015, some 343,000 jobs had been lost in manufacturing since 2008Q2.

Box 1.2 suggests that a greater focus on manufacturing exports can generate indirect employment (i.e., jobs providing inputs to these exports) opportunities. But these jobs are likely to be more capital and skills intensive, further obscuring the prospects of securing a job by the least educated or unskilled/semi-skilled segments of the population who, at the end of 2015 Q2, constituted almost 60 percent and 40 percent, respectively, of the unemployed.

The current environment of weak growth and confidence is not favorable for any sharp pickup in private-sector job creation. As table 1.3 suggests, job creation since the crisis has been driven by government or government-related entities, even though the private sector remains the largest employer overall. In the fourth quarter of 2008, national, provincial, and local government, as well as state-owned enterprises (SOEs), accounted for about 14.6 percent of all jobs. By the last quarter of 2014, this figure had risen to 17.5 percent. The private sector, in contrast, saw its share decline from roughly 73.6 percent to 72.1 percent over the period. By the fourth quarter of 2014, only 31 percent of the working-age population were employed in a private enterprise.

South Africa's jobs gap—defined as the difference between the current level of employment and the level of employment required to return to the pre-crisis ratio of employed persons to working-age population and to absorb new entrants—is estimated at 944,000 in 2015Q2. Average employment growth slowed to 2.3 percent for 2014Q1–2015Q2 from 2.5 percent y/y over 2011Q1–2013Q4. Given the somewhat slower rates of employment creation, we expect to take longer to close this gap (figure 1.12). At the lower rate of job creation of 2.3 percent, we estimate that the jobs deficit would be roughly 593,000 jobs by 2020. If employment

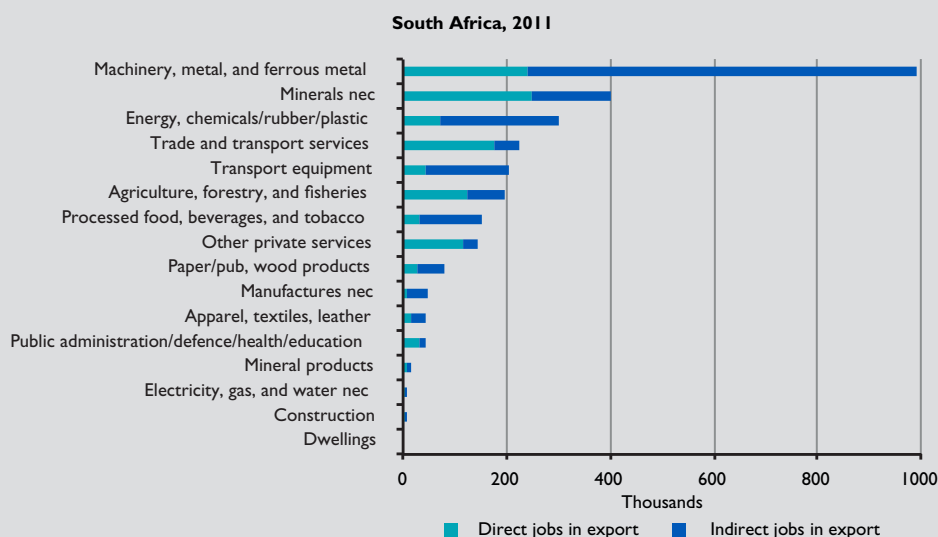


1.2

Exports are a critical source of growth for South Africa; they are also an important channel for productivity enhancement. But what do they mean for jobs? Drawing on a newly developed World Bank dataset¹¹ on the labor content of exports, we explore the possible implications of exports for employment and skills demand in South Africa, paying particular attention to South Africa’s integration into manufacturing global value chains (GVCs) over the past decade.

A critical finding is that manufacturing matters for jobs, but its importance comes mainly through its backward links to the domestic economy (box figure 1). The indirect employment impact of manufacturing exports (jobs in industries providing inputs into manufacturing exports) is nearly 4.5 times greater than the direct employment impact. Indeed, while the minerals sector generates the most direct jobs due to its dominance in the export basket and in relative labor intensity, its weak backward links to the domestic economy stifle its overall employment impact.

Box figure 1. Number of jobs in exports in 2011 across sectors



Source: World Bank calculations.

How have manufacturing exports and GVC integration affected the level and nature of jobs in South Africa? To understand this, we focus on the automotive sector, where South Africa has grown its exports and has become deeply integrated into GVCs over the past decade (box figures 2 and 3). The first point is that while the rapid growth of exports meant that nominal jobs in the sector increased substantially over the decade (box figure 2), the relative labor intensity of South Africa’s exports declined sharply: where automotive exports contributed around \$37 of labor per \$100 of exports in 2001, this declined to below \$30 in 2011 (box figure 3). This level of labor in exports is well below that of Brazil where the labor content has increased; and India, where it has remained broadly stable. South Africa’s decline in labor intensity of its auto exports is explained almost fully by declining labor content in direct manufacturing—indeed, the labor content of direct manufacturing jobs fell by almost half over the decade.

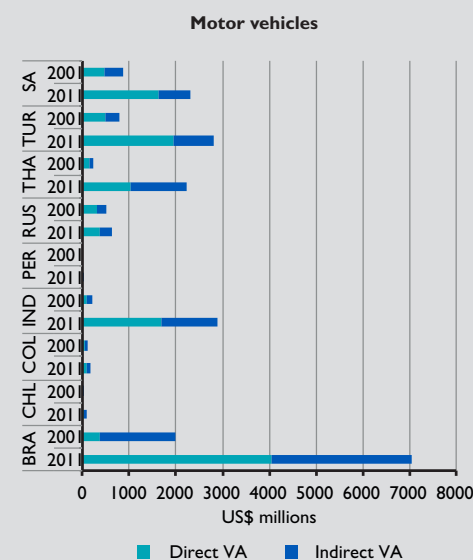
Still, significant job growth resulted from the automotive sector’s extensive backward links to the domestic economy. While each direct job in the sector was linked to one indirect job in 2001, by 2013 it was linked to three. Most important, this came through services sector links, which is unsurprising. In fact, it is exactly what we might expect in an environment of GVC integration: exports make increasing use of foreign inputs (reducing direct labor demand) but coordinating these inputs requires more intensive use of (mainly domestic) services, including financial services, transport and logistics, and other business services

GVC integration also appears to have substantial implications for skills demand. Box figure 3 shows that for direct jobs in the automotive sector, the contribution of unskilled labor per \$100 of exports has declined sharply over the decade, while that of skilled labor has remained steady. This is, again, perhaps to be expected in the context of GVC integration, where the requirements for productivity, quality, and consistency from global lead firms likely contribute to increased capital intensity and demand for higher skills. Coupling this with the strong shift toward indirect-services employment, which also tends to have a higher skills bias, implications for demand for skilled versus unskilled labor may be important, perhaps accelerating the underlying skills bias in South African production.

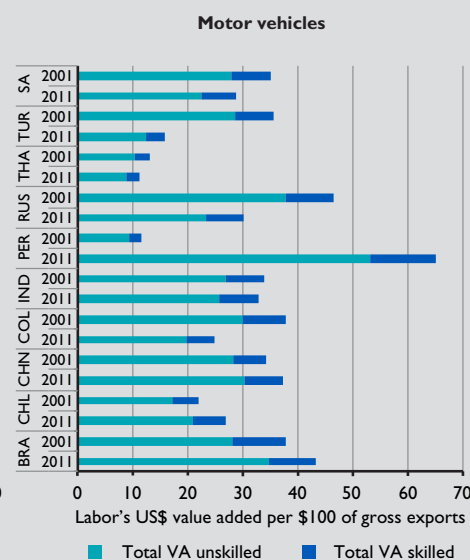
Box What do exports mean for jobs and skills demand in South Africa?¹⁰ (continued)

1.2

Box figure 2. Automotive jobs in exports, 2001 and 2011



Box figure 3. Automotive skills composition of direct jobs as a share of gross exports, 2001 and 2011



Source: World Bank calculations.

Table Government and related entities have picked up some of the slack in creating jobs

1.3

Percent, unless otherwise noted

	2008q4	2009q4	2010q4	2011q4	2012q4	2013q4	2014q4
(as a percentage of total number of employed persons)							
National/provincial/local government	12.9	13.8	14.1	14.6	15.1	15.3	15.4
Government-controlled business (such as Eskom)	1.7	1.9	2.1	1.9	2.2	2.1	2.1
A private enterprise	73.6	73.9	73.4	72.9	72.6	71.6	72.1
Non-profit organization	0.9	0.9	0.9	1.0	1.1	1.3	1.3
A private household	10.8	9.4	9.4	9.4	8.9	9.2	8.9
Do not know	0.1	0.1	0.1	0.2	0.1	0.4	0.2
(as a percentage of total working-age population)							
National/provincial/local government	5.8	5.7	5.7	6.0	6.2	6.7	6.6
Government-controlled business (such as Eskom)	0.8	0.8	0.9	0.8	0.9	0.9	0.9
A private enterprise	33.0	30.7	30.0	30.1	29.7	31.0	31.0
Non-profit organization	0.4	0.4	0.4	0.4	0.4	0.6	0.6
A private household	4.8	3.9	3.8	3.9	3.7	4.0	3.8
Do not know	0.0	0.0	0.0	0.1	0.0	0.2	0.1

Note: 2008–12 QLFS survey weights correspond to the 2001 Census. 2013 and 2014 weights correspond to the 2011 Census.

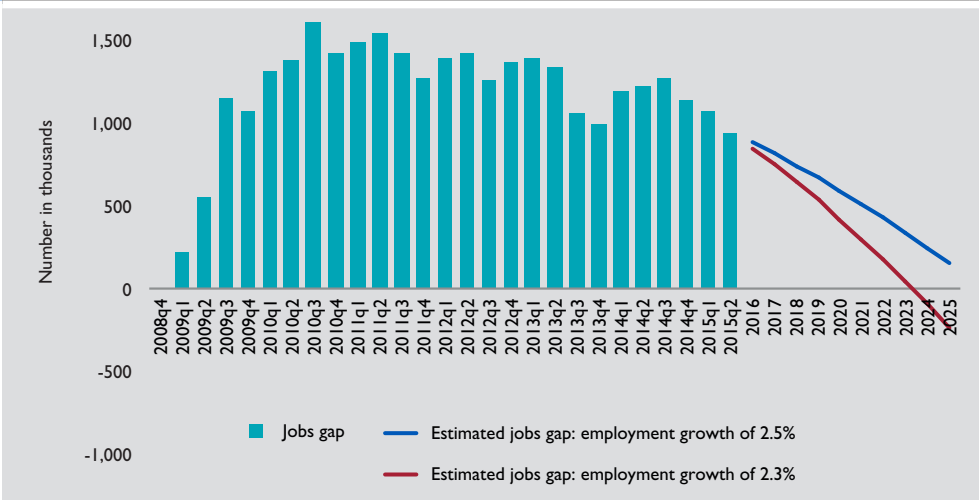
growth could be boosted to the 2011–13 rates of 2.5 percent, the jobs deficit would fall to 419,000 but would still remain high.

South Africa, therefore, needs higher, more inclusive jobs intensive growth to return to pre-crisis employment, yet even at that time the initial absorption or employment rate—only 4.6 persons out of 10 in the

working-age population were employed in 2008—stood well below the average of middle-income countries. Labor-force participation is also low compared to that of peers. Unemployment is largely structural, and about two-thirds of the unemployed have not found a job in more than a year and are concentrated among the less educated.¹³

Figure 1.12 Higher employment growth rates are needed to start bridging the jobs gap

1.12



Source: Statistics South Africa, QLFs 2008–15 and World Bank calculations.

For the first time in more than a decade, personal income-tax rates were raised for all but the bottom tax bracket

Fiscal policy

Despite weaker growth, the budget keeps to its consolidation commitment

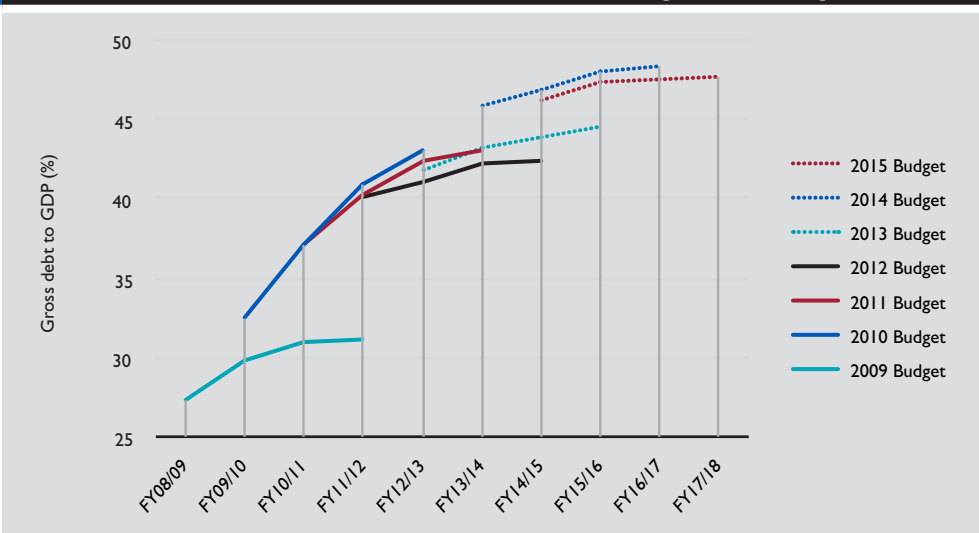
The 2015 budget targets a gradual reduction in the budget deficit, despite a more downbeat growth outlook. The general government budget deficit is projected to gradually narrow from 3.7 percent¹⁴ of GDP in FY2014/15 to 2.5 percent in FY2017/18, as expenditures are contained and revenue collection improved over the course of the three-year medium-term expenditure framework (MTEF). This would (if achieved) generate a small primary surplus in FY2016/17 and FY2017/18, stabilizing the gross debt-to-GDP ratio at 47.6 percent of GDP.

Achieving this fiscal consolidation in an environment of low economic growth will be challenging. That the debt burden has risen far higher than forecast five years ago (figure 1.13) only underscores the lack of fiscal space and role of low growth in forcing it up. The growth outlook underpinning the 2015/16 budget was revised downward to just 2 percent in 2015 and 2.4 percent in 2016, about half of a percentage point lower in each year than at the time of the Medium-Term Budget Policy Statement in October 2014—and there is still a risk that growth will come in below even these downturned projections.

In an attempt to rein in public debt, the 2015/16 budget introduced a mix of revenue

Figure 1.13 How the debt-to-GDP ratio has evolved with each vintage of the budget

1.13



Source: Republic of South Africa National Treasury, Budget Reviews 2009–15.

The pause in the interest rate tightening cycle has ended

and expenditure measures. Revenue measures included an increase of 1 percentage point in the marginal personal income tax rate for all brackets except the lowest—the first increase in those rates in more than a decade—and increases in the fuel levy, excise duties on alcohol and tobacco, and transfer duties on houses valued at more than R2.2 million. They were accompanied by measures to stimulate economic activity, such as tax relief to small businesses, while social payments were raised broadly in line with inflation.

On the expenditure side, the latest budget cut the expenditure ceiling for non-essential recurrent outlays over the next two years and scaled back public-capital investment. It cut spending allocations by 1 percent of projected outlays for the current and next fiscal year relative to original plans. The budget assumed a 7.7 percent increase in the nominal wage bill in 2015/16, or 6.6 percent over the three years of the framework, to help bring the wage bill down from 11.5 percent of GDP in FY2014/15 to 11.0 percent in the outer year.

In contrast, the new three-year pay deal subsequently agreed upon provides for a wage increase of 7 percent in 2015/16, and for wage increases of the consumer price index (CPI) plus 1 percent for each of the next two years. The pay deal also lifted the housing allowance from R900 to R1,200 (subject to conditions) and the medical-aid subsidy from 17.8 percent to 28.5 percent. All these increases will likely test the upper bounds of the budgeted wage envelope and, if growth also falls short of rates assumed in the MTEF, further adjustment measures will likely be required to secure the targeted reductions in the fiscal deficit and debt burden.

Financial stress in key SOEs also poses upside risk to the government's deficit and debt targets. Including sovereign guarantees to SOEs, public-sector debt stood at 58 percent of GDP at the end of FY2014/15. The latest budget targets this broader measure to fall marginally to 57.3 percent by the end of FY2017/18, if these SOEs fund their operations and investment needs within existing guarantee limits.

Monetary policy and inflation

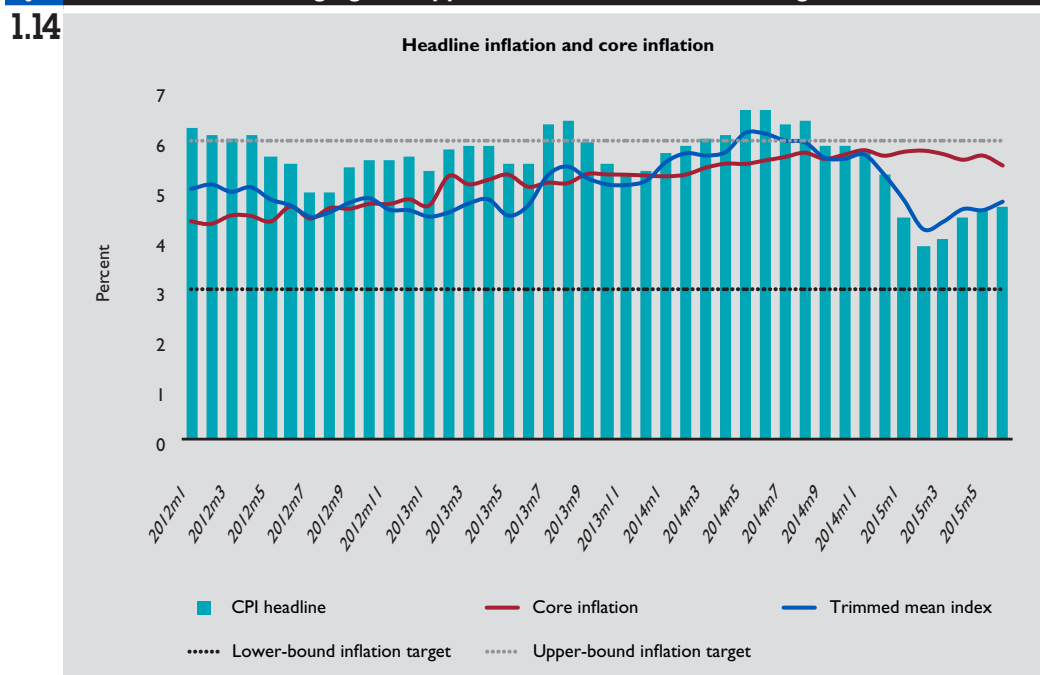
Inflation pressures are poised to rise, triggering the resumption of interest rate increases

Weak underlying demand pressures helped ease inflationary pressures and brought headline inflation close to the mid-point of the inflation-targeting band (figure 1.14). Headline CPI inflation bottomed at 3.9 percent y/y in February 2015—its lowest rate in four years—before picking up gradually to reach 4.7 percent y/y in June, on the back of higher petrol prices (which includes the impact the higher fuel levy implemented in April). Core inflation, at 5.5 percent in June, remained close to the upper bound of the inflation target. In percentage points, the key drivers of monthly inflation were housing and utilities (1.3), miscellaneous goods and services (1.1), food and non-alcoholic beverages (0.7), and alcoholic beverages and tobacco (0.5), which together contributed almost four-fifths of the overall increase in headline prices in June.

Risks to the inflation outlook are to the upside. CPI inflation will likely rise further over the second half of 2015, reflecting the depreciation of the rand and pressures on food prices. Oil prices remain volatile. Crude oil prices averaged \$60.5/bbl in the second quarter, up 17 percent from the first quarter, but have fallen sharply again in July. The potential of a weaker rand in the context of the U.S. Federal Reserve's expected path of monetary-policy normalization, wage settlements above inflation and labor-productivity gains, plus further electricity-tariff increases and higher food prices due to the domestic drought, will all likely add to upward momentum of headline CPI over the remainder of the year and into the first half of 2016, when headline inflation is expected to breach the upper band.

Against this backdrop, the Reserve Bank resumed on its path of gradual monetary-policy normalization, increasing interest rates in July for the first time in a year. The last hikes in the policy rate were in January 2014 (50 basis points) and July 2014 (25 basis points). The July Monetary Policy Committee increased its reference-policy rate by 25 bps to 6.0 percent, citing the persistence of forecast inflation at elevated levels and upside risks to it from second-round effects from a more

Figure 1.14 Core inflation is nudging the upper bound of the inflation target



Source: Statistics South Africa.

depreciated rand. It did, however, signal that any future moves will be highly data dependent given the fragile state of the economy.

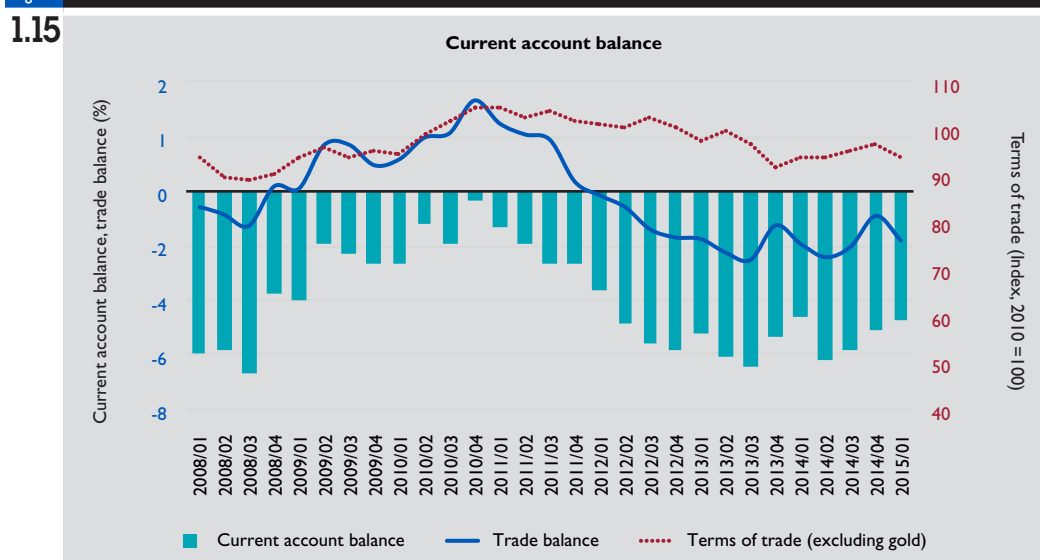
External sector

Adjustment in the current account deficit advances slowly

The current account deficit narrowed a little in 2014, as the trade deficit shrank in the last quarter of the year on the back

of falling oil prices and weak domestic demand (figure 1.15). The deficit had reached a post-crisis peak in 2013 of 6.0 percent of GDP but narrowed to 5.4 percent in 2014. This trend continued in 2015Q1, as the current account deficit improved to 4.8 percent despite the widening trade deficit, which doubled to 1.8 percent in the first quarter of 2015 as gross domestic expenditures picked up and export receipts contracted somewhat. The deficit on the

Figure 1.15 External imbalances has improved a little recently, but South Africa remains vulnerable



Source: South African Reserve Bank.

Real GDP growth is forecast at 2.0 percent in 2015, and to slowly strengthen to 2.4 percent in 2017

services, income, and current transfers account improved over 2015Q1, more than offsetting the deterioration in the trade balance.

South Africa's terms of trade have worsened since 2011, declining by about 7.9 percent (excluding gold; including gold, 8.4 percent). Falling international oil prices toward the end of 2014 helped with the import bill, but lower mineral-export prices cut into export receipts. But in the second half of 2014 import prices fell faster than export prices. This helped bring the trade deficit to a low of 0.9 percent of GDP in the final quarter of 2014. The first quarter of 2015 saw a fall in merchandise-exports receipts (despite increases in the volume of merchandise exports). The value of merchandise imports, on the other hand, increased as higher import volumes countered the subdued international oil prices. South Africa's terms-of-trade (excluding gold) deteriorated by 2.4 percent between the final quarter of 2014 and the first quarter of 2015.

Despite the recent improvement, the current account deficit is still wide, leaving South Africa exposed to risk aversion and global financial market volatility. During 2014, the current account deficit was largely funded by volatile capital flows as net foreign direct investment inflows remain very low. Unidentified capital inflows (i.e., errors and omissions) continue to finance almost 80 percent of the overall current deficit, with identified portfolio and other capital inflows funding the rest.

Economic outlook

Growth will stay hamstrung by domestic constraints

Real GDP growth is forecast at 2.0 percent in 2015, and to slowly strengthen to 2.4 percent in 2017 (table 1.4). Agricultural growth is expected to be pulled down in the near term by the poor maize harvest, but finance and business services are set to grow robustly throughout the forecast period. But overall, growth in South Africa will remain largely below the average growth rate of 4.2 percent and 4.0 percent for Sub-Saharan Africa, in 2015 and 2016–2017, respectively.

Structural impediments will continue weighing heavily on growth. Power-supply bottlenecks are one of the main underlying factors in the downgraded revision of the growth outlook since the previous economic update. And shortages are muting the rebound in gross fixed-capital formation that might have been expected with the end of the platinum- and manufacturing-sector strikes in 2014. Relative to our forecast in the November 2014 Economic Update (Volume 6), real GDP growth has been revised down by 0.5 and 0.8 percentage points for 2015 and 2016, respectively. We expect some improvement in the electricity situation only toward the end of the forecast period as new power-generation capacity comes online.

These structural factors are reinforcing cyclical weakness in domestic demand. Household consumption is expected to grow only modestly. Lower oil prices provided only temporary relief to household budgets

Table **Economic outlook through 2017**

1.4

Percent, unless otherwise noted

	2012	2013	2014	2015	2016	2017
Real GDP	2.2	2.2	1.5	2.0	2.0	2.4
Final consumption by households	3.4	2.9	1.4	1.8	1.9	2.5
Government consumption	3.4	3.3	1.9	0.8	0.7	0.7
Gross fixed capital formation	3.6	7.6	-0.4	0.4	1.5	2.6
Gross domestic expenditure	3.9	1.4	0.6	1.3	1.6	2.2
Exports of goods and non-factor services	0.1	4.6	2.6	3.2	4.3	5.1
Imports of goods and non-factor services	6.0	1.8	-0.5	1.0	3.0	4.5
Current account balance (% of GDP)	-5.0	-5.8	-5.4	-4.9	-5.2	-5.2
Headline CPI inflation	5.7	5.8	6.1	5.1	5.9	5.5
Poverty rate (\$1.25 a day, PPP terms) ^a	11.4	11.3	11.5	11.3	11.3	..

^a Projection using sectoral GDP prediction, micro-simulation method used with pass-through = 1.00 based on GDP constant. Source: World Bank calculations, National Treasury, and South African Reserve Bank.

and headline inflation. The prospect of higher electricity tariffs and potentially higher pass-through of a more depreciated rand to domestic prices, will limit space for households to expand consumption. High unemployment and indebtedness, along with tightening credit standards, continue to weigh on consumer sentiment, while government consumption is subdued because of consolidation efforts.

Concerns over electricity supply and rising input and wage costs are being compounded by broader commodity price weakness as well as policy and regulatory uncertainty, and are likely to dampen the outlook for investment. Labor relations are expected to remain difficult in an environment of weak growth. Moreover, incidents of rising social tension that have received widespread global media coverage may also keep prospective investors hesitant.

On the plus side, the recovery in advanced countries and still-robust growth in Sub-Saharan Africa should boost demand for South Africa's non-mineral exports. Still, the anticipated weakness in mineral demand and prices limit the overall improvement in the current account deficit, which is expected to stay elevated at around 5.0–5.2 percent of GDP over the medium term. Given the weak recovery, South Africa's output gap, put at 1.2 percent of potential growth in 2014, is projected to narrow only slowly toward the end of the forecast horizon.

Given the weak recovery, little progress is expected against the triple challenges of high unemployment, deep poverty, and wide inequality. Agricultural growth is relatively weak, while the extractives and metals sectors continue to struggle against lower minerals prices and rising production costs, causing further job losses in these sectors. With little change in growth drivers or their job intensity expected, unemployment is set to remain sticky and high. Extreme poverty may well remain broadly unchanged at its current level, reflecting the low rate of economic growth. Our forecasts do not foresee inequality narrowing either, because a high rate of joblessness means that the gap in incomes between the employed and unemployed persists. Growth in the consumption of the bottom 40 percent is seen flat at about 1 percent.

Risks for South Africa are not easily discounted

Downside risks to this already-weak economic outlook prevail. On the external side, they include a sharper than expected slowdown in the Chinese economy, bouts of risk aversion and financial-market volatility due to the normalization of U.S. monetary policy and faltering growth in the Euro Area amid uncertainty surrounding developments in Greece. China is still a major market for South African mineral exports, and Europe for manufactured exports, so a slowdown in either would reduce demand for South Africa's exports. The growing size of some regional markets may partly counter any hit from these markets. But South Africa's large current account deficit, financed heavily by volatile capital flows, makes the economy vulnerable to shifts in investor sentiment and shifting capital flows that could arise in the context of fall-out from the "lift-off" in interest rates in the United States. Major rating agencies have downgraded South African sovereign ratings over the past few years, and while they have all maintained their ratings in recent reviews, they continue to cite weak economic performance, deteriorating fiscal and external imbalances, and unaddressed structural vulnerabilities as key risk factors.

On the domestic front, if labor relations do not improve or if power disruptions worsen, growth could well disappoint further. And if wage settlements continue to exceed inflation and productivity gains, competitiveness will erode, undermining the role of net exports in supporting the recovery.

While addressing power shortages will be critical to removing a key break on near-term growth, achieving the 5 percent growth target of the National Development Plan requires much more than that. South Africa needs urgently to boost growth to this level if it is to provide jobs for young workers, address its growing social tensions, and reduce its substantial poverty and inequality. Improved labor relations for a start, matched by greater collaboration between the public and private sectors and policy certainty to improve the business environment, are fundamental to restoring investor confidence.

With growth slow and unemployment high, measures of extreme poverty and inequality are expected to remain stuck at current levels

This faster, more inclusive growth also calls for initiatives to improve education outcomes and the skills of the poor, improve the

quality of public services, and remove red tape for small and medium-sized enterprises to help foster job creation (box 1.3).

Box 1.3 Comparing regulations at the local level: subnational Doing Business in South Africa 2015¹⁵

1.3

The World Bank's Doing Business project studies the role of government and government policies in the day-to-day life of small and medium-sized enterprises. Its fundamental premise is that economic activity benefits from good institutions and transparent regulation designed to be efficient, accessible to all, and simple.

Doing Business reports capture key dimensions of the regulatory environment as it applies to these enterprises and are tools that governments can use in designing sound policies for creating firms and jobs. The global annual Doing Business series benchmarks 189 economies as represented by their most populous city—Johannesburg is the marker for South Africa. Economies with more than 100 million inhabitants are represented by their two largest cities. Subnational Doing Business studies expand the Doing Business analysis further.

Doing Business in South Africa 2015 benchmarks eight metropolitan areas, the city of Msunduzi, and four maritime container ports. Metrics are starting a business, dealing with construction permits, getting electricity, registering property, enforcing contracts, and trading across borders. The report finds that entrepreneurs face different regulatory burdens depending on location. No city performs equally well on all ranked indicators—Ekurhuleni, Johannesburg, and Tshwane lead on starting a business, Cape Town on dealing with construction permits, Mangaung on getting electricity and enforcing contracts, and Johannesburg on registering property (box table 1).

The uneven performance across the indicators shows that there is room for cities to learn from each other and replicate good practices without major legislative changes. Local reforms will not only improve the ranking of one location as compared to another; they can make a significant difference on the global scale as illustrated by the distance to frontier (DTF) score.

For example, if a South African city adopted the good practices found across the nine cities in dealing with construction permits, getting electricity, and enforcing contracts, it would surpass the average performance of OECD high-income economies in all three areas (box figure 1). To give some examples, by reducing the number of requirements for an electricity connection to four (as in Cape Town and Mangaung) and providing a connection within 66 days at a cost of 257.2 percent of income per capita (as in Buffalo City), South Africa's global DTF score on getting electricity would climb 31 points to be close to Japan and Malaysia, and ahead of Slovenia or Finland.

Box table 1. Doing Business in South Africa 2015: Where is it easier?

Municipality Municipal seat	Starting a business*		Dealing with construction permits		Getting electricity		Registering property		Enforcing contracts	
	Ranking (1-9)	DTF score (100 = best result)	Ranking (1-9)	DTF score (100 = best result)	Ranking (1-9)	DTF score (100 = best result)	Ranking (1-9)	DTF score (100 = best result)	Ranking (1-9)	DTF score (100 = best result)
Buffalo City East London	4	78.67	3	77.50	4	75.32	4	62.84	9	62.54
Cape Town Cape Town	4	78.67	1	78.08	2	81.81	8	59.23	6	67.53
Ekurhuleni Germiston	1	81.18	4	76.84	5	71.83	3	64.23	4	68.26
eThekweni Durban	4	78.67	5	76.15	3	75.73	6	62.05	3	69.27
Johannesburg Johannesburg	1	81.18	8	68.52	8	55.74	1	65.82	8	66.14
Mangaung Bloemfontein	4	78.67	9	68.22	1	83.88	9	58.41	1	71.04
Msunduzi Pietermaritzburg	4	78.67	6	74.07	7	63.00	7	59.49	2	70.81
Nelson Mandela Bay Port Elizabeth	4	78.67	2	78.05	9	53.14	5	62.69	7	66.89
Tshwane Pretoria	1	81.18	7	69.88	6	68.51	2	64.71	5	68.17

*On starting a business, each city is ranked either 1 or 4 because the only difference between cities is their proximity to the office of the Compensation Fund (Department of Labor) in Pretoria. Entrepreneurs from Ekurhuleni, Johannesburg and Tshwane conduct the registration of their employees at the Pretoria office and these cities rank equally at the top. In the other cities the process takes longer as the applications are first submitted to the local labor centers, then forwarded to the provincial offices and then to Pretoria. These cities are equally ranked at number 4, just behind the 3 cities ranked at the top.

Note: The distance to frontier (DTF) score shows how far on average an economy is at any given point in time from the best performance achieved by any economy on each Doing Business indicator since 2005. The measure is normalized to range between 0 and 100, with 100 representing the frontier of best practices (the higher the score, the better). For details, see the About Doing Business and Doing Business in South Africa 2015 section. Source: Doing Business database.

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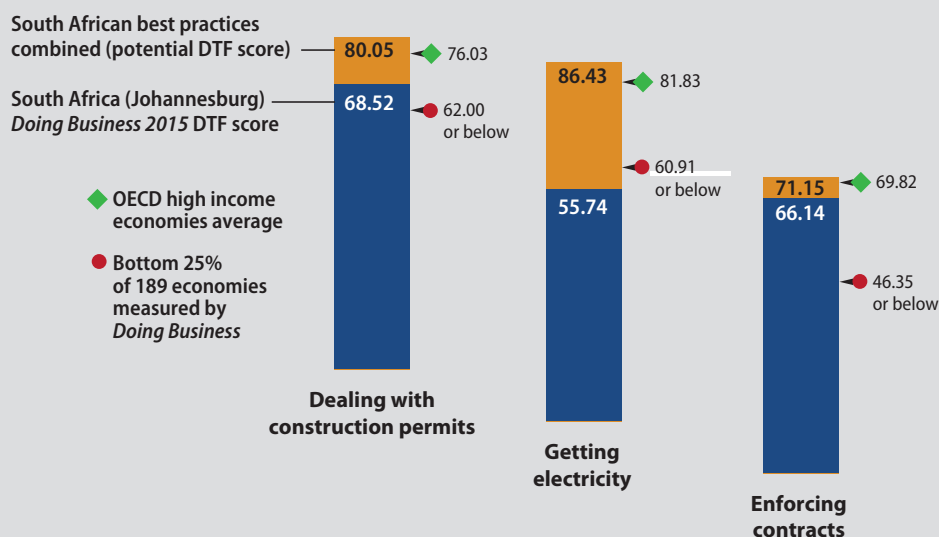
Real GDP growth is forecast at 2.0 percent in 2015, and to slowly strengthen to 2.4 percent in 2017

1.3

Reducing the requirements and time to deal with construction permits to 15 procedures (as in Nelson Mandela Bay) and 83 days (as in Cape Town) and lowering the cost to 0.68 percent of the warehouse value (as in Mangaung) would move South Africa 11 points higher. Enforcing contracts—an indicator where most South African cities fare quite well—and handling court cases as efficiently and as inexpensively as in Msunduzi and Mangaung, respectively, would improve the country's DTF score by 5 points, placing it among the best 25 economies globally on this indicator.

Box figure I. Doing Business in South Africa 2015: Where is it easier?

Distance to the frontier score (DTF)



Notes

- All data are seasonally adjusted annual rates unless otherwise noted.
- In February 2011–March 2011 prices.
- Seasonally adjusted annualized rate. All data are seasonally adjusted annual rates unless otherwise noted.
- Prepared by Victor Sulla (GPVDR).
- The World Bank's SUBSIM model at <http://www.subsim.org/> is a tool to assess the impact of price shocks on household welfare, poverty, and inequality, and the government budget, using household budget survey data and input-output matrixes.
- In reality, the impact of rising electricity tariffs on the poor is moderated to the extent that many metros apply cross-subsidization of average rates and amend the calculation of the free basic electricity allowance. Information was not available on these adjustments, and so the calculations should be interpreted as a maximum impact on the poor in the absence of these mitigating policies.
- The estimates exclude changes to the fuel levy, which rose by 80.5 cents/liter on April 1, 2015. If this higher rate is included, the average household loses an additional 0.8 percent of consumption.
- Estimates for the first and second quarter of 2015 correspond to the 2013 Master Sample using the newly collected 2011 Census data. Prior estimates for 2008 Q1–2014 Q4 correspond to the 2007 Master Sample using the 2011 Census data. Thus quarterly and annual comparisons across estimates using different master samples should be interpreted with care.
- The change in narrow unemployment can be expressed as: $\Delta \text{Unemployment Rate} = (\Delta \text{Unemployed} - \Delta \text{Employed}) + (\Delta \text{Absorption Rate} - \Delta \text{Labor Force Participation Rate})$. In the case of broad unemployment, both the unemployed and the labor-force participation rate include discouraged workers.
- Prepared by Claire Honore Hollweg (GTCDR) and Thomas Farole (GCJDR),

drawing from a forthcoming work that examines the potential to plug South Africa and its neighbors into Regional and Global Value Chains.

11. Cali et al. (2015) use input-output data from GTAP and UNIDO to measure the contribution of labor to the value-added contained in a given country's domestic production and exports, as well as the number of jobs generated by exports, by sector, country, and year; and by skilled and unskilled workers. The data cover 24 sectors (6 services, 3 primary, and 15 manufacturing) in about 100 countries intermittently between 1995 and 2011.
12. Between 2001 and 2011, South Africa's participation in the automotive GVC, as measured by foreign content embodied in the country's exports and the country's exports embodied in foreign exports, more than tripled.
13. In the second quarter of 2015, those with education attainment less than matriculation from secondary-level school represented about 59.6 percent of those unemployed, those with matric represented 32.1 percent, and those with tertiary level education represented about 7.7 percent.
14. The total outturn for national government revenue was R8.7 billion higher in FY2014/15, helped by better than expected collections under taxes on personal income (R3.0 billion), corporate income (R1.8 billion), payroll (R832 million), goods and services (R798 million), and international trade and transactions (R712 million).
15. Prepared by Trimor Mici (DECSN).

SECTION 2

Jobs and South Africa's Changing Demographics

Introduction

South Africa is undergoing a profound demographic shift in which the share of its working-age population has expanded substantially and will continue to grow for another five decades. Shifts of this kind can present a tremendous opportunity to accelerate economic growth, raise living standards, and reduce poverty. As the growth in the working-age population exceeds the growth rate of the overall population, the supply of labor rises; and if the higher number of working-age people can be employed productively, higher levels of income and faster economic growth can result—an effect called the first demographic dividend.¹ However, the combination of higher incomes and fewer non-working dependents in the overall population can also create space for higher savings, which in turn can fund investment in infrastructure and human capital, and give a further and more sustained boost to per capita income and economic growth—an effect known as the second demographic dividend.²

A growing working-age population has helped spur higher growth and higher living standards in many countries, but not all. China's demographic opportunity is estimated to have contributed one-quarter of the country's cumulative real per capita gross domestic product (GDP) growth between 1982 and 2000,³ and two-fifths of the increase in East Asia's income between 1982 and 1990.⁴ Yet a growing working-age population did not have as positive an impact in Latin America. Between 1965 and 2010,

Latin America saw its share of the working-age population increase by more than 20 percent, the same as in East Asia. However, East Asia experienced a sevenfold increase in per capita income, while Latin America had only a twofold gain, in part reflecting different enabling policies.⁵ Indeed, “the dividend period is a window of opportunity rather than a guarantee of improved standards of living.”⁶

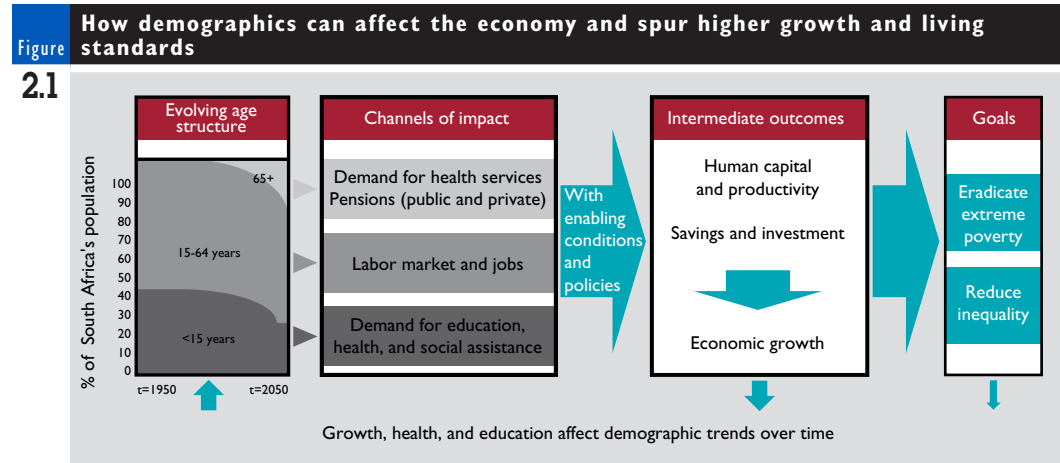
In South Africa, a lack of jobs has stymied its ability to capitalize on its demographic opportunity. Since 1994, the working-age population has expanded by more than 11 million. Job opportunities created were concentrated in services, but not in agriculture, manufacturing, and mining, which shed workers, with the result that total jobs created fell far short of the growing labor supply. Just under one-third of the new entrants to the working-age cohort since 2000 found a job, and by mid-2015 only a little more than 40 percent of the working-age population were employed. Unemployment today is higher than it was at the end of apartheid.⁷ To the extent that unemployment lowers current and future earnings potential through the erosion of skills and human capital during periods of prolonged joblessness, lifetime earnings of workers are lower and the ability to generate savings is constrained.⁸ Savings as a share of GDP have fallen as the working-age population expanded. Real per capita income in 2014 was only 40 percent higher than in 1994, trailing the increases not only in East Asia but also in Latin America.

Only a little more than 40 percent of the working-age population in South Africa work

Under what conditions can South Africa capitalize on its demographic transition? The answer depends on a wide range of economic variables and how demographic changes affect these, and vice versa. Job creation is just the first stepping stone. Better labor productivity, educational attainment, and skills are also critical enablers if new entrants to the working-age

population are to secure jobs in a world where skills are in high demand. But these are areas where South Africa faces challenges.

Our analysis focuses on how job creation, savings, and better human capital can improve enabling conditions for the growing working-age population to contribute to faster economic growth (figure



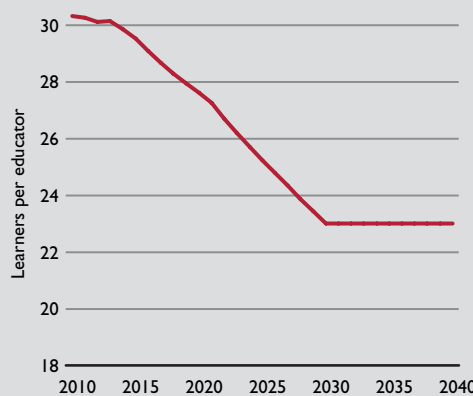
Source: Authors' own depiction for South Africa based on the analytical framework of the forthcoming World Bank and IMF Global Monitoring Report 2015/16.

Box 2.1 Demographic change and the long-term sustainability of social spending

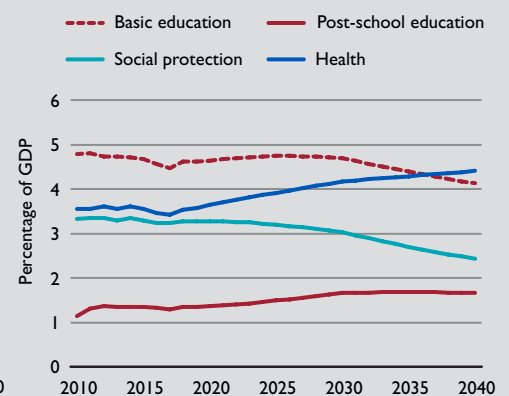
Using United Nations Population Projections, the National Treasury of South Africa has prepared long-term estimates of social spending that take account of trends in future demographics and utilization of public services.¹¹ Its analysis assesses whether current social policies are consistent with a stable or falling debt burden.

Where growth remains around 3 percent a year, government spending on social services is sustainable because demographic change results in a declining school-age population. If policies remain unchanged and real GDP growth exceeds 3 percent a year, the decline in the pupil–teacher ratio results (box figure 1) in a reduction in basic education spending from about 5 percent of GDP in 2015 to just under 4.5 percent by 2040 (box figure 2). Spending on social grants also falls, because the rapidly declining share of young dependents in the population reduces expenditures on the child-support grant by more than the increase in expenditures on the old age grant linked due to the growing number of old people in the population. But the projections reveal pressures on health outlays due to a high growth in the use of health care services.

Box figure 1. Trends in pupil–teacher ratio



Box figure 2. Long-term trends in social spending

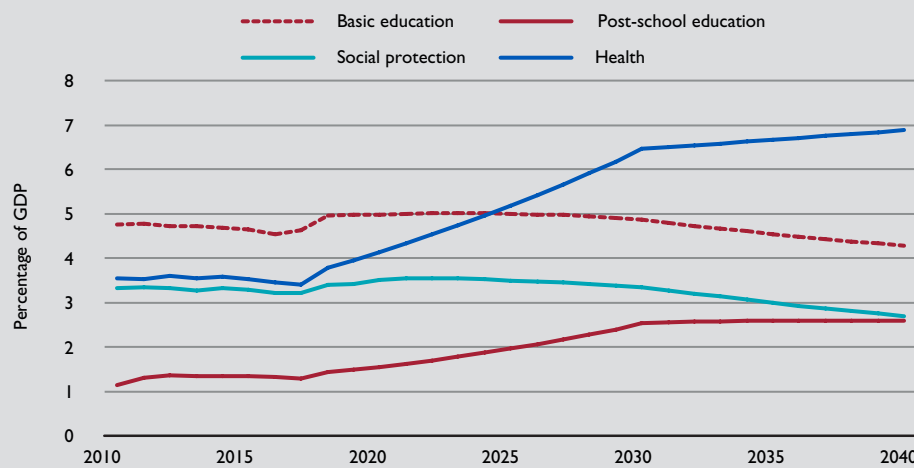


Source: National Treasury (2014).

2.1

Demographic trends point to favorable fiscal dynamics over the long run, but only if economic growth improves and there are no new spending pressures or initiatives. If growth remains around 2 percent a year, the analysis found that social spending would increase as a share of GDP, causing the debt burden to rise, if there are no changes in benefits or taxation. Pressure to address youth unemployment would require expanded vocational training and public works programs, demanding greater fiscal outlays. New social policies, such as National Health Insurance, would add further pressure (box figure 3). Accommodating these initiatives while safeguarding sustainability would require some combination of higher growth, taxes, and reallocation of resources from other programs.

Box figure 3. Projected spending with new policies



Source: National Treasury (2014).

2.1). As the “youth bulge” passes into working age, a country enters its “demographic window of opportunity,”⁹ but as seen a dividend does not materialize automatically. To realize the first demographic dividend, growth must be jobs intensive and the education system has to prepare graduates with the skills demanded by the labor market. Otherwise, a country risks a worsening economic situation with rising unemployment and increased dependency.¹⁰ The second dividend accrues when consumption rises more slowly than incomes and requires not only mechanisms to encourage saving but also productive investment in human capital (knowledge and skills) so labor productivity can improve and boost workers’ earnings.

High-quality public services are also enablers. As the structure of the population changes, demand rises for high-quality schooling to ensure that young entrants are equipped for the workplace. However, it may also be necessary to provide services that help support both job searching

and training, so that inexperienced new entrants and the unemployed can become more mobile across occupations and attractive to hire. And as the working population ages, public demand for health and pension systems rise. The implications of changing demographics for public finances in South Africa may be demanding (box 2.1). While it is necessary to put in place pension and health policies to prepare for a rising elderly population, a first priority is to ensure that workers are gainfully employed during their working lives. This will help boost incomes, savings, and growth, better preparing South Africa for when the old will be a far larger share of the population.

What can South Africa do to put more of its working-age population to work and reap greater benefits from its historically high and growing working-age population? We tackle this question by focusing on the job-related issues. Section 1 below reviews how far South Africa has progressed in its demographic transition. Section 2 presents how the country’s labor market has absorbed

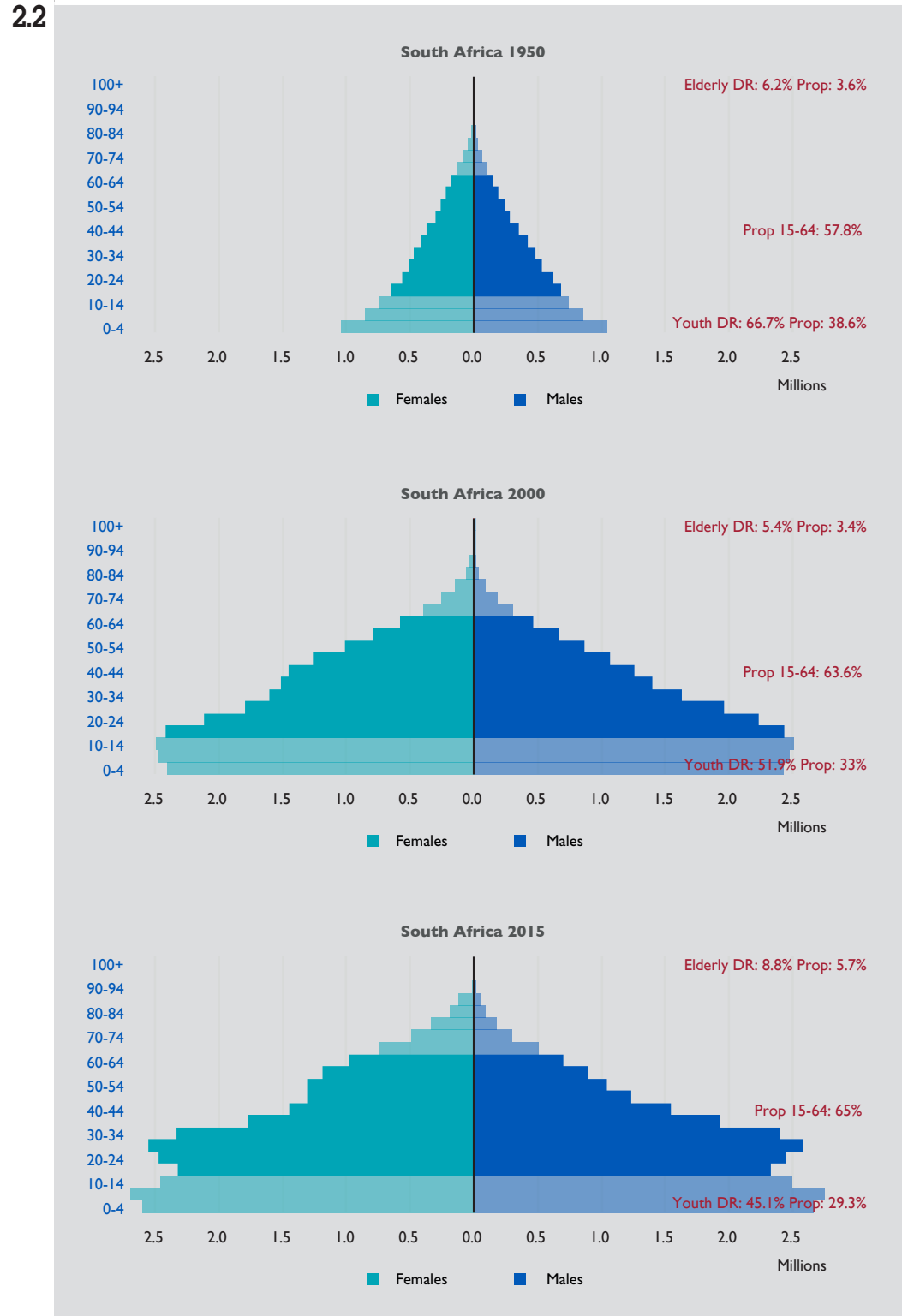
the expanding working-age population and how the pattern of economic growth influenced this performance. Section 3 sheds light on how South Africa's future growth, income, poverty, and inequality could evolve under a different enabling

environment that generates employment, higher savings, and improved productivity and educational attainment. The conclusions explore what policies could help the country to better capitalize on its demographic opportunity.

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As the youth bulge passes into working age, a country enters its demographic window of opportunity

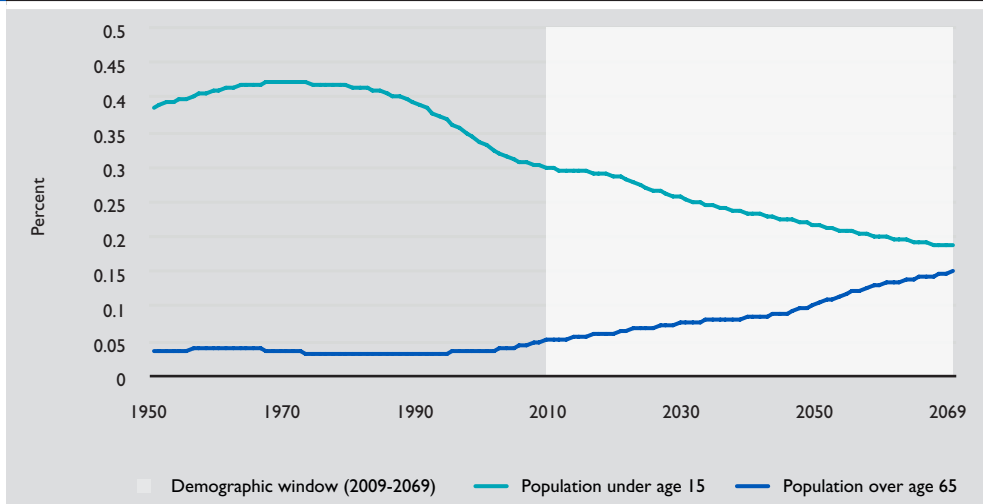
Figure 2.2 South Africa's changing demographic and age profile



DR = dependency ratio, Prop = proportion
Source: United Nations (2013).

Figure 2.3 South Africa's demographic window is open

2.3



Source: United Nations (2013).

In 2015, the working-age share in the population is about 65 percent

How far has South Africa progressed in its demographic transition?

South Africa's population has increased four-fold in the past 65 years to 54.9 million as of mid-2015.¹² Until the end of the 1980s, mortality and fertility rates declined at roughly equal rates and the population expanded by about 2.4 percent a year. Thereafter, an expansion in the use of contraception and family planning contributed to the gradual decline in fertility rates from an average of 6 children per woman in the 1960s to 4.3 by the late 1980s. Population growth slowed to about 2.2 percent a year between 1985 and 1990.

Population growth slowed more sharply in the 1990s as the HIV/AIDS epidemic shaved some eight years from male, and 11 years from female, life expectancy.¹³ After 2005, mortality rates resumed their decline as new HIV/AIDS treatments were disseminated and the fertility rate fell toward 2.55 children per woman by 2015.¹⁴ Population growth averaged 1.4 percent between 2005 and 2015, but with the number of births in 2015 at an all-time high of 1.25 million.

Today almost half of South Africa's population is under 25; 30 percent are under 15. This "young bulge" has begun to move up and change the population pyramid (figure 2.2), lowering the dependency ratio.¹⁵ The UN Department of Economic and Social Affairs, Population Division, which publishes the longest population series for South Africa, shows that the dependency ratio peaked at 83.5 percent in 1970. According

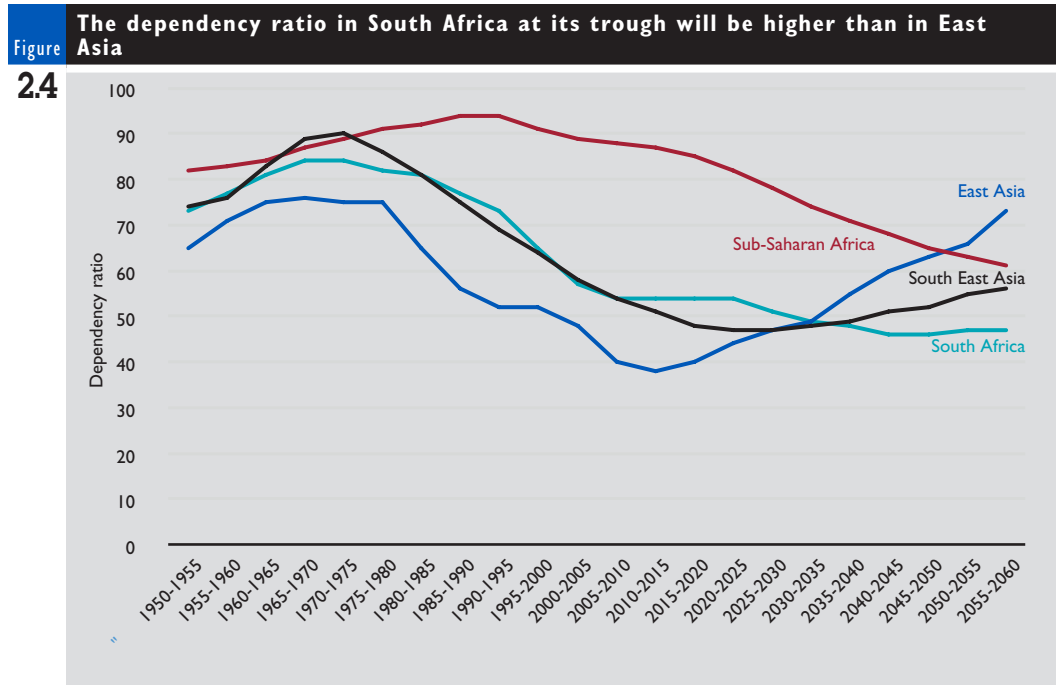
to Statistics South Africa's most recent population estimate, the total dependency ratio was 53.9 percent in 2015, a decline of more than one-third from its peak. There are now about 1.8 working-age persons per young and old dependent. However, because employment is relatively low, there are only 0.8 workers on this measure, or 0.4 workers if all young, old, and non-working dependents are considered.¹⁶

The working-age population, 15–64 years old, expanded 4.5 times or by more than 27 million between 1950 and 2015. The working-age share in the population began to rise, slowly, in 1968 with the expansion taking firm hold after 1972 on the back of sustained declines in the share of the population under 15. In 2015, the working-age share in the population is about 65 percent. United Nations, 2013 put the working-age population at 34.5 million, or more than 10 million higher than in 1994 when apartheid ended. National data from Statistics South Africa show a slightly higher increase since 1994 of about 11 million, to 35.5 million in 2015.

Either way, the window of demographic opportunity is open for South Africa (figure 2.3). The youth-dependency ratio has declined steadily since the late 1960s, creating space for the working-age population to expand and potentially freeing resources for economic growth.¹⁷

The working-age population, 15–64 years old, will grow by at least another 9 million over the next 50 years, peaking in 2065 at about 43.8 million.¹⁸ The next 20 years alone

The working-age population will grow by 9 million people by 2069



Source: United Nations (2013).

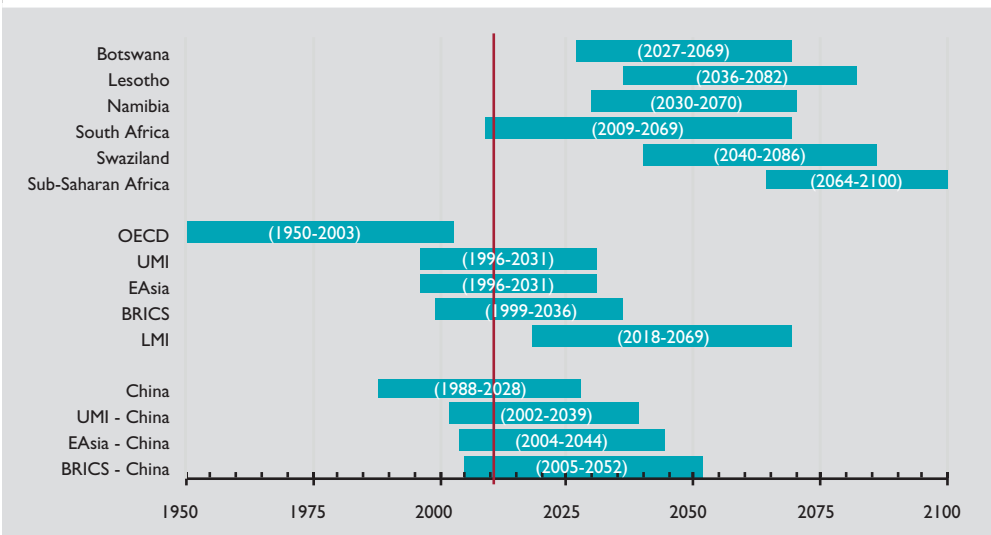
will see an average net increase in the working-age population of about 280,000 people per year, although this does not necessarily translate one-for-one into an increase in the labor force, given that many young people remain in education beyond their 15th birthday. As a share of the working-age population, United Nations (2013) projects that the peak will occur in 2045, when it will reach 68.3 percent of the population and there will be 2.1 working adults to support each young and old dependent. While South Africa has completed almost 80 percent of the transition to its peak working-age share, it still has a window of some 50 years where the working-age share will remain high and before aging becomes a bigger concern: the share of the population aged 65 and older is projected to rise from just under 6 percent of the total population in 2015 to 9 percent in 2045, before reaching 14 percent in 2065.

South Africa's demographic transition to a peak working-age population is, however, shallower and longer than that in countries that have harvested the demographic dividend. Some argue that the faster the transition, the greater its potential impact on growth,¹⁹ although the flip side is that the potential benefits are shorter-lived. According to United Nations, 2013, South Africa started its demographic transition in the late 1960s at a time similar to that in

countries in Eastern Europe and East Asia. However, these data show that South Africa's total dependency ratio, even at its projected trough of 46 percent in 2045, will be higher than East Asia's equivalent trough of 38 percent in 2010, suggesting a more shallow transition for South Africa (figure 2.4). The reason is that the proportion of the elderly population will rise, offsetting some of the reduction in the population of young people.

Nonetheless, at a time when most other major regions of the world are already facing the headwinds of rapidly aging populations, South Africa and Sub-Saharan Africa have relatively young populations (figure 2.5) and, as discussed above, should continue to have them for around another half century. In Sub-Saharan Africa, fertility rates have been much slower to decline and, according to United Nations (2013), its demographic window will open only in the 2060s (figure 2.5).²⁰ This means that as South Africa begins to face negative growth in its working force population (blue bars in figure 2.6 from 2045 onward) implying a rising dependency ratio because of aging, one of its key export markets, Sub-Saharan Africa, could grow on the back of its larger working-age population (pink bars in figure 2.6 from 2045 onward), increasing the demand for South African exports and potentially cushioning the impact of aging on South Africa's growth.

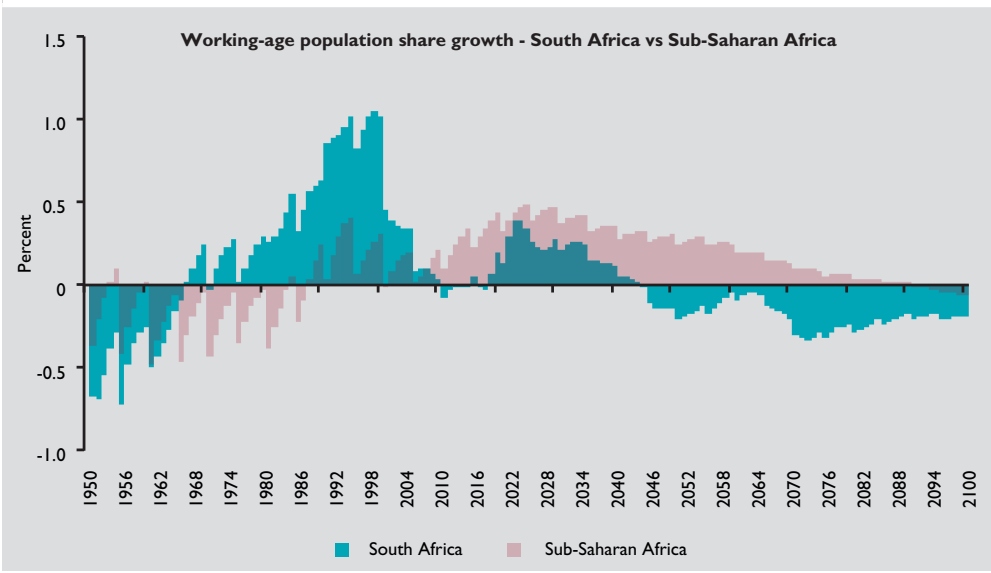
Figure 2.5 The demographic window is already closed in OECD countries and close to closing in China and East Asia



Source: United Nations (2013).

Since 2000 the working-age population expanded by 8.5 million people, but jobs grew by only 2.8 million

Figure 2.6 South Africa is further advanced in its demographic transition than the rest of Sub-Saharan Africa but stands to benefit from a growing region



Source: United Nations (2013).

South Africa’s recent labor market performance amid demographic change

South Africa’s supply of labor increased sharply from 1995. Between 1995 and 2015, the working-age population expanded by more than 11 million. However, the early years after the end of apartheid also saw the mass entry into the labor force of African women, who were largely unskilled and had previously been excluded from the labor force under apartheid. According to some estimates, the female labor force participation rates jumped from about 41

percent in 1995 to almost 50 percent by 2005.²¹

But the labor market did not create enough jobs to match this unprecedented rise in the supply of labor. Between 2000 and 2014, for example, the working-age population expanded by 8.5 million people but the number of jobs grew by only 2.8 million (table 2.1).²² Some 7.7 million people—about 22 percent of the working-age population—were unemployed or had stopped looking for work by 2014. The unemployment rate (on the narrow measure) was 25.4 percent or, if discouraged workers are included, the

South Africa now has one of the lowest employment and labor-force participation rates and highest unemployment rates by upper middle-income country standards

Table 2.1 Evolution of the South African labor market between 2000 and 2014

	Working age		Labor force participation		Employment		Unemployment, narrow		Unemployment, broad	
	(thousands)	(thousands)	%	(thousands)	%	(thousands)	%	(thousands)	%	
2000	27,008	16,078	59.5	12,336	45.7	3,742	23.3	5,278	30.0	
2001	27,528	15,789	57.4	11,660	42.4	4,130	26.2	6,151	34.5	
2002	28,068	16,264	57.9	11,935	42.5	4,329	26.6	6,335	34.7	
2003	28,585	15,906	55.6	11,959	41.8	3,947	24.8	6,349	34.7	
2004	29,080	15,924	54.8	12,265	42.2	3,659	23	6,231	33.7	
2005	29,556	17,035	57.6	13,034	44.1	4,001	23.5	6,351	32.8	
2006	29,999	17,460	58.2	13,601	45.3	3,859	22.1	6,076	30.9	
2007	30,414	17,232	56.7	13,609	44.7	3,623	21	6,226	31.4	
2008	31,839	18,848	59.2	14,549	45.7	4,299	22.8	5,392	27.0	
2009	32,435	18,306	56.4	13,830	42.6	4,476	24.5	6,122	30.7	
2010	33,033	18,303	55.4	13,648	41.3	4,655	25.4	6,734	33.0	
2011	33,640	18,818	55.9	14,118	42	4,699	25	6,912	32.9	
2012	34,253	19,463	56.8	14,562	42.5	4,901	25.2	7,115	32.8	
2013	34,868	19,916	57.1	15,036	43.1	4,880	24.5	7,177	32.3	
2014	35,489	20,268	57.1	15,117	42.6	5,151	25.4	7,665	33.6	

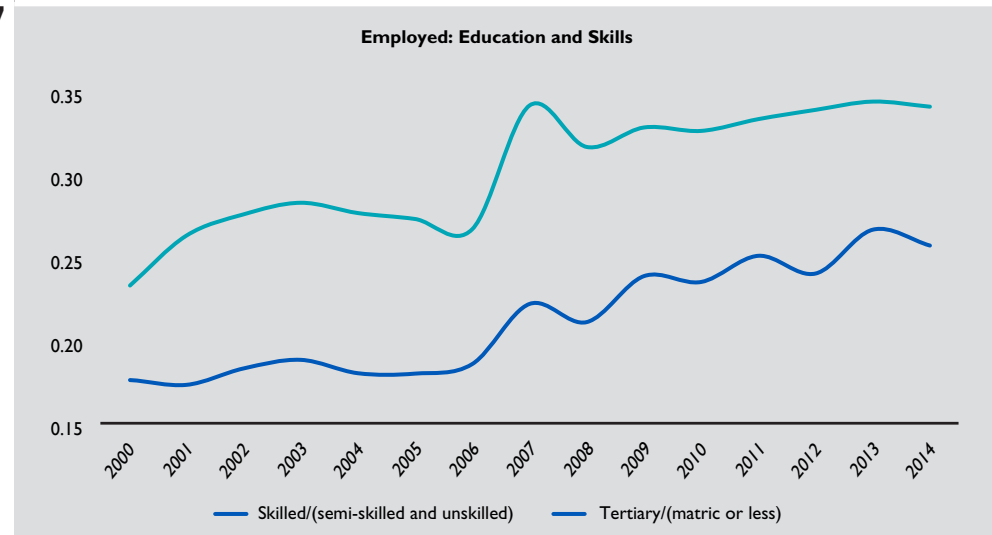
Source: Labour Force Surveys 2000–07, revised September series, and Quarterly Labour Force Surveys (revised with 2011 Census weights).

unemployment rate was closer to 34 percent. Labor-force participation rates have also remained low. After initially rising post-1994 and peaking at close to 60 percent in 2000, labor-force participation rates fell to an average of 57.4 percent in the pre-crisis years between 2000 and 2008. The global financial crisis resulted in the labor-force participation rate falling to 55 percent between 2009 and 2011, but it subsequently recovered to the 57 percent mark in recent years. Even so, by 2014 South Africa had one of the lowest employment and labor-force participation

rates and highest unemployment rates by upper middle-income country standards.²³

The supply of unskilled workers in South Africa grew when the demand for unskilled workers fell and employment became more skills intensive. Agriculture, mining, and manufacturing have shed more than half a million mainly unskilled, jobs since 2000 and now account for only 19 percent of total employment, down from just under 30 percent in 2000. Total employment also became more skills intensive. In 2000, across all sectors, there were about four unskilled/

Figure 2.7 Skilled vs. unskilled workers



Source: Labor Force Surveys 2000–07, September Series, and Quarterly Labor Force Surveys 2008 Q3–2014 Q3, Statistics South Africa. Note: The matriculation exam, or matric, is the South African high school leaving exam. Tertiary is third-level education.

Table Evolution of ratio of skilled to unskilled workers by sector

2.2

	Average 2000-2007		Average 2008-2014	
	Skilled / (Unskilled and semi-skilled)	Tertiary /matric or less	Skilled / (unskilled and semi-skilled)	Tertiary /matric or less
Agriculture	0.036	0.037	0.057	0.044
Mining	0.077	0.080	0.130	0.172
Manufacturing	0.204	0.123	0.246	0.166
Utilities	0.379	0.357	0.452	0.584
Construction	0.089	0.057	0.162	0.091
Wholesale and retail	0.161	0.084	0.189	0.106
Transport/comm	0.330	0.142	0.335	0.199
Financial/real estate/business services	0.731	0.437	0.694	0.447
Community and social services	1.069	0.709	0.922	0.730
Total	0.277	0.186	0.333	0.243

Source: Labour Force Surveys (September series), Quarterly Labour Force Surveys (third quarter), Statistics South Africa, and staff calculations.

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semi-skilled workers to every skilled worker; by 2014 there were just three. Figure 2.7 shows that the ratio of skilled to unskilled and semi-skilled workers rose by roughly 10 percentage points from 2000 to 2014.²⁴ Similar trends are evident using levels of educational attainment (table 2.2). Other institutional constraints, including union activity, spatial disparities that see many of South Africa’s unemployed living in townships and informal settlements far removed from urban centers, and limited opportunities in the informal economy also contributed to the lack of job opportunities and social networks for unskilled workers and new labor-market entrants since 2000.

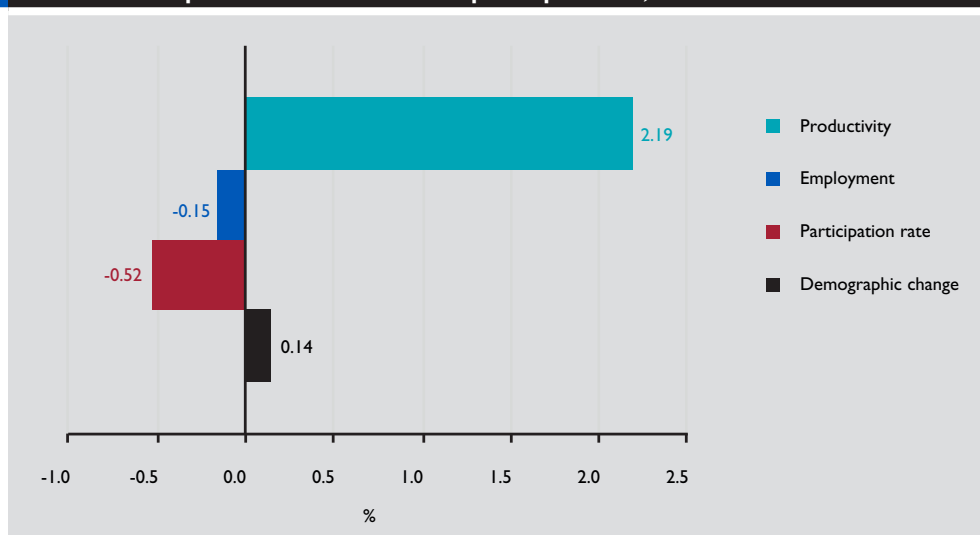
Insufficient job creation has left South Africa’s unskilled or semi-skilled and its

youth facing the prospect of long-term joblessness, and they appear ill equipped for a labor market that demands higher skills. According to the Quarterly Labor Force Survey for the second quarter of 2015, about two-thirds of the unemployed have been searching for jobs for a year or more; 40 percent are new entrants to the labor force and thus being just out of school they lack work experience. Of 10.2 million 15–24 year olds, almost a third do not work and are not in school. The unemployment rate for 15–24 year olds is almost 50 percent (measured as a percent of 2.7 million 15–24 year olds in the labor force). If we broaden the young to also include those up to the age of 34, almost two-thirds of the 5.2 million unemployed are

In 2000 there were around four unskilled workers for each skilled worker, but by 2014 this ratio had fallen to three as the demand for unskilled workers fell.

Figure Drivers of 1.7 percent increase in real per capita GDP, 2000–13

2.8



Source: World Bank calculations based on real GDP per capita and employment from the revised 2000–07 Labor Force Survey (September series) and the Quarterly Labor Force Survey data for 2008 Q3 to 2013 Q3 using consistent census weights.

Increases in years of schooling might not be translating into the skills needed in the labor market.

in this 15–34 age bracket. While more than half of those employed have the South African matric (high school)-level exam qualification or a higher level of education, about 60 percent of the unemployed have not even achieved the matric qualification. Well-documented concerns about the quality of education in South Africa imply that the increase in years of schooling that has occurred might not be translating into the skills needed in its labor market.²⁵

Moreover, since 2000 economic growth in South Africa has largely been driven by gains in labor productivity and has not been jobs intensive.²⁶ In real terms, per capita GDP rose by 1.7 percent a year between 2000 and 2013 (figure 2.8). Labor productivity, measured by output per worker, rose by 2.2 percent a year. However, the decreased labor-force participation rate since 2000 subtracted 0.5 percentage points a year from headline per capita GDP growth. The decline in employment²⁷ shaved off a further 0.15 percentage points

from annual growth in per capita incomes, essentially canceling out the positive impact (0.14 percentage points per year) of the increasing working-age population. Were it not for the drag from lower-labor participation and employment, annual growth in real per capita GDP could have been almost 30 percent higher than it has been. Box 2.2 examines in more detail the role that the service sector played in driving changes in labor productivity and employment before and after the crisis and highlights the worrisome trend that, since the end of the global financial crisis, growth in labor productivity appears to have petered out.

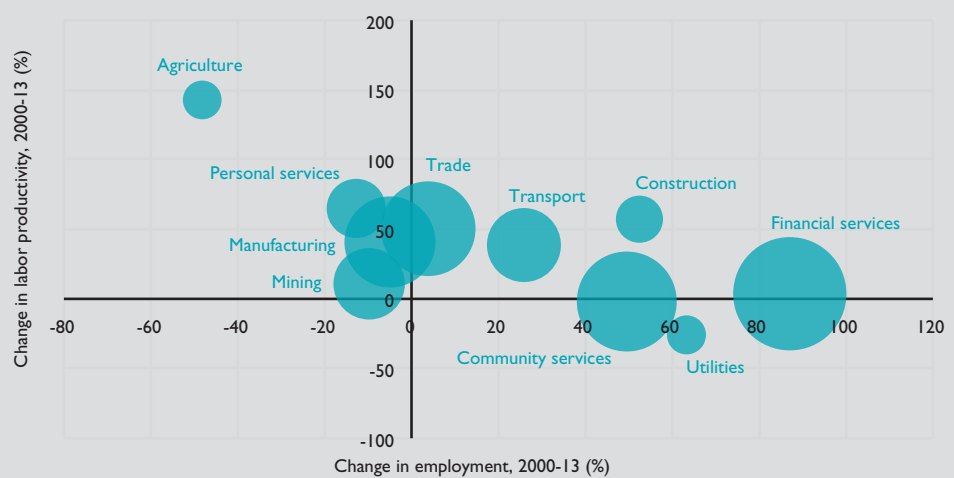
The inability to create sufficient job opportunities, especially for its young and unskilled workers, has stymied South Africa's ability to capitalize on its demographic opportunity so far. The size of the economy as measured by real GDP was 80 percent larger and incomes in real per capita terms of R55,712 in 2014 were just 40 percent

Box 2.2 Sector-level trends in employment and productivity

2.2

Growth in per capita income has been driven by gains in labor productivity and not job creation. Total labor productivity rose by 2.2 percent a year between 2000 and 2013, driving overall growth in per capita incomes. Agriculture, manufacturing, and mining combined shed more than a half a million jobs and saw their combined labor productivity grow at an average rate of 0.7 percentage points a year. Services added more than 2.2 million jobs over the period, but this was not enough to absorb the growing working-age population plus those who lost their jobs in other sectors.²⁹ But services combined job creation with improved labor productivity, accounting for 60 percent of the annual increase in total labor productivity. Within services, employment rose the most in finance, real estate, and business services (up by almost 890,000) and output per worker remained high at around R300,000 per worker.

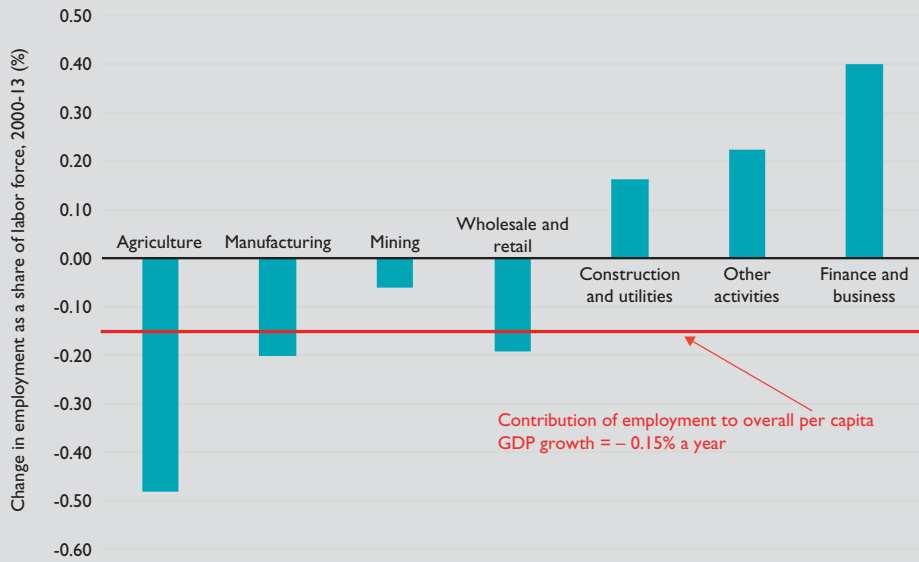
Box figure 1. Changes in employment and labor productivity



Source: World Bank calculations based on real GDP per capita and employment from the revised 2000–07 Labor Force Survey (September series) and the Quarterly Labor Force Survey data for 2008 Q3 to 2013 Q3 using consistent census weights. The size of the bubble corresponds to the rand value of gross value-added of the sector in 2013 reported by Statistics South Africa.

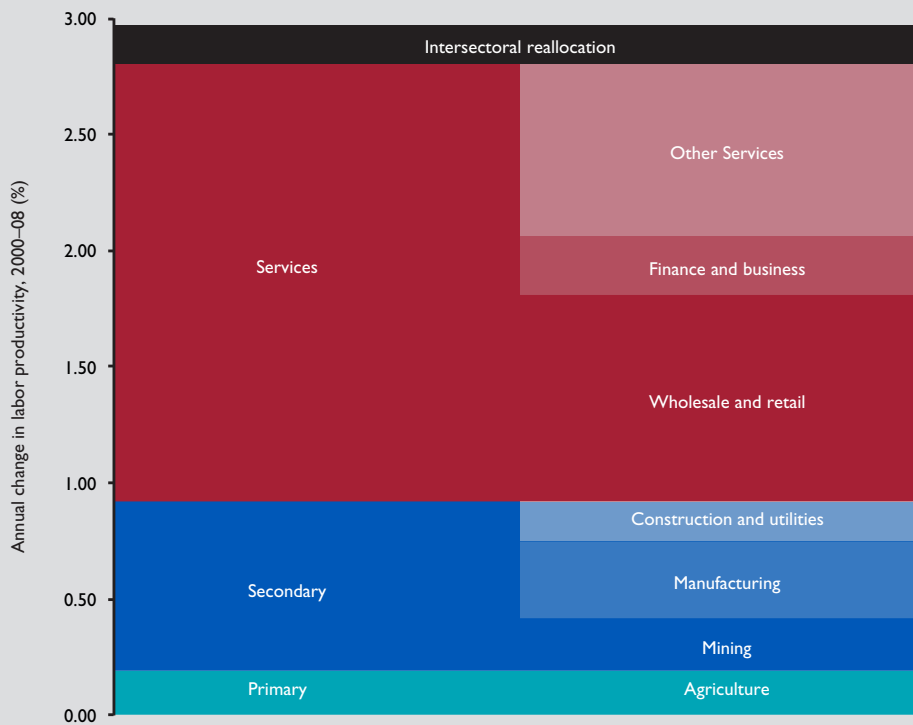
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Box figure 2. Annual change in employment (as a share of labor force) by sector, 2000–13



Job creation, especially in services, expanded after the global financial crisis but productivity growth petered out. Prior to the crisis (2000–08), services employment grew by 1.4 million and labor productivity in services rose by 1.7 percent per year. Since 2010, total employment has grown by about 1 million, recouping the jobs lost in the crisis, driven largely by new jobs in services. However, total labor productivity contracted by an average of 0.23 percent a year between 2010 and 2013, reflecting declines in output per worker in finance, real estate and business services, community services, and transport as employment in these sub-sectors expanded. Growth in real per capita GDP slowed sharply to an average rate of just 0.86 a year between 2010 and 2013.

Box figure 3. Productivity growth, 2000–08

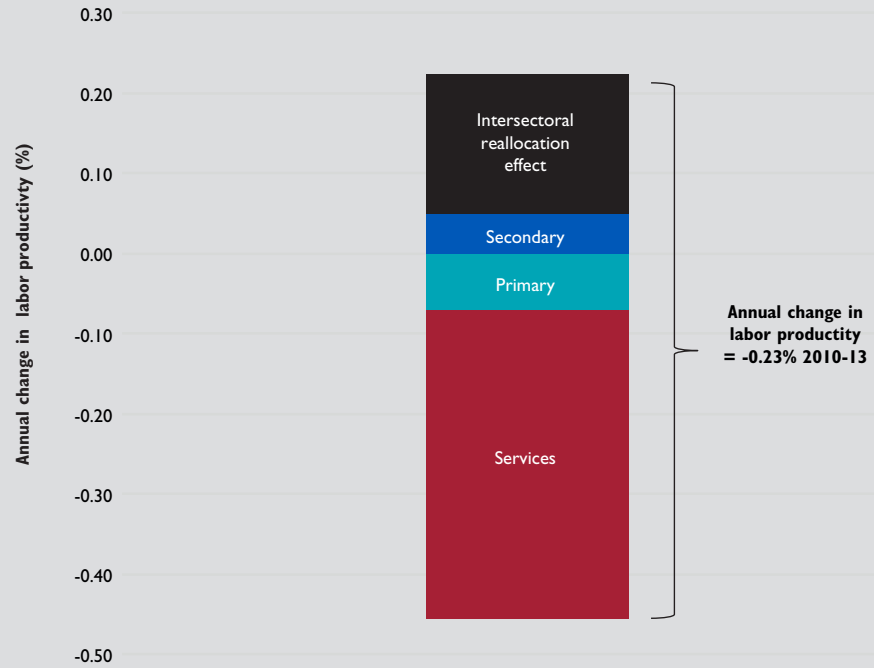


The new jobs needed to reduce unemployment and absorb the many new entrants to the labor force are unlikely to materialize in the coming decades without a better enabling environment.

Box Sector-level trends in employment and productivity (continued)

2.2

Box figure 4. Productivity growth, 2010–13



Source: World Bank calculations based on real GDP per capita and employment from the revised 2000–07 Labor Force Survey (September series) and the Quarterly Labor Force Survey data for 2008 Q3 to 2013 Q3 using consistent census weights.

higher than in 1994. Savings as a share of GDP had fallen to 14.9 percent of GDP by end-2014, from 17.7 percent in 1994, reflecting declining household disposable income amid South Africa’s chronically high unemployment.²⁸

It is hard to envisage a drastic fall in the number of jobless or enough new jobs to absorb the many new entrants forecast to join the labor force in the coming decades without a better enabling environment.

Making the most of South Africa’s future demographic changes

Under what conditions can South Africa capitalize on its demographic transition? The answer depends on a wide range of economic variables and how demographic changes affect these, and vice versa. Job creation is just the first stepping stone (figure 2.9). Better labor productivity, educational attainment, and skills are also critical enablers if new entrants to the working-age population are to secure jobs in a world where skills are in high demand. But, as the previous section showed, these are areas where South Africa faces challenges.

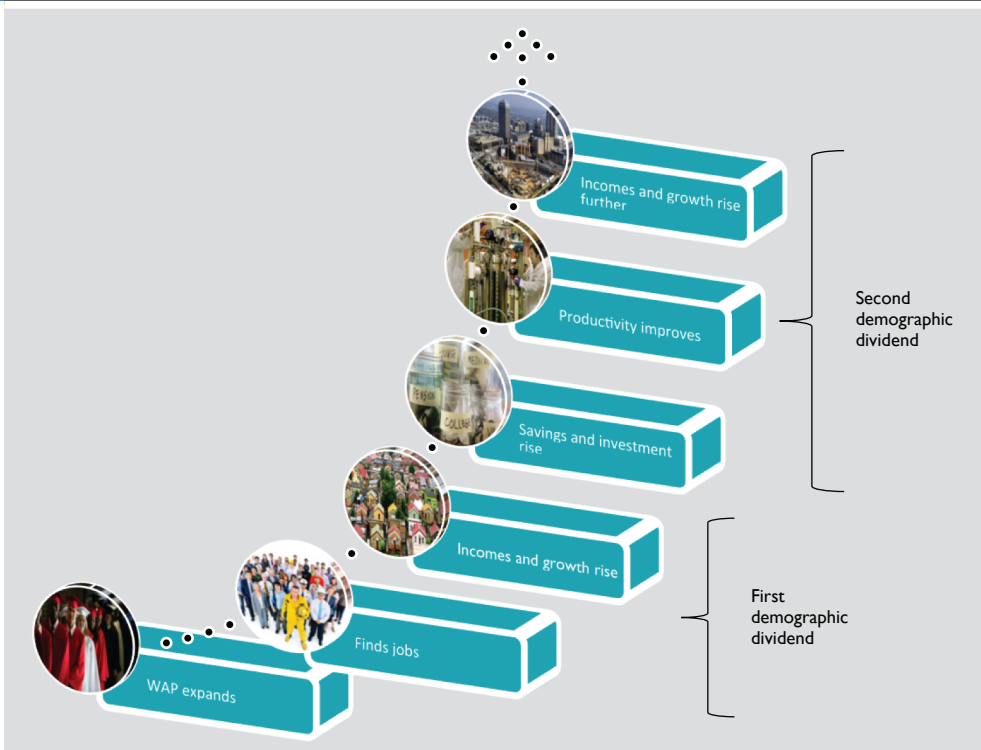
We use a World Bank model, LINKAGE (van der Mensbrugge, 2011),³⁰ to examine how improvements in the enabling environment could help Africa better seize its demographic opportunity. The model ties growth to changes in the labor force, investment in capital, and total productivity. The impact of a changing age structure occurs as a rising working-age population increases the supply of labor and drives higher per capita income (real GDP). As the labor supply rises, the associated reduction in the number of young or old dependents can create space for households to save more. Higher savings in turn boosts investment and drives higher growth in the model.

The model also considers the structure of the labor market, differentiating between skilled and unskilled labor, which in turn affects levels of productivity and overall growth. As countries grow, they see changes in their share of skilled and unskilled workers, and LINKAGE keeps track of the young, working-age, and old-age shares of the population each year to calculate dependency ratios.

To illustrate how a growing working-age population has the potential to affect

Figure 2.9 Stepping stones in realizing a demographic dividend

2.9



Source: Authors' own depiction.

growth, incomes, poverty, and inequality in South Africa, we contrast a business-as-usual baseline scenario with three other potential futures that evolve around the steps involved in creating a better enabling environment to realize the first and second demographic dividends:

- In the business-as-usual baseline scenario, the labor market's ability to absorb new entrants remains constrained. Labor-force participation remains low at its 2014 level of 57 percent and employment rate stagnates at about 43 percent of the working-age population.³¹ Unemployment persists at 25.1 percent. The number of employed increases at the same rate as the working-age population, 0.76 percent a year (drawn from the UN World Population Prospects, 2013), still faster than the growth rate of the total population (0.55 percent a year).
- In scenario 1—"the job-creation scenario"—the labor market improves considerably. Enough new jobs are generated not only to absorb all new entrants but also to reduce unemployment to the upper-middle-income country average of 5.8 percent by

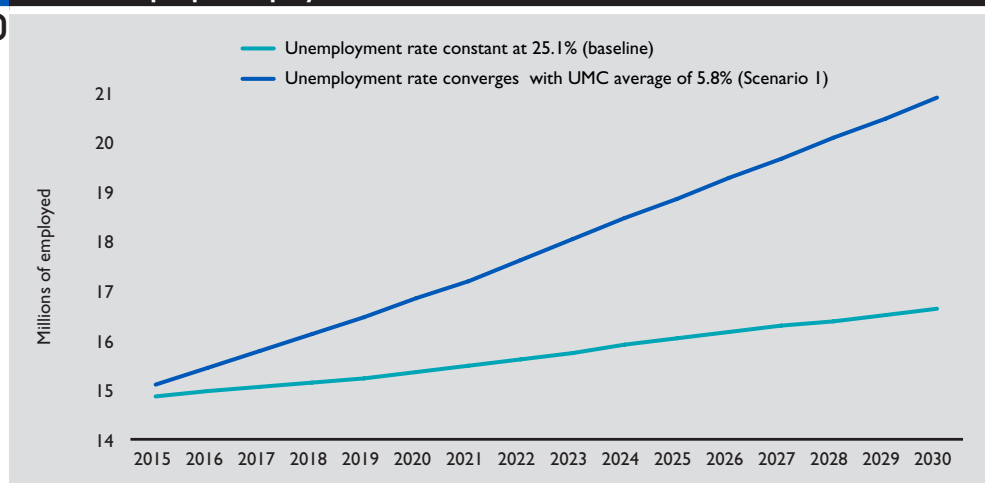
2030.³² The employment rate rises to 54 percent of the working-age population.

- In scenario 2—"the productivity-enhancing scenario"—the fall in unemployment from scenario 1 is accompanied by more rapid gains in labor productivity, whose growth rates converge with the BRIC group average by 2030, implying a 30 percent higher average growth rate in labor productivity than in scenario 1.
- In scenario 3—"the accelerated educational attainment scenario"—the lower unemployment rate and faster labor-productivity growth of scenario 2—is complemented by faster skills attainment by school graduates entering the working-age population. In scenarios 1 and 2, educational attainment rates stay at current levels, but even then the share of workers with more than nine years of schooling rises as younger-age cohorts with more years of schooling than older cohorts cause the share of employed with more than nine years of schooling to rise from 61 percent in 2014 to 68 percent by 2030.³³ In scenario 3 we assume the share of the working-age population that has at least nine years of schooling rises to 72 percent—a level on par with

Without an improved labor market, only 40 percent of those comprising the increase in the working-age cohort will find jobs

Figure 2.10 Number of people employed in baseline and scenario 1

2.10



Source: World Bank staff estimates.

Note: The employment figures in the baseline and scenario 1 are determined by calculating the employment ratio based on the unemployment and labor-force participation rates, and the working-age population projections. The unemployment rate in the Quarterly Labor Force Survey for 2014 was 25.1 percent. The upper middle-income country average unemployment rate of 5.8 percent is from WDI 2014; in scenario 1, it is assumed that the rate converges from 25.1 percent to 5.8 percent at a uniform pace over 15 years. Labor-force participation is held constant in both scenarios at 57.1 percent. The working-age population share projections are taken from the United Nations World Population Prospects (2013) medium fertility scenario.

the projected skill share of 18 non-Middle Eastern high-income countries—to proxy for improvements in educational attainment.³⁴

We now look at each scenario in more detail.

Business-as-usual baseline scenario

If unemployment and employment remain constant at current rates, South Africa sees only a very modest boost to growth and incomes from its rising working-age population. In the baseline, real GDP growth averages 3.7 percent a year and growth in real per capita incomes averages 3.1 percent a year over 2015–30. The number of employed rises modestly from about 14.8 million workers in 2015 to 16.6 million by 2030. This implies that only about 40 percent of the 4.3 million increase in the working-age cohort over the next 15 years will find jobs. Moreover, the high rates of youth unemployment³⁵ imply that the economy is not only forgoing the benefit of the labor supply growing faster than the overall population, but also is missing the potential benefit that these new entrants have more years of schooling. Nor do incomes rise enough to create space for a sharp increase in savings: savings as a share of GDP rise modestly from 14.5 percent of GDP in 2015 to just under 18.5 percent by 2030.

Ultimately, this scenario falls far short of what South Africa could achieve from its demographic tailwinds.

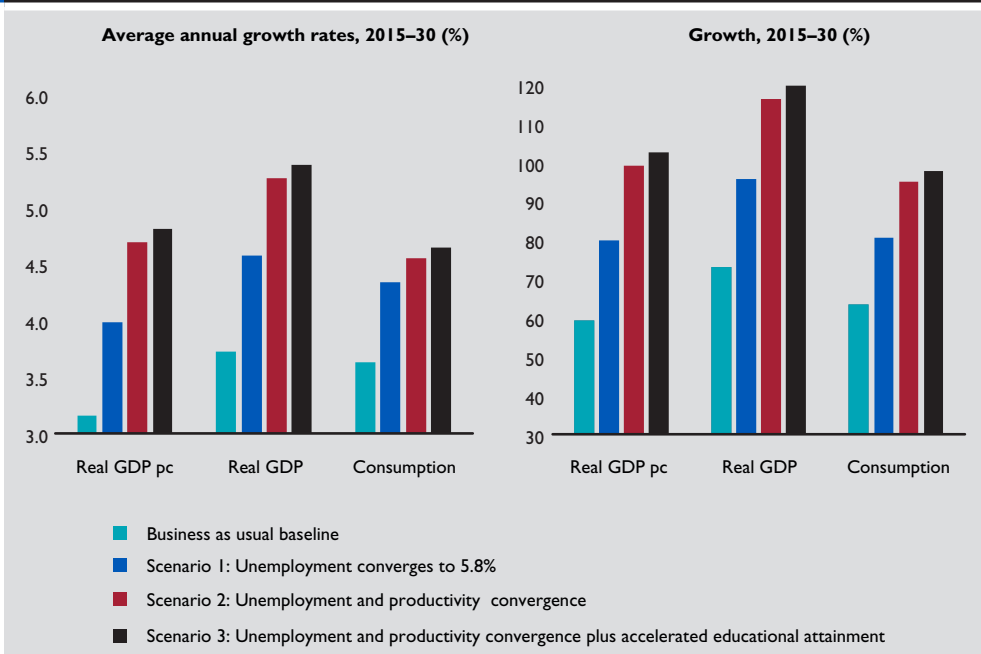
Job-creation scenario

This scenario illustrates the necessity for strong job creation to employ the growing working-age population. Here, South Africa's unemployment rate converges with the upper middle-income country average of 5.8 percent by 2030 and the employment rate rises to about 54 percent.³⁶ Labor productivity growth is positive but not as strong as in other emerging market economies. In this more optimistic future, growth is far more jobs intensive: the number of people employed grows almost three times faster than in the business-as-usual case, with jobs growth averaging 2.2 percent a year. By 2030, 4.03 million more people are working than in the previous case (figure 2.10) and relative to 2015 some 5.8 million new jobs are created, which is more than enough to employ the new entrants and allow South Africa to make a significant dent in its unemployment rate.

Relative to the baseline, the larger number of workers employed has the effect of increasing total economic output. Similarly, real GDP is about 13 percent bigger than in the baseline in 2030 and 95 percent bigger than in 2015, where the unemployment rate converges with the upper middle-income country average. In this scenario, overall GDP and real GDP per capita rise by an average of 4.6 and 4.0 percent a year, respectively, or roughly 1.3 times faster than in the business-as-usual scenario (figure 2.11). By 2030, real

Figure 2.11

Rapid improvements in unemployment rates, labor productivity, and educational attainment can accelerate growth in income and consumption



Source: World Bank staff estimates.
 Note: LINKAGE simulation results for the business-as-usual baseline and scenarios 1, 2, and 3. In scenario 1 the unemployment rate converges from 25.1 percent in 2014 to 5.8 percent in 2030. Scenario 2 is identical to scenario 1, except that the average annual labor productivity growth rate over 2015–30 is 30 percent higher and converges with the BRIC group average productivity growth rate by 2030. Scenario 3 is identical to scenario 2, but with the share of skilled workers converging with the average of 18 non-Middle Eastern high-income countries.

If jobs can be created to absorb new entrants and lower the unemployment rate, GDP growth might average 4.6 percent a year.

GDP per capita would be US\$11,356 per person, about 13 percent more than the US\$10,056 in the business-as-usual case.

But even with more jobs, the gains to growth and income from a growing working-age population appear relatively modest in South Africa because aging is offsetting some of the benefits. By 2030 the share of the population older than 65 will already have reached 8 percent, 2.25 percentage points more than today. This is limiting the scope for a potential second demographic dividend. Because the old draw down their savings faster than the working-age share of the population can increase national savings, the increase in the old-age dependency ratio, particularly after 2027, is high enough to limit the improvements in overall savings and the secondary boost to economic growth via greater investment. Total savings reach 19.5 percent of GDP by 2030, only about 1 percentage point of GDP higher than in the business-as-usual scenario.

Productivity-enhancing scenario

Higher growth in labor productivity will need to accompany job creation if South Africa is to make greater strides in raising growth and incomes as the working-age

population moves toward its peak. In this second scenario, we examine how growth and income evolve if the decline in unemployment highlighted above is also accompanied by improved labor-productivity growth that could come about through better training and skills. Here, overall real GDP rises at an average rate of 5.3 percent a year, above the 5 percent target set in the National Development Plan (2012). The economy’s size more than doubles between 2015 and 2030 and is one-quarter larger in 2030 than in the business-as-usual baseline case. In per capita terms, real GDP growth averages 4.7 percent a year and per capita incomes reach US\$12,558 by 2030. The increase in productivity helps offset some of the pressures on savings and growth from having a growing share of the population older than 65. Savings as a share of GDP is 20.8 percent of GDP in 2030,³⁷ which allows South Africa to reap a somewhat higher dividend from its large working-age population.

Accelerated educational-attainment scenario

The impact of a growing working-age population on growth and incomes would be further enhanced by efforts to improve educational attainment and skills. In the

Extreme poverty could be almost eliminated by 2030 if South Africa could generate jobs and improve labor-productivity growth

third scenario, job creation and faster labor-productivity growth is accompanied by these efforts. In this scenario, overall real GDP and real GDP per capita rise at an average of 5.4 percent and 4.8 percent a year, respectively. Per capita incomes reach US\$12,766 and savings rise to 21 percent of GDP by 2030. The gain in the economy of higher educational attainment is understated by these numbers, because 15 years is not long enough for the full impact of these efforts on growth and incomes to fully materialize.

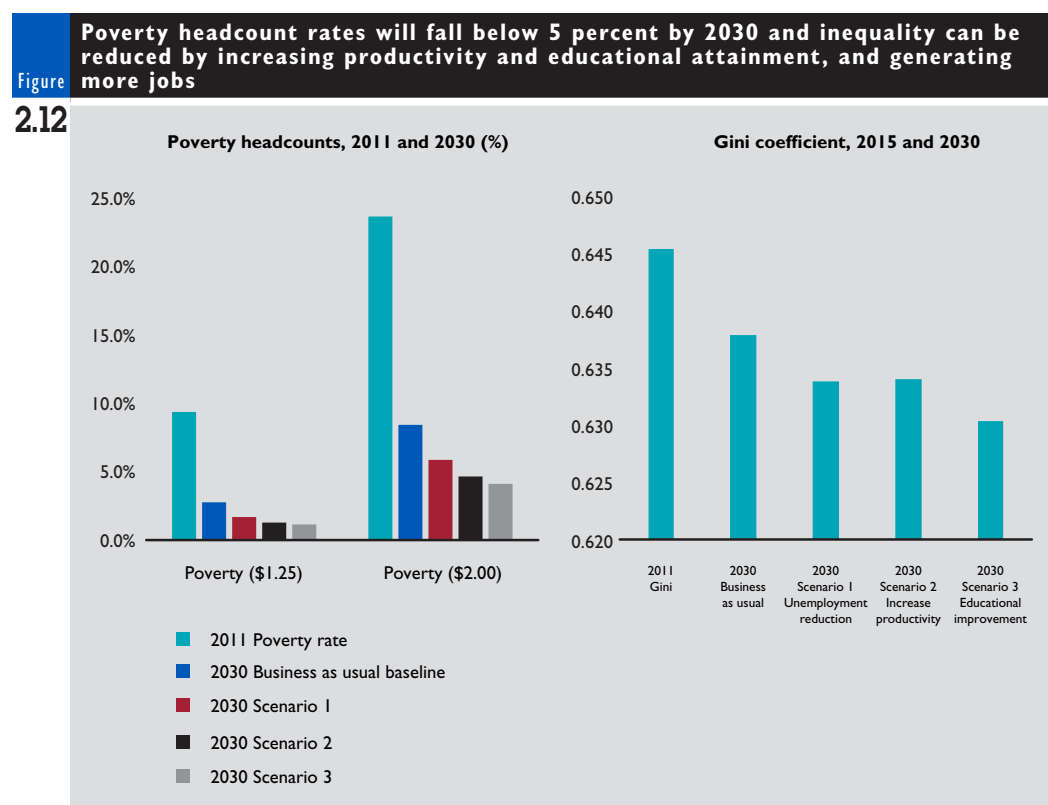
Implications for poverty and inequality

What are the implications, for poverty reduction and inequality, of capitalizing on South Africa's demographic trends by creating a better enabling environment relative to the business-as-usual baseline? We map the different trajectories of per capita income growth from each simulation to households using the 2010/11 Expenditure Household Survey for South Africa.³⁸ This mapping allows us to generate income distributions for each scenario that account for the changes in South Africa's demographics and their

impact on household characteristics, sector of employment, skills, and income; and allows the income distribution to evolve over time. This calculation process in turn is used to estimate the impact of changing growth and income trajectories on poverty and inequality.

Extreme poverty—measured by the share of the population living on less than \$1.25 per day—could be virtually eliminated if South Africa could combine jobs creation with improvements in its labor productivity and educational attainment (figure 2.12). In the business-as-usual baseline the share of the population living on less than \$1.25 (PPP adjusted) a day falls from 9.4 percent in 2011 (Povcalnet, 2015) to 2.7 percent in 2030. However, the extreme poverty rate falls to about 1 percent of the population in scenario 3. When measured at the \$2 a day poverty line, the poverty rate falls by almost three-quarters from 23.7 percent in 2011 to about 4 percent in 2030 in the most optimistic third scenario.

The Gini coefficient narrows the most in the third scenario from 0.645 in 2011 to 0.630



Source: World Bank staff estimates.
 Note: LINKAGE simulation results for the business as usual baseline. In scenario 1, the unemployment rate converges from 25.1 percent in 2014 to 5.8 percent in 2030. Scenario 2 is identical to scenario 1, except that the average annual labor productivity growth rate over 2015–30 is 30 percent higher and converges with the BRIC average productivity growth rate by 2030. Scenario 3 is identical to scenario 2, but with the share of skilled workers converging to the average of 18 non-Middle Eastern high-income countries. The poverty headcount rate for 2011 is taken from Povcalnet. The poverty headcount rates in 2030 under different scenarios are based on GIDD simulation results. The poverty headcount rate is based on the \$1.25/day (PPP-adjusted) and \$2/day (PPP-adjusted) poverty line.

by 2030. This modest reduction is driven by two effects related to demographic change. First, an increase in the number of workers in general, especially skilled workers, in poorer households helps reduce inequality.³⁹ Second, wages of skilled workers are growing more slowly than those of unskilled workers due to the relatively faster growth in skilled labor supply, which leads to a reduction in the wage skill premium.⁴⁰ These changes are less significant between scenarios 1 and 2, where both the number of workers and the relative growth of skilled workers are similar.

Conclusions

South Africa is in its demographic window of opportunity and will remain there for around 50 more years. Since 1994, its working-age population (15–64 years) has increased by 11 million. In the next 50 years, it will grow by another 9 million. Having such a high share of its population—68.3 percent at its peak in 2045—in its working prime presents a tremendous opportunity for the country to boost its growth and raise living standards. But it also presents tremendous challenges. In the next 15 years alone, the working-age population will expand by 280,000 a year. These people will have to find productive jobs if South Africa is to harvest the potential boost to growth and living standards before it faces the rising burden associated with a rapidly growing elderly population.

South Africa has, however, struggled with a high burden of unemployment as the number of jobs created has fallen far short of what is needed to absorb into the labor force the many new young people of working age. Since 2000, only one-third of the 8.5 million additional working age found jobs, mainly in the services sector. Many new entrants were unskilled or lacked basic education qualifications, and they joined the workforce when labor-intense sectors such as agriculture, mining, and manufacturing shed jobs and employment became more skills intensive. Unemployment is now higher than it was at the end of apartheid, with almost one-third of the labor force out of work or discouraged. At a time when almost half the population is under 25, unemployment among the young (15–24) is almost 50 percent, double the national rate. The education system appears to have left

the young unemployed ill equipped for a labor market that demands more skills.

More job-intensive growth would help tackle unemployment and create jobs for many new labor-force entrants in the coming 15 years, allowing South Africa to take the first step in harnessing its favorable demographics. But simply increasing the number of jobs will not be enough to allow South Africa to boost savings and derive the second demographic dividend. More job-intensive growth needs to be accompanied as a first priority by improving the quality of education so that better educated youth are entering the workforce. This needs to be complemented by efforts to improve the productivity of existing workers and the unemployed through better skills development and training. By creating a virtuous circle of job-intensive growth, improved productivity and educational attainment, and higher savings, growth could accelerate to 5.4 percent a year and per capita incomes could double by 2030, which would virtually eliminate extreme poverty and begin to reduce inequality.

Changing the growth and jobs dynamics will require urgent action on several mutually reinforcing fronts. The government has already introduced an employment tax incentive to encourage firms to hire young workers. Through its Industrial Policy Action Plan, it is also offering incentives to promote potentially labor-intense sectors like manufacturing and agriculture. Faster and deeper global and regional integration in trade in goods and services would bolster this effort. Nonetheless, low-cost, labor-intense production is unlikely to be the main engine for job creation for South Africa, given how these sectors have shrunk over the past two decades. Policies also need to focus on developing services, small and medium firms, and household enterprises, including in the informal economy, as engines for job creation. Policies that improve the business environment, especially for small firms, could include reducing the burden of red tape (see box 1.3 in chapter 1), improving access to low-cost finance, and securing greater flexibility in labor-market regulations.

The greatest priority on the supply side is to improve levels of educational attainment in South Africa. Getting basic schooling right is the first step to ensuring that school

leavers and graduates have the foundational skills necessary to function in the modern workplace. Educational attainment not only shapes employment opportunities,⁴¹ but also provides the foundation for further on-the-job learning and training. This will not be an easy task. South Africa has already achieved almost universal school attendance and the challenge now is to improve learning outcomes by better training and support of teachers.

Promoting skills, especially of the long-term unemployed, also calls for complementary efforts. Steps are being taken to scale up technical and vocational education and training opportunities. But access remains a challenge, especially for the young who lack a high school qualification, while the system continues to face problems of quality and institutional capacity in supplying the skills demanded by employers. To broaden access, training opportunities should match the actual educational levels of young unemployed, while financial support for enrollees could help overcome the hurdles of high transport and living costs. Designing training programs in consultation and partnership with the private sector will ensure that they are high quality and better geared to the needs of the labor market. Employers can also provide internships and other opportunities for practical training to help overcome new entrants' lack of work experience.

Notes

1. This effect can be reinforced when the decline in fertility also stimulates increased female labor-force participation.
2. Bloom, Canning, and Sevilla, 2003.
3. See Cai and Wang, 2006.
4. See Bloom et al., 2003.
5. See Bloom et al., 1999, and Drummond, Thakoor, and Yu, 2014.
6. Lee and Mason, 2006.
7. See Banerjee, Galian, Levinsohn, McLaren, and Woolard, 2008 and Wittenberg, 2014. Before 2000, Statistics South Africa collected labor-force indicators using the annual October Household Survey (OHS). In 2000, Statistics South Africa switched to a Labor Force Survey (LFS), causing a break in series, so comparisons with the earlier period should be made with care.
8. Oosthuizen, 2014 finds that South Africans enjoy surplus earnings between ages 30 and 59. High rates and the long duration of youth unemployment means that the transition to surplus occurs late and surplus earnings at one-quarter of mean labor income for 30–49-year-olds are low.
9. The United Nations defines this window as opening when a country's youth share in the population falls below 30 percent and its elderly share remains below 15 percent (UN, 2004).
10. Lin, 2012.
11. See National Treasury, 2014.
12. The population figures for 1965 are derived from United Nations, 2013. The population for 2015 is the recently released mid-year estimate from Statistics South Africa, 2015. After our analysis was completed, the UN World Population Prospects (2013) released updated population projections for the end of July 2015. However, the projections for South Africa were not fundamentally altered from what is presented in this paper.
13. See Moultrie (2015).
14. According to the UNAIDS Spectrum model, which incorporates the effects of HIV/AIDS, HIV prevalence among adults of both sexes aged 15–49 in South Africa is close to its peak, and is expected to decline slowly from the current level reported by Statistics South Africa, 2015 of 16.59 percent in 2015.
15. The ratio of number of children (under 15 years) and those older than 64 to the total number of people between the ages of 15 and 64 years.
16. Authors' calculations based on the Quarterly Labor Force Survey, Q4 2014.
17. According to the United Nations's definition in its World Population Prospects (2013) (which defines the window of demographic opportunity as opening when the youth dependency ratio falls below 30 percent), the window opened in South Africa in 2009 and will not close until 2069.
18. For our discussion of population projections, we use United Nations, 2013, the median fertility scenario. At the time of publication, Statistics South Africa had

- not yet published national population projections that capture the updated 2015 population estimate. Moreover, the national projections do not extend beyond 2030.
19. Mason and Lee, 2012.
 20. See McKinsey Global Institute, 2010, Ahmed, Cruz, Go, Maliszewska and Osorio-Rodarte, 2014, and International Monetary Fund, 2015.
 21. See Banerjee et al., 2008.
 22. Before 2000, labor-force data were gathered from the annual October Household Survey and are not comparable to the data collected from 2000 onward.
 23. According to the World Development Indicators, the average employment ratio was about 54 percent for upper middle-income countries, whereas the unemployment rate and labor-force participation rate were about 11 percent and 65 percent, respectively.
 24. Statistics South Africa define semi-skilled occupations as jobs such as clerks, sales and services, skilled agriculture, craft and related trades, and plant and machine operators. Low-skilled are elementary and domestic workers. Managers, professionals, and technicians are skilled occupations.
 25. See, for example, van der Berg, S., Taylor, S., Gustafsson, M., Spaull, N., and Armstrong, P., 2011. Trends in the International Math and Science Study showed that the average scores on math and science for South Africa's best-performing students (those in the 95th percentile) were below the average scores achieved by students in Singapore; Taiwan, China; the Republic of Korea; Japan; Finland; Slovenia; and the Russian Federation (HSRC, 2012).
 26. A Shapley decomposition is used to decompose per capita real GDP growth into contributions from labor-productivity growth, employment growth, and labor-force growth. The aim is to assess their roles in driving overall economic growth. Our decomposition uses data from 2000–13 (revised Labor Force Survey) to ensure a consistent employment data series. It uses the revised Labor Force Survey (September series) on employment (for 2000–07) and the Quarterly Labor Force Survey data for 2008 Q3 to 2013 Q3, which are reported by Statistics South Africa using consistent census weights. From 2014 Q3, the Quarterly Labor Force survey data were compiled using the new 2011 census weights and so are excluded from the Shapley decomposition for consistency purposes.
 27. Measured in the Shapley decomposition as a percentage of the labor force.
 28. See World Bank, 2011.
 29. South Africa is not alone in experiencing rapid growth driven by the services sector. Ghani and O'Connell, 2014 find that other countries in Africa such as Ethiopia, Kenya, and Zambia have experienced rapid growth in real GDP driven by the services sector.
 30. LINKAGE is a dynamic simulation model that captures global behaviors in general equilibrium. It is a global model that also incorporates the changing nature of trade and investment linkages between South Africa and its key trading partners, including the BRIC group. The model is explained in detail in van der Mensbrugghe (2011). Data from Global Economics Prospects 2015, January (World Bank, 2015) are used to determine real GDP per capita growth through 2017. After 2017 through 2030, these figures come from the OECD. Also after 2017, such growth is endogenously determined as the model solves for different equilibria over time. Domestic savings as a share of GDP are parameterized following the empirical estimates by Loayza et al. (2000) for the elasticity of savings to growth in GDP per capita, and child dependency and old-age dependency ratios.
 31. On the basis of the Quarterly Labor Force Survey at the end of 2014, the unemployment rate is taken to be 25.1 percent.
 32. The upper middle-income country average unemployment rate is the ILO-modeled average from the World Bank's WDI database.
 33. The education levels of the working-age population projected by this simple assumption and the demographic effect is consistent with the Constant

- Enrolment Ratio scenario of the KC and Lutz (2010) education projections database, which is the least optimistic of the education projections in that database.
34. The 18 non-Middle Eastern high-income countries report survey data to I2D2/GIDD (Global Income Distribution Dynamics) database. The average of 72 percent is based on the conservative assumption that educational attainment rates will remain stable in these countries.
 35. Taken as the average in the 2014 Quarterly Labor Force Surveys: about 50 percent for 15–24 year olds and 30 percent for 25–29 year olds.
 36. The 5.8 percent unemployment rate assumption is consistent with the National Development Plan's (NDP) employment–unemployment target for the 2010–30 period. However, the NDP also incorporated an increase in the labor-force participation rate to 65 percent on top of the fall in the unemployment rates to 6 percent by 2030. This would yield an employment ratio of 61 percent. The assumptions considered in our scenarios are more conservative, since labor-force participation rates are assumed to remain constant at 57.1 percent over the time horizon. As a result, the employment ratio for 2030 is 54 percent in the three non-baseline scenarios.
 37. The increase in savings boosts investment, which in turn requires more labor. Under the model, since labor supply must equal labor demand, the increase in the capital-to-labor ratio implies that wage growth is constrained to ensure that all workers remain employed.
 38. Estimates are derived using the GIDD micro-simulation framework developed by Bussolo, Hoyos, and Medvedev (2010). The GIDD draws on the 2010/11 Household Survey data for South Africa to estimate the distribution of incomes across households. In addition to incorporating the key changes in our variables that are derived from our three scenarios conducted in the LINKAGE model, the GIDD methodology updates the household survey data for the end year of our simulation, 2030. This is done by reweighting the population characterized by the 2010/11 Household Survey using no-parametric cross-entropy methods but keeping this process consistent with the UN population projections. For the skill–unskilled breakdown, and to ensure comparability across countries, the GIDD defines as skilled anyone with more than nine years of education.
 39. The Gini coefficient declines from 0.645 to 0.6393 when the income distribution of 2011 is estimated on the basis of the new weights of 2030, an approach in line with the UN population projection for 2030.
 40. The wage–skill premium is defined as the ratio between the average wage of skilled and of unskilled workers.
 41. See World Bank (2012).

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