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The report was discussed at a meeting of the Economic and Development Review Committee on 19 May 2008 with Professor Philippe Aghion and Professor Murray Leibbrandt acting as external discussants.

BASIC STATISTICS OF SOUTH AFRICA

(2007, unless otherwise noted)

THE LAND

Area (thousand sq. km)	1 221

THE PEOPLE

Population (millions, mid-year)	47.9	Labour force (thousands, 15-65, Sept.)	17 178
Provinces (% of total population)		Employment (% of total)	
Eastern Cape	14.4	Agriculture	8.8
Free State	6.2	Industry and construction	26.0
Gauteng	20.2	Services	65.2
KwaZulu-Natal	20.9		
Limpopo	11.3		
Mpumalanga	7.4		
Northern Cape	2.3		
North West	7.1		
Western Cape	10.1		
Annual population growth (%, 2001-07)	1.1		
Inhabitants per sq. km	39.2		

GROSS DOMESTIC PRODUCT

Gross domestic product		Gross value added (% of total)	
In rand billion	1 994	Agriculture	3.2
Per capita (USD, PPP, 2006)	9 087	Industry and construction	31.3
		Services	65.5

PUBLIC FINANCES

General government (% of GDP)		Public debt (% of GDP)	30.6
Revenue	26.6		
Expenditure	26.0		

FOREIGN TRADE

Exports of goods and services (% of GDP)	31.6	Imports of goods and services (% of total)	34.7
Main commodity exports (% of total, 2006)		Main commodity imports (% of total, 2006)	
Machinery and transport equipment	21.5	Machinery and transport equipment	37.8
Non-ferrous metals	20.6	Manufactured goods and articles	19.9
Iron and steel	10.8	Mineral fuels	18.3
Crude materials, inedible, except fuels	10.3	Chemicals	8.9

THE CURRENCY

Monetary unit: Rand		Rand per USD (period average):	7.05

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Executive summary

Mainstream economic policies have brought impressive economic performance, but remaining problems are still huge

The democratically elected government that came to power in 1994 inherited an economy wracked by long years of internal conflict and external sanctions. Against that backdrop, economic performance since 1994 has been impressive. In particular, the successive governments during that period have shown considerable prudence, refraining from resorting to economic populism in an effort to boost short-term growth. As a result, public finances were stabilised, inflation was brought down, foreign capital was attracted in growing amounts, and economic growth, after lagging for a time, improved. The awarding of the 2010 FIFA World Cup to South Africa is just one sign that South Africa is now seen as a stable, modern state, in many ways a model for the rest of the African continent. However, there have also been notable weaknesses in the economic record to date, especially as regards unemployment, inequality, and poverty. Social problems such as HIV/AIDS and crime have been prominent as well, and these twin scourges also have a strong negative economic impact. Indeed, there are strong bi-directional links between economic and social problems, as is shown by the recent attacks on immigrants, who are blamed for aggravating unemployment and downward pressure on wages. One challenge for the future will be to maintain the macroeconomic prudence which has fostered fiscal and external sustainability while dealing with these formidable problems. This will also make it easier to tackle more boldly some of the legacies of apartheid which are still holding back progress for many black South Africans. This is especially true as regards education, competition policy, and the functioning of labour markets. The in-depth chapters of this Assessment therefore focus on how to strengthen competition and improve labour market outcomes. Education is also discussed, though in somewhat less depth, in part because a separate OECD study of South Africa's education system is forthcoming.

Growth has improved, supported by rising terms of trade…

Although there was some initial improvement in growth performance after the stagnation of the last years of apartheid, income growth per capita for the first decade of the democratic era was modest, and South African living standards continued to diverge from the OECD average. While output per worker grew steadily, growth in the labour force far outstripped that of employment, pushing unemployment to extremely high levels. Investment increased slowly, and South Africa's export performance was weak, with a

steady decline in global market share. From 2004 onward economic growth picked up substantially, through improvements in the rate of increase of both employment and capital formation. An important spur to the growth acceleration was the surge in the prices of South Africa's main export commodities. The supply response in mining was actually muted, but on the demand side higher natural resource export receipts gave an impetus to domestic spending. Consumption has grown more quickly than output every year since 2004. Recently there also has been an increasing contribution to growth from investment, in part reflecting a ramping up of public infrastructure spending.

... and macroeconomic policies remain credible, although tested by current global economic conditions

The budget deficit, which exceeded 7% of GDP in 1993/94, was reduced progressively through both revenue measures and expenditure restraint, and for the last two years the budget has been in surplus. The turnaround in budgetary performance has brought the public debt burden down to moderate levels, which in turn has contributed to improved investor sentiment towards South African assets. That improvement was reflected in strong portfolio inflows and successive upgradings of South African's sovereign credit ratings. The medium-term budget plan calls for surpluses to continue, though this is recognised to be a cyclical phenomenon, as on a cyclically adjusted basis the budget has remained in deficit and is projected to remain so. As to monetary policy, the South African Reserve Bank (SARB) has, like the National Treasury, earned a reputation as a credible and competent agency. Its operational independence is constitutionally guaranteed, and it has established a broadly successful record under inflation targeting since 2002. The targeted measure of inflation declined from about 7% prior to the adoption of inflation targeting to just over 3% in early-2005, and expectations quickly converged to the SARB's target zone. When inflation subsequently began to turn up, the SARB repeatedly raised interest rates, 10 times in all since 2006. Nonetheless, inflation has continued to rise, and a combination of global and domestic economic circumstances are providing a stern test to monetary policy. South Africa is exposed to considerable inflationary pressures from surging food and energy prices, import price pass-through from the recent weakness of the rand, and electricity tariffs which are likely to rise rapidly this year and next. The SARB itself now expects inflation to remain above the target range until the second half of 2010.

Growth could be strengthened further, however...

The welcome acceleration of real GDP growth in the past few years has done little to improve South Africa's ranking relative to other middle-income countries, as faster growth has been a worldwide phenomenon; South Africa's growth rate still trails behind those of the most dynamic emerging economies. And while trend growth of total factor productivity also appears to have turned up, it is still only around average for a country of South Africa's per capita income level. Moreover, the faster rate of growth in the past four years has been accompanied by only a modest decline in unemployment, and the government's development strategy, the Accelerated and Shared Growth Initiative for South Africa (*AsgiSA*), foresees further increases in growth rates to an average of 6% a year

between 2010 and 2014 in order to achieve the objectives of halving unemployment and poverty.

... and needs to be more broadly based

Given that the development strategies articulated by the governments of the democratic era have been oriented to improving the lot of the historically disadvantaged majority black population, the most disappointing aspect of post-apartheid economic performance is the emergence and persistence of extreme levels of unemployment, particularly for less-skilled younger blacks, together with the continuation of widespread poverty and the widening of inequalities. The failure to bring unemployment down decisively is probably the greatest source of popular discontent about the government's economic policies, despite numerous successes, and it naturally leads to pressures to try more radical and activist solutions which risk being wasteful and counterproductive. This is recognized by the government, which aims to promote more employment-intensive growth. The government has also pursued the route of affirmative action to address historic inequities, but the Black Economic Empowerment initiative (BEE) to this end has often been criticised for primarily enriching a small number of already well-off blacks rather than raising the incomes of the poor.

The large current account deficit is the main source of macroeconomic vulnerability

Since 2003, South Africa's current account deficit has grown steadily, reaching 9% of GDP in the first quarter of 2008. Such levels, though high, are not extreme by international standards, but they do expose South Africa to the risk of a financial crisis associated with a sudden stop of capital inflows. This risk remains moderate, given that South Africa's net foreign liabilities are still modest and that debt in particular is very low, with a large proportion of the net capital inflows having so far come in the form of equity investment. Moreover, the deficit does not correspond to public dissaving, but to private savings-investment behaviour. On the other hand, the size and pace of increase of the deficits cast doubt on their sustainability, and recent experience across a range of countries shows that adjustments of external imbalances are often sudden and disruptive, and sometimes occur well before debt ratios get very large. Moreover, while increases in investment have been increasingly responsible for the widening of the current account deficit, South Africa's savings-investment gap has up until now mostly reflected not anomalously strong investment but unusually low savings. This is more suggestive of a consumption boom than of an inflow of capital to exploit attractive investment returns.

AsgiSA, the current national development strategy, represents a well-designed approach...

The formulation of *AsgiSA* was in many ways a courageous process. The government consulted widely with social partners and sought international expert opinion on economic development. The result was a strategy that first identified a limited number of constraints to faster and more broadly shared growth, and then outlined a set of policy interventions to remove those constraints. The diagnosis of the constraints to growth is

broadly sensible. Deficiencies are identified in state organisation, capacity, and strategic leadership, along with high cost and low efficiency of the national logistics system and some infrastructure. The economy is rightly seen as suffering from a shortage of skilled labour, and high barriers to entry and low competition in some sectors of the economy. It is likewise persuasive that the regulatory environment could be improved, reducing the burden on small and medium-sized enterprises in particular. The identification of the strength and volatility of the rand as a key constraint is probably the least clear-cut of the identified constraints, at least at this time, since much of the appreciation of 2003-06 has been unwound of late, and to some extent volatility of the exchange rate reflects the variability of key export commodity prices.

… but the mapping from constraints to policies is not always convincing

While the policy interventions set out in *AsgiSA* are each aimed at addressing one or more of the identified constraints, in some cases the linkage between the constraint and the policy solution is weak, while in others the policy action looks insufficiently strong to remove the constraint to faster and more evenly shared growth. For example, the emphasis on industrial policies risks preserving the apartheid-era pattern of protected national champions insulated from foreign competition and enjoying high mark-ups. This runs counter to the acknowledged need to enhance the level of competition in the economy. Also, the emphasis on government programmes and initiatives is at odds with the recognition of failures of government planning, coordination, and administrative capacity as one of the constraints to achieving faster and more widely shared growth. In addition, in the area of education the focus appears too narrow, with comparatively little emphasis on improving basic education.

Rapid convergence to advanced country living standards requires not only raising employment…

South Africa's very low labour utilisation explains a large part of the gap of GDP per capita with the most advanced economies. Compared to other middle-income countries, South Africa has relatively strong average labour productivity, but extremely low employment. Although in the long-run sustained increases in living standards and convergence to the levels enjoyed by advanced countries will only be achieved *via* growth in labour productivity, this suggests that in the near term priority should be given to creating jobs for the millions of primarily low-skilled South Africans currently wanting work.

… but also boosting productivity by more competition-friendly regulation

South Africa's relatively strong average labour productivity is a direct consequence of a prolonged process of capital deepening under apartheid. This trend was accompanied by relatively slow growth of total factor productivity (TFP), in an environment of weak competition, extensive public sector involvement and trade isolation. Greater trade openness has led to increased competitive pressures and helped improve productivity

performance over the recent past, but a large gap still remains. There is strong international evidence that a competition-friendly regulatory environment can help to lift living standards in the long run through increases in labour productivity growth.

Competition-friendly regulatory reform would contribute to stronger productivity performance…

Strengthening competition can contribute a great deal to the achievement of improved resource allocation and technical efficiency. Robust competition in product markets improves firms' performance by stimulating capital deepening, innovation and better corporate management. Empirical work for South Africa confirms the pro-productivity effect of competition, and surveys of South African enterprises point to anti-competitive barriers and practices as a major impediment to innovation. As the estimation of an OECD product market regulation (PMR) indicator shows, South Africa's product market is very restricted by international standards, with high mark-ups and concentration in many sectors and relatively extensive state involvement in the economy. These findings highlight the potential contribution of competition-enhancing regulatory reforms to South Africa's long-term economic prospects. The support for such reforms, clearly expressed in *AsgiSA*, should therefore be translated into a comprehensive policy strategy: given the complementarities that exist among different elements of regulatory reform, the creation of a broad, coherent and systematic framework for the conduct of regulatory policy would generate synergies between different product market reforms. More vigorous competition, by depressing excessive margins, would also help contain inflationary pressures which are expected to remain severe for some while to come. Policies to strengthen domestic competition and increase openness to trade and direct investment thus promise substantial payoffs in a range of areas.

… and would also help improve labour market outcomes

The fact that employed workers are on average productive and well-paid compared to those in other middle-income countries while an extremely large part of the labour force is excluded from employment altogether is in part a function of weak product market competition in some sectors. The weakness of competition makes it possible for large incumbent firms to set high prices and make excess returns, which in turn makes it possible for them to pay wages above the competitive level without going out of business. It also makes strikes or other forms of withheld effort more costly for firms, making them more willing to pay a premium over the market-clearing wage rate. This fact provides a link between the issue of low labour utilisation and product market regulation. Although empirical evidence for South Africa is limited, the existence of large incumbent firms with monopoly power tends to be associated with lower output and employment and higher prices in the affected sectors. The erosion of excess returns accruing to incumbent firms would therefore be expected to result in higher output and a shrinkage of the wage premium enjoyed by employees of these firms. This would lead to increased employment in these sectors, as well as in other sectors using the output of industries with weak competition (such as monopolised network industries) as inputs.

Improving employment growth will require first and foremost unwinding some legacies of apartheid…

Some aspects of the unemployment problem are clearly related to legacies of the apartheid era. Notably, under apartheid the education system was not designed to provide the majority black population with the human capital necessary to perform skilled work. Blacks were even forbidden from some occupations, and were mainly recruited into manual labour or menial work. Although access to schooling for non-whites has commendably been increased and public financing per pupil has been largely equalised across the school system, serious defects remain which continue to impede the opportunities of historically disadvantaged groups and which contribute to the skills mismatch in the labour market. Also, too little has been done to unwind the spatial misallocation of workers – despite improvements, the marks of the homeland and township system remain visible in present settlement patterns. The long distances travelled for commuting and job search raise reservation wages and depress search activity. Another negative aspect of apartheid that has not been fully addressed in the past 14 years is the suppression of entrepreneurial initiative among the majority black population. In the formal sector, the attractiveness for skilled blacks of affirmative action positions in existing corporations under the BEE initiative hinders the creation of new small black-owned businesses. Meanwhile, the informal sector remains small for an economy of South Africa's average income level, and has absorbed surprisingly little of the surge in the supply of less-skilled labour. Many restrictions persist making it hard for informal businesses to operate. While efforts to eliminate informality may be understandable in the sense that formal sector jobs provide better pay and conditions, the emphasis should be on facilitating formal sector employment rather than on suppressing the informal sector, which would cut against the imperative of making rapid progress in reducing unemployment.

… and perhaps also addressing some features of labour markets that inhibit job creation

Work on OECD member economies provides robust evidence that various aspects of labour market institutions and policies can lead to higher unemployment. While not all of these features are relevant in the case of South Africa – for example, tax wedges in South Africa are relatively low and unemployment insurance is limited – the extent and persistence of high unemployment suggest that labour market policies can play a role in tackling the problem. Prominent among the common complaints heard about South Africa's labour market rigidities is the claim that firing costs are too high. While the computation of an OECD employment protection legislation (EPL) indicator suggests that in fact the laws are not particularly restrictive, it does seem that some aspects of the implementation of the regulations could be improved. Beyond EPL, the potentially negative labour demand consequences of strong trade unions (mainly focused on employed workers) and sectoral minimum wages, as well as possible disincentive effects on labour supply of the expanding system of social grants, warrant careful monitoring to ensure that social aims are being achieved without an undue negative impact on employment. Apart from actions to ease labour market rigidities, there may also be scope for more active measures to allow young

less-skilled blacks to gain an employment foothold, such as lengthening maximum allowable probation periods during which normal labour regulations don't apply, or expanding the system of wage subsidies for first-time workers.

Much scope remains for harnessing economic potential to serve social aims

While South Africa's problems are difficult and multi-faceted, a combination of sound macroeconomic policies with structural policies aimed at enhancing competition appear to be most promising to unleash the enormous potential of South-Africa's labour force and address social ambitions within the framework of a strongly growing economy.

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Chapter 1

Achieving accelerated and shared growth for South Africa

The formulation of the Accelerated and Shared Growth Initiative for South Africa (AsgiSA) was in many ways an impressive process. The government consulted widely with social partners and sought international expert opinion on economic development. The result was a strategy that first identified a limited number of constraints to faster and more broadly shared growth, and then outlined a set of policy interventions to remove those constraints. AsgiSA set targets for growth for 2006-10 and 2011-14 aimed at meeting the government's previously determined objective of halving unemployment and poverty by 2014.

Success on the growth front has already been achieved. Real GDP has risen by 5% a year since 2004, exceeding the AsgiSA target of 4½% for this period. But despite this outperformance on growth, the reduction of unemployment and poverty, despite some progress, has lagged.

The diagnosis of the constraints to growth is broadly sensible, although the concern with rand overvaluation and exchange rate volatility may not warrant the same prominence as other factors. At the same time, the list might have been longer; some major issues with serious economic consequences, such as HIV/AIDS and crime, were not touched in AsgiSA.

The main weakness of AsgiSA, however, is in the mapping from constraints to interventions. While much of the diagnosis of constraints concerns obstacles facing firms in entering markets, policy responses are predominantly state-oriented, and some may frustrate the objective of strengthening competition. Moreover, the emphasis on government investment, initiatives and programmes is at odds with the finding that limited public capacity for policy planning, implementation and coordination is a major constraint.

In addition, AsgiSA could do more to recognise the synergies between different policies that would open up opportunities for the historically disadvantaged black population. For example, there are complementarities between the pro-competitive measures in product markets and policies to facilitate mobility in labour markets, which would permit the economy to generate more jobs in the face of cyclical upturns such as the one underway since 2004.

One admirable aspect of AsgiSA was the provision that the programme could be amended or supplemented based on regular review of progress by government and outside observers. It is hoped that the evaluation in this Economic Assessment can be of use to the authorities in this context.

The origins of *AsgiSA*

On 6 February 2006, Deputy President Mlambo-Ngcuka launched a development strategy, the Accelerated and Shared Growth Initiative for South Africa (*AsgiSA*), which was designed to permit the achievement of pre-announced goals concerning the halving of unemployment and poverty between 2004 and 2014. This OECD *Economic Assessment of South Africa* approaches the evaluation of economic policies through the prism of *AsgiSA*. The current chapter gives a broad assessment of the initiative, against the background of South Africa's macroeconomic performance in the post-apartheid era. Subsequent chapters look at two particular problems identified in *AsgiSA* which the OECD Secretariat considers to be key to achieving sustained rapid and broad-based growth: lack of competition and poorly functioning labour markets.

One question that arises with respect to this approach is to what extent *AsgiSA* is still and will remain the main organising framework for the government's economic policy. To some extent, the six constraints identified in *AsgiSA* have been displaced by the urgent priority of confronting the electricity shortages that have emerged in the past year. And the government's penchant for repackaging its policies has seen a new expression in the Apex Priorities unveiled in the President's State of the Union address in February 2008, which contain both economic and other priorities. Moreover, the period since the unveiling of *AsgiSA* has highlighted conflicts within government concerning the right economic strategy, while the challenge to ensure coordination within government, identified as a constraint by *AsgiSA*, has been shown up within the *AsgiSA* process itself. Given also that a new government will take office next year, it would not be surprising if the old wine of *AsgiSA* were decanted into a new bottle after the elections. Nonetheless, *AsgiSA* remains the clearest overall strategy for South Africa's economic development over the medium-term. As such, evaluating this strategy seems a valid way of assessing the South African economy and its growth prospects.

AsgiSA was born out of a recognition that despite substantial economic achievements since the transition to democracy in 1994, the fruits of those successes were not being shared widely enough. The same disadvantaged blacks who had suffered under apartheid were failing to improve their living standards under majority rule.

AsgiSA is the third major development strategy adopted since 1994. In the early years of the first post-apartheid government, the main policy framework was the Reconstruction and Development Programme (RDP), which was part of the election platform of the African National Congress in the 1994 elections. The RDP comprised both socio-economic programmes designed to redress imbalances in living conditions and institutional reform, educational and cultural programmes, employment generation and human resource development. An RDP Fund was created to finance RDP projects, and a separate RDP office set up to administer the Fund and coordinate the programme across ministries. In 1996, however, the government introduced a macroeconomic policy framework called the Growth, Employment and Redistribution (GEAR) strategy, which put fiscal sustainability to the fore and stressed that macroeconomic stability was a necessary condition for successful development. The RDP did not actually end with the launching of GEAR, but from 1996 the separate RDP office was disbanded, and the programme was deemphasised, while GEAR took centre stage.

GEAR achieved impressive macroeconomic stabilisation, but growth performance remained mediocre, and unemployment, already extreme, continued to rise, along with inequality and poverty (Gelb, 2005). It was therefore decided to take a careful look at how to accelerate growth and ensure rising living standards for the majority. The government undertook a characteristically democratic and consultative process, inviting input from business and social groups and commissioning research from a group of eminent international economists.[1] The methodology adopted was to identify the main constraints to more rapid growth and design policy interventions to address those constraints.

Macroeconomic performance since 1994

Growth was slow to come, but has picked up since 2004

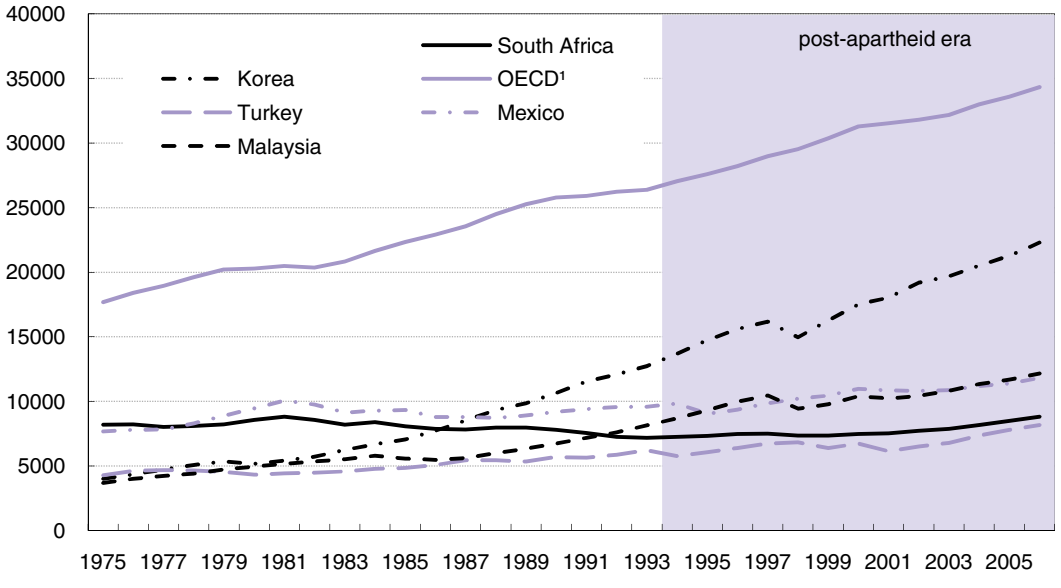
In the mid-1970s, South Africa was comparable in per capita income terms to many OECD members (and well ahead of other countries which were later to join the OECD, such as Korea, Mexico, and Turkey). The country endured a long period of absolute and relative decline in the last decades of apartheid, however (Figure 1.1).

Economic growth was particularly poor in the 1980s and early 1990s (Fedderke, 2002), as South Africa fell victim to increasing international isolation and civil conflict. Moreover, the economic system under apartheid was designed to restrict the majority black population to providing low-skilled labour, largely for white-owned enterprises or the white-controlled government. The suppression of the accumulation of human capital by the majority of the population exerted a substantial drag on potential growth during the apartheid era.

Growth in the initial years of the new democratic regime that began in 1994 was positive but sluggish. In particular, while the working age population grew quite rapidly, employment growth did not keep pace. Thus, although output per worker grew steadily, per capita income in

Figure 1.1. **GDP per capita in PPP terms**

Constant 2005 international USD



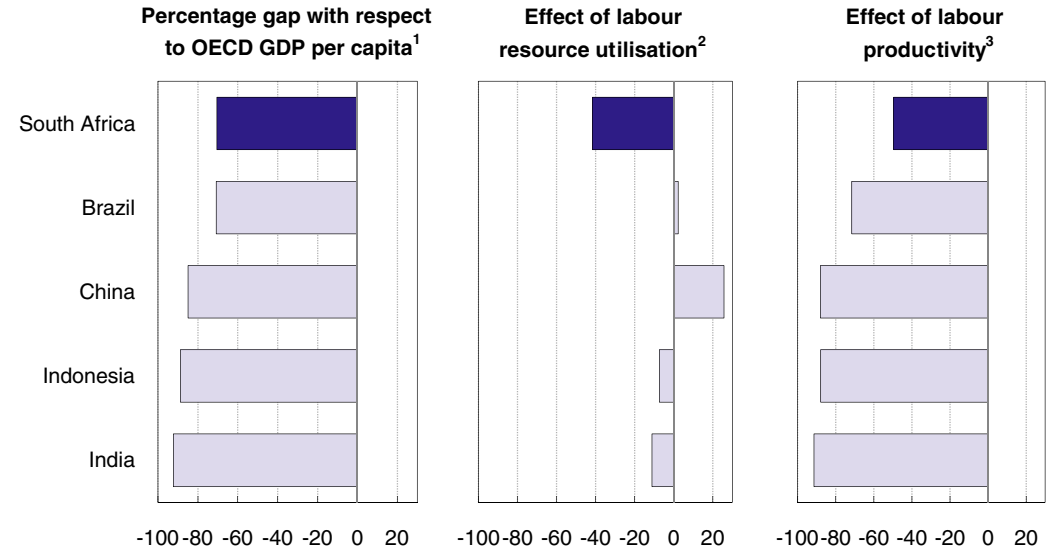
StatLink http://dx.doi.org/10.1787/405762500708

1. Excluding Hungary, Poland, Slovak Republic and Turkey.

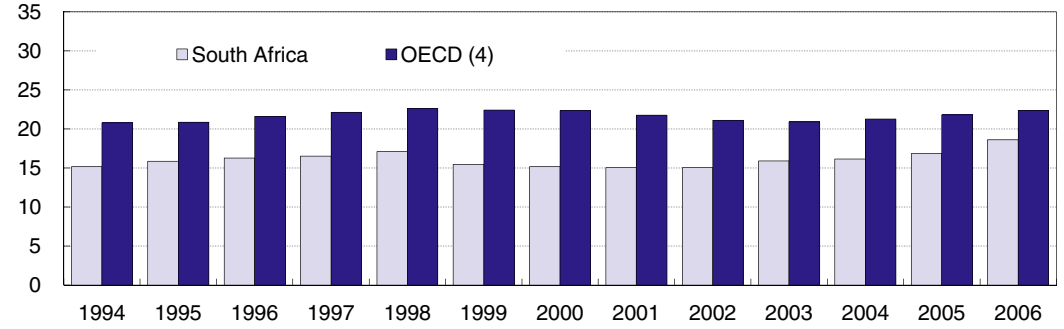
Source: World Bank, *WDI database* on line, and OECD estimates.

Figure 1.2. **Labour productivity, capital accumulation and GDP per capita**

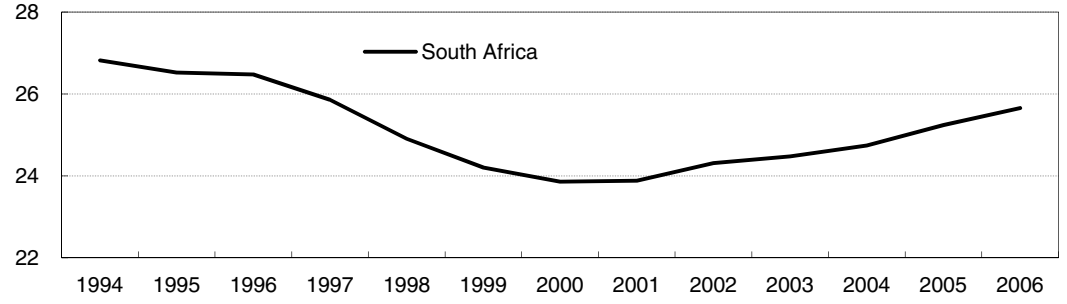
A. The sources of real income differences, 2006



B. Gross fixed capital formation (% of GDP)



C. GDP per capita at constant 2005 PPP (OECD=100)[5]



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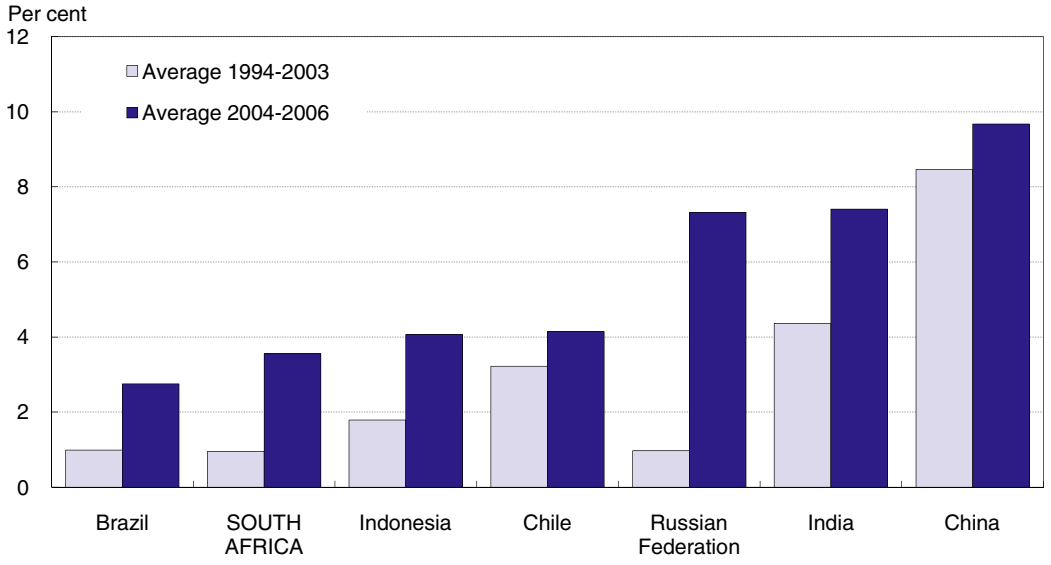
1. Based on revised 2006 purchasing power parities (PPPs) from the World Bank.
2. Labour resource utilisation is measured as the employment rate, based on national labour force surveys, except for India where it is an OECD estimate based on the National Sample Survey.
3. Labour productivity is measured as GDP per employee.
4. Simple average.
5. Excluding Hungary, Poland, Slovak Republic and Turkey.

Source: OECD *Economic Outlook database* No. 82, *SARB database* and World Bank, *WDI database on-line, and OECD estimates.*

South Africa advanced by less than 1% a year between 1994 and 2003, and South African living standards continued to diverge from the OECD average (Figure 1.2C). The gap in GDP per capita in *vis-à-vis* the OECD average is to an unusually large degree, for a country of South Africa's income level, a function of low labour utilisation (Figure 1.2A). Compared to other middle-income countries, both among OECD members and non-member economies, South Africa has relatively strong average labour productivity, but extremely low employment. The broad picture that emerges from the first decade after the end of apartheid is of an economy that continues to function and grow, but from which a growing section of the population is excluded. Moreover, while data limitations complicate a more precise analysis, productivity growth does not seem to have been driven by capital deepening, as investment rates were low (Figure 1.2B). Slow growth in the last years of apartheid appears to have left considerable excess capacity that permitted total factor productivity to grow *via* a rise in capacity utilisation rates.

From 2004, economic growth has picked up substantially, averaging over 5% annually through 2007. The acceleration came about both through employment growth, which quickened from an average of about 1½ per cent in the period 1995-2003 to 3.3% during 2004-07, and an increase in investment, which grew by an average of 10.6% a year compared to 3% in the earlier period. Growth in total factor productivity also seems to have accelerated.[2] This welcome acceleration of growth did little, however, to improve South Africa's ranking relative to other middle-income countries – most also witnessed higher growth rates in recent years, leaving South Africa still trailing well behind the most dynamic emerging economies (Figure 1.3).

Figure 1.3. **Real per capita GDP growth rates, 1994-2003 and 2004-06**

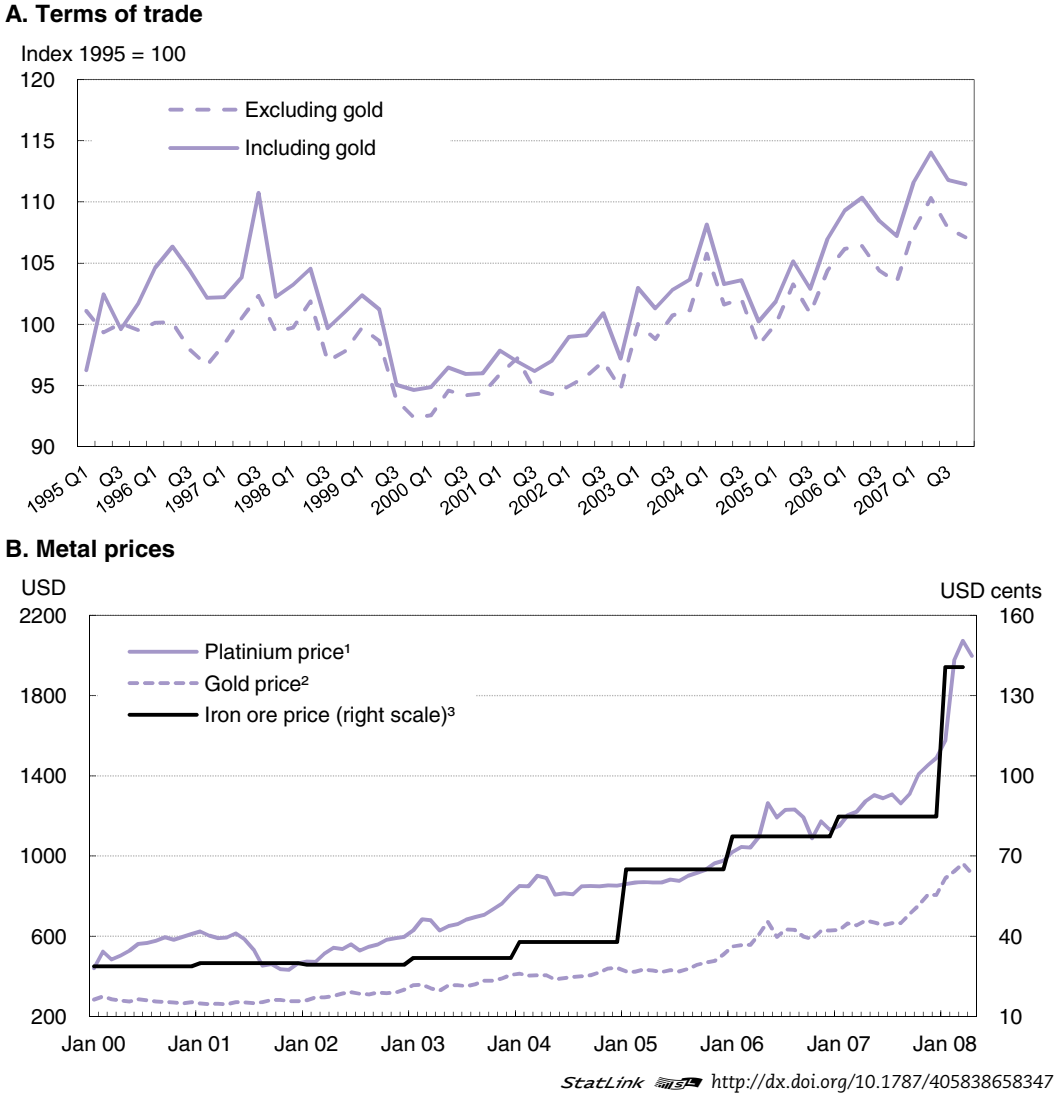


StatLink http://dx.doi.org/10.1787/405815072625

Source: SARB database and World Bank, *WDI database*.

One important exogenous factor which changed in the early 2000s was the price trends for South Africa's main export commodities. Until 2002, prices for precious metals, iron ore, coal, and diamonds remained on a downtrend, but their recovery since then has outweighed even the effect of higher prices for imported energy, resulting in a steady improvement in the terms of trade over the past 6 years (Figure 1.4).

Figure 1.4. **The terms of trade**



StatLink http://dx.doi.org/10.1787/405838658347

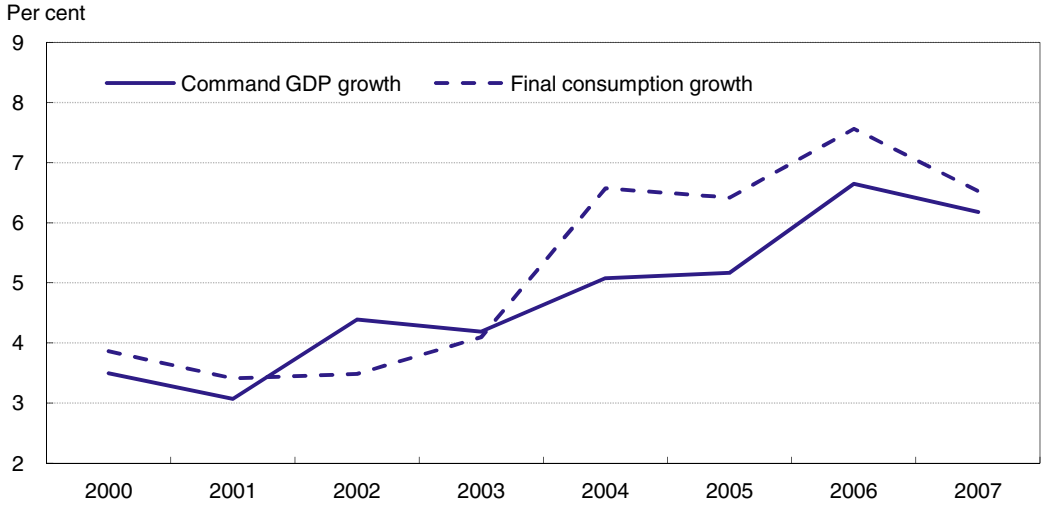
1. Metal Bulletin Platinum Matthey USD/Troy Ounce.
2. Gold Bullion London Bullion Market USD/Troy Ounce.
3. Brazil, contract price to Europe, USD cents/Dry Metric Ton Unit.

Source: SARB database, Datastream and *IMF, IFS database*.

As a result of the turnaround in the terms of trade, South Africa's so-called command GDP – a summary measure of the impact of changes in the terms-of-trade on a country's ability to command goods and services (*i.e.* its purchasing power) – has outstripped real GDP over the past five years, having previously lagged in virtually every year since 1994.[3] South Africa's increased purchasing power was associated with rapid consumption growth (Figure 1.5).

In light of the improving terms of trade, it is surprising that mining did not make a greater contribution to the pick-up in growth since the early 2000s. The long-running decline in gold output continued largely unabated, while output did not initially respond significantly for platinum or other metals. A key reason for the slow supply response to higher prices appears to have been the adoption of the Minerals and Petroleum Resources Act of 2004, pursuant to which the state became the custodian of mineral resources and mining companies had to

Figure 1.5. **Command GDP and consumption**



StatLink http://dx.doi.org/10.1787/405856455370

Source: OECD calculations based on *SARB database*.

reapply for mining licenses. Eligibility was linked to satisfying Black Economic Empowerment (BEE) criteria, and companies' energy was devoted to qualifying and securing their license rather than expanding output to exploit higher prices.[4] License renewals were slow in coming, and uncertainty has persisted, dulling the output response in the mining sector.[5]

Prudent fiscal policies have reduced the public debt burden and attracted foreign capital…

The new democratic government that came to power in April 1994 inherited serious fiscal and other imbalances. The budget deficit in 1993/94 was equivalent to over 7% of GDP, and was still above 5% when determined macroeconomic stabilisation efforts began under the GEAR programme (Figure 1.6). The authorities had notable success in strengthening revenue collection – the independent Revenue Authority is seen as a model of effective government policy implementation – but also succeeded in restraining expenditure growth between 1997 and 2003.

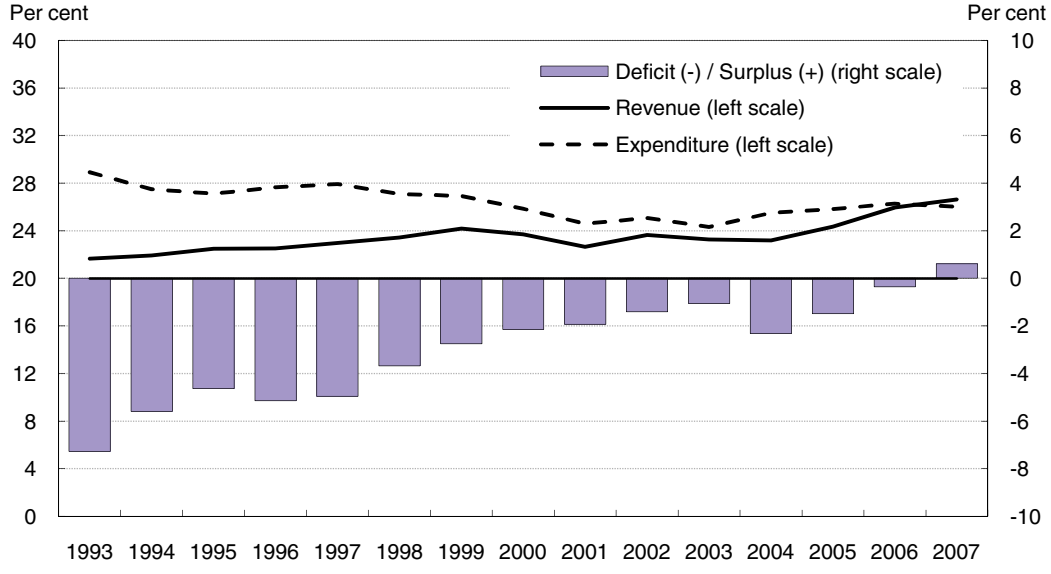
The improvement in the fiscal situation accelerated with the pick-up in growth from 2003. Whereas under GEAR the aim was to reduce public deficits to 3 per cent of GDP, by 2006/07 the budget was in surplus, and the current Medium Term Budget Plan projects further surpluses through 2010/11.

The turnaround in budgetary performance has given rise to a sharp reduction in the ratio of public debt to GDP since 1996 (Figure 1.7). This has contributed to an improvement in investor sentiment towards South African assets, which has seen its reflection in strong portfolio inflows since 2003. The major credit rating agencies have upgraded South Africa several times since the mid-1990s, and Standard and Poor's recently reaffirmed its BBB+ sovereign rating, despite the financial market turbulence and rand weakness in late-2007 and early-2008, citing South Africa's solid coordination of fiscal and monetary policies and the continued build-up of international reserves.

… although the current fiscal stance is less tight than it appears

While the South African government has earned its reputation for fiscal prudence, part of the improvement in the budgetary position has been driven by the commodity price upturn

Figure 1.6. **Public finances**
As a percentage of GDP, fiscal year (31 March)



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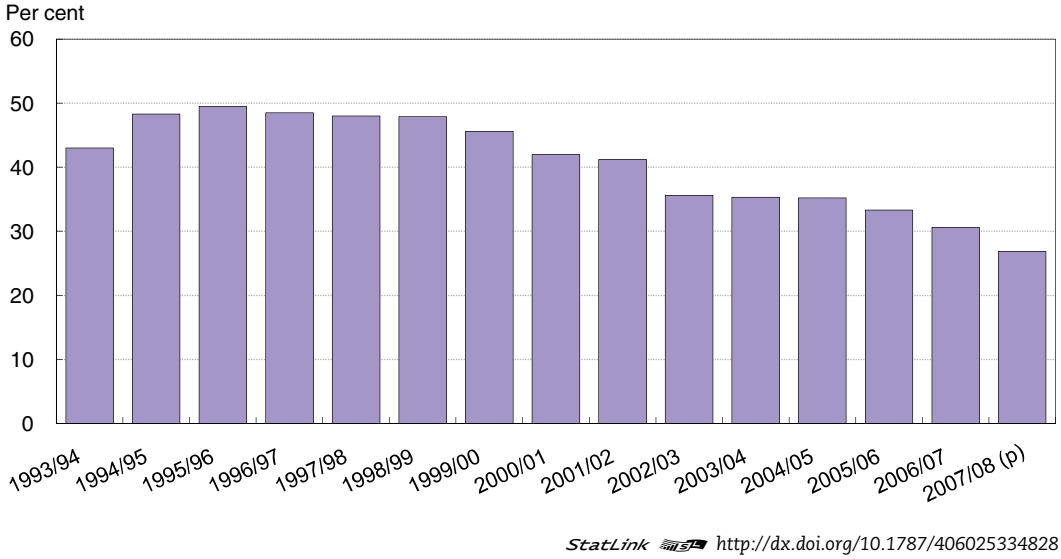
Source: SARB database.

Figure 1.7. **Public debt to GDP**[1]



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1. Debt of the central government, excluding extra-budgetary institutions and social security funds.

Source: National Treasury, *2008 National Budget Review*.

and (the related phenomenon of) stronger economic growth. Thus, according to the Treasury's own estimates, the structural balance has remained in deficit even while the unadjusted balance has swung into surplus. Treasury projections show a continued widening of the cyclically adjusted deficit in 2008/09, then a moderate reduction through 2010/11.

Monetary policy has been effective and credible…

A major achievement of the post-apartheid governments was to maintain a strong and independent central bank, which has helped underpin confidence in macroeconomic

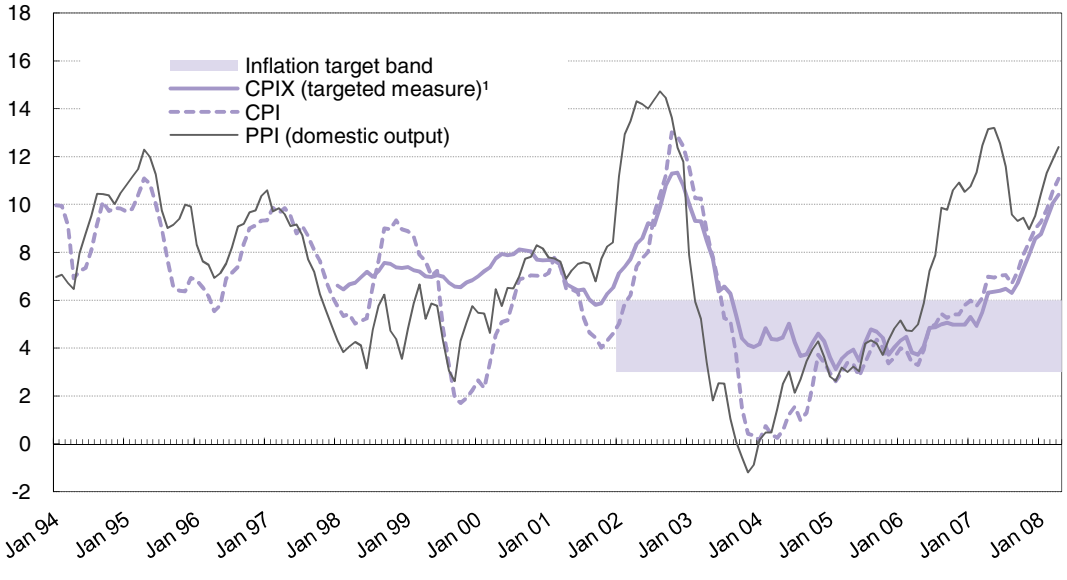
stability. Inflation had been as high as 16% in the early 1990s, and was still around 10% in early 1994 before the new government took office. The independence of the South African Reserve Bank (SARB) was enshrined in the Constitution in 1996, and inflation control was moderately successful through the late 1990s. In 1998-99, however, the SARB's eclectic approach, using mixed monetary and inflation indicators, came under stress from another upturn in inflation. In the Budget speech in February 2000 the Government announced the decision to adopt pure inflation targeting, with a target range of 3-6% for the consumer price index excluding mortgage payments (the CPIX).[6]

As was the case for many other countries adopting inflation targeting in the past two decades, the early experience was broadly positive, although initial progress at reducing inflation in South Africa was temporarily unwound by the emerging market crisis of 2001, which saw a sharp depreciation of the rand and substantial imported inflation. Despite that episode, inflation in South Africa on the targeted CPIX measure declined from about 7% prior to the introduction of the new monetary policy regime to just over 3% in early-2005, and expectations quickly converged to the SARB's target zone.[7] In addition, international reserves were gradually built up to reduce vulnerability to swings in international financial market sentiment towards South Africa.

... even if it is now under strain

More recently, however, the upturn in global food and energy prices has posed a stern challenge to the SARB, as it has to many other inflation-targeting central banks. Despite a series of interest rate hikes from mid-2006 through June 2008, inflation has continued to move up, driven by rapid increases in food and energy prices (Figure 1.8). From April 2007 onward, CPIX inflation has been above the 6% ceiling of the SARB's target range, rising to 10.4% in April 2008.

Figure 1.8. **Inflation**
Year-on-year percentage change



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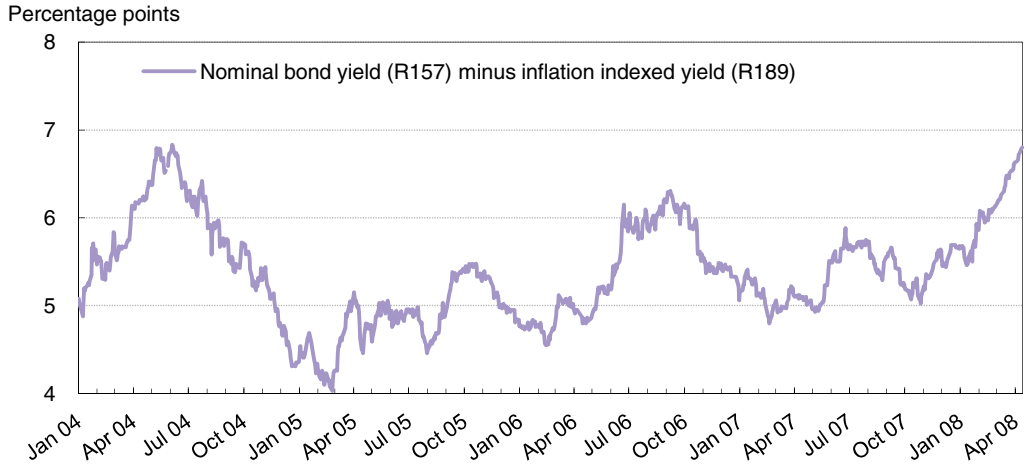
1. The CPIX is equal to the CPI excluding interest payments on mortgage loans.

Source: Statistics South Africa.

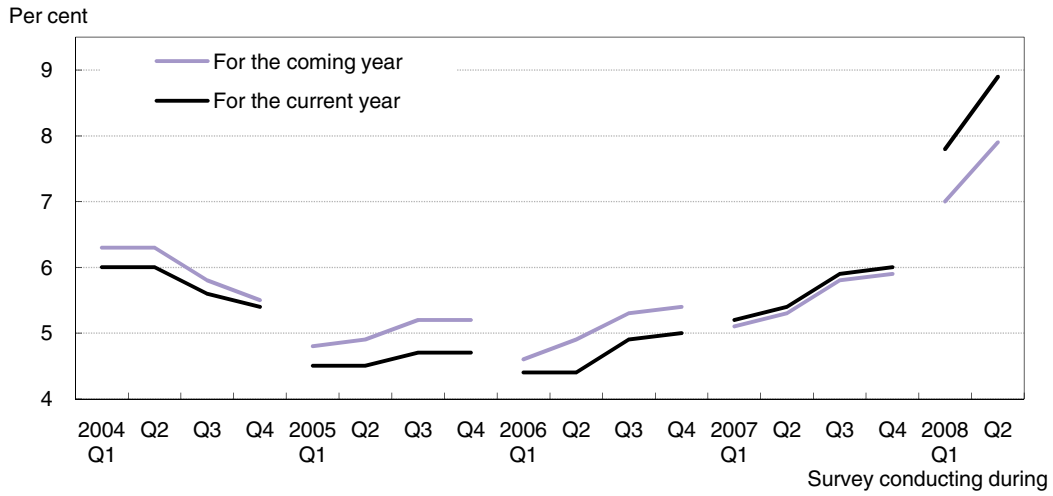
This prolonged overshooting of the inflation targets represents the first taste of a more difficult global environment for monetary policy. Until early-2008, inflation expectations remained reasonably well anchored, with both survey measures and breakeven inflation rates on inflation-indexed bonds consistent with a return of inflation to within the target range by 2009. With the further upturn in inflation so far this year, however, combined with anticipation of sharp increases in electricity prices to come, recent measures of expectations have indicated a prolonged period outside the target zone (Figure 1.9). The SARB itself, in its June 2008 monetary policy statement, pushed back the expected horizon for getting inflation back into the target band to the third quarter of 2010.

Figure 1.9. **Inflation expectations**

A. Yield gap between inflation-indexed and nominal bonds



B. Survey measure[1]



1. CPIX inflation expectations.

Source: Reuters, Fin24.com and Bureau of economic research.

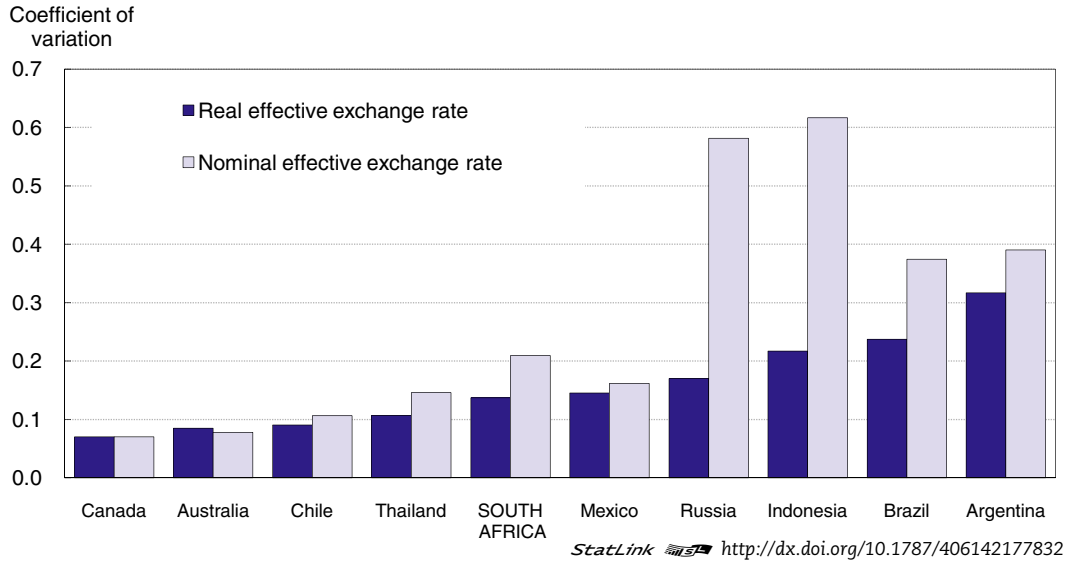
This worsening in expectations reflects the recognition that significant inflationary pressures remain in the pipeline. The first round of substantial electricity tariffs in response to the supply shortages took place in April (14.2%), and the electricity utility

Eskom was awarded a total increase in fiscal year 2008/09 of 27.5%. Inflation will also see some pass-through from the weakness of the rand since late-2007, as well as the latest upward move in oil prices, raising the prospect of CPIX inflation moving back into double digits. Moreover, while wage settlements, as measured by Andrew Levy Employment Publications, increased only moderately from 6.5% in 2006 to 7.3% in 2007, year-on-year wage growth moved up to 7.8% in the first quarter of 2008, and the acceleration of inflation so far this year is likely to feed further increases in wage demands.

The exchange rate is volatile, though so are the terms of trade

By most standards, and particularly in relation to OECD countries, the exchange rate of the South African rand has been volatile in the last 14 years. The nominal effective exchange rate has seen several swings of 20% or more over the space of a few months, and its average variance over the post-apartheid era has been greater than even some middle-income countries which suffered severe balance of payments crises in that time (Figure 1.10). Volatility of the real effective exchange rate has been somewhat lower, placing South Africa somewhere in the middle of the group of emerging market economies.

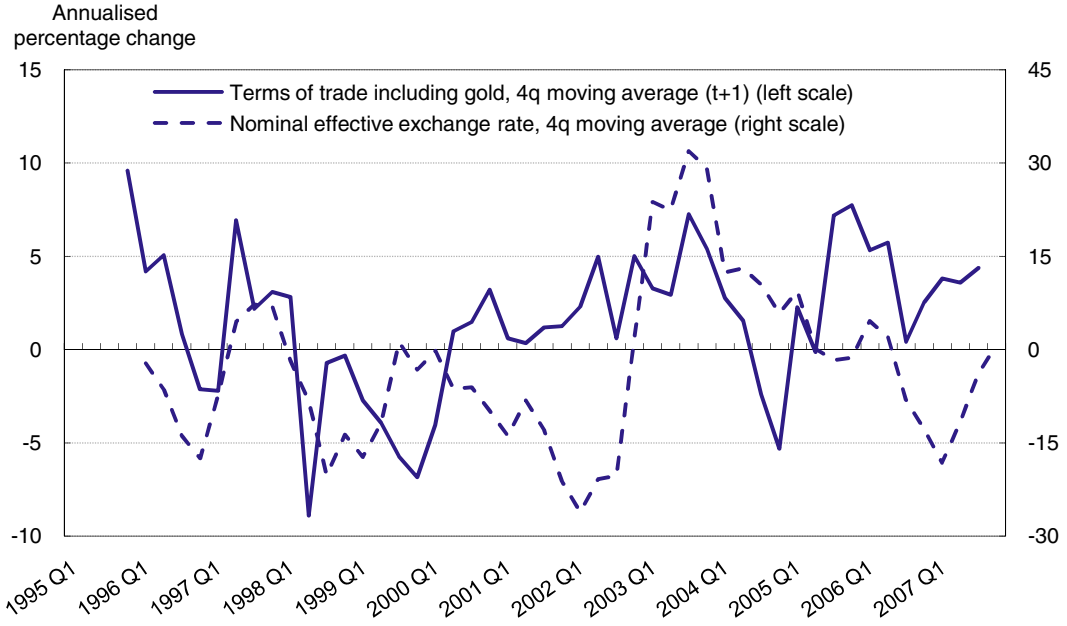
Figure 1.10. **Nominal and real effective exchange rate variability, 1995-2005**



Source: OECD calculations based on IMF, *IFS database*, national sources and OECD estimates.

The volatility of the exchange rate is partly explained by the fact that South Africa is an unusually commodity-dependent economy, and the prices of its major export commodities have been highly variable. Mining accounts for about 7% of GDP and more than a quarter of exports, considerably more than even relatively resource-rich OECD economies such as Australia or Canada, as well as other quite commodity-dependent middle-income countries such as Brazil and Chile. Swings in the exchange rate have to some extent followed fluctuations in key export commodities, although there clearly remains an important part of exchange rate movements which cannot be explained by commodity price swings (Figure 1.11) (Frankel, 2007).

Figure 1.11. **Fluctuations in commodity prices and the nominal effective exchange rate**



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Source: OECD's calculations based on South African Reserve Bank database.

The current account deficit is the main source of vulnerability…

Until 2003, South Africa had moderate current account surpluses and deficits, with no systematic tendency in one direction or another. Since then, however, deficits have been growing steadily, reaching 7.3 per cent of GDP in 2007 (Figure 1.12A). Although such levels are not extreme, even in comparison with some OECD countries (Figure 1.12B), they do expose South Africa to the risk of a financial crisis associated with a sudden stop of capital inflows, as has happened to many other middle-income countries with large current account deficits in the past two decades.

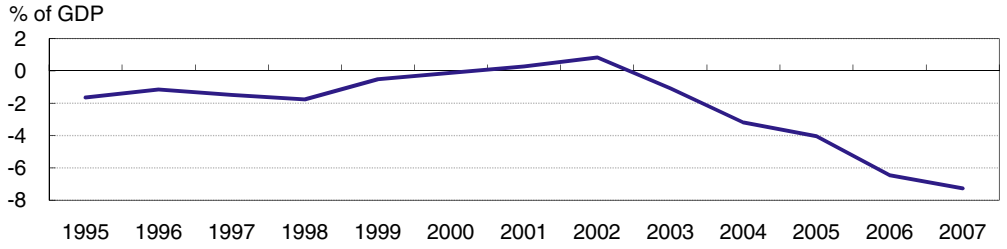
There are certainly valid reasons not to be overly concerned about the scale of such external deficits. Although South Africa's net foreign liabilities are rising rapidly, external debt remains very low, and has been growing only gradually, with a large proportion of the net capital inflows coming in the form of equity investment. Moreover, the deficit does not correspond to public dissaving, but to private savings-investment behaviour.

At the same time, however, the size and pace of increase of the deficits cast doubt on their sustainability, and recent experience across a range of countries shows that adjustments of external imbalances are often sudden and disruptive. Moreover, while increases in investment have been increasingly responsible for the widening of the current account deficit, South Africa has not anomalously strong investment but unusually low savings (Figure 1.13).

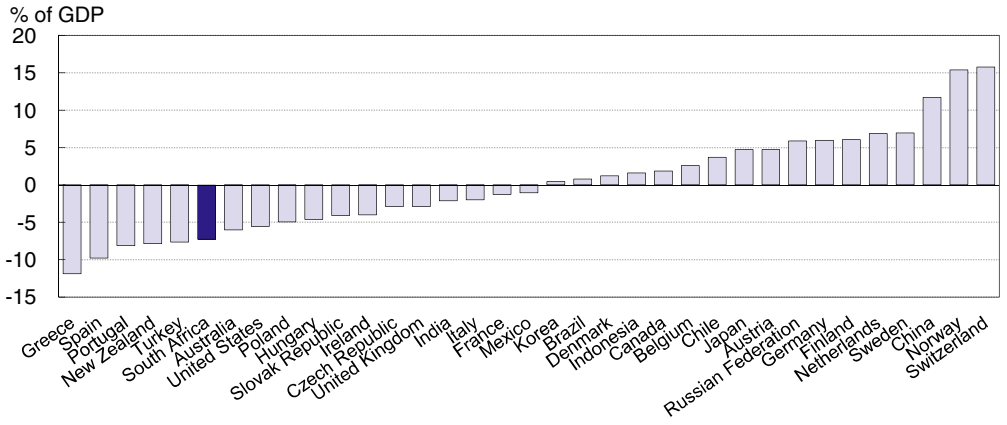
In addition, while importing capital from more capital-intensive countries makes sense from a standard development point of view, some recent research (Prasad *et al.*, 2007) indicates that the most successful development cases have actually been capital exporters. There may therefore be a case for taking action to reverse the widening of the current account deficit not only to reduce vulnerability to a sudden stop of capital inflows, but also to enhance long-term growth prospects.

Figure 1.12. **Current account developments**

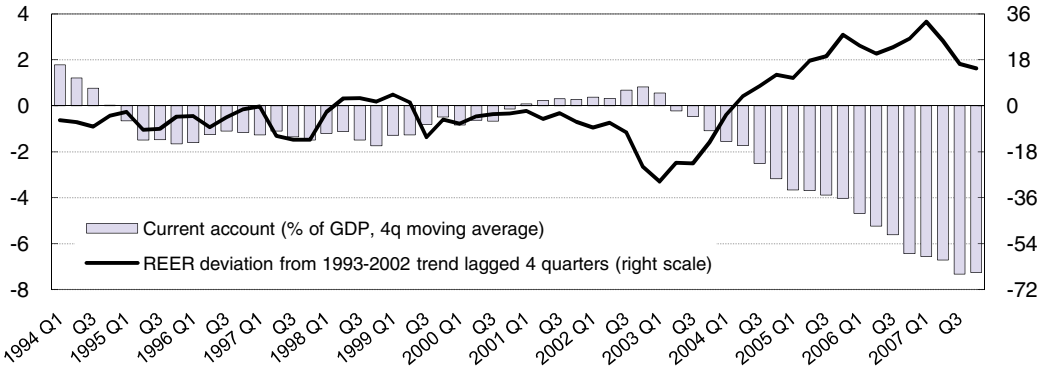
A. Current account balance



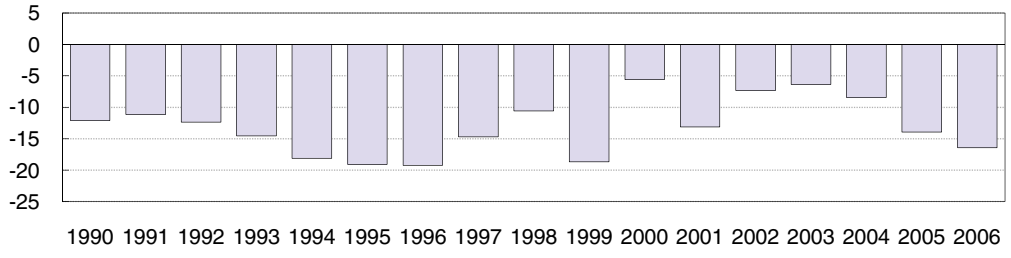
B. Comparison with selected countries, 2007



C. Real effective exchange rate and current account



D. Net foreign assets (as a percentage of GDP)



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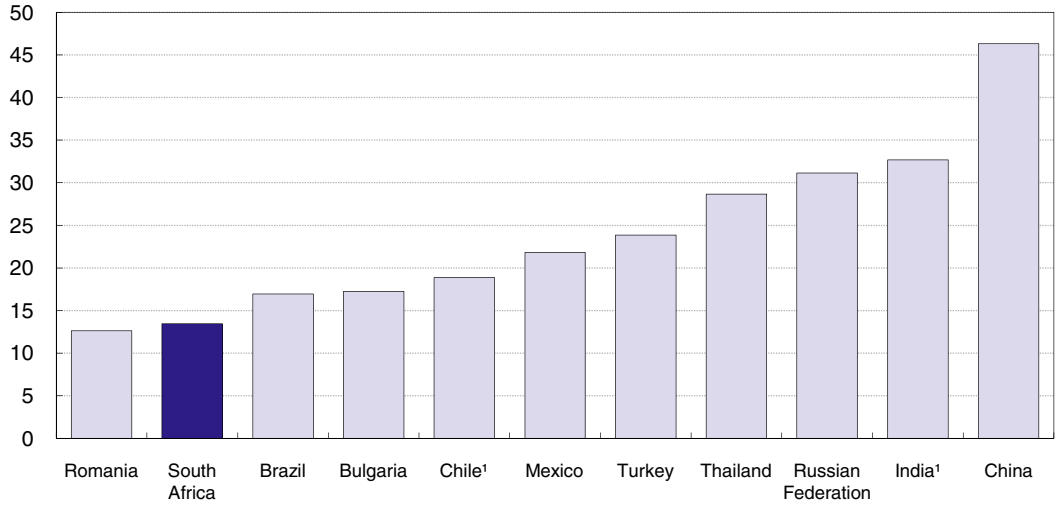
Source: SARB, *OECD Economic Outlook No. 82* and IMF, *World Economic Outlook*, October 2007.

Figure 1.13. **Savings as a proportion of GDP, 2006**



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1. 2005.

Source: World Bank, *World Development Indicators database.*

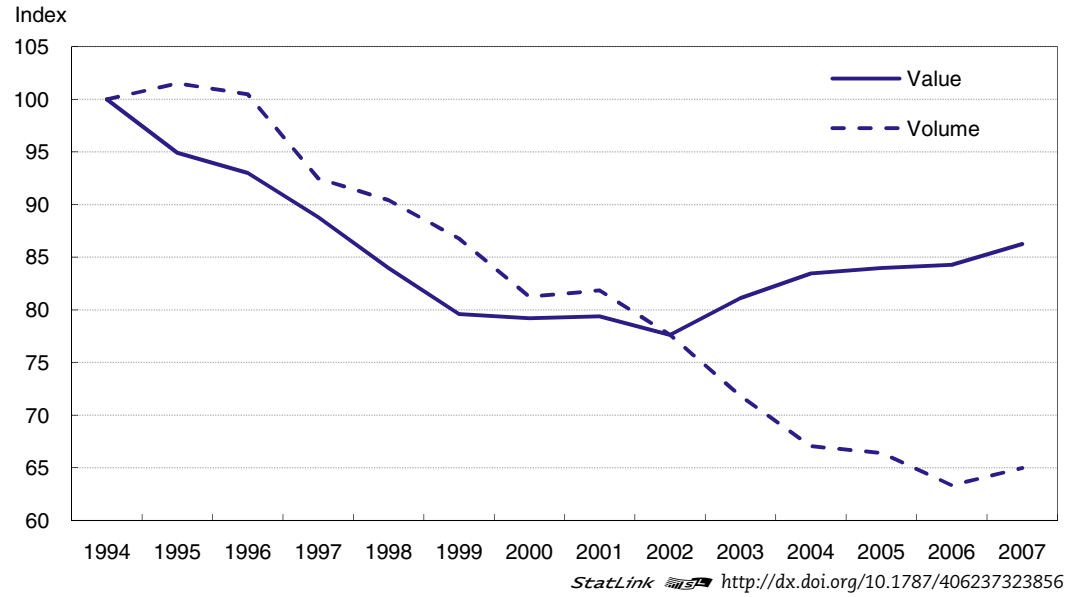
... and is partly a reflection of years of weak export performance

South Africa has suffered from a long period of relatively poor growth in export volumes. As a result, in volume terms the South African share of global markets has been in secular decline, although the steep rise in export prices in recent years has meant that there has been some recovery in value terms (Figure 1.14).

To some extent, this weak export performance can be attributed to technical factors, such as the depletion of South Africa's gold mines or the impact on the mining sector's

Figure 1.14. **South African exports – world market share**

1994 = 100



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Source: OECD calculations based on *SARB database* and IMF, *International Financial Statistics database.*

Table 1.1. **Revealed comparative advantages**

	Advantages							Export share	
SITC, rev. 3		2000	2001	2002	2003	2004	2005	2006	2006	Cumul.
68	Non-ferrous metals	3.0	3.1	3.9	13.0	16.2	15.0	19.4	20.6	20.6
67	Iron and steel	7.9	6.5	9.2	10.9	12.7	11.0	9.1	10.8	31.4
28	Metalliferous ores and metal scrap	3.3	3.7	4.3	2.8	2.5	4.0	5.6	7.4	38.7
32	Coal, coke and briquettes	4.1	4.4	7.5	5.2	5.6	6.6	5.6	6.0	44.7
66	Non-metallic mineral manufactures, n.e.s.	3.3	17.5	4.4	3.2	3.1	3.2	2.7	5.3	50.1
05	Vegetables and fruit	2.4	2.5	3.4	3.5	3.6	3.2	2.6	3.0	53.0
52	Inorganic chemicals	1.2	1.3	1.8	1.0	1.6	1.8	1.4	2.0	55.0
74	General industrial machinery and equipment, n.e.s., and machine parts, n.e.s.	–1.4	–1.7	0.1	–0.5	0.1	0.1	0.9	5.8	60.8
11	Beverages	0.7	0.8	1.4	1.4	1.3	1.0	0.8	1.2	62.0
25	Pulp and waste paper	1.5	1.0	1.1	1.1	0.9	0.8	0.7	0.8	62.8
51	Organic chemicals	–0.8	–0.9	–0.3	–0.2	0.2	0.5	0.7	2.2	65.1
06	Sugars, sugar preparations and honey	0.9	1.2	1.0	0.7	0.4	0.5	0.6	0.8	65.8
03	Fish (not marine mammals), crustaceans, molluscs and aquatic invertebrates, and preparations thereof	0.7	0.8	1.2	1.0	0.8	0.7	0.5	0.7	66.6
24	Cork and wood	0.4	0.5	0.8	0.7	0.6	0.6	0.4	0.7	67.2
27	Crude fertilisers, other than those of division 56, and crude minerals (excluding coal, petroleum and precious stones)	0.4	0.4	0.5	0.5	0.4	0.7	0.4	0.6	67.8
97	Gold, non-monetary (excluding gold ores and concentrates)	0.1	0.0	0.1	0.6	0.8	0.7	0.3	0.3	68.1
	Disadvantages								Import share	
SITC, rev. 3		2000	2001	2002	2003	2004	2005	2006	2006	Cumul.
33	Petroleum, petroleum products and related materials	–9.6	–11.5	–7.6	–7.3	–10.9	–10.5	–14.4	17.9	17.9
93	Special transactions and commodities not classified according to kind	15.7	3.2	–8.9	–9.4	–8.5	–8.7	–7.7	7.7	25.6
76	Telecommunications and sound-recording and reproducing apparatus and equipment	–6.1	–5.5	–5.2	–4.1	–4.6	–5.3	–4.8	5.5	31.1
75	Office machines and automatic data-processing machines	–3.8	–4.2	–3.6	–4.3	–4.6	–4.4	–3.8	4.3	35.3
72	Machinery specialized for particular industries	–3.3	–3.8	–3.8	–3.7	–3.5	–3.0	–2.9	4.2	39.5
77	Electrical machinery, apparatus and appliances, n.e.s., and electrical parts thereof (including non-electrical counterparts, n.e.s., of electrical household-type equipment)	–3.6	–3.7	–2.8	–3.0	–2.5	–2.8	–2.7	4.0	43.5
89	Miscellaneous manufactured articles, n.e.s.	–2.2	–2.0	–1.6	–1.3	–1.5	–1.8	–2.0	2.9	46.4
54	Medicinal and pharmaceutical products	–2.1	–2.6	–2.1	–2.1	–1.8	–2.0	–1.8	2.0	48.5
87	Professional, scientific and controlling instruments and apparatus, n.e.s.	–1.8	–2.1	–2.0	–1.7	–1.6	–1.6	–1.5	2.0	50.5
71	Power-generating machinery and equipment	–1.6	–1.3	–0.9	–1.3	–0.7	–0.7	–1.4	2.9	53.3
84	Articles of apparel and clothing accessories	–0.1	0.0	0.3	0.0	–0.7	–1.1	–1.4	1.6	55.0
65	Textile yarn, fabrics, made-up articles, n.e.s., and related products	–1.3	–1.3	–1.0	–0.9	–1.0	–0.9	–0.8	1.4	56.4
85	Footwear	–0.7	–0.8	–0.7	–0.7	–0.8	–0.8	–0.8	0.8	57.2
57	Plastics in primary forms	–1.1	–0.9	–0.8	–0.8	–0.9	–0.7	–0.7	1.3	58.5
73	Metalworking machinery	–0.7	–0.6	–0.6	–0.7	–0.6	–0.5	–0.6	0.7	59.3
78	Road vehicles (including air-cushion vehicles)	0.6	0.2	4.0	2.8	0.8	–1.1	–0.6	9.6	68.9
04	Cereals and cereal preparations	–0.7	–0.3	–0.5	–0.5	–0.8	–0.1	–0.5	0.9	69.8
42	Fixed vegetable fats and oils, crude, refined or fractionated	–0.4	–0.5	–0.5	–0.6	–0.6	–0.5	–0.5	0.5	70.3
59	Chemical materials and products, n.e.s.	–0.9	–0.9	–0.8	–0.7	–0.5	–0.6	–0.5	1.3	71.6
58	Plastics in non-primary forms	–0.5	–0.6	–0.6	–0.5	–0.4	–0.4	–0.4	0.6	72.2

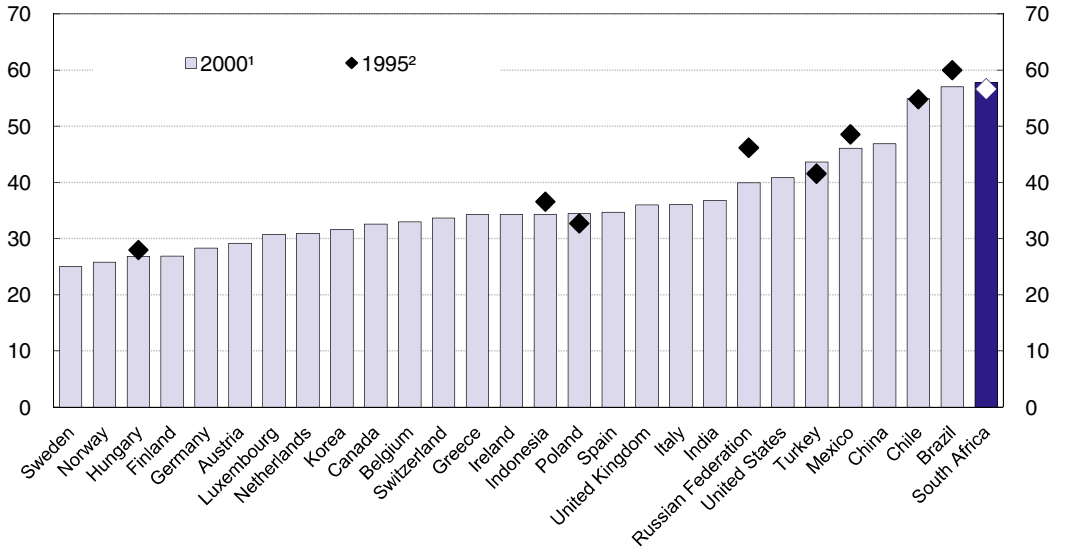
Source: United Nations, *Commodity Trade Statistics database (COMTRADE)*.

supply response to rising international precious metals prices arising from the relicensing of mining companies beginning in 2004, uncertainty over which is only now beginning to dissipate. Nevertheless, to an important extent the declining market share is a reflection of poor trend productivity growth, which also helps to explain the narrow range of manufacturing activities in which South Africa has established a revealed comparative advantage (Table 1.1). The Table shows the net export or import status for 2000 through 2006 of industries at a two-digit level of aggregation – the measure of comparative advantage is the industry's share in total exports minus its share in total imports, and thus varies between +1 and –1. The cumulative column shows that, in 2006, more than 50% of total exports were from 5 industries (all involving metals or coal) in which South Africa had a revealed comparative advantage.

Unemployment and poverty remain the most pressing economic problems…

Given that the development strategies articulated by the governments of the democratic era have been oriented to improving the lot of the historically disadvantaged majority black population, the most disappointing aspect of post-apartheid economic performance is the emergence and persistence of extreme levels of unemployment, particularly for less-skilled younger blacks, together with the continuation of widespread poverty and the widening of inequalities.[8] South Africa's distribution of income is among the most unequal in the world (Figure 1.15).

Figure 1.15. **Gini coefficient**



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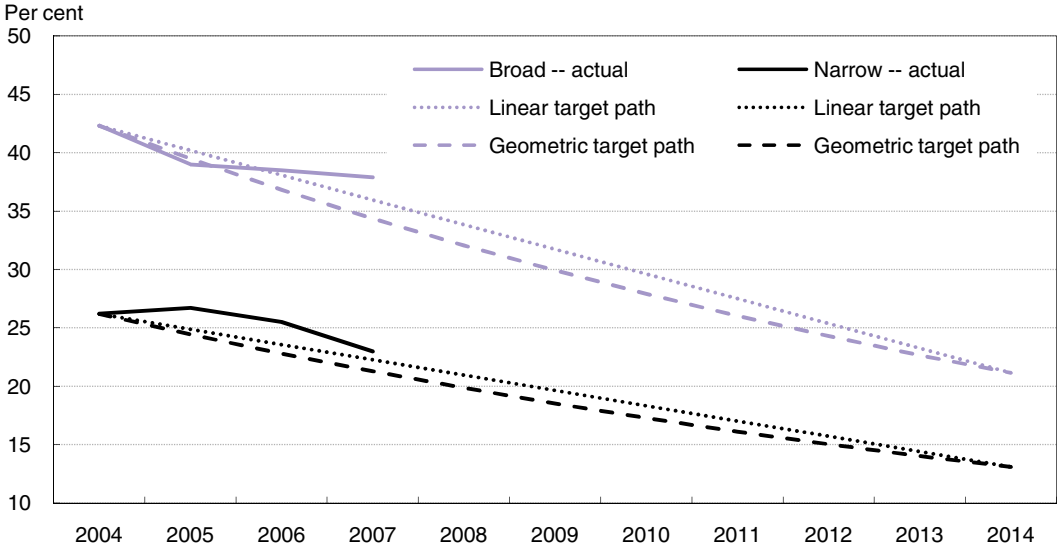
1. 2004 for Brazil, China, India and Mexico. 2003 for Chile and Turkey. 2002 for Indonesia, Hungary, Poland and Russian Federation. 1999 for Netherlands and United Kingdom. 1998 for Korea.
2. 1996 for Brazil, Indonesia, Mexico, Poland and Russian Federation. 1994 for Chile and Turkey. 1993 for Hungary.

Source: World Bank, *WDI database* on line.

The most recent *Labour Force Survey*, for September 2007, did show a quickening in the pace of decline of the standard (narrow) measure of unemployment, from 25.5% in March to 23% in September. This decline is of course welcome, but progress toward meeting the goal of halving unemployment by 2014 is still lagging. (Figure 1.16) Moreover, the most

recent downward move in the narrow measure of unemployment was accompanied by a rise in the number of discouraged workers. The decline in the broad measure has been less rapid, suggesting that progress in addressing the wider problem of non-employment is still slow.

Figure 1.16. **Progress on reducing unemployment, 2004-14**



Source: OECD calculations.

... along with power shortages, which threaten near-term growth prospects

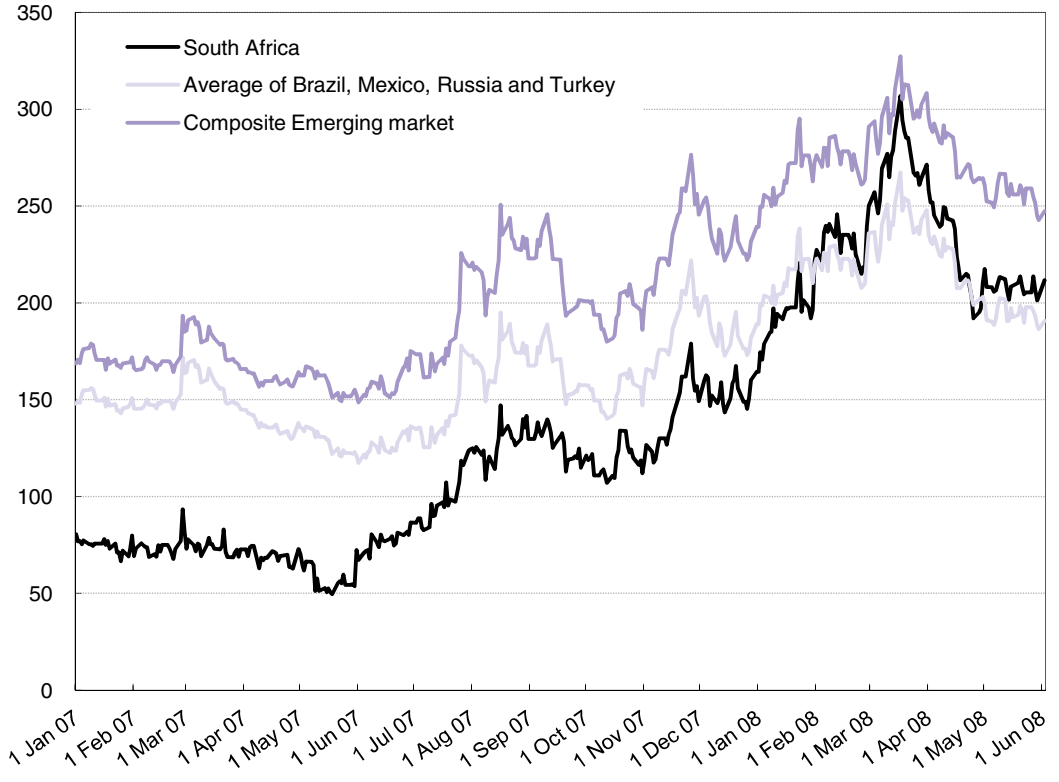
South Africa has for a long time benefitted from some of the cheapest electricity in the world. The state-owned electricity company Eskom is the 5th largest electricity utility in the world, and benefits from South Africa's abundance of coal, which is used to produce about 90% of the country's electricity.[9] After a wave of investment in the 1980s, and given slow economic growth, capacity was well in excess of demand throughout the 1990s, and electricity was priced below long-run marginal cost, taking into account investment needed to maintain and increase capacity.

It has long been known that new investment in electricity generation would be needed. As far back as 1998, a *White Paper* foresaw electricity demand exceeding supply by 2007 unless capacity was increased, and noted the need to decide on investments to expand supply by the end of 1999. At the time, however, the government was looking to encourage the emergence of independent generators, and did not approve new investment by Eskom. In the end, however, Eskom's dominance and the low price of electricity in South Africa made participation in new projects unattractive for potential entrants, and no independent producers emerged. In the meantime, Eskom was prevented from bringing on new capacity – indeed, some Eskom plants were taken out of commission – and the reserve margin shrank from a comfortable 25% in 2002 to only around 8% in 2007, as demand rose rapidly with the pick-up in economic growth after 2003. The reduced reserve margin greatly raised Eskom's vulnerability to unplanned outages, which were made more likely by the fact that the belated realisation that a major investment push was necessary had diverted scarce expertise within Eskom from maintenance to new generation. When large unplanned outages occurred, the reserve margin evaporated and the system was

destabilised, leaving Eskom little choice but to shed part of the load through power blackouts. These occurred towards the end of 2007, and intensified in January 2008, when a combination of planned and unplanned outages forced widespread power cuts and the shutdown of the country's mines for 5 days. Power was subsequently restored, but scheduled load-shedding has continued, with the mines limited to 90% (subsequently raised to 95%) of their 2007 usage, and households subjected to rolling blackouts.

The loss of output in the first quarter, together with the prospect of extended power shortages and outages at least during the rest of 2008, has led economic forecasters to revise down their projections for real GDP growth this year by between 0.5 and 1 percentage point, and has been a blow to financial market sentiment towards South Africa. Superimposed on a generalised reassessment of emerging country risk, spreads on South African short-term paper moved up sharply from November 2007 through March 2008 (Figure 1.17), although some of that relative deterioration has since been unwound as the more recent improvement for South Africa has also been more marked than for other emerging markets taken together.

Figure 1.17. **Worsening relative bond spreads in early 2008 – an Eskom effect?**



StatLink http://dx.doi.org/10.1787/406341038816

1. JPM EMBI+.

Source: Datastream.

The government has constructed a policy response to the crisis, with demand- and supply-side components. On the demand side, measures include near-term power rationing *via* scheduled load-shedding, power quota allocations over the medium term, subsidies for alternative energy usage, restrictions on sales of incandescent bulbs, and

energy efficiency measures within the state sector. Further measures such as solar-powered traffic lights and time-of-use tariffs for households are foreseen. On the supply side, the programme for adding new Eskom capacity is being stepped up, while the target for co-generation has been raised, and 3 000 megawatts (about 7 per cent of the total system) in power from independent producers is targeted for 2012. It is doubtless the case that both demand- and supply-side measures are needed to restore a comfortable reserve margin and avoid unplanned power outages over the next few years. It is not, however, clear that the marginal cost per kilowatt hour generated or saved is even approximately equalised across the different measures, nor that any differences in marginal costs are justified in terms of other objectives, such as reduction of carbon emissions or equity. In particular, there seems to be a danger in terms of economic efficiency from excessive use of command and control measures such as rationing. At the same time, the government is preparing the population for the prospect of substantially higher electricity prices. An initial price increase of 14.2%, which will certainly not be sufficient to cover the long-run costs of electricity production, came into effect in April, and the National Energy Regulator of South Africa (NERSA) awarded a further increase of 13.3% effective from July, and warned that annual increases of 20-25% were expected for the next three financial years.

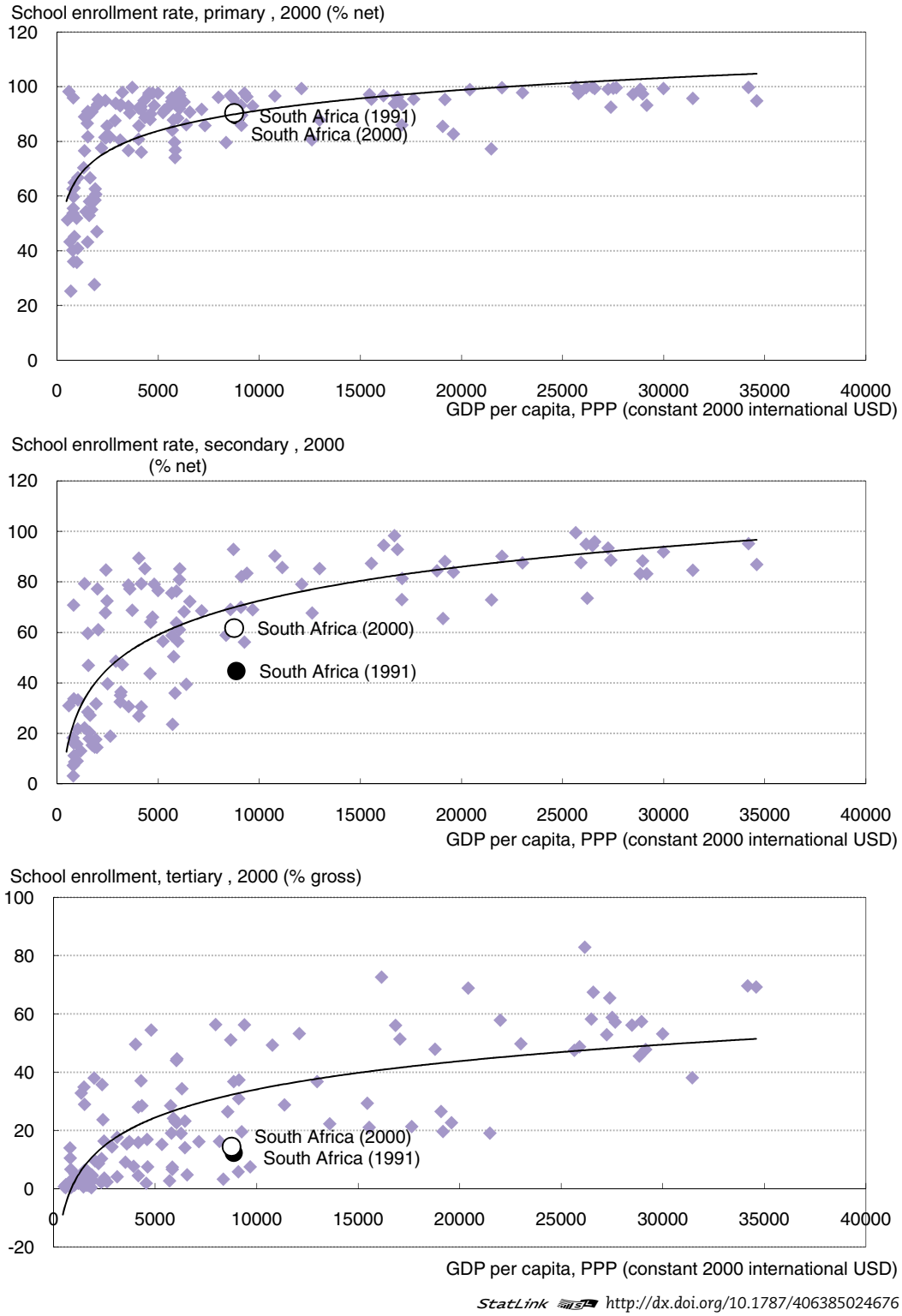
Educational outcomes are poor, contributing to entrenched poverty, inequality, and a skills gap

As will be discussed further in Chapter 3, the phenomenon of persistent extreme unemployment is bound up with the failure of the education system to deliver enough skilled workers to the labour force.[10] Too many school-leavers are functionally illiterate and innumerate, while the economy has been developing in a skill-biased manner (Bhorat and Hodge, 1999), with growing wage differentials across skill levels and much higher probability of being unemployed for individuals with less than secondary education.

Although there have been significant successes since 1994, notably in increasing enrolment and equalising public funding per pupil across the schools of the four formerly separate ethnically-based systems, there has been no clear improvement in scholastic achievement, and results have remained very unevenly distributed. The 2006 PIRLS international literacy study found that more than 80% of 10-12 year olds tested in African languages had not attained "basic reading skills and strategies" (Howie *et al.*, 2007), and a report by the Centre for Development and Enterprise (2007) stated that 70% of exam passes were accounted for by the 11% of schools that were formerly designated white, Indian, or coloured. Despite relatively high overall public expenditure on education, the performance of large sections of the school system underperforms even some much poorer sub-Saharan African countries, while a small part of the system continues to perform broadly at OECD levels. The persistence of such highly skewed results is in part a function of the fact that each school, run by its own Board, may charge tuition fees. As a result, total spending (private plus public) per pupil in former white schools remains much higher than in former black schools, and huge disparities remain in the provision of teachers, books, computers, and infrastructure.

The failure to bring a sufficiently large proportion of students through the system and give them adequate skills is reflected in the much worse relative enrolment rates for secondary and tertiary education compared to primary in the year 2000 (Figure 1.18). Since then there has in fact been a policy of "planned expansion" of enrolment under the 2001

Figure 1.18. **Enrolment rates at primary, secondary, and tertiary levels**



StatLink http://dx.doi.org/10.1787/406385024676

Source: World Bank, *WDI database*.

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National Plan for Higher Education, which has largely met its targets with the notable exceptions of science, engineering and technology. On the other hand, there remains a major problem of high dropout and low completion rates, particularly in science and engineering, which is largely due to the poor preparation of students in primary and secondary school.

The *AsgiSA* constraints and interventions

The identified constraints are generally plausible...

Drawing in part on the research performed by the Harvard group of economists asked to consider different aspects of the question of how to unleash faster growth in South Africa, *AsgiSA* identifies six constraints (see Box 1.1 for details). Of these, most are plausible candidates for obstacles to more rapid sustained increases in living standards, and some are interrelated. The shortage of skilled labour is, for example, one factor hindering state organisation and administrative capacity, in addition to being an element in the mismatch of skills in the economy which is manifest in persistently high levels of unemployment, predominantly of less-skilled labour. This is one part of the labour market dysfunction which is considered in more detail in Chapter 3. The recent electricity supply crisis is eloquent testimony to shortcomings in national logistics and infrastructure. And the issues of barriers to entry and competition in sectors of the economy and the regulatory environment and burden on small, micro and medium-sized enterprises seem indeed to be striking problems in South Africa; Chapter 2 focuses on this area, considering the extent to which policies in the area of product market regulation and competition could be improved.

While the list of constraints is generally convincing, some quibbles are possible. To begin with, certain items on the list, while clearly relevant, look incompletely specified. For example, the discussion of the constraint on the supply of skilled labour appears to place more stress on training relative to basic education than would be warranted. Also, on the important question of the functioning of labour markets, only skill shortages and spatial settlement patterns are mentioned as a constraint. While both of these are important problems, there are other features of labour market regulation and institutions which also play a significant role in sustaining very high unemployment and low productivity in much of the economy. Only the reference to the impact of irrational apartheid-era settlement patterns on labour costs touches on the key characteristic of unemployment, which is that it reflects an excess supply of less-skilled labour at prevailing wages. As is developed in more detail in Chapter 3, the apartheid-era spatial allocation of workers is certainly one apartheid legacy issue with an impact on the unemployment problem, but it cannot, 14 years into the democratic era, be picked out as the sole factor behind the low employment equilibrium in which South Africa has been trapped for more than a decade. Workers in South Africa do indeed still tend to live unusually far from their place of work, which raises reservation wages and search costs. But post-apartheid policies in a range of areas including housing, transport, competition, and crime control could all have made a greater contribution to unwinding this negative legacy.

... although not all agree on the importance of the volatility and level of the rand

The main question mark concerning the identified constraints relates to currency volatility and level. Other things being equal, there are good reasons to expect currency volatility to be bad for growth: in particular, risk-adverse firms will be less willing to invest

Box 1.1. **The *AsgiSA* constraints**

In designing a programme to deliver accelerated and more broadly shared economic growth over a decade, the South African authorities explicitly rejected what they took to be the unfocussed approach of the Washington Consensus, choosing instead to identify a fairly small number of constraints seen to be holding back a growth take-off. This approach is associated in particular with Dani Rodrik, who was one of the Harvard professors to author a paper in the preparation phase of *AsgiSA*.

The constraints identified by the South African authorities were as follows:

- Currency volatility, as well as its strength at the time *AsgiSA* was launched.

As seen already, the rand is indeed a relatively volatile currency, but most of the fluctuations have been related to swings in the prices of South Africa's key export commodities (which generally are positively correlated): precious metals, iron ore, coal, and diamonds.

- Cost and efficiency of national logistics system and some infrastructure.

The identification of this constraint rightly recognises that South Africa is hampered in its ability to benefit from international trade both by its geographical remoteness *vis-à-vis* major markets and by shortcomings relating to infrastructure and competition, which raise the cost of moving goods and conveying services over distance.

- Shortage of skilled labour amplified by the impact of apartheid spatial settlement patterns.

In *AsgiSA* the skills shortage is laid at the door of apartheid, for its discriminatory system of education and skewed patterns of population settlement, which resulted respectively in insufficient human capital accumulation and a situation in which many live a great distance from their places of work. There is indeed considerable evidence of a skills mismatch in the South African labour market, with shortages of skilled workers and a huge excess supply of workers with low skill levels. Fourteen years into the democratic era, however, putting all the blame on apartheid risks overlooking what more could have been and can be done to improve the skill level and spatial distribution of South African workers.

- Barriers to entry and competition in sectors of the economy.

AsgiSA recognises that the South African economy remains relatively concentrated, mentioning in particular upstream production sectors such as paper, chemicals, and iron and steel, as well as inputs such as telecommunications and energy. The strategy also sees market structure as hindering downstream production or service industry development in some cases. As developed further in Chapter 2, the relative lack of competition in many sectors is indeed a pervasive and costly problem in South Africa.

- Regulatory environment and burden on SMMEs.

A corollary of South Africa's high level of concentration is the relative underdevelopment of small and medium-sized enterprises. *AsgiSA* correctly acknowledges that various aspects of the regulatory environment contribute to this outcome: tax administration, the planning system (including Environmental Impact Assessments), municipal regulation, the administration of labour law and, in specific sectoral regulatory environments, regulation unnecessarily hampers the development of businesses.

- Deficiencies in state organisation, capacity and strategic leadership.

There is an important recognition in *AsgiSA* that the capacity of the state is limited. Government at all levels, like the private sector, is affected by the skills shortage, and other problems, such as the prevalence of HIV/AIDS, also sap planning and implementation capacity.

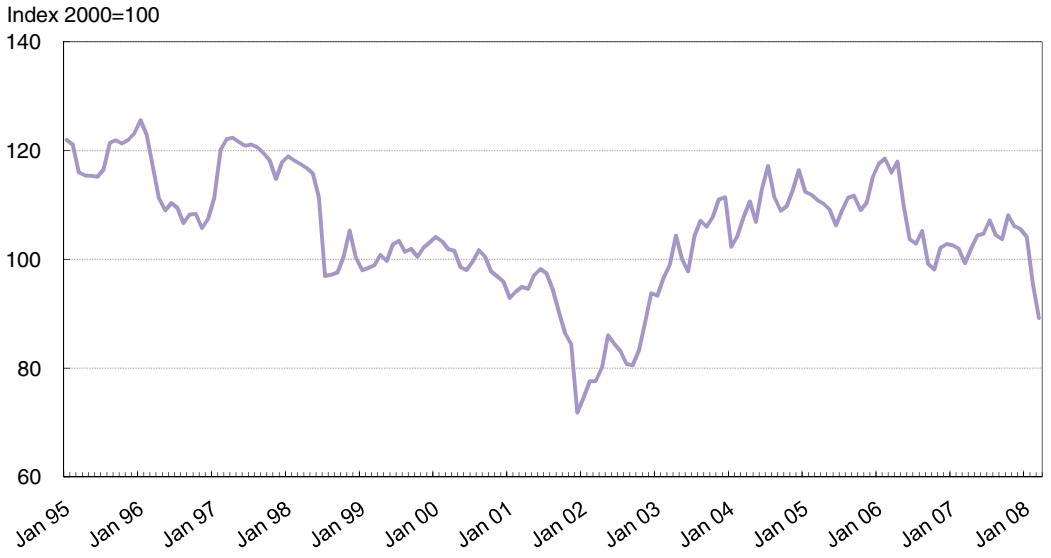
in an economy with a volatile real exchange rate, as the risk of bankruptcy owing to adverse currency movements will be higher in such an economy. Moreover, as noted by Obstfeld and Rogoff (1998), exchange rate volatility may also impose certain indirect costs, as firms charge higher prices as a risk premium to cover the cost of exchange rate fluctuations. On the other hand, to the extent that the exchange rate movements reflect swings in the country's wealth and permanent income owing to changes in the value of its natural resource endowments, then suppressing such movements would hinder market signals and potentially lead to an inefficient allocation of resources. Schmidt–Hebbel (2006) views the literature as not having established a clear relationship between exchange rate volatility and trade flows and welfare. Aghion *et al*. (2006) find no adverse effect of exchange rate volatility in countries with well-developed financial sectors. Moreover, one recent study (IMF, 2006) found no evidence of negative effects of exchange rate volatility through the trade channel for South Africa. At least a few countries, especially resource-rich ones, have grown rapidly despite high levels of exchange rate volatility. Probably the extent to which exchange rate volatility is a constraint on growth depends on the counterfactual, such as the nature of the measures that would be taken to limit such volatility. For example, if the response to exchange rate volatility were to increase the adaptability and resilience of the economy, that would be unproblematic, whereas measures like capital controls would need careful justification, given that they tend to impose efficiency costs and can eventually be circumvented. Or again, the mere adoption of a fixed exchange rate regime could make the economy more susceptible to currency misalignment and thus more crisis-prone, whereas the establishment of a stabilisation fund to convert natural resource wealth into external assets that are used to insulate the domestic non-resource economy from the effects of swings in commodity prices could indeed improve stability and long-term growth. The question of whether misalignment is more or less likely with a clean float *vis-à-vis* an alternative regime is indeed a key question, since this is a channel by which exchange rate volatility could have negative welfare effects.

If currency volatility is less clearly a key constraint than the others mentioned, the level of the rand is more controversial still. Studies of the issue (*e.g*. Frankel, 2007) leave considerable uncertainty over the fundamental equilibrium level of the real effective exchange rate of the rand. On the one hand, the current account has deteriorated sharply in recent years, and the deficit is now at a level that would imply explosive growth of net foreign liabilities if it remained unchanged in relation to GDP. While real depreciation is neither necessary nor sufficient to deliver an adjustment in the current account, it is nonetheless very often an important element in such adjustments. On the other hand, the current account deficit has emerged over a period where South Africa's terms of trade have been improving significantly, and essentially reflects private sector savings-investment behaviour, since the public sector has a small budgetary surplus. It could be that South African residents have been adjusting to the perceived increase in permanent income implied by the upturn in export commodity prices by increasing consumption, while investment has recently also turned up. In such a case, the current account deficit is best seen as a temporary equilibrium, with no case for policy action to correct exchange rate misalignment.[11]

In any event, if the rand was overvalued when *AsgiSA* was launched in early 2006, it must be much less so now. Despite further improvement in the terms of trade in the last two years, the rand fell in real effective terms by 19% between March and November 2006,

and then had another downward lurch, amounting to about 15% in real effective terms, from November 2007 through March 2008 (Figure 1.19). About half of the deviation of the real effective exchange rate from the 1994-2002 trend that began in 2003 has now been unwound, and the improvement in the terms of trade would suggest that the fundamental equilibrium real exchange rate has moved up relative to that trend.

Figure 1.19. **Real effective exchange rate**



StatLink http://dx.doi.org/10.1787/406401361030

Source: SARB database.

... and other constraints might have warranted mention

AsgiSA sticks to constraints and policies which are purely economic in nature, which would explain why important cross-cutting issues are not squarely addressed. While such an approach is understandable, it risks losing sight of the economic significance of certain "non-economic" issues. Two obvious examples are the problems of HIV/AIDS and crime.

The prevalence of HIV/AIDS in South Africa is above all a human tragedy on a grand scale. Some 19% of the prime age adult population is estimated to be HIV positive, and deaths from AIDS now amount to nearly one thousand a day (UNAIDS, 2006). There are approximately 1.2 million AIDS orphans under the age of 18, and millions more children have lost one parent to the disease, which is the biggest single cause of death for South Africans aged 24-49. Such a scourge clearly has a considerable economic impact. For example, it hinders government capacity for policy implementation, identified as a key constraint in *AsgiSA*. It also adds to the serious problem of absenteeism in schools, both for teachers and pupils, and thus not only hits the supply of skilled labour now, but also undermines the supply of skills in the future. Productivity is sapped by illness and higher turnover, and even the attendance of all-too-frequent funerals.

The other obvious constraint on faster growth not mentioned in *AsgiSA* is crime, especially violent crime. Crime is perennially an important issue in business climate surveys, with South Africa ranking among the worst countries in the world on this front: in the 2007-08 Global Competitiveness Index calculated by the World Economic Forum, for

example, South Africa was ranked 126th of 131 countries for the business costs of crime and violence. The problem is not merely one of perceptions: South Africa has one of the highest homicide rates in the world, with particularly high numbers of gun deaths. The prevalence of crime has a negative impact on foreign direct investment in particular, and is also a factor in the emigration of much-needed skilled workers. Moreover, crime is an issue impeding the mobility of workers; the bad reputation for muggings and violence of the informal taxis which form much of the basis of urban transport is a factor that must raise reservation wages and discourage job search.

The main problem, though, is the mapping from constraints to actions

The policy interventions set out in *AsgiSA* are each aimed at addressing one or more of the identified constraints. In some cases, however, the linkage between the constraint and the policy solution is weak, or even perverse, while in others the policy action looks insufficiently strong to remove the constraint to faster and more evenly shared growth.

Notably, some policy actions seem to cut against the recognition that lack of competition is a constraint to growth…

AsgiSA rightly identifies barriers to entry, limits to competition and limited new investment opportunities as one of the key constraints binding on South Africa as it attempts to achieve faster and more widely shared growth. Certain policy actions, such as regulatory reviews aimed at reducing burdens on small businesses and the strengthening of competition law, do indeed go in the direction of addressing this constraint. The overall thrust of policies outlined in *AsgiSA*, however, is not clearly pro-competitive. In particular, the emphasis on industrial (or sectoral, as they are also referred to) policies risks preserving the apartheid-era pattern of protected national champions insulated from foreign competition and enjoying high mark-ups. There is a clear danger of distorting market signals in order to favour certain firms or industries. OECD experience with such policies is mixed at best, even in countries with greater capacity for planning and implementation than South Africa. They have often involved substantial waste of public resources while encouraging rent-seeking and protecting generally large incumbent firms from competition. Moreover, they can be used as an excuse for protectionism, while the impetus of foreign competition is an important force for stimulating efficiency and innovation.

A related point in this context is that the elimination of the informal (or "second") economy is specified as one of the six main policy interventions. The wish to ensure good jobs for all those seeking work is understandable, but the focus should be on creating conditions for growth in formal employment and not on the suppression of the informal sector. In the latter case, there is a danger of prolonging the apartheid-era legacy of suppressing entrepreneurialism among the majority black population.

… and there is a tension between the acknowledgement of limited government capacity for coordination and implementation and the ambition of some interventions…

It is notable that *AsgiSA* mentions a plethora of new government programmes and initiatives across a range of areas, while at the same time failures of government planning, coordination, and administrative capacity are recognised to be among the constraints holding back South Africa's growth performance. The strategy envisages public investment

rising from 4% of GDP to 8% under *AsgiSA*, mainly to meet infrastructure needs ranging from the urgent need for increased electricity generation capacity to building new sports stadia for the 2010 FIFA World Cup. Industrial policies are to be ramped up under the National Industrial Policy Framework, and various public education and training programmes are to be expanded, while a new institution (the Joint Initiative for Priority Skills Acquisition, or JIPSA) was created in this area. *AsgiSA* also foresees the review of the functioning of a number of public development finance institutions – the Industrial Development Corporation (IDC), the Land Bank, the Development Bank of South Africa (DBSA) and the National Development Agency – with a view to improve their support for the government's development efforts. While no details are mentioned in *AsgiSA*, this could imply a net increase in public resources for these institutions.

Even in the absence of the shortage of skilled labour and the limited capacity for policy implementation, the programme outlined in *AsgiSA* might appear unbalanced towards public sector programmes. Quite apart from the administrative challenges of running a successful industrial policy, for example, the whole enterprise is beset with risks of waste, inefficiency, and corruption. And many countries have achieved sustained development without devoting any significant resources to public development finance institutions. South Africa's own experience with public training programmes to date is not encouraging as regards effectiveness and take-up. But South Africa's acknowledged shortage of skills, leadership, and coordination in the public sector provides an additional reason to envisage a less state-oriented approach. Such an approach would be one in which government certainly plays a key role in the provision of some infrastructure and services such as basic education and health, but otherwise largely seeks to provide the framework conditions for competitive markets.

… while within education and training the focus seems too narrow…

On education and skills, the main focus of *AsgiSA* is on a series of training initiatives. As noted above, a new institution, JIPSA, was created to identify urgent skills needs and design quick solutions. In addition, a major expansion was planned for Further Education and Training (FET) colleges, and the Adult Basic Education and Training Programme was to be expanded. Other measures included Phase 2 of the National Skills Development Strategy, under which funds raised by a 1% skills levy are spent by Sector Education and Training Authorities (SETAs). The experience of OECD countries with worker training as a way of improving the skills of unemployed workers to get them back into employment has generally been disappointing. And in the case of South Africa, the impression is of a number of disparate and generally small-scale efforts, especially relative to the size of the unemployment problem, and which are beset by serious implementation problems.[12]

The need to improve basic education is reflected in some initiatives mentioned in *AsgiSA*, such as the Dinaledi schools programme to double the number of passes in mathematics and science to 50 000 by 2008. But worthy as some of these programmes may be, it is doubtful whether they have the scale to have a significant impact on the overall economy and the skills mismatch that is reflected in the very high unemployment rate. A more critical task, and one more squarely in the purview of the government, is to raise the quality of education for the 1 million or so students coming out of the schooling system each year.

... and actions to improve labour market policies per se are largely missing

It is striking that in a strategy which has as one of its two main aims the reduction of the prevailing very high level of unemployment, very little is said directly about policies to improve the functioning of the labour market. *AsgiSA* rightly mentions shortages of skilled labour as a problem, but the issue of how to find employment for those who are jobless and would like to work (representing as much as 35% of the economically active population), which means above all those with low levels of skills, is a central issue which gets little attention. Indeed, while at least one of the identified constraints was implicitly largely about labour markets, none of the six key areas are specifically devoted to this area.

There is little substance to policies to tackle currency volatility and overvaluation, though that may be no bad thing

The first area, macroeconomic policy, is mainly targeted at limiting exchange rate volatility. But no specific actions to that end are mentioned. Rather, the identification of such actions is left as a future task: "one challenge is to find strategies to reduce the volatility and overvaluation of the currency; another is to ensure that within an inflation targeting regime fiscal and monetary policy work together to produce sustained and shared growth." (Presidency, Republic of South Africa, 2006) The sense is that when *AsgiSA* was formulated there was dissatisfaction in at least some parts of government and its support base with what was seen as the overly hawkish conduct of monetary policy since the adoption of inflation targeting. For much of 2005 and into 2006 the target measure of inflation was towards the bottom end of the target range (while headline inflation had been as low as 0.2% year on year in 2004), and the rand had risen in real effective terms by nearly 80% since the low point at the end of 2001.

The problem for those who would like greater attention to be paid by the SARB to growth or the exchange rate is that the adoption of inflation targeting has made inflation the predominant and overriding objective for monetary policy (SARB, 2000). Other variables cannot be taken into account other than through their impact on inflation in the forecast horizon (two years for South Africa). The SARB's independence in carrying out its mandate is enshrined in the Constitution and the law on the central bank. Government's only real options concerning monetary policy are to alter (*i.e.* raise) the inflation target or to take the decision to abandon inflation targeting altogether. *AsgiSA*'s caution regarding policies probably reflects a reluctance to countenance such options, which would certainly undermine the authorities' reputation for credible and prudent macroeconomic policy-making.

While the options for achieving a shift in the conduct of monetary policy may be both limited and unpalatable, more could perhaps nonetheless be done to limit real exchange rate volatility. A fiscal policy which did more to extract resource rents during commodity price upswings would at least partially insulate the rest of the economy from oscillations in the terms of trade. This would be less straightforward in South Africa than in a case like Norway, where natural resource windfalls are easier to identify and extract. If exchange rate volatility is truly perceived as one of the main constraints to faster growth, however, then progress in this direction might be warranted.

Moreover, while some statements of *AsgiSA* include the high level of the exchange rate as a concern, over and above volatility, there is no policy action explicitly targeted at correcting such a possible overvaluation of the rand. There are references to "ensuring

inflation targeting continues to support growth", but no explanation as to what that is taken to mean. In fact, the best instrument for resisting real exchange rate volatility and avoiding overvaluation of the rand is fiscal policy. Again a mechanism to capture and save a greater part of export commodity price windfalls could be worth considering in this context.

The plans for infrastructure investment appear to have underestimated the urgency of the electricity shortage

Increasing public infrastructure investment is a major plank of the *AsgiSA* strategy, but in retrospect there was little sense in the strategy of the threat to electricity supply or the primacy of maintaining it. The limited supply of skilled labour and planning capacity may have had an impact on Eskom's ability to plan sufficient new capacity while at the same time limiting outages in existing plants owing to failures in maintenance or planning. And some of the measures announced in 2008 in response to the blackouts experienced in January, notably as regards the facilitation of market entry by independent producers, could have been taken earlier.

No doubt part of the reason for the delay in more decisive measures in the electricity sector is that a key part of the necessary policy response was the politically painful step of raising electricity prices both for industry and households. Perhaps now that it is widely accepted that prices will have to rise substantially to cover long-run marginal costs and limit demand growth, it will be possible to focus not only on raising electricity supply over the long term but also on increasing South Africa's energy efficiency. The high energy intensity of the economy represents not only a sub-optimal allocation of resources – with electricity prices set below long-run marginal cost, overconsumption is encouraged – but also imposes negative externalities on the rest of the world by making South Africa a major source of carbon emissions.[13]

How *AsgiSA* could be strengthened to improve the chances of meeting the government's key goals

As already noted, the preparation of *AsgiSA* was done in a creditably open manner, taking input from a number of groups and individuals. The articulation of *AsgiSA* also included an expression of openness to subsequent adjustments in the strategy (Presidency, 2006). From the perspective of the OECD, a number of additions and modifications to *AsgiSA* could be warranted.

Macroeconomic policies, building on the good track record to date, may need to be strengthened in the face of a less favourable international environment

Overall, the global economic context looks less favourable for South Africa than in recent years. Domestic inflationary pressures, including the need for substantial further increases in electricity prices, are being aggravated by rising international prices for oil and food, while the tightening global credit conditions have seen their effect in an apparent sharp weakening in portfolio inflows, resulting in a bout of marked rand weakness. The SARB is therefore facing a situation in which its inflation targets are likely to be missed for another two years. Having established a track record of credibility in fighting inflation, it would probably be a mistake for the authorities to succumb to pressure to raise the inflation target range or even abandon formal inflation targeting altogether. It would be

preferable to continue to communicate the exceptional nature of the current situation while remaining resolute in securing an eventual return to the target band.

Meanwhile, with the country having experienced 4 years of above-potential growth, and given exceptionally high commodity prices, inflation well above target, and a current account deficit that has reached a worrying scale, a case can be made for tightening fiscal policy, at least to move towards a neutral cyclically-adjusted stance. This would reduce domestic demand, and contribute to achieving better internal and external balance. Such a move would no doubt be politically difficult – only recently the government's objective was to limit deficits to 3% of GDP, and neither politicians nor the population have got used to the idea of running (cyclically unadjusted) surpluses over a number of years. In part because of such political pressures, over the longer term there may be a case for introducing a fiscal rule, or at least a more systematic way of capturing commodity price windfalls. For one thing, despite South Africa's generally good record as regards avoiding corruption, rent-seeking is always a danger in an environment of high commodity prices in resource-rich countries, and limiting discretion in spending windfalls may help address that risk. In addition, a mechanism for enhancing fiscal policy's countercyclicality with respect to commodity price swings would help insulate the rest of the economy from their effects, notably on the exchange rate. At a minimum, the National Treasury should further develop its work on cyclical adjustments to the budget balance and continue to give more prominence to the structural balance. A broader understanding of the temporary nature of booming revenues would help to overcome political obstacles to fiscal restraint.

More attention could be paid to labour market institutions

While, as is discussed further in Chapter 3, much of the rise in South Africa's unemployment rate can be attributed to exogenous factors such as demographic trends, falling commodity prices for much of the 1990s, and increased foreign competition in traditional labour-intensive manufacturing activities, the persistence of very high unemployment over a long period indicates that labour markets are slow to adjust. Aspects of the legacy of apartheid such as inefficient spatial settlement patterns and discriminatory education policies undoubtedly play a role in inhibiting the efficient operation of the labour market, and stronger action to unwind these legacies is probably warranted. In addition, there is a widespread perception, at least among employers, that employment protection legislation (EPL) is overly restrictive, imposing high firing costs in particular. Even if, as is reported in Chapter 3, the legislation per se does not appear to be restrictive when compared with OECD economies as well as a number of other developing and middle-income countries, in practice firing procedures can be administratively burdensome and lengthy. This likely contributes to lower labour market flows and longer unemployment spells, as well as distorting labour market arrangements in favour of short-term contracts, with negative consequences for training outcomes also. This is one area where attention to labour market policies and institutions could help achieve the main *AsgiSA* goals.

Improvements in human capital are most likely to come via reforms of the school system

The main contribution that the state can make to raising the average level of skills – thereby reducing the existing skill mismatch between labour demand and supply in South Africa – is to improve the quality of general education. Although overall public

expenditure on education is not abnormally low in relation to GDP, there appears to be scope to reap greater efficiencies, as too many schools continue to suffer from a lack of basic infrastructure as well as books and supplies, and international achievement tests suggest that the schooling system is failing to provide many students with basic literacy and numeracy skills. One difficulty that arises in this context is the sharing of the responsibility for education between the central government and the provinces, which creates a challenge for ensuring that funds for education are spent as intended across the country. Chapter 3 outlines some policy priorities for addressing the educational system's drag on labour market outcomes.[14]

Concerning public training schemes, there appears to be scope to reduce their rigidity and cut administrative costs. Notably, the SETA system, funded by the national training levy, has proved too cumbersome to be widely used, and has suffered from underimplementation, poor quality training, and even fraud. A more effective approach may be to provide firms with tax credits for providing training. Other training programmes appear less problematic, but are not of a scale to make a major impact on unemployment.

South Africa could benefit from a comprehensive strategy to increase competition

Above all, despite the identification of barriers to entry and concentration as a constraint to faster growth, a relatively neglected area in the policy interventions side of AsgiSA relates to competition in product markets. As will be discussed in Chapter 2, South Africa's overall burden of product market regulation is heavy by OECD standards, and state ownership and interference impose high barriers to entry in many areas. In particular, the lack of competition in network industries is one factor impeding their performance as regards productivity and innovation, while the lack of efficiency of these industries has negative spill-over effects for the whole economy. Industrial concentration and protection of incumbents was one element in the system that long disadvantaged the majority black population and entrenched a hugely unequal distribution of wealth and income. The government should see competition as a pro-democratic force with considerable potential for shrinking economic rents accruing to a few and generating more widely shared growth.

Especially given South Africa's geographical remoteness, which makes it more difficult to benefit from globalised trade flows, particular attention may need to be paid to facilitating international trade.[15] While policies such as infrastructure development, regulatory streamlining, and support for meeting international standards all have roles to play in that respect, another important part of this can come through pro-competitive trade policies.

A greater emphasis on competition would also suggest a reduced focus on potentially costly and wasteful industrial policy interventions, which is also justified by the acknowledged deficiencies in public sector administrative capacity, planning and logistics.

Raising formal sector employment does not have to mean discouraging informal sector activity

While achieving formal sector employment for all those who want it is a valid long-term goal, in the nearer term the priority should be in increasing employment of all sorts, to absorb the excess supply of (particularly less-skilled) labour. In general the choice for the unemployed is not between a job in the formal sector or the informal one, but rather between some form of job and none. It is likely that the informal sector has a role to play

in absorbing more of the excess supply of less-skilled labour, which may therefore warrant a less negative approach to the "second economy". Formal and informal employment can grow together, as indeed they have for much of the post-apartheid period – as has been seen, however, such growth has been insufficient to prevent a big increase in unemployment. As part of a broader effort to encourage small enterprises, ways of reducing barriers to informal activity could be examined.

Notes

1. The input from the group of economists, under the aegis of Harvard University's Center for International Development, took the form of a series of research papers, including Aghion *et al.* (2007) on competition, Rodrik (2006) on constraints to growth, Hausmann and Klinger (2006), Edwards *et al.* (2006) and Frankel (2006). The group's working papers can be found at *www.cid.harvard.edu/southafrica*.
2. According to *Productivity SA*, total factor productivity in the private sector was 2.9 per cent a year for the period 1995-2003, rising to 3.8 per cent from 2004-05. Figures for 2006-07 were not yet available.
3. See Kohli (2003). Command GDP is defined as follows: command GDP = TDDV + XGSV*(PXGS/PMGS) – MGSV, where TDDV is real domestic demand, XGSV and MGSV are, respectively, export and import volumes, and PXGS and PMGS are the export and import deflators.
4. See Annex 1.A1 for an explanation of the aims and features of the Black Economic Empowerment programme (subsequently rechristened the Broad-Based Black Economic Empowerment programme).
5. Other more recent factors hindering a positive output response to high metals prices have included stricter enforcement of safety regulations in the wake of mining fatalities, and the electricity shortages beginning in January 2008.
6. The Governor of the SARB confirmed in April 2000 that the SARB would be adopting an inflation targeting regime, with the targets to come into effect in 2002. Van der Merwe (2004) gives a chronology and analysis of the move to formal inflation targeting.
7. Quarterly inflation expectation surveys are conducted on behalf of the SARB by the Bureau for Economic Research (BER), and are available on the BER website at *www.ber.ac.za*.
8. As noted in the 2008 *African Economic Outlook* (OECD, 2008), some 43% of the population in 2006 remained below a poverty line set at approximately 2 USD a day, despite progress on poverty reduction made in recent years *via* extensive social grants.
9. One implication of South Africa's heavy reliance on domestic coal and its underpriced electricity is that the economy is far more carbon-intensive than other countries of similar GDP per capita (United Nations, 2007). Eskom's power plants clustered around the main coal mines are one of the biggest point sources of carbon emissions anywhere.
10. The OECD's Education Directorate is currently conducting an *Education Review* of South Africa, which will assess the system in detail and make detailed recommendations. This *Economic Assessment* therefore says relatively little about this crucial area.
11. The IMF, in its assessment of the real exchange rate in the context of the 2007 Article IV consultation with South Africa, concluded that the rand was broadly in line with fundamentals.
12. The 2008 *African Economic Outlook* observes, for example, that while the shortfall of skilled workers has been estimated at 300 000, the training capacity of the SETAs is only about 7 000 workers a year. As to implementation problems, Chapter 3 notes in particular the widespread criticisms of the SETA system as inflexible and providing low-quality training.
13. In 2004 South Africa was estimated to be the 11th largest emitter of carbon dioxide, ahead of larger and more populous middle-income countries such as Brazil, Mexico, and Turkey, as well as some advanced economies with larger populations, such as France (United Nations, 2007). South Africa's relatively rapid emissions growth rate in the period up to 2004 suggests that it is now in the top 10.
14. The forthcoming OECD *Education Review* will provide a more comprehensive assessment of South Africa's education and training system.
15. See Boulhol, de Serres and Molnar (2008).

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ANNEX 1.A1

Black Economic Empowerment (BEE)

BEE's origins and aims

Overcoming the legacies of apartheid has been a central theme of the economic and social policies of the South African government since 1994. While care has been taken to limit the economic disruption associated with the intended transformation of South African society, policies have been aimed at progressively unwinding the disadvantaged position of the majority black population. The concept of BEE was inherent in various laws and initiatives during the 1990s. For example, one aim of the 1994 *Reconstruction and Development Programme* was to deracialise business ownership and control completely, "through focused policies of black economic empowerment".

In the first decade after apartheid a number of new laws restored rights to land and tenure, made unfair discrimination illegal, and introduced reverse discrimination measures to provide new economic opportunities to historically disadvantaged persons.[1] In particular, the Employment Equity Act of 1998, which applied to employers of more than 50 employees, contained requirements relating to affirmative action for blacks, women, and the disabled, and obliged firms to prepare employment equity plans and periodic reports on the implementation of such plans.

The government also implemented various policies, strategies and programmes aimed at overcoming economic inequalities and underdevelopment, including the *Integrated Human Resources Development Strategy*; the *Urban Renewal Programme*; the *Integrated Sustainable Rural Development Programme*; the *Tourism Transformation Strategy*; the *Strategic Sector Plan for Agriculture*; and the *National Small Business Development Promotion Programme*. In 1997 the government began to award procurement contracts preferentially to black-owned businesses, a practice formalised into law in 2000 with the Preferential Procurement Act.

In 2003, BEE took another step forward when the Department of Trade and Industry (DTI) released *South Africa's Economic Transformation: A Strategy for Broad-Based Black Economic Empowerment,* in conjunction with the introduction of the *Broad-Based Black Economic Empowerment Act*.[2] The main aims of the new law were to establish a legislative framework for the promotion of BEE; to enable the Minister to issue codes of good practice and to publish transformation charters; and to establish a BEE Advisory Council reporting to the President, as chair of the Council. According to the Act, broad-based black economic empowerment (BBBEE) was to be facilitated by:

- promoting economic transformation in order to enable meaningful participation of black people in the economy;

- achieving a substantial change in the racial composition of ownership and management structures and in the skilled occupations of existing and new enterprises;
- increasing the extent to which communities, workers, cooperatives and other collective enterprises own and manage existing and new enterprises and increasing their access to economic activities, infrastructure and skills training;
- increasing the extent to which black women own and manage existing and new enterprises, and increasing their access to economic activities, infrastructure and skills training;
- promoting investment programmes that lead to broad-based and meaningful participation in the economy by black people in order to achieve sustainable development and general prosperity;
- empowering rural and local communities by enabling access to economic activities, land, infrastructure, ownership and skills; and
- promoting access to finance for black economic empowerment.

The functions of the Advisory Council were to: advise government on black economic empowerment; review progress in achieving BEE; advise on the draft codes of good practice; advise on the development, amendment or replacement of the BEE strategy; advise on draft transformation charters if requested to do so; and facilitate partnerships between organs of state and the private sector that will advance the objectives of the Act. Pursuant to the Act and the Strategy, BEE codes of good practice were circulated in 2005 and came into effect in February 2007.

BEE elements and scoring

A key element of the BEE strategy (and the law) was the scorecard, according to which firms would be evaluated for the purpose of assessing the degree of BEE compliance. The scorecard has 7 elements: ownership, management control, employment equity, skills development, preferential procurement, enterprise development, and socio-economic development. Each element is scored against a benchmark, and the different elements are combined to arrive at an overall score, along the following lines:[3]

Table 1.A1.1. **National BBBEE scorecard**

Scorecard element	Weighting	Targets
Ownership	20	25%+1
Management control	10	40-50%
Employment equity	15	43-80%
Skills development	15	3% of payroll
Preferential procurement	20	70%
Enterprise development	15	0.375% of turnover
Socio-economic development	5	0.125% of turnover
Total BBBEE points	100	

Scores for each element are calculated as a ratio of the actual situation (*e.g.* 12½ per cent black ownership) to the target (25% + 1 vote, for ownership). This score (in this example, 50%) is then weighted and the weighted scores added up to get an overall total score. Enterprises are grouped into different categories of contributors to BEE, with a score of more than 65% being sufficient to be classified a good contributor.

The act requires the government to apply the BEE criteria, as set out in the scorecard, whenever it:

- Grants a license to engage in a specific regulated economic activity, for example, gambling or mining.
- Grants a concession to a private enterprise to operate an asset or enterprise on behalf of the state.
- Sells an asset or a state-owned enterprise.
- Enters into a public-private partnership.
- Engages in any economic activity.

Apart from this leverage on firms to encourage them to comply with the BEE goals, the BEE Strategy also calls for the formation of partnerships with the private sector, with one possible form of such partnerships being the voluntary creation of sector- and enterprise-based charters. Such charters are to include specific mechanisms to achieve BEE objectives in that sector or enterprise and should provide measurement indicators and targets. Only some sectors and enterprises are expected to develop empowerment charters, especially those continuously engaging the government in contracts, or regulated by the government. In other sectors, voluntary compliance with the spirit of this strategy and, in particular, the implementation of the scorecard approach is to be encouraged.

Progress to date

While the validity of the aims of BEE is not in question, experience with the various initiatives adopted in the 14 years since the end of apartheid to deliver black economic empowerment casts some doubt on whether the means chosen to achieve the ends are the most effective. There is little evidence that broad-based equity has been significantly advanced, despite the costs and likely distortions, and there is considerable evidence that implementation has been very partial.

Of course, while the BEE approach has been pursued for much of the post-apartheid period, the formal BBBEE system only came into effect in 2007. As regards the functioning of the scorecard system, for example, it is therefore still probably too early to arrive at firm conclusions.

The government itself has commissioned studies on the functioning of BEE. Most recently, a group from the University of Pretoria prepared a report for the Presidency, the government, and the Presidential Black Business Working Group to measure progress (see Consulta Research, 2007). That report found that while advances had been made in some areas, especially on black ownership, overall BEE compliance was low: only 20% self-reported full compliance, while nearly twice that number reported "no plan or progress" towards compliance. Also, as of July 2007, nearly two thirds of respondents reported having no BBBEE scorecard. The Director General of the DTI, reporting to parliament in August 2007, said that on non-ownership aspects of BEE covered by the codes of practice more attention was needed, and that in many aspects the private sector was "not coming on board as it should". There was a "confusion and lack of a correct understanding of broad-based BEE" across whole sections of the economy (Sabinet, 2007).

The Consulta Research 2007 study, along with an earlier one and comments and analysis from various quarters all suggest a number of other shortcomings. Notably, there is a strong perception that BEE only benefits a small circle of rich black business people:

only 7.7% of respondents in the 2007 study disagreed with that proposition, for example. Other constraints to compliance cited by respondents include skills shortages, high turnover of black people, and high compliance costs. With regard to this last factor, the codes of good practice are often seen as too complex, especially for owners of small businesses. A related criticism is that BEE may have too many objectives, with goals relating to non-discrimination by gender or physical disability being bundled in with the main aim of undoing decades of racial discrimination.

One further observation is that BEE is excessively focussed on employment equity in existing companies, and not enough on the creation of new ones.[4] A related point is that the risk-reward balance facing potential black entrepreneurs is insufficiently attractive relative to the option of BEE affirmative action positions in the white-dominated corporate sector (Gelb, 2006).The experience to date suggests that care is warranted in avoiding the emergence of an overly complex and burdensome process that commands substantial public resources and unnecessarily distorts markets without yielding widespread compliance. It is likely to be the case that measures such as the promotion of competition and the improvement of basic education will be powerful instruments for broad-based equity and black economic empowerment that can complement and do not rely on the more administrative measures that characterise the BEE strategy.

Notes

1. Such laws included: the Promotion of Equality and Prevention of Unfair Discrimination Act; the Extension of Security of Tenure Act; the Restitution of Land Rights Act; the Employment Equity Act; the National Empowerment Fund Act; the Competition Act; the Telecommunications Act; the Preferential Procurement Policy Framework Act; and the Minerals and Petroleum Development Act.
2. The Act was passed by parliament in 2003 but only promulgated in April 2004.
3. The scorecards used and the targets for elements within the scorecard can differ across sectors. The table corresponds to the version articulated in the Strategy.
4. One comment to this effect was made by Ann Bernstein, Director of the Centre for Development and Enterprise, in an article in the *Mail and Guardian*, 21 September 2007.

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Chapter 2

Reforming goods and services markets in South Africa

This chapter examines the potential role of competition policy in enhancing long-term productivity growth in South Africa. It begins by analysing recent economic performance both in terms of productivity dynamics and trade competitiveness. Different sets of measures indicate that the level of market concentration, albeit decreasing, has remained relatively high. To a large extent, an excessive monopolisation of the economy is a lasting legacy of the apartheid regime, which manifested itself during the period of forced import substitution. While the authorities primarily emphasise market-oriented responses to overcome these distortions, state interference in the economy remains extensive and is widely perceived as a viable development path. Empirical evidence shows unambiguously, however, that South Africa would reap large benefits from increased domestic and foreign competition.

The chapter therefore investigates the role of regulatory and institutional reform in reducing barriers to entry, exit and growth. More precisely, it uses the OECD's methodology to calculate an indicator of Product Market Regulation (PMR) to assess the degree to which government regulation in markets for goods and services promotes or inhibits competition. The overriding conclusions that emerge are that the overall burden of regulation is relatively heavy by OECD standards and that state ownership and interference impose high barriers to entry in many areas. In particular, the lack of competition and uncertain decision-making process in network industries impede their efficient development in terms of productivity and innovation, with negative spill-over effects for the whole economy.

These findings highlight the potential contribution of a competition-enhancing regulatory reform to South Africa's long-term economic prospects. The support for such a policy line, clearly expressed in the Accelerated and Shared Growth Initiative for South Africa (AsgiSA), needs therefore to be reasserted and translated into a comprehensive policy strategy: given the complementarities that exist among different elements of regulatory reform, the creation of a broad, coherent and systematic framework for the conduct of regulatory policy would allow the synergies of product market reform to be reaped.

The role of competition in enhancing productivity

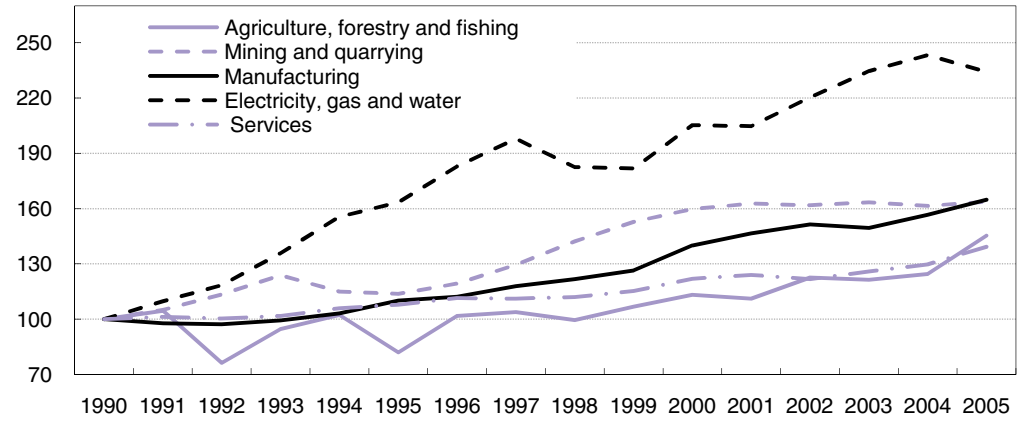
Productivity and export performance: a mixed picture

South Africa's productivity performance over the past two decades has been clearly influenced by the dramatic political developments during that period, with two different patterns of labour productivity growth being observed before and after the transition towards democratic governance. Under the apartheid regime, capital accumulation was the main driver of economic growth, with the capital/output ratio rising from approximately 1.8 in the late 1970s to around 2.5 in the beginning of the 1990s and in parallel an increased specialisation in capital-intensive industries.[1] This prolonged process of capital deepening was accompanied by a very weak growth of total factor productivity (TFP). This poor outcome is not only the result of the subsequent decline in the productivity of over-accumulated fixed capital, but is explained to no less an extent by other important factors like the discriminatory practices in human capital formation, the large public sector involvement in this fixed investment and the negative impact of trade isolation (Mac Carthy, 2005). Looking just at the manufacturing sector, the trend was even more pronounced, with TFP stagnating during the last two decades of apartheid (see Fedderke, 2002). This had far-reaching consequences for the convergence process: although the *level* of labour productivity in South Africa still compares favourably with other emerging economies (given the high capital intensity) the productivity gap with the most advanced OECD countries – when controlled for the structure of the economy – increased markedly between the late-1970s and the mid-1990s.[2, 3]

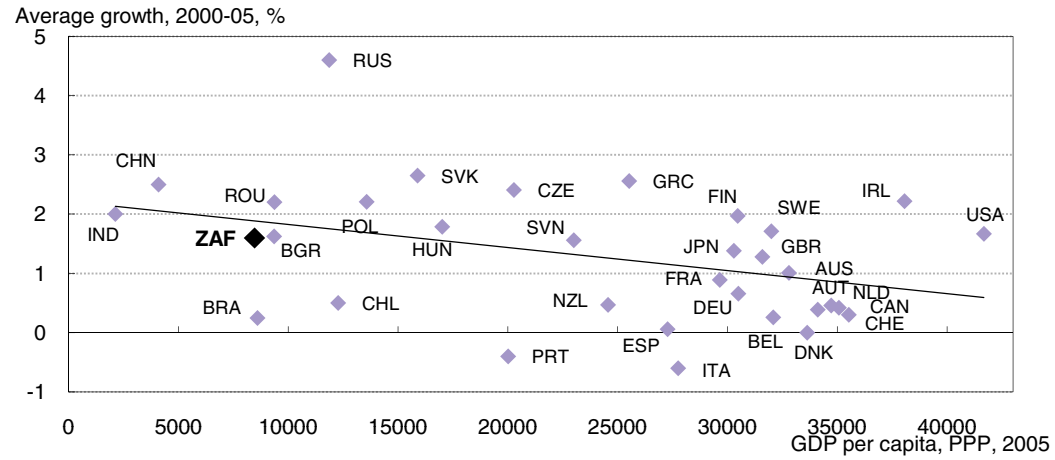
As shown in Figure 2.1.A, the poor productivity gains trend reversed progressively after the mid-1990s and labour productivity accelerated continuously over the last decade. This acceleration was first observed in the mining industries, but has become widespread across sectors in the most recent years. Unlike the previous phase, the higher growth rate of labour productivity was achieved despite a much lower rate of capital accumulation – the capital output ratio for the whole economy has been steadily decreasing since 1995 – and was essentially driven by a more efficient use of the factors of production. TFP growth for the whole economy reached approximately 2% over the period 2000-05 and almost 3% in the manufacturing sector. This is broadly in line with what is required for assuring a rate of catching-up corresponding to South Africa's GDP per capita level (Figure 2.1B). TFP growth also benefited from the rapid accumulation of human capital: although measuring the stock of human capital is fraught with difficulty, standard indicators like the average number of years of schooling in the working age population recorded a remarkable jump over the same period.[4] In the manufacturing sector, however, it is worth noting that capital intensity increased further over the period 2000-05[5] and the rise in labour productivity might still have come *via* factor substitution and some labour-shedding (Mac Carthy, 2005). Moreover, part of the TFP growth in the manufacturing sector is attributable to a more intensive use of production capacities: the capacity utilisation rate in manufacturing reached an historical high level, at 86%, and there is not much room to raise it further (see Figure 2.1C.).[6]

Figure 2.1. **Labour productivity and TFP growth**

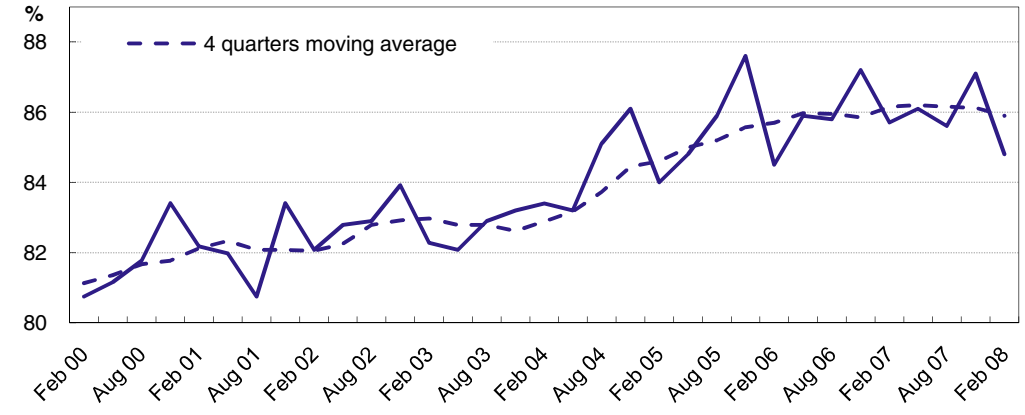
A. Labour productivity by sectors (1990 = 100)



B. TFP



C. Capacity utilisation rate in the manufacturing sector



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Source: OECD calculations based on Statistics South Africa; Productivity SA, Productivity Statistics 2006; *OECD Productivity database*; OECD *Economic Survey Chile 2007*; L. de Mello (2008); OECD, *OECD Economic Outlook No. 82 database* and OECD estimates.

Faster productivity gains did not translate automatically into unit labour cost competitiveness gains, as real wage growth over the period 2000-06 roughly matched the rate of growth of labour productivity (see Figure 2.2A).[7] The moderation of real wage growth since 2006 is moreover essentially explained by the surge in inflation, meaning the relative nominal wage dynamic *vis-à-vis* trade partners did not necessarily evolve favourably. More fundamentally, and as shown in Chapter 1, productivity gains over the period 2002-06 did not keep pace with the combination of the labour cost increases and the relatively fast nominal effective exchange rate appreciation. Given that the level of labour cost relative to value added was not particularly low already in 2002 – according to cross-country comparisons conducted at the firm level – the cost competitiveness factor thus certainly contributes to an explanation of the poor recent export and trade performance.[8]

Cost competitiveness issues are however unlikely to fully account for the very large deterioration of the non-mineral and non-commodity trade balance (from a surplus of 1.4% of GDP in 2000 to a deficit of 8.3% of GDP in 2006). Several recent studies focusing on South Africa's export performance have highlighted the importance of the quality factor and the lack of diversification of the export basket (Alves and Kaplan, 2004; and Hausmann and Klinger, 2006). As already noted in Chapter 1 with the analysis of revealed comparative advantage (RCA), only a few South African manufacturing sectors have reached a degree of international competitiveness that would enable them to export on a significant scale. The car industry, which benefits from a generous support programme (see below), is an exception. Despite the fact that the technology intensity of production and exports is expanding at a relatively fast pace (OECD, 2007d), the overall level of sophistication of exports remains low: the share of high-value-added goods in manufacturing exports to OECD is approximately 2.5%, putting South Africa at a similar level to Ukraine (see Figure 2.2B). South Africa's presence and share of trade in dynamic products has hence been relatively marginal and the country is struggling to compete with developed ones for skill-intensive goods and with Asia for labour-intensive goods (Alves and Kaplan, 2004).

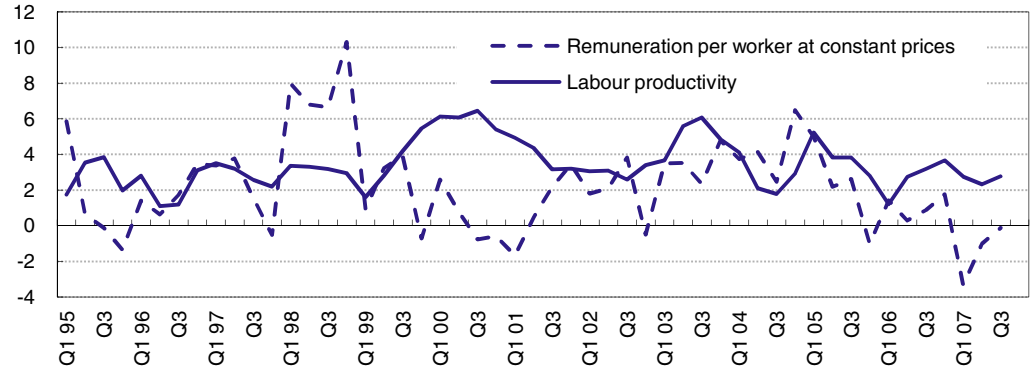
Another way to assess the degree of sophistication of the export basket would consist in comparing the structure of its specialisation pattern with the theoretical one corresponding to a country with South Africa's aggregate level of productivity. Such an indicator has been developed by Hausmann, Hwang and Rodrik (2005). They begin with a measure of the revealed sophistication of each product, which is the weighted average per capita GDP of all the countries that export the good. The weight corresponds to the revealed comparative advantage of each country in that good. This measure of sophistication for each product is then used to measure the sophistication of a country's entire export basket – an indicator called EXPY (Figure 2.2C).[9] If South Africa ranks relatively well in 2004 on EXPY relative to its GDP level, Hausmann and Klinger (2006) argue that this is not only due to an improvement in the indicator itself but to a large extent to a very weak GDP performance before 2000. Moreover, these authors found that the process of transformation in the industrial structure of the economy has been slow and argue that the large degree of "heterogeneity" in the current structure of production is one factor limiting the ability to climb the value added chain and to develop new lines of products.[10]

Increased domestic competition would accelerate productivity convergence

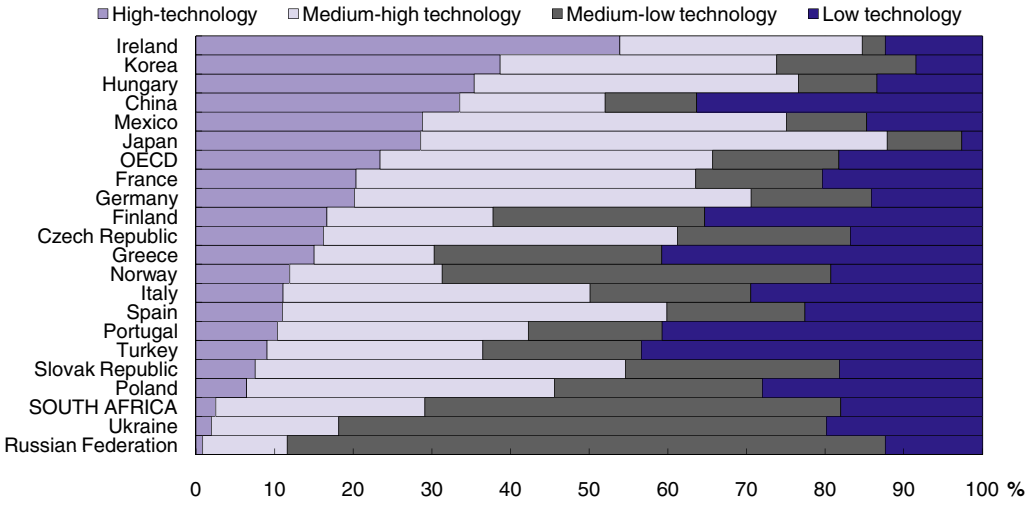
Accelerating the convergence of South African living standards towards those of the more advanced economies will require increasing economic and technical efficiencies – that is the efficiency of resource allocation and the efficiency of production.[11]

Figure 2.2. **Productivity, real wage growth and export competitiveness indicators**

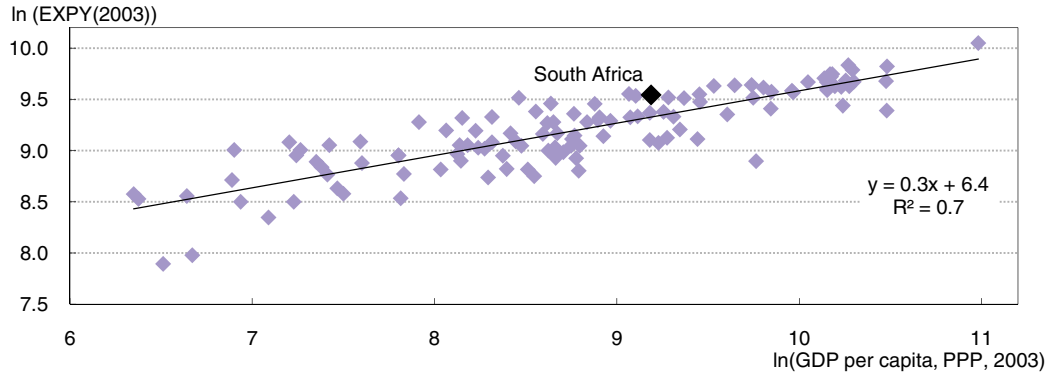
A. Productivity and real wage in non-agricultural sectors (year on year percentage change)



B.Share of high and medium high-technology in manufacturing exports to OECD countries (as a percentage of manufacturing exports, 2004)



C. Relationship between per-capita GDP and EXPY[1], 2003



StatLink http://dx.doi.org/10.1787/406471352244

1. EXPY is a measure of the sophistication of a country's export basket developed by Hausmann, Hwang and Rodrik (2005).

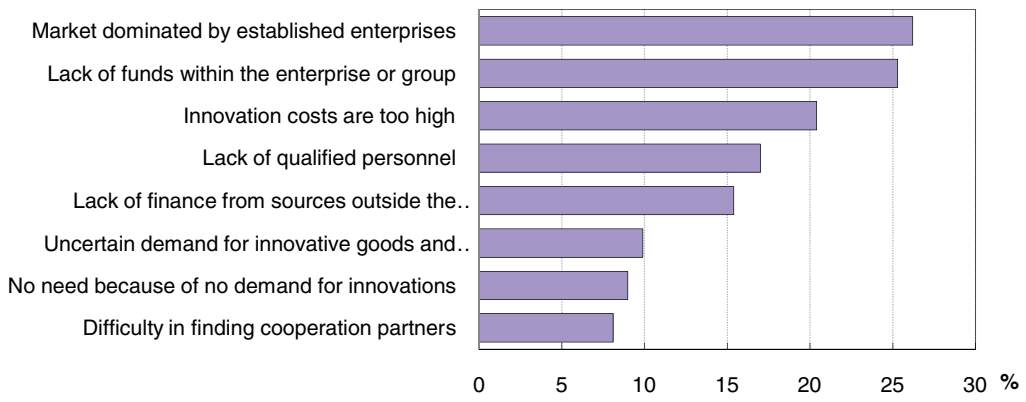
Source: South African Reserve Bank database; OECD, *STAN Bilateral Trade database* 2006/I; OECD calculations based on OECD *ITCS database;* and Hausmann, Hwang and Rodrik (2005).

Strengthening competition can contribute a great deal to the achievement of both of these ends. Robust competition in product markets is shown to improve firms' performance, *via* the stimulation of capital deepening, innovation and better corporate management (see Nickell, 1996; Blundell *et al.*, 1999; or Aghion and Griffith, 2005a). The effect of competition on productivity is theoretically ambiguous, as the possibility of extracting a certain rent may provide a powerful incentive to innovate. Empirically, however, this effect is found to be dominated by the positive effect on productivity of close competition and entry threat. This aggregate positive impact proves to be stronger for firms/countries not far from the technological frontier, which could suggest that, at the macroeconomic level, increased competition might play a potentially less important role in improving global performance for emerging economies.[12, 13] Several studies done in middle-income countries have nevertheless led to similar results as for OECD countries. In particular, in countries where the industrial structure was characterised by a high degree of concentration – typically transition economies from the former communist bloc – the positive impact of domestic and foreign competition on productivity growth is found to be relatively strong (see OECD, 2006a; or OECD, 2007c).

There are a few studies that have examined the relationship between concentration and productivity in South Africa. Using Rosenbluth indices as a measure of competitive pressures in the manufacturing sector, Fedderke and Szalontai (2004), and Fedderke and Naumann (2005), found respectively that increased concentration is detrimental to output growth and investment.[14] Aghion *et al.* (2007) obtained a strong negative effect of price-cost margin (an inverse measure of product market competition) on productivity growth: a 10% reduction in markups in the manufacturing sector would increase its productivity growth by 2 to 2.5% a year. Their results hold consistently for two distinct measures of the Lerner index and for three different datasets.[15] They also found that the relation between competition and innovation efforts has an inverted U-shape form. Their findings make it possible to conclude that most of South African firms/sectors are located on the upward-sloping part of the curve, where productivity increases with competition. Not surprisingly then, enterprise surveys point to anti-competitive barriers and practices as a major impediment to innovation (Figure 2.3).[16]

Figure 2.3. **Highly important factors that hampered innovation**

Percentage of enterprises



Source: Innovation Survey 2005, Human Sciences Research Council South Africa.

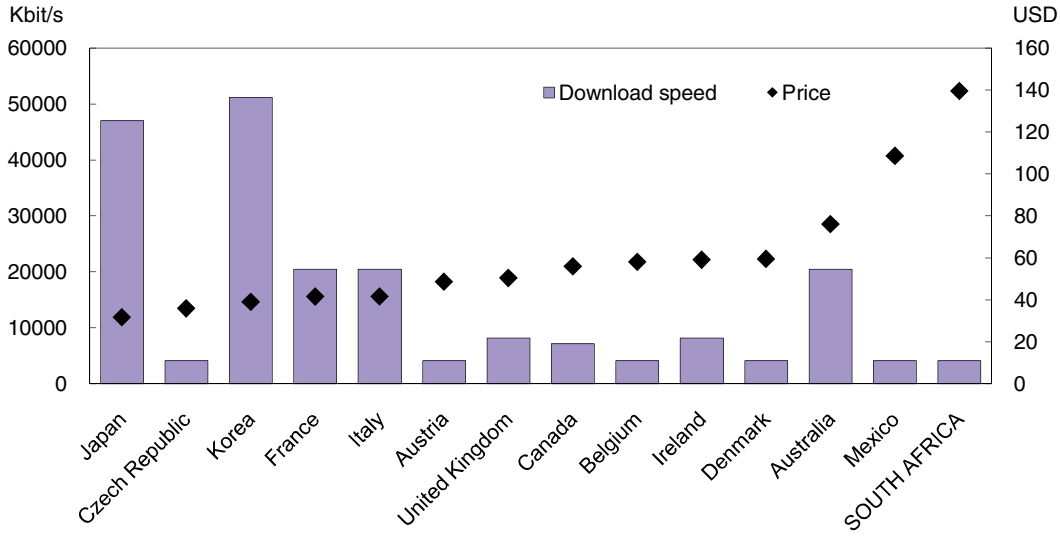
The potential benefits of reducing anti-competitive barriers are therefore likely to be large for South Africa, as the level of competition in product markets is found to be relatively weak overall. Obviously, high concentration is in part the legacy of history: under apartheid, the product market was characterised by huge distortions and has been shaped by policies of monopoly concessions, protection of incumbents from foreign competition and state support to key sectors.[17] The lack of competition was magnified by the concentration of ownership and the disproportionate influence of conglomerates.[18] Although measuring competitive pressures in a robust manner is fraught with difficulties, linked to the paucity of data at a sufficiently disaggregated level, empirical evidence generally confirms high market power of insiders. High concentration prevails in many key industries producing intermediate goods, such as steel, cement and chemicals, which translates into higher input costs.[19] Using Rosenbluth and C5% indicators of horizontal concentration in the manufacturing sector, Fedderke and Naumann (2005) found that the South African manufacturing sector was characterised by high concentration throughout the period 1976-2001. The C5% occupancy rate decreased substantially in the late 1990s in the vast majority of sectors, however (Table 2.A1.1 in Annex).[20] Studies examining the magnitude of price-cost margin both at the industry and firm level – an indicator that should theoretically give a better sense of "exercised" market power – also point to an unusually low level of competition in South Africa, albeit increasing slightly.[21]

While high concentration in the manufacturing sector inhibits its own overall performance, it is important to highlight that the competitiveness of the tradable sectors depends to no small extent on the efficiency of the non-tradable sectors on which they rely for services and other inputs. In other words, weak competition along the different links of the value-added chain might in the end translate into strong negative cumulative effects. In particular, there is growing evidence that network industry liberalisation brings large benefits to the manufacturing sector.[22] In South Africa, much remains to be done in this area: the electricity and freight transport sectors are both dominated by a state monopoly and the telecoms industry has an oligopolistic structure where the vertically integrated – and partially privatised – incumbent operator dominates the market (see Annex 2.A3). The case of the transport company Transnet is particularly striking, as this public company groups together several network monopolies (rail freight, ports infrastructure and pipelines). Weak competition throughout the state-dominated sectors has translated into higher cost for firms and citizens: in the telecom sector, for instance, the monopoly in the fixed line segment has led to a situation where prices for domestic and international communications are extremely high by world standards (see Figure 2.4), while in transport the cost of trading across borders – in particular shipping goods from and to South African ports – is identified as a major barrier for businesses (World Bank, 2007).[23] Growing concerns over an insufficient level of competition in the retail banking sector, which may mechanically translate into higher costs of borrowing, have been expressed more recently. This has a potentially non-negligible effect on SMEs' development.

The opening-up of trade has contributed to increased market discipline

South Africa's progressive reintegration in international trade since the mid-1990s has been a major achievement. Following decades of protectionist trade policy and import controls during the apartheid era, trade liberalisation was viewed as a key component for stimulating economic growth. It was part of the government's national development strategy and the process was spurred by the Uruguay Round of trade negotiations and,

Figure 2.4. **Broadband advertised speed and monthly subscription price**
xdsl, October 2007



StatLink http://dx.doi.org/10.1787/406512810771

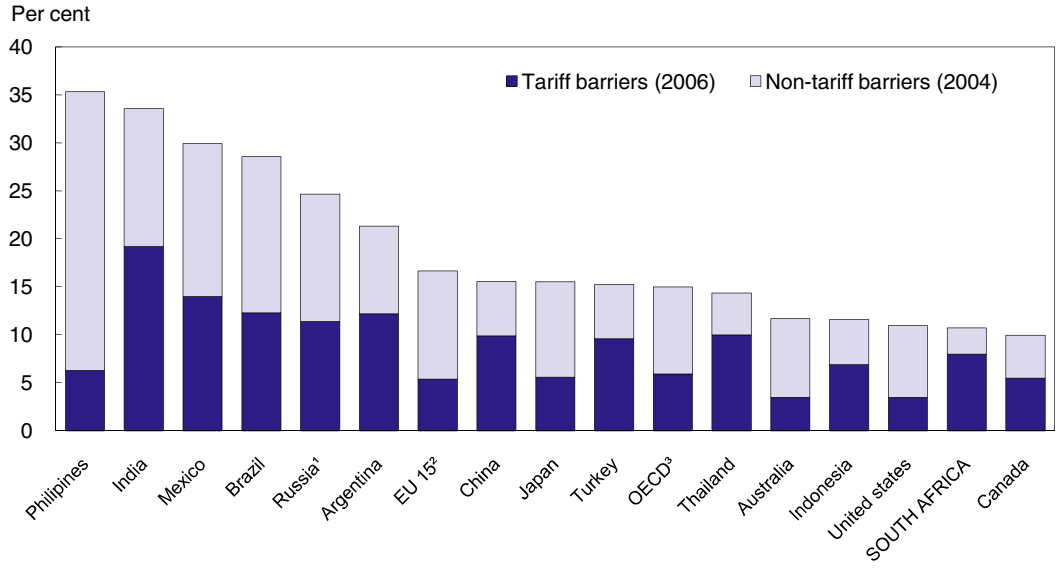
Source: OECD Broadband statistics and national sources.

subsequently, World Trade Organisation (WTO) accession in January 1995. South Africa committed to an initial five-year phased programme for rationalizing the complex and distorted tariff regime. Considerable progress has been made in eliminating quantitative restrictions, reducing the number of tariff lines and rates, reducing the number of non-*ad valorem* tariffs and also increasing the share of bound tariff lines.[24, 25] While the simple average Most-Favoured-Nation applied tariff rate exceeded 20% in the early 1990s, it stood at approximately 8% in 2006 (see Figure 2.5). This average value compares well with other emerging economies and reflects the fact that, in some areas, South Africa's programme of tariff reduction was more ambitious than what was required by WTO and, also, that South Africa negotiated WTO entry as an advanced economy.

Since the early 2000s, however, more gradual adjustments have been made in the tariff structure and the latter is still characterised by a relatively high level of complexity and dispersion.[26] In particular, sectors and product lines that are considered sensitive continue to be quite heavily protected.[27] Moreover, the tariff regime imposes in general higher duties on consumer goods than on intermediate goods and this translates mechanically into higher effective rates of protection (ERP).[28] An analysis of ERP across sectors seems indeed to indicate that important industries continue to enjoy very high levels of protection.[29] The trade distortion might be aggravated in these sectors if coupled with weak domestic competition: in particular, when insufficient competition allows import parity pricing, domestic producers might easily pass the import tariff on to consumers.[30]

Trade liberalisation has been the main engine behind the rapid expansion of trade flows and there is an abundant literature underlining the overall positive effect on economic performance of the opening-up of trade. Edwards and Lawrence (2006) find that the growth in non-commodity manufacturing exports driven by trade liberalisation outpaced imports. Investigating the relation between trade liberalisation and economic

Figure 2.5. **Tariffs and non-tariff barriers**



StatLink http://dx.doi.org/10.1787/406532516817

1. 2005 for tariff barriers data.
2. EU15 minus Luxembourg.
3. OECD minus Korea, Luxembourg and Slovak Republic.

Source: *TRAINS database*, Kee, Nicita and Olarreaga (2005).

growth or productivity, Thurlow (2006) obtains a positive effect. Although the poor appear to have disproportionately carried some of the negative effect of this process, overall they have not been made worse off. A recent OECD study shows that TFP growth in South Africa has been strongly stimulated by trade liberalisation and the reduction in effective rate of protection (OECD, 2008). Increased domestic market discipline is the main channel through which these positive effects are transmitted. In the case of South Africa, foreign competition indeed acted as a powerful force to contain and eventually reduce mark-ups and it largely contributed to the decrease in concentration in the late 1990s. Edwards and Van de Winkel (2005) estimate that a 1% reduction in tariffs led on average to a decrease in mark-ups by around two percentage points in manufacturing. The same conclusion holds when looking at the effect of increased import penetration instead of direct tariffs (Fedderke *et al.*, 2003; or Edwards and Van de Winkel, 2005).[31]

An assessment of product market regulation in South Africa

The weak level of competition in South Africa highlighted in the previous section calls for a thorough examination of anti-competitive practices, barriers to market entry or exit and the overall regulatory environment. Regulatory reform can indeed make a significant contribution to reducing barriers to entry and removing obstacles to firms' growth once they have entered the market. Recent empirical work shows unambiguously that restrictive product market regulation (PMR) impedes productivity growth through a variety of channels: these channels include the direct negative effect of weak competitive pressures on both market efficiency and technical efficiency, as well as its indirect negative impact on innovation and *via* the slowdown in the diffusion of new technologies (OECD, 2007a; Nicoletti and Scarpetta, 2003). This literature also indicates that the gains

obtained from a pro-competitive regulatory reform are potentially very large and even higher for countries far from the technological frontier (Conway *et al.*, 2006). While it is fair to recognise that, according to international benchmarking exercises,[32] the regulatory environment in South Africa compares relatively favourably with other emerging economies, comprehensive regulatory reform would play a key role in addressing economic challenges identified in *AsgiSA*: stimulating competition, reducing barriers to business and market entry, and raising the investment rate and FDI.

The regulatory framework in South Africa: a comparison with OECD countries

With these considerations in mind, the OECD Secretariat undertook in late-2007 an assessment of South Africa against the PMR indicators developed by the OECD Economics Department in recent years.[33] All OECD economies are covered by those indicators, plus a limited but growing number of other comparators in emerging economies. The indicators are based on a detailed questionnaire concerning regulatory policy, which is sent by the Secretariat to participating governments. The questionnaire is divided into three broad groups: domestic barriers to entrepreneurship, state control and barriers to trade and investment. (Annex 2.A2 describes the PMR review process in more detail and presents the full results for South Africa). The following broad conclusions emerge from the PMR review:

- The level of product-market regulation is higher than that of any OECD country in 2003, except Poland (Figure 2.6). It is similar to the level of regulation observed in India and Ukraine (OECD, 2007b; OECD, 2007c), but the regulatory burden in South Africa appears to be higher than in Brazil or Chile.
- The burden of product-market regulation is well above the OECD average with respect to all three major components of the aggregate indicator.
- There are high barriers to entry for both domestic and foreign firms. These barriers are particularly severe in sectors characterised by significant state ownership.
- There is also room for improving the regulatory process. The South African initiatives currently taken to introduce Regulatory Impact Assessment (RIA) may represent an important step forward.

In the analysis of the specific PMR indicators that follows, two important caveats should be borne in mind. First, the PMR questionnaire does not take into account the specificity of Black Economic Empowerment (BEE) policy mentioned in Chapter 1, and is by its nature not well equipped to evaluate the regulatory impact of the BEE scorecard. Such an attempt would require different analytical tools and a distinct approach. Second, this benchmarking exercise represents an assessment of formal regulatory policy settings and does not provide any information about the way these policies are implemented. In some cases, an improvement in institutional and administrative capacities in enforcing formal regulatory policies might therefore achieve much more than a reform of these formal policies itself. This applies in particular at sub-national levels: municipalities' regulations and charges are often pointed out as the most troublesome type of regulations (SBP, 2005).[34]

A closely linked but different issue relates to instability of the regulatory framework: high regulatory uncertainty may indeed prove as problematic as the regulatory burden, in particular if combined with weak administrative capacities. In South Africa, surveys of entrepreneurs show that almost one fifth of business people consider policy uncertainty as a major or very severe constraint to growth (World Bank, 2006). The introduction of the Minerals and Petroleum Resources Act in 2004, which made the state custodian of all

mineral assets, has probably been the most emblematic such case. The Act brought the legislation into line with common international practice but, however well intended, this change in the regulatory regime has created an uncertain and unpredictable environment for investors. These uncertainties and delays in obtaining conversions had a major negative impact on investment.[35]

Figure 2.6. **Aggregate product-market regulation indicator**

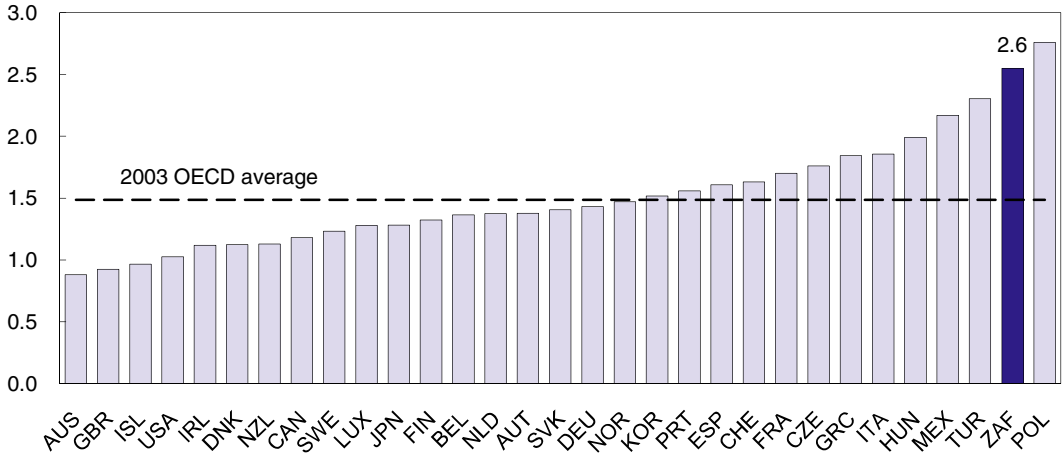


Table 2.1. **Summary indicators of product-market regulation**

	OECD			South Africa	Brazil	India
	Average	Low	High			
Product-market regulation	1.5	0.9	2.8	2.6	1.9	2.9
State control	2.1	0.6	3.6	3.2	2.5	3.5
Barriers to entrepreneurship	1.5	0.8	2.5	2.2	1.3	2.6
Barriers to trade and investment	1.0	0.3	2.4	2.3	1.9	2.6

State ownership and intervention act as a major barrier to entry

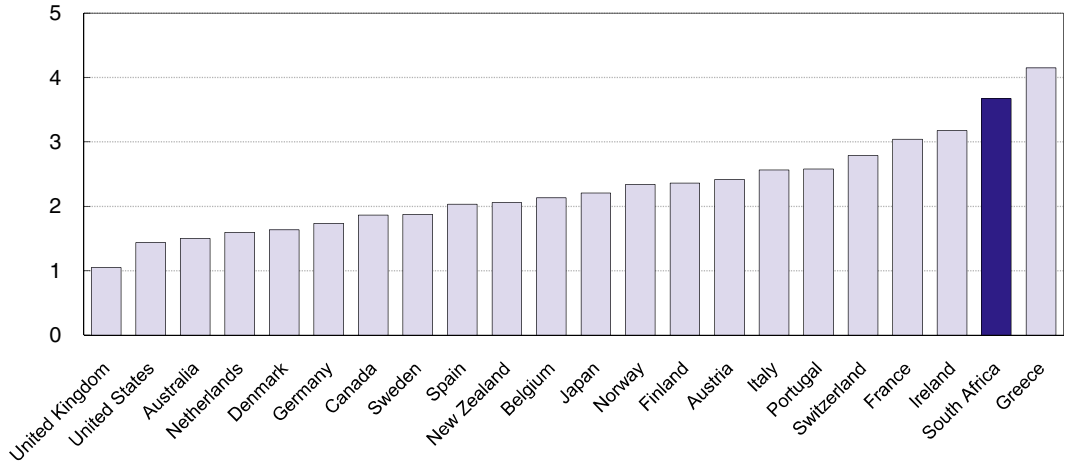
The state remains an important player in the economy, not only through regulation and the provision of public goods and services, but also *via* its ownership of substantial productive assets. On the official data, roughly 43% of the country's capital stock was in the hands of the state and municipal authorities at the end of 2006. Not surprisingly then, South Africa gets a very high score for the PMR indicators on the size and the scope of the public sector (Figures 2.A2.2 and 2.A2.3). State-owned enterprises (SOEs) alone control around 19% of the capital stock against 22% in 1995 and 20% in 2000. These high figures are to a certain extent related to the fact that the state's holdings are concentrated in capital-intensive sectors such as mining, defence industries, the power sector and utilities. The moderate decline in this share also indicates a slow pace of privatisation over the most recent period.

Competition is South Africa suffers as a result of the relatively large share of output that is generated in highly monopolised and vertically integrated network industries. While large economies of scale naturally exist in industries such as energy, railway transport, port infrastructure and telecommunications, the contestability of these markets is limited further by the institutional setting and various anti-competitive practises. First of all, high legal barriers to entry exist in precisely these sectors and this is reflected in the poor score on the corresponding PMR indicator (Figure 2.A2.12).[36] Publicly-owned firms may, moreover, be given an exemption from the general application of the competition law under specific circumstances.[37] Second, the conflict of interest between the state's role as regulator and its role as owner is clearly an aggravating factor. On many different occasions, state interference has helped entrench the dominant position of the incumbent operator either by protecting certain markets or by restricting the choice for licensing.[38] For example, although the authorities have renewed their commitment to local loop unbundling, the partially state-owned monopoly was given until 2011 before its competitors may benefit from infrastructure access. Finally, the high degree of vertical integration makes it particularly difficult for new firms to enter or develop in the most competitive segments of these markets and also puts regulators in a difficult position.[39]

This feature of the South African product market is not surprising, given the higher degree of complexity of regulatory policies in network industries. Many OECD countries face today similar challenges and are still lagging behind best practice with respect to liberalisation of non-manufacturing sectors (OECD, 2007a). With this in mind, the OECD Economics Department has recently developed specific tools to measure restrictions to competition in the seven following industries: electricity, gas, air passenger transport, rail transport, road freight, postal services and telecommunications (see Conway *et al*., 2006).[40] This indicator – specific to energy, transport, and communications – complements the aggregate PMR described above:[41] it includes measures of public ownership, access to markets for third parties, the market structure and the degree of vertical integration.[42] Applied to South Africa, this industry-specific indicator reveals that the level of regulatory restrictiveness is well above the OECD average (Figure 2.7). There is, however, strong heterogeneity across sectors: South Africa performs well in the road transport sector, is about average in the gas industry and postal services, but among the worst performers in the telecom, rail freight and electricity sectors.[43] Moreover, it is worth mentioning that port infrastructures, which are also part of a vertically integrated monopoly in South Africa, are not taken into account in this benchmarking exercise.

It is often argued that a positive counterpart of this limited competition lies in the possibility for the South Africa government to use monopolised state-owned enterprises (SOEs) as an arm for development: letting the monopolies support the financing of these social objectives naturally gives an incentive for the state to protect their dominant position. Confronted with the urgent need to deliver better services to the whole territory and to accelerate convergence of poorer and disadvantaged areas, this temptation is understandable. In many respects, there have been remarkable achievements, like the electrification of millions of new homes in a relatively short period of time. However, it is not clear why other consumers of these services should finance such goals, which would be best-served with social policy instruments. Heavy-handed approaches might indeed bring significant costs for the economy in terms of loss of efficiency and competitiveness, on top of the direct cost for the consumers of overpricing. The cost of the inefficient allocation of resources and, in some cases, misguided universal service requirement might

Figure 2.7. **Product market regulation in energy, transport and communication**
Scale of the indicator is 0-6 from least to most restrictive of competition[1]



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1. 2003 except for South Africa, 2007

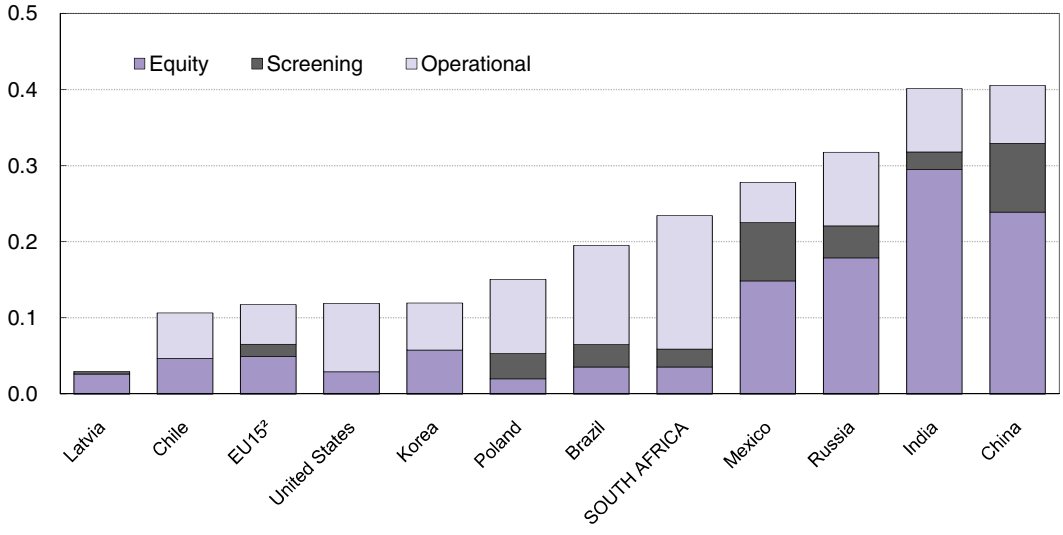
Source: OECD.

prove very large *ex post*. In the late-1990s for instance, the incumbent telecoms operator was given a large mandate to roll out new connections. Whereas Telkom managed to roll out 2.8 million lines over the consecutive five-year period, about 70% of these new lines were disconnected because of non-payment following price increases. The mobile market has been on the other hand liberalised since 1994 and the industry expanded rapidly – with a market penetration now exceeding 50%.

Regulatory barriers for foreigners are also high, but conditions for start-ups are easier

Would-be foreign entrants are facing similar obstacles. The PMR indicator for barriers to foreign ownership shows South Africa not far above the OECD average (see Figure 2.A2.14), but severe restrictions apply in network industries. For example, stringent requirements are in place for investment in the energy sector, in the international bandwidth arena or domestic air transport.[44] This diagnosis is in line with the OECD's FDI restrictiveness indicator, which is based on a more comprehensive methodology than the PMR sub-indicator. More precisely, this indicator covers not only equity investment limits, but captures also operational restrictions, as well as the screening procedures for the investment to take place. Again, South Africa compares well with respect to ownership restrictions, but performs poorly for management and human resources limitations (Figure 2.8). With respect to ownership restrictions, multinationals are in principle exempted from the requirement of transferring an equity share to a BEE group -although this exemption does not apply to all sectors.[45] More fundamentally, the detailed FDI restrictiveness indicator is to some extent capturing the impact of BEE policy on human resources management. An integral part of the Black Economic Empowerment Act of 2004 is the balanced scorecard, which measures companies' empowerment progress in several areas, like management at senior level, employment equity and human resource development. BEE compliance to such criteria is then a key element taken into account for

Figure 2.8. **FDI restrictiveness index**[1]



StatLink http://dx.doi.org/10.1787/406582444677

1. This aggregated Index covers the following sectors and sub-sectors: Business (legal, accounting, architectural, and engineering services), Telecommunications (fixed line telephony and mobile telephony), Construction, Distribution, Finance (insurance and banking), Tourism, Transport (air transport, maritime transport and road transport), Electricity and Manufacturing.

Source: Koyama and Golub (2006).

public procurement of goods and services and also licensing (see Annex 1.A1 for a detailed description of BEE policy).

Similarly, regulatory barriers that apply to trade appear to be more of a constraint than direct tariff barriers, as shown by the corresponding PMR indicators (see Figures 2.A2.15 and 2.A2.17). This reflects among others the fact that the principle of national treatment in respect of regulatory policy is not enshrined in law. According to a survey conducted by the World Bank, trade and customs regulation is seen as a serious obstacle for their operations for around 16% of enterprises, slightly ahead of anti-competitive practices (ICA, 2006).

One area where South Africa ranks relatively well concerns the procedures for starting a new business. The country ranks below the OECD average on the start-up restrictions indicator for both public limited companies and sole proprietors (Figures 2.A2.9 and 2.A2.10). This primarily reflects low costs for registering a new business and, also, an effort to reduce the number of public bodies that an entrepreneur needs to contact during this early phase. Still, there is a gap between the theoretical duration for registration and the actual one, although creating a "one-stop shop" registration process would improve the situation. In any case, it is anti-competitive practices rather than regulations on starting a business that may lead very small businesses to operate in the informal sector.[46]

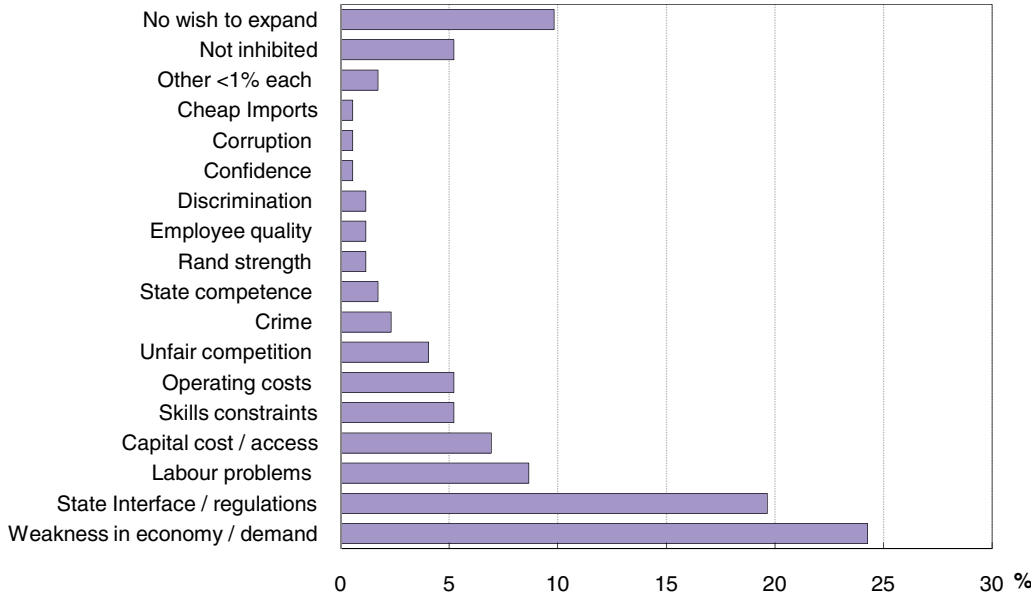
Excessive administrative burden impedes business growth and SMEs development

According to the PMR indicators, barriers to entrepreneurship in South Africa are high relative to OECD countries. With formal legal barriers to entry essentially concentrated in network industries, these barriers reflect an excessive administrative burden for most business activities. A survey of 1 140 South African firms (Strategic Business Partners, 2005)

confirms that the state's interface with business is one of the major factors inhibiting business growth, ranked second after "weakness in the economy/lack of demand" (Figure 2.9).[47] Particularly problematic is the regulatory compliance complexity, far ahead of direct costs associated with registration, licensing or payments of various charges and fees. This is a consistent finding from different studies of the regulatory framework: using three independent firm-level surveys, Rankin (2006) also shows that administrative burden and time costs associated with regulations is much more of a concern for entrepreneurs than monetary, transaction or efficiency costs.[48] Apart from the direct red tape cost, this administrative burden represents a potentially non-negligible welfare loss: a number of cross-country studies found that removing administrative bottlenecks and improving the transparency of regulation could have a significant positive impact on the overall performance of the economy through a variety of channels including increased foreign direct investment (Kurtzman *et al*., 2004).

Figure 2.9. **Factors inhibiting business growth**

Percentage of responses



Source: SBP, *Counting the cost of red tape for business in South Africa*, Figure 3.1.

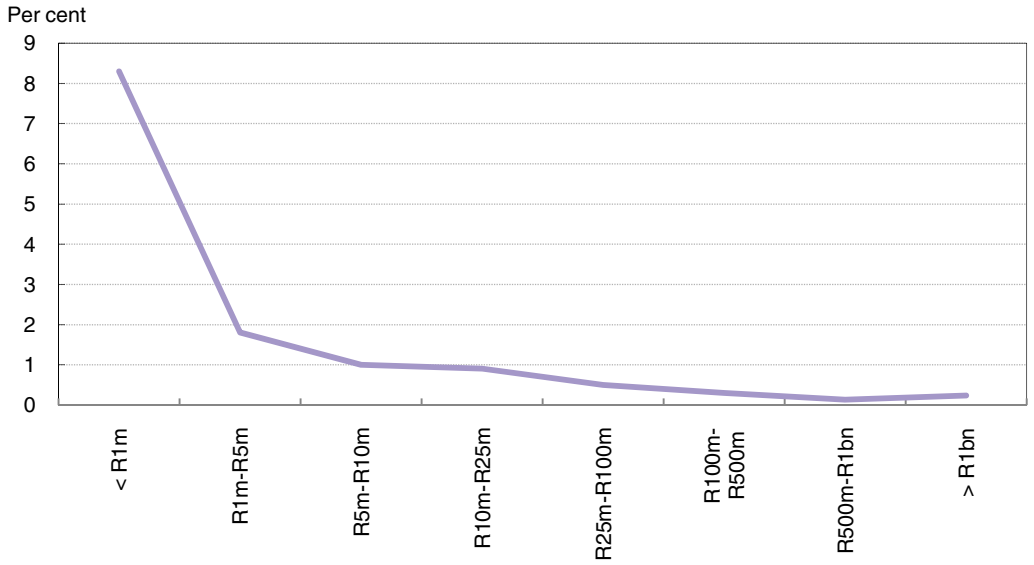
The results of these surveys point to substantial transaction costs for firms coming from the build-up of regulations, thereby reducing the efficiency of product markets. There is however no government-wide programme aimed at reducing administrative burdens on enterprises and citizens, or at reviewing and reducing the number of licenses and permits required by the different levels of government. The central government does not even currently have a clear picture of what that number is. These weaknesses are reflected in a number of PMR indicators concerned with the process, rather than the substance, of regulation. In particular, South Africa performs poorly on the simplification of rules and procedures and communication indicator (Figure 2.A2.7). The score on this specific indicator is essentially linked to the complexity of regulation, whereas communication does not seem to be much of an issue: procedures for providing

information about the enforcement and operation of regulations are well established and government policy imposes specific requirements in relation to transparency of information.[49] Another area where there is room for improvement concerns the nature of the regulation itself: to a large extent the authorities have resorted to coercive regulation (as opposed to incentive-based regulation), both in general and in specific sectors (see Figure 2.A2.6). In other words, there is in some spheres the need for better regulation, not simply less regulation.

A common initiative that could do much for reducing red tape would be the streamlining of procedures for getting licenses and permits, another area where South Africa ranks amongst the most regulated OECD members (Figure 2.A2.8). Although there is a plan to introduce single contact points for providing information on notifications and licenses in the near future and, even more important, for applying for the required licenses and notifications, such "one-stop shops" are not in place yet. Their implementation could in turn help to improve the coordination between relevant government authorities, as the complexity of the regulatory environment often stems from the accumulation of regulations and administrative requirements from different departments collecting sometimes the same information. For example, the agro-processing industries are subject to regulation by no less than seven different government bodies or agencies (SBP, 2006).[50] Another tool for simplifying government administration would consist in adopting the principle of "deemed clearance" under which licences are issued automatically if the relevant office does not act by the end of a statutory response period.[51]

Such steps would be particularly beneficial for SMEs, which bear a disproportionally high regulatory burden with respect to their size: as indicated in Figure 2.10, the ratio of annual regulatory compliance cost to turnover peaks dramatically for small firms. This is unsurprising given the potential economies of scale in such an area, but the curve appears to be particularly steep in the case of South Africa. This indicates that red tape might represent a powerful obstacle for SMEs to develop and expand their activities, even if they had the potential to do so. According to the same SBP study based on a large firm survey, the total recurring compliance costs for the formal sector would amount to around 6.5% of GDP, which is much higher than typical estimates found in OECD countries.[52] Interestingly, the use of external professionals represents one third of these expenses, which once again is a good indicator of the overall complexity of regulation.[53] Setting quantitative targets to gain traction in reducing these costs would be an important step forward (OECD, 2006). It is worth mentioning that the measure of the compliance costs reported in the SBP's survey not only covers product market regulation but also labour regulation, which is often perceived, together with tax regulation, as a particularly troublesome area for businesses.[54] This high cost of compliance might in turn act as a powerful barrier for informal entrepreneurs to move into the formal economy: according to a survey of informal entrepreneurs, the reduction in regulatory barriers, easier permits and less state interference is considered by one third of the respondents to be the "most needed assistance expected from government".[55]

Figure 2.10. **Regulatory compliance cost as a percentage of turnover**
Per cent



Source: SBP, *Counting the cost of red tape for business in South Africa*, Figure 4.6.

The role of institutional and regulatory reform in enhancing competition

Despite considerable progress in liberalising some areas and sectors of the economy, which have brought visible benefits, the previous analysis clearly indicates that the level of regulation in South Africa remains on average restrictive when compared with best OECD practices. A comprehensive approach to reform would still require a better enforcement of the general competition laws, the adoption of pro-competition regulatory policies and greater openness to foreign trade and investment. More fundamentally, changing the course of policies that lead to high state interference in the economy would be key to improving product and services markets performance in South Africa. Indeed, the poor scoring on regulatory process reflects in part the failure to allow more room for market solutions, as well as some co-ordination problems among different state agencies. Widening the scope for market-driven approaches to economic issues thus represents one of the basic and key challenges of regulatory reform.

Strengthening the competition policy framework

A sound and credible competition policy framework is a vital ingredient in ensuring a dynamic and growth-enhancing business environment. In the immediate aftermath of the political regime change, the improvement of competition policy was particularly high on the government agenda, as there was an urgent need to correct the inherited distortions generated by the over-concentration of economic power and markets. With this objective in mind, a much-improved competition law was adopted in 1998, which set up a new institutional framework (see Box 2.1). The 1998 Competition Act is broadly in line with international norms and incorporates many of the same principles that are found in OECD jurisdictions (OECD, 2003). The competition authorities (the Competition Commission and the Tribunal) are statutorily independent and, in contrast to their predecessor the Competition Board, use much more transparent and elaborate procedures for evaluating

Box 2.1. **The competition law and the competition authorities**

The legislative basis for competition policy in South Africa is the "Competition Act", which was adopted in 1998 to replace the much-criticised 1979 law on "Maintenance and Promotion of Competition Act". The competition law sets up three independent institutions: the Competition Commission, which is the executive body in charge of identifying and investigating anti-competitive practices; the Competition Tribunal which adjudicates competition matters presented by the Competition Commission; and the Competition Appeal Court (CAC). Whereas the Commission deals with small-scale mergers and exemption, the Competition Tribunal is the first instance decision-maker about large mergers. Decisions of the Competition Tribunal can only be appealed to the CAC.

The Act focuses on two main areas, mergers and prohibited practices. The latter are separated into restrictive practices – related either to horizontal or vertical agreements – and abuse of dominant position. The notion of dominance relates to both market share and market power, with similar concepts as found in the EU's definition. Different concentration thresholds are applied for determining dominance. A firm is *de facto* dominant if its market share exceeds 45%. With a market share between 35% and 45%, a firm is presumed to be dominant, but not considered as such if it shows that it has no market power. Below that threshold, an abuse of dominance case corresponds to exercised market power. The notion of unfair competition is absent in the competition law.

The Competition Act applies to all economic activity, and state-owned enterprises are in principle subject to it. In an industry or sector where other regulatory authorities are involved in competition policy matters, however, concurrent jurisdiction is a recurrent issue. In these cases, the law does not provide any explicit rules to demarcate overlapping jurisdictions, but instructs the Competition Commission and the regulatory bodies to conclude agreements and define procedures for cooperating and avoiding duplication of responsibilities. This concerns important sectors of the economy, like energy, telecom, air transport, broadcasting and the banking sector. Memoranda of understanding were concluded with the Independent Communications Authority of South Africa (ICASA) and the National Energy Regulator.

In practice, it is however extremely difficult to clearly distinguish between competition and regulation. Such distinction appears to be particularly problematic in the telecom industry, where complex technical regulations (on spectrum use for instance) have a direct impact on competition. In this sector, jurisdictional overlapping is further complicated by some provisions of the 2005 Electronic Communications Act, which states that ICASA would deal with abuse of dominance and vertical relationship. The regulator and the Commission are now jointly working on a new memorandum to improve their cooperation. In such an uncertain regulatory framework, Telkom has contested the jurisdiction of ICASA in the past and is now contesting that of the Competition Commission. The latter matter has been brought to the High Court.

Source: OECD (2003), Competition Commission (2007).

cases (Roberts, 2004). In almost ten years of operation, it is widely recognised that the Commission and Tribunal have managed to improve the environment for competition. Nevertheless, much remains to be done in order to curb market power in a large number of sectors.

To begin with, there is still scope for improving and amending the Act itself. The general purpose of the law is to promote and maintain competition, but the Act specifies a

range of secondary policy objectives that might potentially enter into conflict with it and prove inconsistent with each other. These broader and multiple goals assign to the competition law a role in promoting employment, expanding opportunities for South African firms to participate in world markets and supporting the growth of black-owned enterprises.[56] Until now, economic efficiency has been the overriding principle in the evaluation of cases, but there is a risk of confusion and pressure on the competition authorities to review their prioritisation in favour of other public interest issues – in particular if policies and instruments which are supposed to address these issues in the first place do not meet expectations. There is thus a need to clarify the role of each policy instrument. With respect to Black Economic Empowerment, the objective to achieve faster development of small and medium-sized black businesses represents a well-intended and important policy priority. The instruments used to achieve this goal should, however, be carefully monitored: reducing anti-competitive barriers would probably turn out to be a more effective way of integrating black entrepreneurs than the creation of complicated regulation like the BEE scorecard or attempts to divert competition policy from its core focus.

Strikingly, the terrain on which competition law is applied does not fully reflect the need to provide more resources to address concentration. Merger control has so far constituted the pre-eminent activity of the competition authorities, while the number of cases concerning abuse of dominance or other prohibited practises appears to be relatively limited. Over the period 2006-07, the Commission was notified of more than 400 mergers, whereas it has initiated only 6 new investigations for prohibited practices on top of about 25 such ongoing cases. This imbalance reflects first the rigorous administrative standards required for merger evaluation and second the fact that investigation is simplified by the process of notifications, contrarily to abuse of dominance cases.[57]

In this context, increased human and budgetary resources would be welcome, in particular in order to strengthen the enforcement and policy divisions. This is particularly the case as the Commission has already started to take a tougher stance on concentration issues, and has been treating an increasing number of important cases, such as in the steel, agro-business and banking sectors: in August 2006, the Commission has launched a large banking enquiry into bank charges and bank services, with the objective of increasing transparency and competition pressures in the sector.

The capacity for action of the Competition Commission would also be greater if it could, when initiating an investigation, launch a market inquiry in which it could use the same powers it has when receiving complaints. In case an apparent anti-competitive outcome is observed, this would help in identifying the main source/causes behind the market failure. This represents a potentially serious impediment to its action, in particular given the overall weak consumer constituencies (Schwella, 2002). Finally, anti-competitive behaviour is sometimes difficult to detect just because of the poor availability of firm-level data. Competition policy would benefit from a better understanding of horizontal and vertical structures of the markets.

Reforming the regulatory process

The PMR benchmarking exercise shows that reducing barriers to entrepreneurship can potentially generate significant benefits for South Africa. The South African authorities are well aware of the need to reengineer administrative processes and *AsgiSA* rightly identifies the cumbersome regulatory environment as a growth constraint. Implementing a co-ordinated

programme of regulatory reform based on transparency, accountability and efficiency is, however, a complex and time-consuming task. Confronted with similar challenges, OECD governments have often established regulatory oversight bodies with cross-departmental responsibility for regulatory policy (OECD, 2002). OECD experience suggests indeed that regulatory reform is more likely to fail or lead to sub-optimal results if left entirely to ministries or if a fragmented approach is followed. Given the multi-faceted challenges South Africa is facing with respect to product market regulation and the complementarities existing among the different element of regulatory policy, the Australian example of a National Competition Policy might represent an interesting framework to look at: this framework addressed comprehensively many aspects of a pro-competition regulatory reform, including in particular a legislation review, reforms of government businesses and network industries and greater trade openness.[58]

A first important step to improve service delivery to South African firms and thereby limit the transaction and compliance costs of regulations would be to introduce provisions for a systematic assessment of new regulation on a cost-analysis basis. On the initiative of the Presidency and the National Treasury, the implementation of Regulatory Impact Assessment (RIA) has been under study since 2005. A second phase is under way since January 2007, as the Cabinet approved a 2 year pilot project to test the RIA instrument on selected legislative proposals.[59] This initiative has confirmed so far the potential of such an instrument, as long as: *i)* it is inserted early in the regulatory process; and *ii)* interdepartmental coordination is improved. The pilot project also stressed the importance of RIA covering subordinate regulations, which had a tendency in the recent past to expand at a very rapid pace (see SBP, 2005) and of a gradual phase-in at the state level, given the need for administrative capacity-building.

Reviewing existing legislation would also do much to reduce administrative burdens, in particular for SMEs, and would represent an important part of a more comprehensive regulatory reform. Such a review could be integrated as a second stage of the RIA process or, if allowed by sufficient administrative capacities, could be conducted in parallel. For that purpose, the government could draw on other recent well-intended initiatives: the Department of Trade and Industry (DTI) has already commissioned studies to investigate the regulations that impose disproportionately high costs on SMEs and has also commissioned *ex post* assessments of selected legislative acts five years after their adoption.[60] Finally, it is worth noting that the full implementation of RIA could be facilitated by the fact that some authorities, notably the DTI and the Financial Services Board (FSB), are already equipped to address cost-benefit issues in regulation (Business Leadership, 2003).

The decision-making process in regulatory issues also needs to be improved and the uncertainties associated with regulatory reforms reduced. In such a process, the state should not try to do too much. In that respect, the adoption of the new Minerals and Petroleum Resources Act in 2004 is emblematic. Various social objectives have been linked to the conversion of rights such as 40% management by blacks by 2014 and the simultaneous adoption of a social and labour plan (SLP) – which implies some obligations for the mining company in developing infrastructure of communities surrounding the mine and in creating sustainable job opportunities. In the first place, this mix of objectives has been a factor slowing down the process of the mining right reform itself.

Restructuring network industries

There is now solid cross-country evidence that liberalisation policies in network industries have led to higher productivity, better quality and, often, lower prices (see Hoj *et al.*, 2007). South Africa's experience is an unfortunate illustration of this empirical evidence, as the combination of a deficient decision-making process, weak corporate governance and lack of competition has resulted in disruptive infrastructure bottlenecks. Ultimately, the private sector has a crucial role to play in narrowing the infrastructure gap and improving both the operational efficiency and corporate governance.[61] However, ownership change will not necessarily achieve much in those industries characterised by large economies of scale if undertaken without due attention to the market structure and the regulatory environment. In other words, a sound regulatory regime is key to the successful restructuring of these sectors. Nevertheless, there are synergies between privatisation and reforms leading to a strengthening of competition: recent research finds indeed that privatised firms respond faster to competitive pressures than SOEs.[62]

While the Competition Commission and the Competition Tribunal have managed to improve the environment for competition in many domestic markets, they have only limited jurisdiction in the network industries. The interface between the general competition framework and sector regulation is a recurrent issue encountered in the implementation of competition law, but jurisdictional conflicts are particularly cumbersome in the case of South Africa (see Box 2.1).[63] An aggravating factor has been the absence of regulators in the transport industry, while the level of independence and resources of the energy and telecom regulators needs to be strengthened. The current government's plan is to have two new and separate regulators for rail freight and port infrastructure. One might however wonder if a fragmentation of such special bodies should not be avoided and if the integration of sector regulators as special chambers within a super-regulator for network industries would not be a better option, one that would also help to keep regulatory capture in check. In any case, designing a more efficient institutional setting and clarifying respective responsibilities remain priorities. Also problematic and often confusing is the division of responsibilities between the department in charge of policy and the Department of Public Enterprises (DPE) in charge of control.[64]

A comprehensive liberalisation programme of network industries was envisaged in the early years of the new political regime, but plans to allow for more competition in network industries appear to be much less ambitious today. Still, the South African authorities are well aware of the need to improve the current situation. Apart from strengthening the regulatory framework, there is an imperative need to let the market play a bigger role in these industries, while reducing the role of the state. Ironically, the current failure to deliver quality services at reasonable cost in the telecommunications industry is sometimes attributed to its partial privatisation. While it is true that an unregulated private monopoly is unlikely to provide satisfactory services either, it is also clear that the large state's involvement in these sectors acted as a major impediment to competition and that weak horizontal and vertical competition had a negative impact on their performance (see Annex 2.A3). In these circumstances, the authorities face daunting issues to reform these different industries:

- In the *electricity sector*, a comprehensive reform is unlikely to be implemented until the balance between supply and demand is restored. In order to achieve that goal efficiently, the adjustment of prices towards long-run marginal costs must complement measures

to increase supply. Nevertheless, the restructuring of the distribution sector and its consolidation into financially viable regional distributors is a first priority task and needs to be addressed quickly. If the authorities opt for a single buyer model, a transparent, well-regulated and conducive environment for prospective private participants in the electricity generation market should be put in place. Designing efficient long-term IPP contracts under a single buyer model represents however an acute problem (see Hunt, 2002; or OECD, 2004)[65] and, in many countries, has been used as a first step to liberalization. In the short run, it is important to set up a procurement and bidding mechanism for new generation capacity that is managed by an independent entity and not by Eskom. In the longer run, separation of generation, transmission and distribution should be envisaged.

- In the *telecom industry*, there is an urgent need to reform and liberalise the fixed line services. The entry of a second operator was slow to produce any improvement in the competition conditions, which are largely inhibited by the pricing system: interconnection and access fees to the incumbent's network do not adequately reflect costs. In order to improve the regulatory process and obtain a fair rate structure, ICASA's independence and staffing needs to be strengthened. In particular, provisions should be made to prevent the Minister of Communications from being able to interfere in the licensing process though policy directives. To limit conflict of interest, the role of the state as a major shareholder in the industry should be progressively reduced. In that respect, the creation of a parastatal broadband company to compete with the partially state-owned incumbent does not appear to be a move in the right direction.
- In the *transport industry*, the major issue is again the structure of ownership and, at the moment, the high costs associated with the port operations impede the development of South African external trade and undermine the country's international competitiveness (see Annex 2.A3). In addition to the fact that the state is a major player, the structure of that involvement should be reconsidered. In particular, there are no obvious reasons to keep the different divisions of Transnet under the same umbrella. This concerns not only the separation of the rail freight and port division, but also the separation of port authority from the port operation functions. As envisaged in the National Port Act, the latter would be a positive step in the direction of creating a more competitive environment in the sector, and encouraging private sector investment. This requires also that the newly created regulator would efficiently monitor the access of new operators and manage to impose cost-based fees. Until now, the new policy guidelines have been however slow to be translated into actions and the regulatory uncertainty that still prevails needs to be fixed rapidly. In the longer run, the introduction of competition between the different South African ports is to be envisaged.

Further reducing barriers to FDI and trade

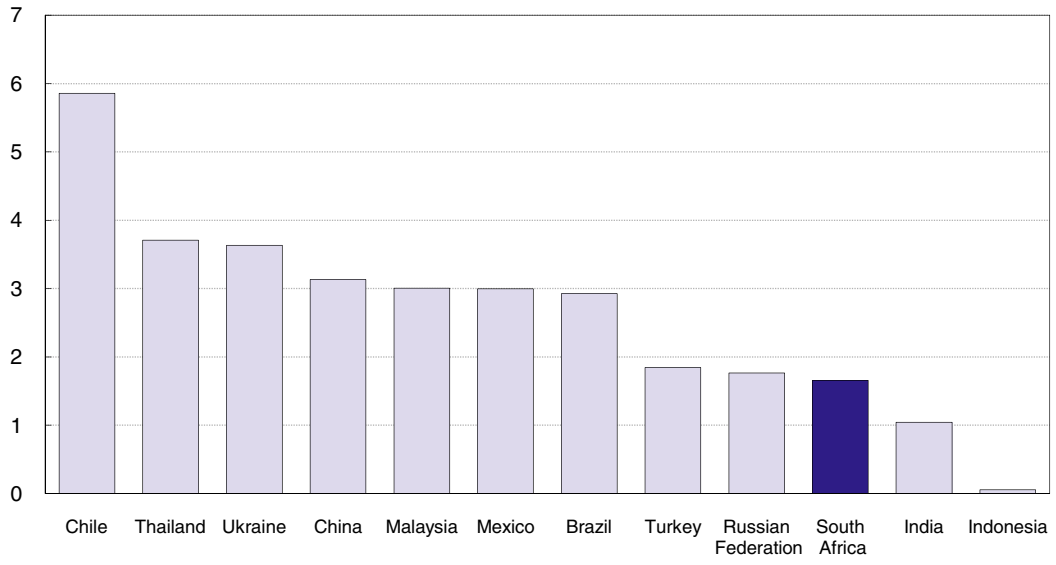
As already mentioned above, increased domestic competition could play a critical role in accelerating convergence of the South African economy. South Africa could also reap large benefits of greater openness to FDI. Growing empirical evidence emphasises the positive impact of FDI and foreign-performed R&D on domestic total factor productivity, *via* the import of technology, know-how and managerial expertise.[66] Moreover, the growth-enhancing effects of FDI-induced spillovers is potentially greater in emerging economies (Savvides and Zachariadis, 2005), provided that other structural barriers or the institutional framework do not impede that process. In the case of South Africa, Fedderke and Romm

(2006) reach a similar conclusion: they found a long-run positive effect of FDI on growth and complementarities with domestic investment.

Notwithstanding explicit barriers to FDI, the regulatory environment is a key determinant of FDI. Nicoletti *et al.* (2003) show for instance that the share of foreign direct investment is negatively affected by restrictive regulatory policies. Compared to other emerging economies and African countries, the institutional-regulatory environment in South Africa is clearly perceived as attractive for investors: the country ranks relatively well in various investment climate assessments and, according to entrepreneurs' surveys, the regulatory environment is even considered as one of the main drivers of FDI.[67] This "regional comparative advantage" is somehow offsetting South Africa's much less favourable skill endowment.[68] As shown by the PMR benchmarking exercise, however, barriers to trade and investment remain high *by OECD standards*. Reducing these barriers is thus likely to have a substantial and quick pay-off in terms of increased FDI.[69]

The current level of FDI inflows is lagging that for most fast-growing emerging economies (Figure 2.11). Even when taking into account the potential negative impact of geographical distance, these inflows have been relatively low over the most recent period. The FDI stock is concentrated in the mining industry among tradable sectors and in the financial sector (the leading service industry) among non-tradables.[70] On the other hand, FDI remains relatively weak in the transport, energy and telecommunications sector, which is undoubtedly linked to the barriers described in the previous sections. In the manufacturing sector, South Africa was relatively successful in attracting FDI in the automotive industry, essentially thanks to the generous Motor Industry Development Programme (see Box 2.2). Such a support programme is often justified by the "infant industry" argument. The extent to which such argument may apply to a sector essentially driven by FDI is however questionable, as is the quasi-permanent character of the subsidies.

Figure 2.11. **FDI inflows as a percentage of GDP, average 2000-06**



StatLink http://dx.doi.org/10.1787/406634806228

Source: OECD calculations based on IMF, *IFS database*.

Box 2.2. **The Motor Industry Development Programme**

The Motor Industry Development Programme (MIDP) is a major governmental support for the car industry. It was established in 1995, replacing a support scheme based on local content requirements which was not fully WTO-compliant. This extensive programme favours firms producing for the domestic market or export. It comprises the following elements:

- Producers for the domestic market benefit from a duty-free allowance on imported components (amounting to 27% of the value of the vehicles).
- In addition to qualifying for duty drawbacks on imported components, vehicles and components exporters earn tradable duty-rebate credits in proportion to the local content of their export. Since the first review of the programme, the "qualifying" value of these Import Rebate Credit Certificates (IRCC) is being graduallly reduced from 100% of the local content value in 2002 to 70% by 2009 (60% for components).
- As a counterpart to the reduction of the "qualifying value" of IRCCs, a new production-asset allowance is granted to vehicle manufacturers which invest in new production capacities. This allowance corresponds to 20% of the capital expenditure, in the form of import-duty credits.

Initially, this programme was due to run until 2012, with a gradual phasing-out: the maximum rebate for each rand of exported local content is indeed decreasing with the gradual reduction of import tariffs.* Recently, the maintenance of support until 2020 was announced by the South African authorities, with a probable shift to a production allowance only. This decision is a reminder that, once in place, such programmes have a tendency to persist and prove difficult to remove. Undoubtedly, the MIDP contributed to a great extent to the expansion of the auto industry and the increased foreign direct investment, which led in turn to much improved export performance of the industry: the share of vehicles and components now accounts for around 9% of total goods exports (against 6% in 2000 and much less in 1995). As expected, car manufacturers specialised in the production of just a few lines, and the share of the domestic market served by imports grew in parallel with exports (Black, 2007).

Even if such a subsidy programme succeeds in generating exports and gaining economies of scale, the overall cost puts its effectiveness in question. Firstly, the relatively high level of protection induces higher costs for consumers, who pay a duty-inclusive price (Flatters, 2005). In other words, critics argue that the IRCCs allow the auto industry to sell at mark-ups products or components that have been imported duty-free.. Secondly, the direct subsidies for new projects are potentially distorting production and investment decisions by allowing uncompetitive investments to take place. For competitive investments that would have taken place anyway, such support schemes simply translate into a higher rent for car producers. Thirdly, the compliance and regulatory costs of the MIDP seem to be non-negligible (see SBP, 2006). According to Flatters (2005), the overall level of subsidies provided for car assembly and components production could be indeed very high and still exceed 200% of the amount invested. Other studies found on the other hand that consumers in South Africa do not pay a higher price than in EU markets and argue that the South African industry has almost reached cost competitiveness in an effectively duty-free environment (Barnes *et al*., 2004). This would however also contradict the argument that the industry is still vulnerable to declining support and would also advocate in favour of a more rapid reduction in import duties. In any case, a detailed cost-benefit analysis of the programme would be highly welcome, especially given the DTI's intention to extend it over a much longer period than initially planned.

* Import tariffs for vehicles are set to decrease from 30% in 2007 to 25% in 2012.

The existence of a relatively high level of protection for some sectors – like the car or textile industries – in an environment of overall limited trade barriers is emblematic of a certain tension between two contradicting policy approaches. This tension goes beyond the area of trade policy, and the divergence of views is sometimes expressed within the government: while *AsgiSA* reasserts a high level of government support for a pro-competitive policy approach, this is occasionally challenged by calls in favour of the use of command and control regulation and of the "developmental state" paradigm. Of particular concern are the recent initiatives undertaken that lay the basis for a more active role of the state in the economy: in August 2007, the DTI unveiled its National Industrial Policy Framework (NIPF), which aims at eliminating the perceived shortcomings of South Africa's development trajectory. While the NIPF refers to *AsgiSA* and explicitly recognises the negative impact of monopoly pricing in some sectors, it simultaneously states that the government has "to engage across substantial parts of the manufacturing, services and primary sectors of the economy" and does not say much on the issue of simplifying the structure of trade tariffs. It should be recognised that the DTI also claims to be in favour of a process of "self-discovery"; however, the fact that most of the major markets in the business sector are listed as priority sectors to get support of some kind seems to indicate that the NIPF is close to being an advocate for a *de facto* picking-winners strategy.

The justification given in the NIPF for an active role of the state is that South Africa "has a relatively diversified and complex economic base that needs ongoing consolidation and renewal". This statement is at odds with past South African experience, which clearly showed the limit of industrial policy. If such a strategy of protecting established businesses is applied, there is a risk of a waste and misallocation of resources, as these policies often further distort competition between industries or firms. The risk is likely to be greater in an environment of weak administrative capacities, which is highlighted in AsgiSA and in the NIPF itself. Also worrying is the fact that the strategy tries to deliver too much, as trade and innovation policy goals and instruments are mixed with objectives aiming at promoting BEE and employment. All these goals would be best served by focusing on the improvement of competition conditions and continued market liberalisation: in the case of South Africa, increased competition is found to have not only a positive effect on productivity and investment, as mentioned above, but also on employment (Fedderke and Naumann, 2005). Interestingly, the effect is found to be non-linear: the higher the level of concentration, the greater the negative effect of a further increase in concentration on employment (Fedderke and Szalontai, 2004).

Notes

1. The distortions brought by the political system of apartheid had a major impact on the productivity growth pattern (see Mac Carthy, 2005). As mentioned in Chapters 1 and 3, discriminatory practises were particularly severe in the education system and embedded in the functioning of the labour market and skills development.
2. The fact that South Africa ranks relatively highly as concerns the *level* of labour productivity still holds when controlling for the structure of the economy (see World Bank (2006), where the level of productivity is compared at the firm level in specific industries).
3. According to Edwards and Golub (2003), the level of TFP was 28% of the USA level in 1979 and only 19% in 1997 in the manufacturing sector, using adjusted data from the UNIDO Industrial Statistics Database at the 3-digit level.

4. According to the updated version of the dataset created by Cohen and Soto (2007), the increase in the average number of years of schooling over the period 2000-05 was one of the highest in the world.
5. According to data from the SARB and Statistics South Africa, the ratio of the capital stock to value added in the manufacturing sector rose from 1.6 in 1995 to almost 1.9 in 2006.
6. It is worth noting that the fast rise in productivity observed in the electricity sector – shown in Figure 2.1A – is also due to the fact that previous overbuilding of capacity allowed production to be increased without much investment. The electricity outages of 2007-08 showed the limits of that process.
7. Time-consistent data on wages are not easily available and any analysis on wage development needs to be taken with caution.
8. See World Bank (2006). Unit labour costs are found to be lower than in some Eastern European countries, but higher than in Brazil, Malaysia and much higher than in China.
9. This indicator is of course positively correlated with the actual income – *i.e.* rich countries tend to specialise in rich-country goods. More importantly the authors find that fast-growing emerging markets economies tend to have EXPYs that are well above what one would expect given their actual level of per capita income.
10. In other words, the authors argue that the ability of a given country to develop the production of one good is related to its capability in the production of a good that is relatively similar.
11. Both forms of efficiency are important: a monopoly may be for instance technically efficient (operating at, rather than below, its production function) but not allocatively efficient. Allocative efficiency is best served by robust competition.
12. See Aghion *et al.* (2005b).
13. Hence giving some ground to the "developmental state" argument.
14. See Annex 2.A1 for the definition of the Rosenbluth concentration index.
15. The databases covers sector-based industrial data as well as firm level data for listed companies.
16. More generally, anti-competitive practises are also considered as a major impediment to business growth, according to business surveys (see World Bank, 2006).
17. See *e.g.* OECD (2003).
18. In 1994, five conglomerates, with roots in the mining sector, accounted for 84% of the stock exchange capitalisation (OECD, 2003).
19. In particular, the monopolistic structure of the steel industry enables the dominant player to practice import parity pricing for the local market (see Roberts, 2004).
20. An examination of the concentration of control on the Johannesburg Stock Exchange gives a similar picture and trend The top four groups controlled collectively 60% of market capitalisation in 2002 (Roberts, 2004). This figure is however significantly down, from 80% in the early 1990s.
21. See Fedderke and Hill (2006) or Aghion *et al.* (2007). Studies trying to estimate mark-ups give less robust results: Edwards and Van de Winkel (2005) find on the contrary relatively standard mark-ups in the industry using Roeger's method. Such estimates are however fraught with difficulties and measurement issues (typically for the cost of capital) and might therefore be significantly biased.
22. See *e.g.* Arnold *et al.* (2007); or Conway *et al.* (2006).
23. Ultimately, the conditions of South Africa's network industries have negative spill-over effects and distort competition in other sectors. For example, mis-priced energy not only aggravates the imbalance between demand and supply of electricity but also biases competitive conditions in favour of less energy-efficient firms. Bottlenecks in the transport sector may lead to an inefficient spatial allocation of resources and to a situation where most productive firms do not necessarily benefit from the most cost-effective inputs.
24. From approximately 12 500 in 1994 to around 6 500 in 2007. See IMF (2005) for more details on South Africa commitments to the WTO.
25. A bound tariff line is a commitment not to increase a rate of duty beyond an agreed level. Once a rate of duty is bound, it may not be raised beyond the bound level without compensating the affected parties.

26. Applied tariffs still range between 0 and 55% (with the bulk of lines being equal to 5% or 10%).
27. Typically, higher protection applies in the agro-processing, textile and motor industries.
28. The effective rate of protection measures the total protective effect of the overall tariff structure. For example, if the total value of the tariffs on *imported inputs* used by domestic producers to produce a given *finished good* exceeds the tariffs on the same but *imported finished good*, the effective rate of protection is negative, *i.e.,* the industry is discriminated against in comparison with the imported product.
29. See *e.g.* Fedderke and Vaze (2004); or Edwards and Van de Winkel (2005).
30. There are signs that high market power is leading or has led to import parity pricing behavior : this is the case in the steel industry (see Roberts, 2004), and some segments of the chemicals industry (Corporate Strategy and Industrial Development, 2005)
31. This market disciplining effect is found to be stronger for trade with developed economies.
32. See *e.g.* World Bank (2007), World Economic Forum (2006), A.T. Kearney (2007).
33. The indicators for South Africa were based on the regulatory policies in place at end- November 2007.
34. This is particularly true for the tourism industry (SBP, 2006).
35. The concomitant negotiation of the Mining Charter – which lays down minimum black ownership requirements to secure a mining license – did of course complicate the process.
36. Legal barriers to entry are an aggravating factor: for instance, constitutional prerogatives are given to municipalities for the distribution of electricity and water.
37. For example, in the fuel and energy sector, PetroSA was granted an exemption for a period of three years commencing 29 January 2005 from the provisions of section 4(1) of the Competition Act that regulates horizontal conduct.
38. An emblematic example of this has been the decision taken in September 2007 to opt for Transnet, and not a private competitor, to award a license to construct a multi-year pipeline from Durban to Gauteng (see Business Day, 19 September 2007).
39. For instance, the competition conditions in the Value Added Network Services segment are very much affected by the high degree of vertical integration in the telecommunication industry (Theron and Boshoff, 2006).
40. The indicators cover transmission, distribution and supply in electricity and gas; infrastructure as well as passenger and freight services in rail transport; domestic and international routes in air passenger transport; basic letter, parcel and courier services in post; and trunk, long distance and mobile services in telecommunications.
41. It is therefore not part of the core indicator.
42. More precisely, the indicators consists in: barriers to entry in all sectors; public ownership in all sectors except road freight; vertical integration in electricity, gas and rail transport; market structure in rail transport, gas and telecommunications; and price controls in road freight (see Conway and Nicoletti, 2006).
43. This is consistent with the score on the PMR indicator measuring the administrative burden in the road freight and retail distribution sector; see Figure 2.A2.11.
44. The undersea cable operator that will provide high-speed digital connection between South Africa, Europe and India, must be majority African- or South African-owned. In the air transport sector, 75% South African ownership is required to enter the domestic market.
45. Typically the mining industry, where the Mining Charter applies, and the oil sector.
46. According to a firm survey, only 4% of them perceive regulations for starting a business as one of the three major constraints for doing business (see Rankin, 2006).
47. As the lack of demand is also a predictable response from relative uncompetitive firms, the regulatory burden is likely to be the single most important obstacle for successful businesses.
48. Efficiency costs are arising from the impact of regulation on firms' behaviour and decisions (installation and maintenance of equipment required by regulations, changes and choices about production techniques, adaptation to markets according to the regulation in place).

49. Moreover, the business community is consulted during the elaboration phase of new regulation and also has the possibility to send comments on it during a period of six weeks after it has been published in the government's Gazette.

50. The National Health Department, the National Department of Agriculture, the National Department of Environmental Affairs and Tourism, provincial departments of health, the Perishable Product Export Control Board, the South Africa Bureau of Standards and the South African National Accreditation System.

51. In the tourism industry, for instance, small businesses complain about the application procedure and delays to obtain the Road Carrier Permit, which has to be renewed every three years. This regulation requires that for every bus on the road an RCP application needs to be published in the *Government Gazette* for comment. Due to these long delays, firms often need to ask for temporary permits, which appear to be very time-consuming to obtain as well (SBP, 2006).

52. A survey conducted in eight OECD members in the late 1990s, covering only firms with less than 500 employees, led to an estimate of around 3% of GDP on average for similar compliance costs (see Cordova-Novion and De Young, 2001).

53. BEE compliance and equity regulations are the ones where the use of professional services is the most extensive.

54. With respect to tax regulation there has been some clear improvement over the recent past, with the adoption in 2005 of the "small retailers VAT package", which led to a simplification of accounting for small firms.

55. See SBP (2005), p. 72.

56. It is worth pointing out that unions have a formal role in the merger review process, where they can directly raise their concerns about job losses (see OECD, 2003).

57. In 2001, a " fast track " procedure to deal with relatively unproblematic transactions, where the firms involved have a sufficiently low market share or/and the increase in market share is limited. This has served to improve marginally the situation.

58. Of course, the Australian and South African economies are not fully comparable. Nevertheless, many of the challenges facing South Africa today are somewhat similar to the barriers that impeded growth in Australia a couple of decades ago: weak domestic competition and excessive government intervention (see OECD, 2004a).

59. This pilot is aimed at assessing the effectiveness of RIA in South Africa as well as acquiring experience regarding the use of such instrument, its scope and the way it should be applied across different spheres of government.

60. This was done in particular for the competition Act.

61. Based on a limited number of case studies, the World Bank (2006) estimates that privately owned firms are much more productive than similar partially government owned firms (the estimated coefficients of their regression would suggest productivity is more than 100% higher).

62. On the complementarities between privatisation and competition, see Megginson and Netter (2001), Commander *et al.* (1999); and the work surveyed in Nellis (1998). In an enterprise-level study covering Bulgaria, Romania and Poland, Angelucci *et al.* (2002) find that competitive pressure has stronger effects on the productivity of privatised firms.

63. This situation has sometimes led to expensive litigation over purely procedural matters, altering the efficiency of regulatory bodies' work (Schwella, 2002).

64. That means the Department of Transport, the Department of Communications or the Department of Mineral and Energy.

65. The single buyer model introduces only a limited form of competition and the prices at which IPPs sell their power essentially reflects the initial conditions of the long-term contract and not costs of services. Moreover, one difficulty with such contract is linked to the dispatch of electricity produced by IPPs: IPP contracts have often been made *nondispatchable,* in order to avoid that the system operator discriminate in favour of the incumbent. The problem is that *nondispatchable* contracts can work only for a few small plants, otherwise it is difficult for the system operator to keep control of the system.

66. See *e.g.* Guellec and van Pottelsbergh de la Potterie (2001).

67. See for example World Economic Forum (2006), World Bank (2007) or A.T. Kearney (2007).

68. See World Economic Forum (2007).

69. Empirical evidence confirms moreover that trade openness is an important factor determining FDI in countries comparable to South Africa (Arvanitis, 2005).

70. At the end of 2006, FDI in the mining sector and the financial sector accounted respectively for 40% and 26% of the total stock (according to South African Reserve Bank statistics).

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ANNEX 2.A1

Concentration indicators

Table 2.A1.1. **C5% concentration index for South African manufacturing industry**

Sector	1976		1985		1996		2001	
	n	C5%	*n*	C5%	*n*	C5%	*n*	C5%
Food and food products	76	65.29	72	70.12	71	75.16	134	65.93
Beverages	12	55.64	9	62.68	8	74.26	21	76.27
Textiles	26	52.29	32	55.92	34	48.11	51	36.00
Clothing, except footwear	60	46.75	61	50.58	81	58.68	75	34.18
Leather and leather products	8	37.17	8	50.25	8	67.86	12	27.69
Footwear	6	36.73	7	46.08	13	56.42	16	39.99
Wood and wood and cork products	32	51.35	30	63.34	65	61.10	67	38.45
Paper and paper products	8	53.36	11	75.43	19	62.05	30	78.13
Printing, publishing and allied industries	56	60.99	65	62.45	99	69.25	83	48.90
Basic chemicals	7	69.55	9	62.88	12	70.79	23	68.55
Rubber products	22	55.97	26	66.16	36	80.85	64	40.33
Plastic products	3	36.55	4	46.63	9	56.67	14	30.22
Glass and glass products	16	53.46	23	85.40	51	87.31	58	69.74
Other non-metals	1	69.60	2	75.83	4	74.96	13	66.07
Basic iron and steel industries	45	73.48	51	76.93	57	69.89	56	76.00
Non-ferrous metal basic industries	6	47.60	10	63.07	5	64.66	30	70.60
Metal products, except machinery and equipment	4	58.48	5	65.47	4	67.34	45	47.49
Machinery, except electrical	119	56.14	143	60.24	206	61.79	225	38.41
Electrical machinery apparatus	54	60.77	93	66.58	144	58.26	248	51.60
Motor vehicles, parts and accessories	29	79.42	40	83.90	81	85.19	89	78.87
Transport equipment	33	68.01	40	73.37	56	75.27	120	58.99
Furniture	37	53.39	53	52.12	78	58.38	67	56.68
Other manufacturing industries	7	53.15	11	59.90	13	83.38	30	50.66
Average	**29**	**56.31**	**35**	**64.14**	**50**	**68.16**	**68**	**54.34**
Average weighted by output		**60.81**		**66.52**		**69.01**		**61.09**

Note: *n* refers to the number of firms making up the group of 5% of largest firms while the C5% value refers to the cumulative percentage of output attributable to that group of firms.
Source: Fedderke and Szalontai (2004); and Fedderke and Naumann (2005).

Table 2.A1.2. **Rosenbluth concentration index for South African manufacturing industry**

Sector	Rosenbluth Index				
	1972	1979	1988	1996	2001
Food and food products	0.0046	0.0051	0.0070	0.0051	0.0015
Beverages	0.0282	0.0194	0.0483	0.0502	0.0116
Textiles	0.0081	0.0099	0.0087	0.0062	0.0019
Clothing, except footwear	0.0039	0.0040	0.0037	0.0031	0.0014
Leather and leather products	0.0238	0.0242	0.0300	0.0485	0.0104
Footwear	0.0281	0.0219	0.0216	0.0171	0.0067
Wood and wood and cork products	0.0065	0.0082	0.0092	0.0039	0.0017
Paper and paper products	0.0294	0.0254	0.0300	0.0242	0.0077
Printing, publishing and allied industries	0.0055	0.0041	0.0037	0.0031	0.0017
Basic chemicals	0.0440	0.0428	0.0329	0.0448	0.0094
Rubber products	0.0971	0.0853	0.0670	0.0449	0.0103
Plastic products	0.0130	0.0100	0.0081	0.0044	0.0017
Glass and glass products	0.1533	0.2129	0.1265	0.1657	0.0210
Other non-metals	0.0139	0.0080	0.0073	0.0064	0.0034
Basic iron and steel industries	0.0515	0.0579	0.0587	0.0860	0.0083
Non-ferrous metal basic industries	0.0507	0.0630	0.0713	0.0811	0.0048
Metal products, except machinery and equipment	0.0025	0.0022	0.0015	0.0013	0.0005
Machinery, except electrical	0.0049	0.0033	0.0023	0.0017	0.0004
Electrical machinery apparatus	0.0119	0.0086	0.0075	0.0031	0.0019
Motor vehicles, parts and accessories	0.0166	0.0127	0.0126	0.0108	0.0018
Transport equipment	0.0697	0.0541	0.0350	0.0281	0.0048
Furniture	0.0064	0.0049	0.0036	0.0031	0.0023
Other manufacturing industries	0.0196	0.0065	0.0045	0.0083	0.0020
Average	**0.0301**	**0.0302**	**0.0261**	**0.0283**	**0.0051**
Average weighted by output	**0.0218**	**0.0211**	**0.0217**	**0.0265**	**0.0038**

Source: Values for 1972-96 from Fedderke and Szalontai (2004); calculations for 2001 based on Stats South Africa, Large Sample Survey (2004).

Definition of the Rosenbluth index:

$$R = \left[2 \sum_{i=1}^{n} (i \cdot ms_i) - 1 \right]^{-1}$$

where ms_i is the market share of the ith-ranked firm and n the number of firms.

ANNEX 2.A2

Product-market regulation in South Africa

As noted in the chapter, product-market competition is a key driver of productivity growth in OECD countries.[1] To gauge the extent of restrictions on competition in product markets and identify weaknesses in regulatory frameworks, the OECD Economics Department has constructed a set of quantitative indicators of product-market regulation (PMR). PMR assessments are systematically done for all member economies, and they have been conducted for a small but increasing number of non-members as well. They provide a basis for assessing countries' performance in a comparative context. The ability to benchmark current regulation and future policy choices in this manner is an important element of the OECD "peer review" of economic policies and has proven useful in encouraging countries to implement structural reforms that can enhance economic performance.

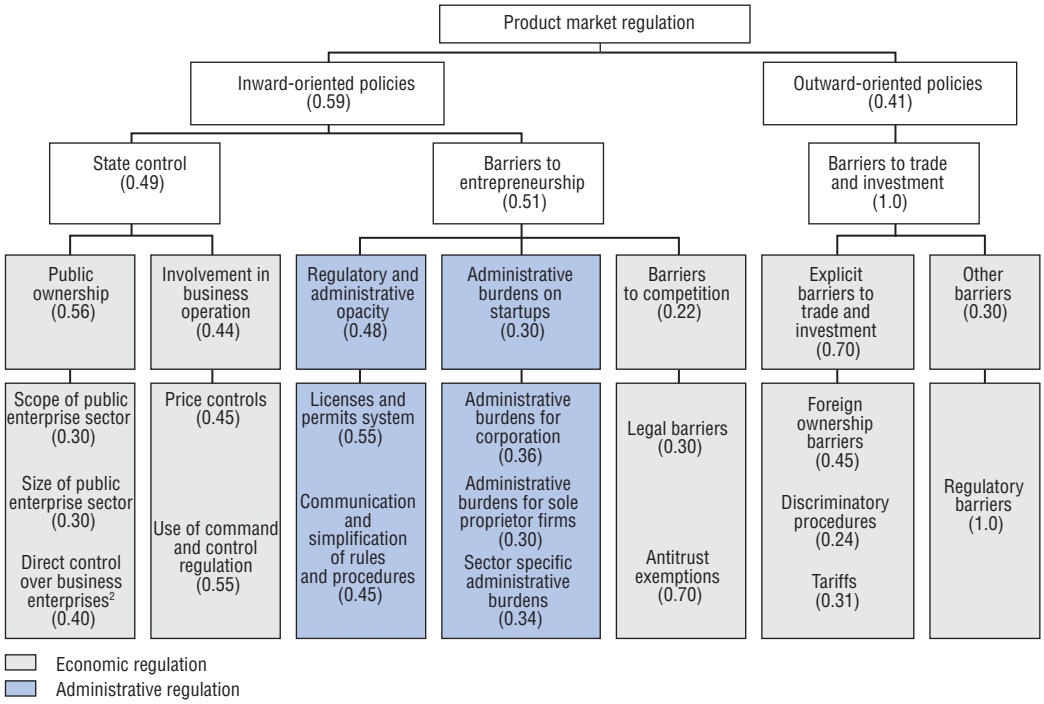
Overview of the PMR system

The PMR indicator system has a pyramidal shape, with 16-low-level indicators at the base, three intermediate-level aggregate indicators in the middle and one overall indicator of the degree of product-market regulation at the apex (Figure 2.A2.1). The low-level indicators capture specific aspects of the regulatory regime, summarising information on government responses to more than 140 questions concerned with economy-wide or industry-specific regulatory provisions. They reflect regulatory policy settings as of end-September 2007; in some instances, changes have been adopted since then but it has not been possible to recalculate the indicators. The intermediate-level aggregate indicators and the overall PMR indicator are constructed as weighted averages of their constituent lower-level indicators.[2] The low-level and intermediate indicators are divided into two main groups: those concerned with inward-oriented policies, comprising state control and barriers to entrepreneurship; and those focusing on outward-oriented policies, comprising barriers to trade and investment.

The 16 low-level indicators in the PMR system cover a wide range of product market policies. This annex provides a brief description of each low-level indicator, the benchmarking of South Africa against OECD members with respect to that indicator and, where necessary, commentary on the interpretation of the results for South Africa. (The OECD data reflect the most recent PMR exercise, conducted in 2003.) First, however, it is necessary to comment briefly on what the PMR indicators do and do not cover.

- The indicators are designed to reflect regulations that have the potential to reduce the intensity of competition in areas of the product market where technology and market

Figure 2.A2.1. **The PMR indicator system**[1]



1. The numbers in brackets indicate the weight given to each lower-level indicator in the calculation of the higher-level indicators immediately above it. The weights were derived by applying principal components analysis to the set of indicators in each of the main regulatory domains (state control, barriers to entrepreneurship, barriers to trade and investment, economic regulation and administrative regulation). The same approach was used to derive the weights used to calculate the indicators of inward and outward-oriented policies and the overall PMR indicators. The principal components analysis was based on the original 1998 data.
2. Two indicators from the 1998 version of the PMR indicators ("Special voting rights" and "Control of public enterprise by legislative bodies") have been combined into this indicator.

Source: OECD, Conway, P., V. Janod and G. Nicoletti (2005).

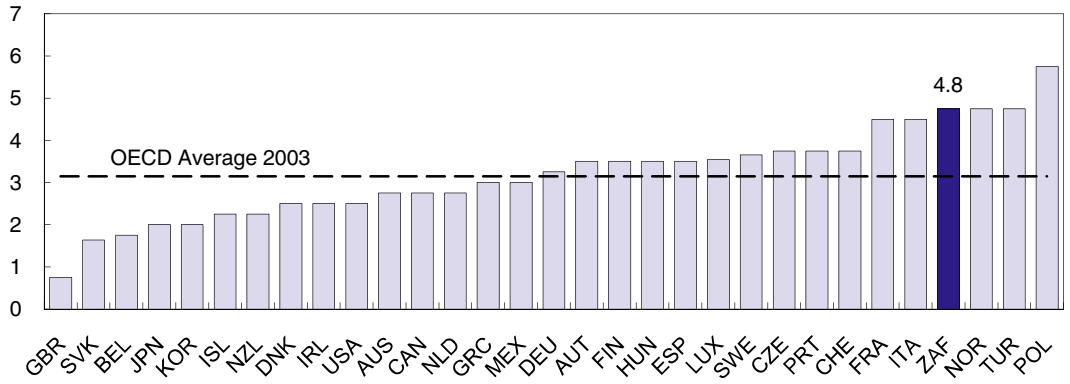
conditions make competition viable; they are, therefore, of greater direct relevance to some sectors than others. However, some of the indicators capture aspects of regulatory institutions and procedures that, if deficient, may reduce the overall quality of regulation: these are likely to be relevant to virtually all sectors.

- As noted in Chapter 2, the indicators are based on explicit policy settings and thus reflect formal regulation only. "Informal" regulatory practices, such as administrative guidance or self-disciplinary measures of professional associations, are captured to only a very limited extent in the PMR indicators system. Similarly, the way in which regulations are applied by enforcement authorities, which can have an enormous impact on competition in a given market, is also only reflected to a very limited degree in the PMR indicators.
- The indicators are designed to facilitate broad comparisons among OECD members and to some extent their construction reflects norms, practices and institutional characteristics more typical of OECD members. In some cases, therefore, individual indicators may have a tendency to generate surprisingly favourable or unfavourable scores for emerging economies.

Results of the PMR assessment of South Africa

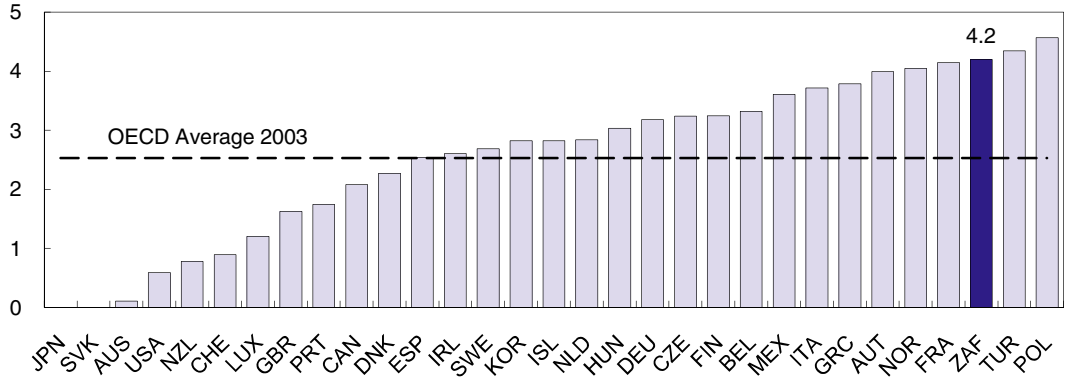
The *scope of public enterprise* indicator measures the pervasiveness of state ownership across business sectors. It reflects the proportion of major sectors in which the state holds an equity stake in at least one firm.

Figure 2.A2.2. **Scope of public enterprise**



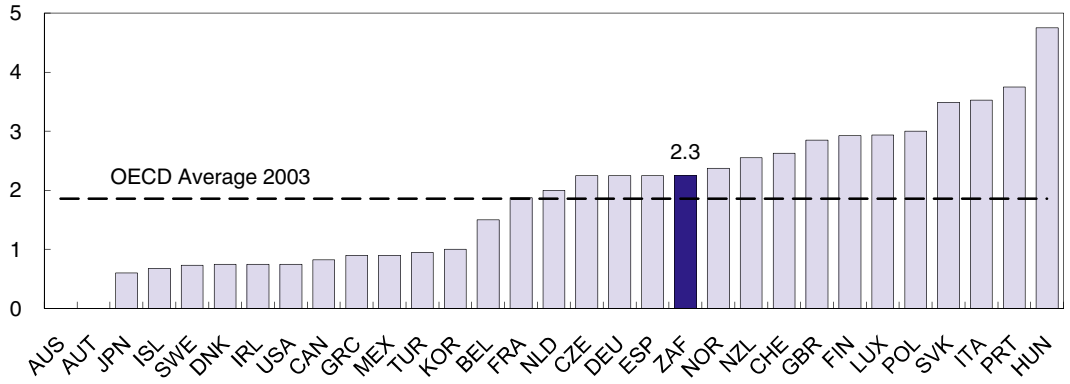
The indicator for the *size of public enterprise* reflects the overall size of the state-owned enterprise (SOE) sector relative to the size of the economy as a whole.

Figure 2.A2.3. **Size of public sector**



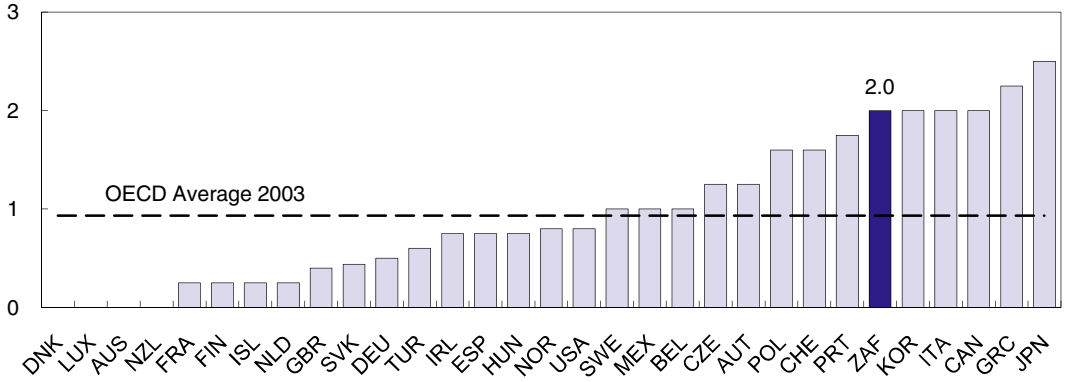
Direct control over business enterprises measures the existence of government special voting rights in privately owned firms, constraints on the sale of state-owned equity stakes, and the extent to which legislative bodies control the strategic choices of public enterprises. South Africa's poor score on this indicator is in part a product of its high score on the scope and size of the public sector and reflects also the existence of legal constraints to the sale of stakes held by the government in some sectors.

Figure 2.A2.4. **Direct control over business enterprises**



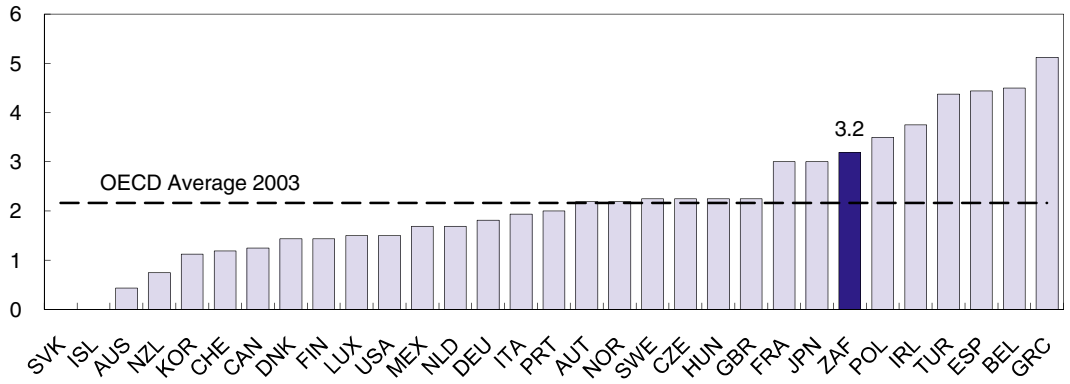
The *price controls* indicator reflects the extent of price controls in specific sectors. The share of administrative price in the CPI basket is approximately 18% in South Africa.

Figure 2.A2.5. **Price controls**



The *command and control regulation* indicator measures the extent to which the authorities use coercive (as opposed to incentive-based) regulation, both in general and in specific service sectors. South Africa's rough average conceals a high degree of variation in the policy settings that underlie this indicator, which range from its liberal policies *vis-à-vis* road freight, to a much greater reliance on traditional instruments (not incentive-based) for general regulations.

Figure 2.A2.6. **Command and control regulation**



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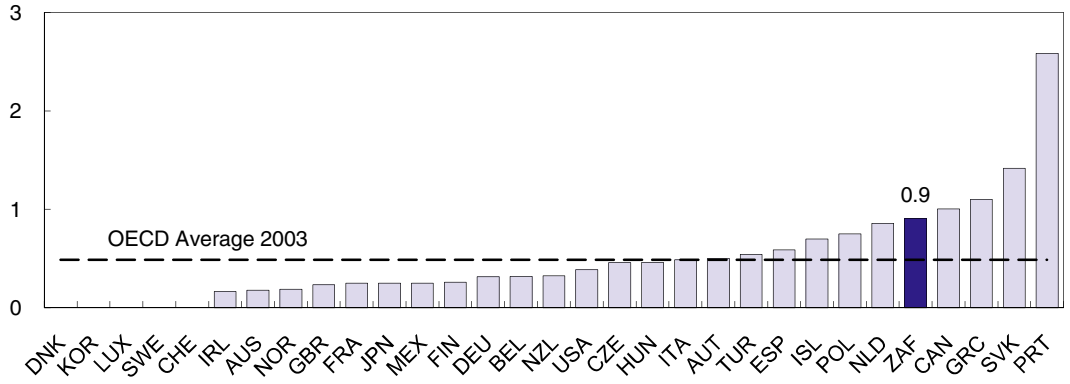
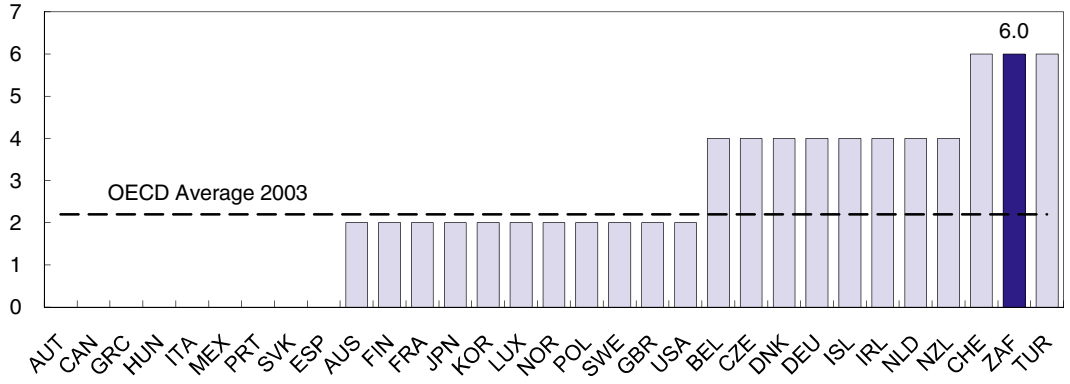
Communication and simplification of rules and procedures refers to aspects of the government's communication strategy and efforts to reduce/simplify the administrative burden of interacting with government. South Africa performs better on communication, whereas the complexity of regulatory procedures represents a particular burden for businesses.

Figure 2.A2.7. **Communication and simplification**



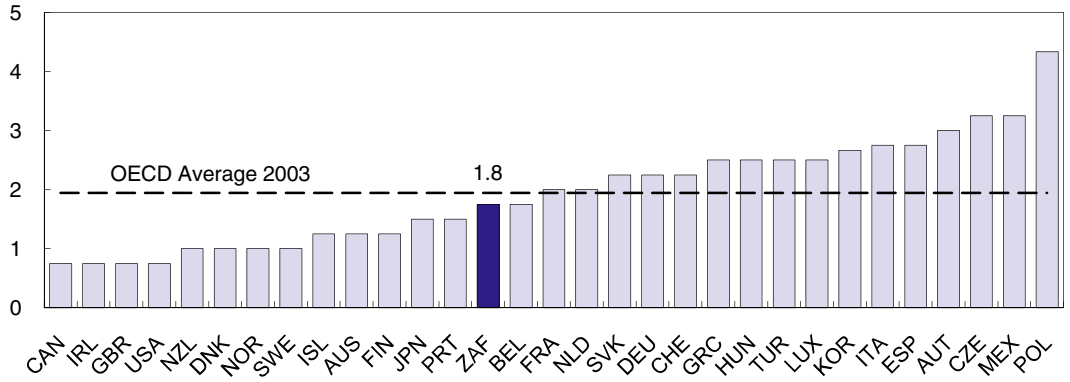
The *licenses and permits* indicator reflects the presence or absence of such devices as "one-stop shops" and "silence is consent" rules for getting information on, and issuing, licenses and permits.

Figure 2.A2.8. **Licenses and permits**



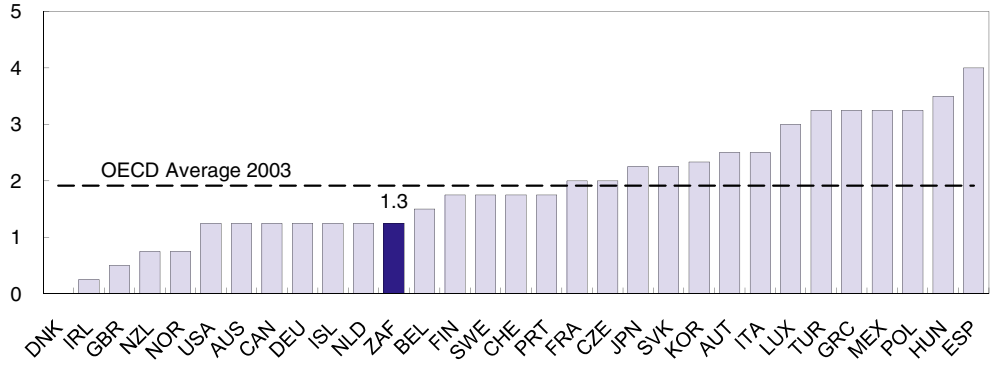
The *start-up: corporations* indicator reflects the number of mandatory procedures involved in the creation of new companies, as well as the number of agencies involved and the total cost of start-up procedures in both time and money. Costs have been converted at PPP exchange rates.[3] Here, South Africa's performs relatively well. This is essentially linked to the low direct costs to start a business and the relatively limited number of day theoretically required to complete all the procedure to register a business. In practise, the "time" cost might be higher if there are long administrative delays (which might explain that the score differs significantly from WB Doing Business indicators).

Figure 2.A2.9. **Start-up: corporations**



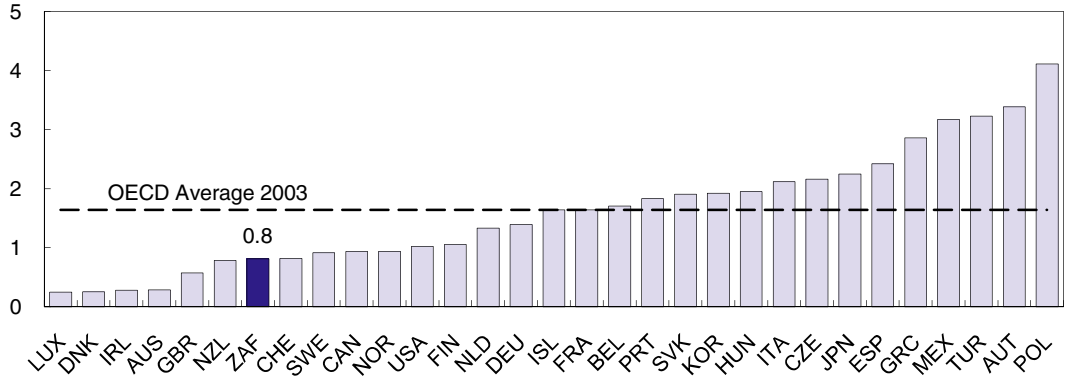
Start-ups: sole proprietors is constructed in a more or less identical fashion to the indicator for new companies but is concerned with unincorporated small businesses. Again, costs have been converted at PPP exchange rates and South Africa performs well relative to OECD countries.

Figure 2.A2.10. **Start-up: sole proprietors**



The *sector-specific administrative burdens* indicator reflects administrative burdens in the road transport and retail distribution sectors, two sectors that are subject to relatively limited regulation compared to OECD members.

Figure 2.A2.11. **Sector-specific administrative burdens**



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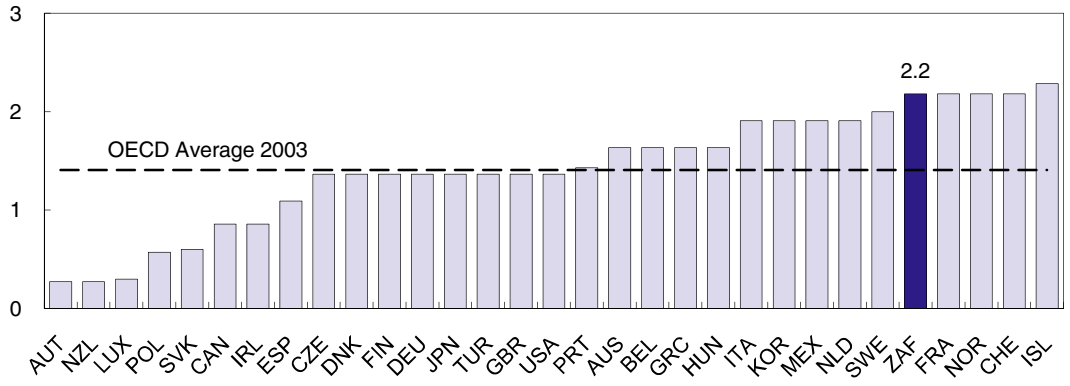
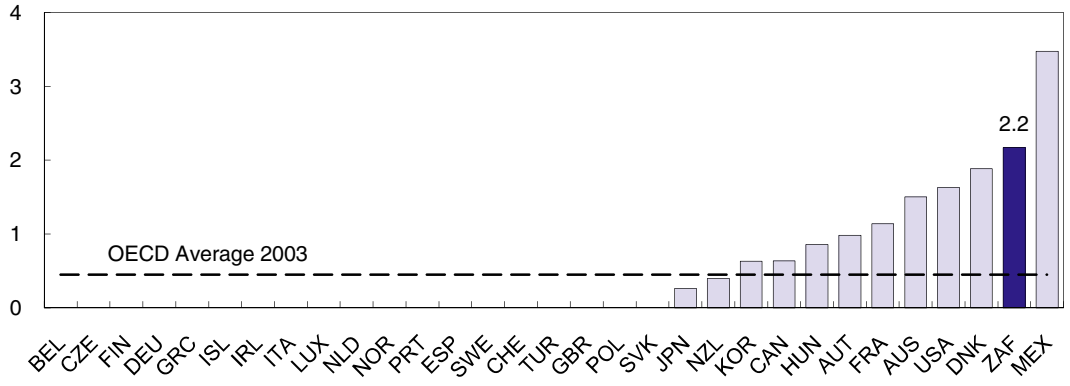
The *legal barriers* indicator refers specifically to the scope of explicit legal limitations on the number of competitors allowed in a wide range of business sectors or subsectors. The poor score of South Africa reflects the large number of sectors, essentially in network industries, that are protected by legal barriers to entry.

Figure 2.A2.12. **Legal barriers to entry**



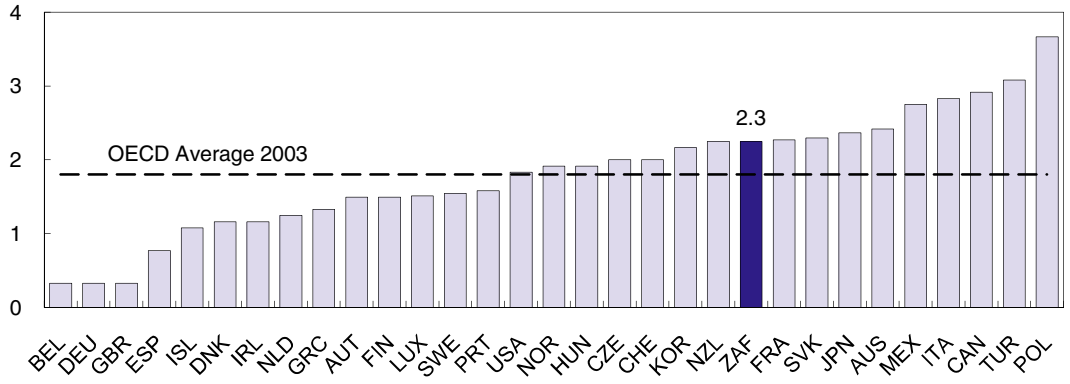
The indicator for *antitrust exemptions* measures the scope of exemptions to competition law that are either extended to public enterprises or authorised by other government and regulatory authorities (see section on the competition law in the core text for more details).

Figure 2.A2.13. **Antitrust exemptions**



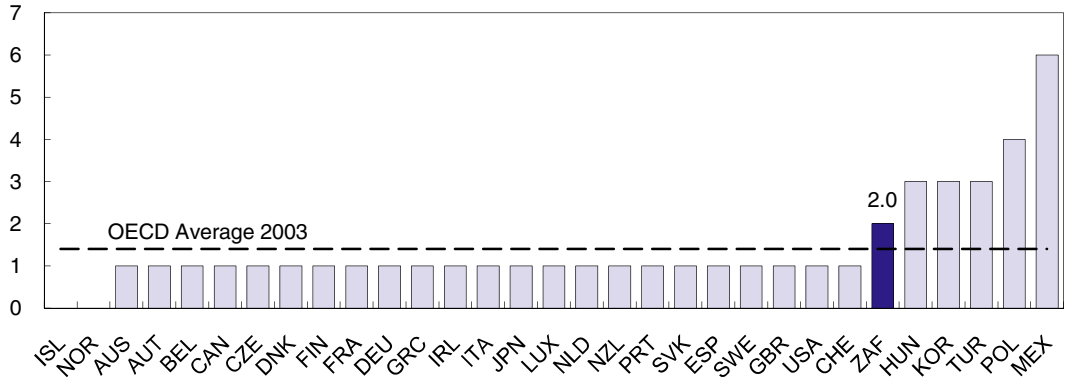
The indicator for *ownership barriers* measures the extent to which legal restrictions apply on foreign acquisition of equity in public and private firms in general, and in the telecommunications and airlines sectors in particular. In the air transport sector, 75% South African ownership is required to enter the domestic market.

Figure 2.A2.14. **Barriers to foreign ownership**



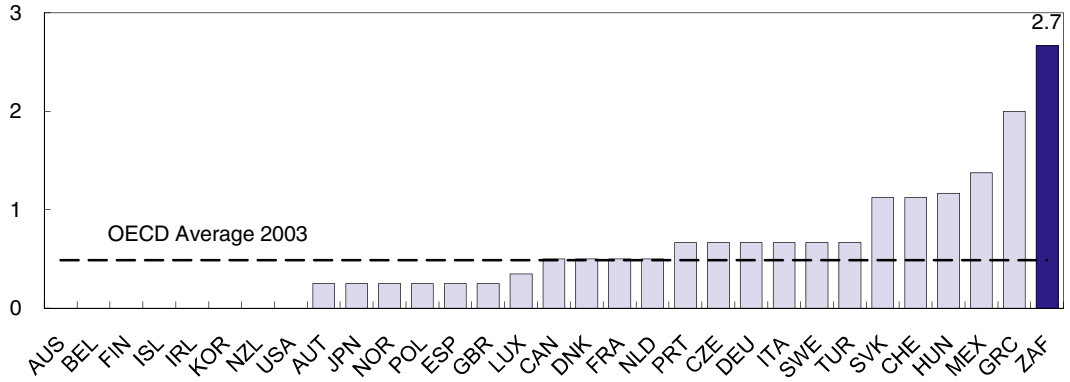
Tariffs reflects the (simple) average of a country's most-favoured-nation tariffs.

Figure 2.A2.15. **Tariffs**



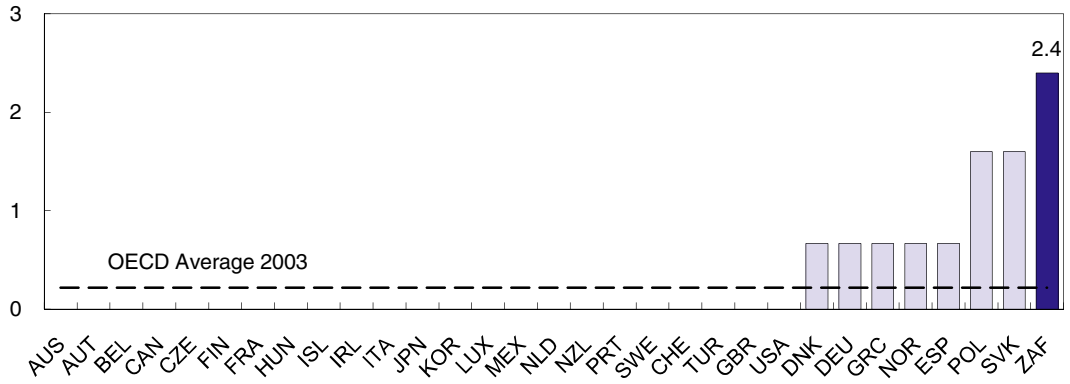
The *discriminatory procedures* indicator reflects the extent of discrimination against foreign firms at the procedural level. It does *not* cover restrictions on foreign ownership, which are captured by *barriers to foreign ownership*. In South Africa's case, the high score reflects the absence of any specific provisions requiring explicit recognition of the national treatment principle.

Figure 2.A2.16. **Discriminatory procedures**



Finally, the indicator for *regulatory barriers* reflects other barriers to international trade, such as international harmonisation of standards and regulatory norms or mutual recognition agreements. South Africa's very poor score on this indicator is a reflection of the lack of mutual recognition agreements with other countries.

Figure 2.A2.17. **Regulatory barriers to trade**



Notes

1. See OECD (2002), Nicoletti and Scarpetta (2003) and Conway *et al.* (2006) for empirical evidence on the links between the intensity of competition in product markets and productivity performance.
2. See Conway, Janod and Nicoletti (2005) for more detailed information on the content of the regulatory questionnaires, the methodology used to construct the low-level indicators and the aggregation of the summary indicators.
3. The results, therefore, differ from other published OECD assessments. Given the gap between the rand's market exchange rate and purchasing-power parity, however, a meaningful comparison requires the use of PPP exchange rates for all countries.

ANNEX 2.A3

Network industries: Structure and regulatory framework

Electricity

The electricity sector is dominated by a vertically integrated state-owned monopoly, Eskom, which provides 95% of electricity generation, owns and operates the transmission grid and supplies around 60% of electricity directly to end-users. The remaining 40% of the distribution is held by approximately 180 municipalities, with a few of them having small generation capacities. Eskom is currently among the cheapest electricity providers in the world. Its tariff adjustments were consistently below inflation over the period 1993-2002, and only slightly above inflation since 2003. This reflects competitive domestic coal prices, a recognised and improving operating efficiency,[1] preferential tax treatment and, above all, the fact that tariffs are far from covering long-run capital expenditure costs. Now that demand for electricity has been rising rapidly, whereas policy indecision and hesitations over industry restructuring have delayed much needed new investments, the previous large excess in generation capacity – due to overinvestment in the 1980s – has dwindled and the industry is confronted with a very tight capacity margin. Outages have become increasingly common, culminating in load-shedding on an unprecedented scale across the country in January 2008.

The government formulated its strategy to deal with the power crisis in the "National Response to South Africa's Electricity Shortage" issued in January. This document admits that in the absence of active measures the risk of load shedding will remain high until at least 2013. The strategy foresees both supply-side and demand-side measures. In the near term on the supply side, it is envisaged that Eskom's capacity can be raised by 3 000 megawatts (*i.e.* more than 7%) over 2008-09, and 500 megawatts added from other producers. Medium-term plans include extending overall capacity by a further 14 000 megawatts by 2015, with 3 000 megawatts coming from independent producers. In this way, the system's capacity would be raised by 45% by 2015 compared to current levels.

In the short-term, however, demand-side management is seen as remaining necessary to address the power shortages. Rationing appears to be an important component of the government's policy, and it has already been implemented *via* load-shedding, although the strategy views this as an undesirable option with an extremely negative impact on the country's image. Instead, the government suggests alternative options of rationing in the medium-term such as quota allocations. Further demand-management measures include customer behavioural change programmes (restrictions on sales of incandescent light bulbs, solar water-heating programme), substitution of electricity with liquefied petroleum

gas, and measures to increase energy savings in government buildings and state-owned enterprises.

At the same time, the crisis in the sector highlighted the issue of electricity pricing. The "National Response to South Africa's Electricity Shortage" acknowledges that the electricity price in South Africa is very low compared to other countries, and that the gap is widening. While suggesting that increases above inflation will be needed to fund capacity expansion, the document states that the electricity price will remain among the lowest in the world.

In this context, any attempt to restructure Eskom is likely to be postponed further, which may in turn add to the lack of clarity surrounding South Africa's policy for its electricity market. At the time of the 1998 Energy White Paper, government policy envisaged a far-reaching liberalisation of the market: its three segments would be separated, the distribution sector merged into six regional electricity distributors (REDs) and, in the longer term, competition introduced between power generation plants. Even before the emergence of stress on the supply side, however, the reform plan stalled and, in 2004, the government announced that it would instead opt for a single-buyer model.[2] Eskom's generation and transmission would not be unbundled and that Eskom would keep 70% of total generation capacity, while 30% would be sold to independent power producers (IPPs). However, progress in attracting private sector investment has so far been slow and the current market structure is a serious obstacle to competitors' entry. This risk is illustrated by the long delays incurred for the installation of new private generation capacity (1 000 MW in Eastern Cape and Kwazulu Natal), for which the bidding process started in 2004: these delays are partly attributable to concerns raised by Eskom about the power purchase agreement.[3]

The rationalisation of the distribution sector, characterised by serious structural inefficiencies and excessive fragmentation, constitutes another major policy challenge. Municipal distributors generally have limited technical capacity and lack the governance and management expertise to operate complex local networks (Kessides *et al.*, 2007). As a result, the level of investment and maintenance is often found to be inadequate, which leads to the deterioration of the quality of electricity supply. Despite the renewed commitment of South African authorities to solve this urgent problem, the consolidation into six financially viable REDs has been extremely slow. A major obstacle to this rationalisation process is the fact that municipalities have constitutional prerogatives for the distribution of electricity (Article 1.55.7 of the constitution), so that participation in the REDs can only be voluntary. At the same time, many of the municipalities are relying on the revenue obtained from the re-sale of electricity to cross-subsidise other services (Teljeur *et al.*, 2003), which explains in turn their lack of enthusiasm about distribution restructuring.

The electricity industry is regulated by the National Energy Regulator of South Africa (NERSA), which is also in charge of gas and petroleum product regulation. NERSA was established in 2005 as the successor to the National Electricity Regulator (NER). The new underlying legislation – the National Energy Regulator Act – incorporates the IEA principles of regulation and strengthens in particular the transparency of the decision making process. With respect to electricity regulation, NERSA's key functions are to: determine electricity prices; issue licenses for generation, transmission and distribution; settle disputes between suppliers and customers; and advise the Department of Minerals and Energy (DME) in the development of policy. While the regulator's positive impact on

Eskom's governance and on the partial rationalisation of municipal tariffs is widely recognised, strengthening the regulatory framework appears to be crucial in order to overcome the current stress situation. As the oversight of Eskom's investment planning and decision making is divided between the regulator, the Department of Public Enterprise (DPE, representing the state as Ekom's owner) and the DME (responsible for strategy), greater coordination between the different stakeholders is needed to ensure that new investment programmes will be cost efficient. With Eskom remaining the dominant incumbent, NERSA will face the difficulty of providing sufficient guarantees to new players for entering the market on a competitive basis. This might prove even more challenging as, in terms of the 2006 Electricity Regulation Act, the Minister of Minerals and Energy retains wide powers with respect to market entry, which falls *de facto* under its umbrella.[4] Any further delay in the restructuring of distribution might lead to an increasing burden falling on NERSA, especially as tariffs are now set to rise markedly over the next few years.[5]

Transport

The major player in the transport sector is Transnet Limited (Transnet), a 100% state-owned transport corporation in charge of the country's railways, ports and pipelines. It consists of five divisions: Transnet Freight Rail, the rail subsidiary; Transnet Rail Engineering, responsible for rolling stock maintenance; Transnet National Ports Authority, the landlord for South Africa's ports; Transnet Port Terminals, managing operations in the major seaports; and Transnet Pipelines, running the country's pipeline network. As in the case of Eskom, the DPE is the sole shareholder of Transnet on behalf of the government.

Transnet is unique, as in no other country does a single company control the railways, ports and pipelines. Transnet's monopolistic position in the major segments of the transport sector has allowed the company to extract significant rents, whereas its centralised structure has provided an opportunity for cross-subsidies both within and among divisions.[6] Thus, the company has used profits from export freight lines and the ports landlord business to support loss-making general freight and passenger rail services. Despite Transnet's monopolistic position in several areas, the company's activities have been virtually unregulated.

Rail

The railway sector is characterised by a dominance of state ownership and a monolithic structure. Transnet Freight Rail, the largest division of Transnet, controls virtually all the South African rail infrastructure, and is the country's major operator of freight and passenger services. The few private companies operating in the sector serve local markets and don't compete with Transnet Freight Rail. At the same time, inter-modal competition, in particular with the liberalised road sector, is strong. The railway sector has no economic regulator. Tariffs are set by Transnet Freight Rail and approved by its parent company Transnet. Although some customers have bargaining power, there is no appeals body in case of a dispute over tariffs. There is some evidence that average freight tariffs are substantially higher in South Africa than in many industrialised and developing countries. In 2005, freight tariffs per tonne/km at PPP exchange rates were twice as high as in Russia, and almost three times as high as in the US and Canada.[7] This applies to most goods, with the exception of iron ore, which has a lower tariff than, for example, the US. Despite this relatively high level of tariffs, the company has deferred spending on maintenance and replacement of the system's assets, which has led to a progressive decline in the quality of infrastructure and aging of the rolling stock.[8]

The sector's development has been slow over the last decade. Freight traffic increased by less than 14% over 1995-2005, while in many other emerging economies (*e.g.* China, India, Russia) it grew by about 50% during this period. Moreover, that increase was accounted for by two dedicated commodity rail links[9] – on the rest of the Transnet Freight Rail network, volumes of freight traffic (mostly general freight) actually declined. The sector is losing market share to road haulage: more than 80% of the increase in freight traffic over 2003-05, for example, was captured by road. Poor reliability of the rail system was one of the main reasons behind this shift. Frequent train delays and cancellations prompted customers to switch to road haulage, especially for transportation of high-value goods, and when timing is important. This shift puts severe pressure on the road network. Transnet's monopoly position may have limited its response to the competitive pressure from road haulage: profits generated in the export commodity lines and other businesses to some extent permit continued underperformance of the general freight business. Similarly, passenger rail traffic is very low and has been steadily declining. The lack of reliable passenger services, in particular, on suburban routes complicates commuting and is viewed as one of the obstacles for efficient job search. The current plans to improve passenger services in anticipation of the World Cup 2010 include building rail links between major towns and airports, such as the Gautrain rapid rail connection between Johannesburg (city and airport) and Pretoria. While these projects will benefit the business travellers and tourists, the problem related to the lack of reliable passenger transport for everyday commuters will not be resolved.

There have been several government proposals to reform the country's rail system since 1994, but few have reached the implementation stage. Progress has been made with the separation of passenger transport: the subsidised rail commuter service Metrorail, formerly part of Transnet, was transferred to the South African Rail Commuter Corporation (SARCC), and the long-distance passenger transport division of Transnet Freight Rail, Shosoloza Meyl, should be integrated with SARCC soon. However, reform of freight operations stalled. The Department of Transport (DoT) formulated its initiatives in the 2004 White Paper on National Transport Policy, and in the subsequent National Freight Logistics Strategy (NFLS) in 2005. The latest document envisages endorsing private sector participation in the operations to promote competition, while suggesting that infrastructure remain state-owned. The Strategy argues for retaining cross-subsidies to support infrastructure and operations that are not commercially viable, but in the "national interest". The subsidies should become "transparent and well-managed". The Strategy also calls for an establishment of three independent regulators: a rail economic regulator responsible for regulation of the relationship between network owner and the multiple operators; a regulator in charge with safety and environment; and a security regulator. It is unclear whether these initiatives will go forward; Transnet's own strategy, supported by the DPE, focuses on increased investment in infrastructure and improved management while preserving the current structure of the sector.

Ports

Due to the geographical location of South Africa, ports are essential for the country's external trade. There are seven major seaports: Durban, Cape Town, Port Elizabeth, Richards Bay, Saldanha Bay, East London and Mossel Bay. A new port, Ngqura (Coega) in the Eastern Cape, is under construction and expected to be completed by 2009. Exports

volumes handled in the ports are approximately three times higher than imports, with bulk exports such as coal and iron ore accounting for a large share.

Transnet plays the dominant role in the sector. Although the landlord business was separated from operations in 2000, both Transnet National Ports Authority (NPA), the company that owns and manages infrastructure of all major South African ports, and Transnet Port Terminals, the main operator, remained divisions of Transnet. Tariffs are also set by Transnet, which in the absence of an independent regulator makes the company the referee in the sector where it is also the major player. This has created barriers for market entry and reinforced Transnet Port Terminals' dominant position in the market for port operations in the different segments of the market (containerised, break-bulk and bulk cargoes). Although many private companies are involved in the port operations, they mostly operate in individual markets and do not compete with Transnet Port Terminals, or with each other.[10] Only break bulk cargo operations are subject to a tangible competition. Shipping is private and at least in theory there is open access to the port system.

The NFLS recognises that port operations are inefficient and expensive. Productivity in handling containerised cargoes in particular is considered to be low by international standards. This results in frequent congestion in the ports and long waits, which increases inventory cost for cargo owners. Additional costs for cargo owners come from congestion charges imposed by shipping companies. Poor integration with inland networks further undermines efficiency of the port operations. Moreover, ports infrastructure has suffered from chronic underinvestment. While the NPA is Transnet's most profitable business, a large share of its profits has been diverted to support other divisions, rather than being invested into maintenance and expansion of the system's critical assets. As a result, the capital requirements of the sector remain substantial. The NFLS identifies the lack of an appropriate regulatory framework as underlying the poor performance of the sector and other government documents have elaborated on the need for reform of the sector (the White Paper of National Commercial Ports Policy in 2002, and the most recent National Ports Act in 2005). The National Ports Act calls for several important changes, some of which have been implemented or are under way: the bill envisages the establishment of an Independent Ports Regulator, the separation of the port authority from the port operation functions and a creation of a competitive environment in the port sector. The Ports Regulator is currently being set up. Its main functions will be to exercise economic regulation of the ports system, promote equitable access to ports and monitor the activities of the NPA. According to the bill, the National Port Authority should, at a time to be determined by the Minister of Public Enterprises, be separated from Transnet and established as a new state-owned corporate entity.

Telecommunications

The telecommunications industry is characterised by an oligopolistic structure and high state involvement. The partially privatised incumbent operator, Telkom SA, remains the major player in the sector, occupying a dominant position in the fixed-line market and in ADSL broadband access. The second national operator, 30% state-owned Neotel has so far had only limited impact on enhancing competition in the sector, not least because of the barriers to access to Telkom's infrastructure. It is not before 2011 that Telkom is required to unbundle the local loop, which gives the incumbent time to strengthen its dominant position and prevents Neotel from significant expansion. The involvement of the state in the sector appears to be on the rise, with a fully state-owned broadband company,

Infraco, being established. Infraco will take over the existing network of Transtel, a subsidiary of Transnet, the state-owned transport conglomerate. Neotel should have a four-year exclusive agreement to use Infraco's broadband capacity. The mobile market has been liberalised since 1994 and three operators are currently licensed to provide services. The largest mobile provider – with a market share around 60% – is Vodacom, in which Telkom holds a 50% stake, although negotiations regarding a potential sale of its stake to the UK Vodafone are ongoing. While ADSL broadband market is dominated by Telkom, a wireless and mobile broadband environment is more competitive. However, the licensing process is slow and cumbersome, which impedes market entry.

The dominance of a few well-established players in the sector manifested itself in high prices and monopoly rents. South African telecoms tariffs have been very high by international standards for many years, and progress in bringing them down has been slow. The 2005 report by Genesis Analytics, commissioned by the South Africa Foundation[11] compared South African telecoms tariffs across ten products with a peer group of 15 countries[12] and found them to be the most expensive on five products and higher than the average on nine. Although prices have decreased since the time the report was released, prices in the comparator countries have been dropping, too, so that the majority of South African tariffs remain uncompetitive. ADSL broadband tariffs are particularly high by international standards, reflecting Telkom's dominant position in this segment. While tariffs for individual mobile services are lower, business services are twice as high as the average for the group. At the same time, the South African consumers enjoy lower charges for wireless and mobile broadband access, compared, for example, to countries like Australia and Britain, as competition in this segment advanced.

High communication tariffs are at odds with the objective of universal access that the government has promoted since the mid-1990s. Even if physical infrastructure is in place, the telecommunication services are not affordable for a large part of the population. Fixed line penetration is consequently extremely low, at around 10 subscribers per 100 inhabitants as of 2005. This hinders the development of wireline internet access, in addition to the fact that broadband access itself is very expensive. Not surprisingly, development of internet services remained slow. The internet penetration rate (at 11 users per 100 inhabitants in 2005) is well below that of comparator countries, and the Genesis Analytics report found that growth rates had been sluggish, averaging 6.4% a year during the period 2002-04. In contrast, mobile services have been developing rapidly, and mobile penetration rate exceeded 70 subscribers per 100 people in 2005, although not all of the connections may be actively used. A recent increase of 41.5% in the internet penetration rate in 2005 is most likely to be attributable to the growing market of mobile and wireless access.

The telecommunications sector is regulated by the Independent Communications Authority of South Africa (ICASA), also in charge of regulation of broadcasting and postal industries. ICASA was established in 2000 following a merger of the telecoms and broadcasting regulators. The regulator's mandate is based on the ICASA Act of 2000 (amended in 2006), as well as the Broadcasting Act of 1999, the Telecommunications Authority Act of 1996 and the 2005 Electronic Communications Act. ICASA is responsible for regulation, licensing, consumer protection and managing the frequency spectrum. Its mandate also includes promoting the attainment of universal service and access. ICASA is generally perceived as a weak regulator, lacking resources and expertise to effectively regulate the sector.[13] Its independence is compromised by the strong role that the Department of Communications (DoC) plays in the industry. The DoC is in charge of

developing the policies and legislation in the telecommunications sector, and has a strong say in the regulation issues through the policy directives, appointment of the ICASA Councillors and budget approval. ICASA's role is further complicated by widespread public ownership in the sector. The Universal Service and Access Agency of South Africa (USAASA) was set up pursuant to the 1996 Telecommunications Act, with the primary objective being to promote universal service and access for all South Africans. The policies pursued by the agency have been widely seen as ineffective, which USAASA itself recognises.

The underperformance of the industry can to a large extent be attributed to the approach to reform in the sector taken by the authorities, a so-called "managed liberalisation". While the 1996 Telecommunications White Paper envisaged an accelerated opening of the sector and less state participation, the Telecommunications Amendment Act of 2001 implied a more gradual approach, with a slower opening-up and the continuing and even increasing state participation. The most recent Electronic Communications Act (2005) is a big step forward compared to previous legislation, in particular, on the issues of licensing, but it is still open to interpretation, for example, in leaving scope for the DoC to interfere into the licensing process. Implementation will require stronger capacity of the regulator ICASA.

In 2005, the South Africa Foundation identified twelve steps for lowering costs and improving access in the telecommunications sector, including unbundling Telkom's local loop, establishing interconnection at cost-based prices, ensuring greater ICASA independence and accountability and reviewing licensing and spectrum fees. The progress has been mixed, as summarised in a follow-up report issued in 2007.

Notes

1. See Kessides *et al*. (2007).
2. At the same time, Eskom was authorised to invest in new capacity after a 2001 Cabinet decision prohibited such new investments.
3. More precisely, Eskom expressed fears that the regulator would not allow the full cost of the purchase power agreement to be passed through to customers
4. Among other things, the DME decides what new generation capacity is needed, administers the bidding process for IPPs and determines to whom the electricity may be sold and how.
5. Given the magnitude of the task and the lack of information, municipal price regulation is generally done by comparison and not based on an evaluation of the "real numbers".
6. See NFLS (2005), p. XIV.
7. *World Bank Railway database* (2007).
8. For example, average age of locomotives in 2005 was 25 years, whereas the international best practice average is 16 years. See NFLS (2005).
9. The 580 km-long COALLink (transporting export coal to the Richards Bay coal terminal) and the 861 km-long Orex line (transporting export iron ore to Saldanha port terminal).
10. Examples include the Richards Bay Coal Terminal operated by coal producers, the SA Sugar Terminal operated by the South African Sugar Industry association, and handling of the bulk petroleum cargo.
11. Association of South Africa's largest corporations and major multinational companies with a significant presence in South Africa. In 2005, the association changed its name to Business Leadership South Africa.
12. Australia, Denmark, Hong Kong, Netherlands, South Korea, Sweden, United Kingdom, United States, Brazil, India, Malaysia, Morocco, Thailand and Turkey.
13. See *e.g*. Teljeur *et al*. (2003).

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Chapter 3

Realising South Africa's employment potential

Unemployment in South Africa is extremely high and very unevenly distributed, being concentrated among young less-skilled blacks.

The sharp increase in unemployment in the 1990s was driven by a surge in the supply of less-skilled labour, accompanied by a failure of labour demand to keep pace. Growth of the working-age population and the release of pent-up pressures for labour force participation in the majority black population explain the big increase in the supply of less-skilled labour, while negative demand shocks in labour-intensive sectors were an important factor in the slow growth of demand. The combination of these factors means that market-clearing would have required a substantial fall in real wages in the decade after 1994, especially for less-skilled workers. Although some decline in real wages does appear to have taken place, this was insufficient to prevent the jump in unemployment – union power and other features of the labour market prevented a much larger downward move in real wages.

Legacies of the apartheid era can explain at least part of the increase in labour supply and the inability of the economy to absorb it. More could have been done, however, to unwind those legacies, and other features of policies and institutions have contributed to the labour market dysfunctionThe failure of unemployment to fall more decisively during the period of robust growth since 2003 suggests that structural factors have been impeding the efficiency of the labour market.

While improvements in the implementation of employment protection legislation could help reduce unemployment, it is probable that bigger gains could be reaped in other areas. Changes in municipal laws and regulations to ease urban migration and facilitate informal employment are likely to be particularly important. Over the longer term, improvements in basic education will be key to reducing the excess supply of less-skilled workers. Efforts to tackle crime could help reduce the brain drain and attract skilled immigrants, which would likely boost labour demand for less-skilled workers via complementarities. And improvements in product market regulation to strengthen competition could help expand formal sector employment.

No country has achieved a major and sustained reduction in unemployment without rapid economic growth. Along with structural reforms to labour markets, education, and product markets, care needs to be taken to ensure that macroeconomic conditions remain supportive to achieving the employment and poverty reduction goals articulated in AsgiSA.

In the near term, the overriding priority is reducing unemployment. Without further increases in labour force participation rates, however, even cutting the unemployment rate to single digits would leave employment rates very low by international standards. In the longer term, further major benefits can be reaped from raising employment rates towards advanced country levels. Attention may have to shift to delivering continued increases in labour inputs, in order to ensure sustainable economic growth and lasting reductions in poverty and inequality.

Diagnosing unemployment in South Africa

Unemployment is the most salient problem of post-apartheid South Africa. The lack of employment for a large share of those who want it not only implies a great loss of national income relative to potential, but is also an important factor in South Africa's extreme levels of inequality and widespread poverty. The failure to bring unemployment down decisively is probably the greatest source of popular discontent about the government's economic policies, despite numerous successes, and it naturally leads to pressures to try more radical and activist solutions which risk being wasteful and counterproductive. All this is of course recognised by the government, which under *AsgiSA* aims to halve unemployment (and poverty) by 2014, by removing a number of constraints on faster output and employment growth.

While some things are known about the causes of South Africa's very high unemployment rates and what can be done about them, a number of puzzles and uncertainties remain. For example, while it is clear that an important aspect of unemployment is mismatches between unskilled job-seekers and skill-intensive jobs, it is less clear why labour demand has evolved in such a skill-biased manner, and in particular why informal employment has not absorbed more of the workers excluded from the formal sector. Another important uncertainty relates to the evolution of real wages. While some observers see the increase in unemployment in the second half of the 1990s as proof of excessive real wages, some measures show real wages falling during that period. Analysis is complicated by the fact that data are often partial or missing and sometimes inconsistent.

A broad question of interest which is taken up in this chapter, although no definitive answer is possible, is to what extent labour market policies themselves explain the emergence and persistence of extreme unemployment. One contribution to answering that question made by this chapter is the calculation of the OECD's employment protection legislation (EPL) indicator for South Africa, and the benchmarking of that indicator against OECD and selected non-OECD economies.

More broadly, the chapter aims to add to the already extensive literature analysing the sharp rise in unemployment in South Africa in the post-apartheid era, and to suggest some policy priorities that would assist in meeting the government's goal of halving unemployment by 2014.

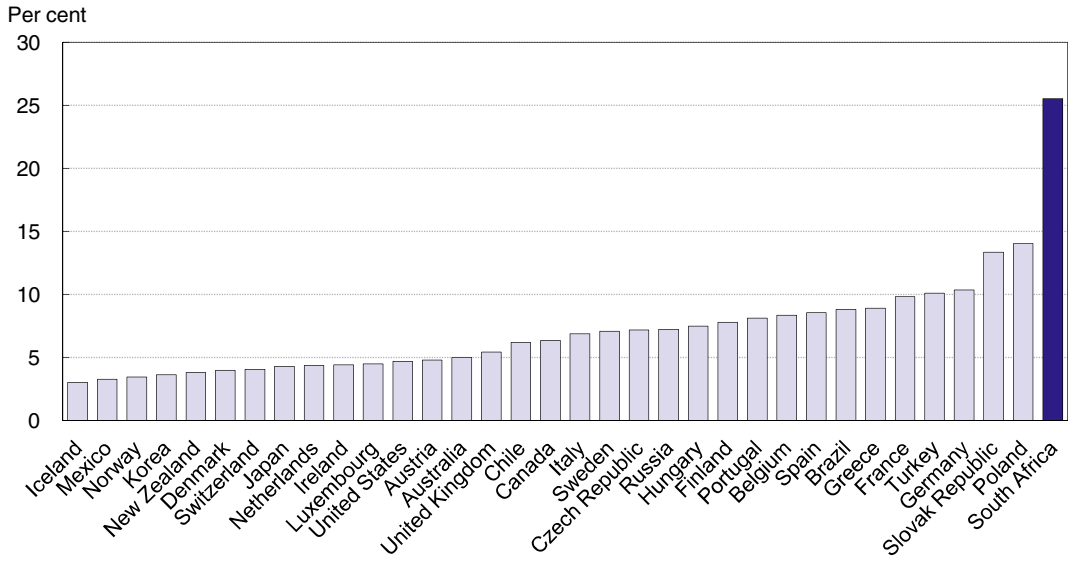
Labour market performance

Unemployment is extreme and persistent…

The rate of unemployment in South Africa is extreme by virtually any standard, and it is certainly an outlier when compared to the OECD, notwithstanding the severe unemployment problem still seen in some advanced economies (Figure 3.1).

The ramifications of the unemployment problem are severe and wide ranging. Achieving full employment (that is, a situation in which such unemployment as remains is

Figure 3.1. **Unemployment rate, 2006**
Persons aged 15-64 years[1]



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1. 15-65 for South Africa, 15-60 for Brazil, and 2005 data for Luxembourg.

Source: OECD, database on *Labour Force Statistics*; *ILO, Laborstata* database; and national statistical institutes.

only frictional) could add around USD 1 000 to GDP per capita, lift millions of South Africans out of poverty, and significantly reduce the extreme level of income inequality that currently characterises the country.

Given the scale of unemployment, it is inevitable that there be questions about the reliability of the official statistics. In particular, doubts are sometimes expressed about whether all those counted as unemployed are really actively seeking work.[1] Reviews of the data (*e.g.* Bhorat, 1999; Nattrass, 2000) have not, however, uncovered any serious flaws. There is therefore no reason to think that the data are substantially overestimating true unemployment.

It has also been argued that much of South Africa's measured unemployment may really be voluntary, in the sense that at the prevailing wage available to job-seekers, they are unwilling to work, preferring some alternative, whether that be public benefits, household agriculture, or continuing search for a better wage offer (Kantor, 1980; Gerson, 1981; and ILO, 1996). There is, however, considerable evidence to suggest that any such voluntary unemployment is at most a small part of the total. Kingdon and Knight (2004a) show that the unemployed are worse off in terms of income, expenditure, and well-being than those employed in either the formal or the informal sector, making it unlikely that they are to any significant extent choosing unemployment over undesirable jobs. To the extent that search for a well-paid formal sector job is more likely to be successful from unemployment than from informal employment, there would be some "wait" unemployment, but there is little evidence that this is an important feature of the overall unemployment picture.

... as well as unevenly distributed

Unemployment is not only high on average but also very unevenly distributed among age groups, genders, skill categories and ethnic groups. Unemployment rates are highest for youth, women, and blacks (Table 3.1). Regionally, unemployment is lowest in the provinces with the highest per capita incomes and containing the major metropolitan centres, being some 12 percentage points higher in largely-rural KwaZulu-Natal than in the Western Cape.[2]

Table 3.1. **Unemployment rate, 15-65 years**
September 2007

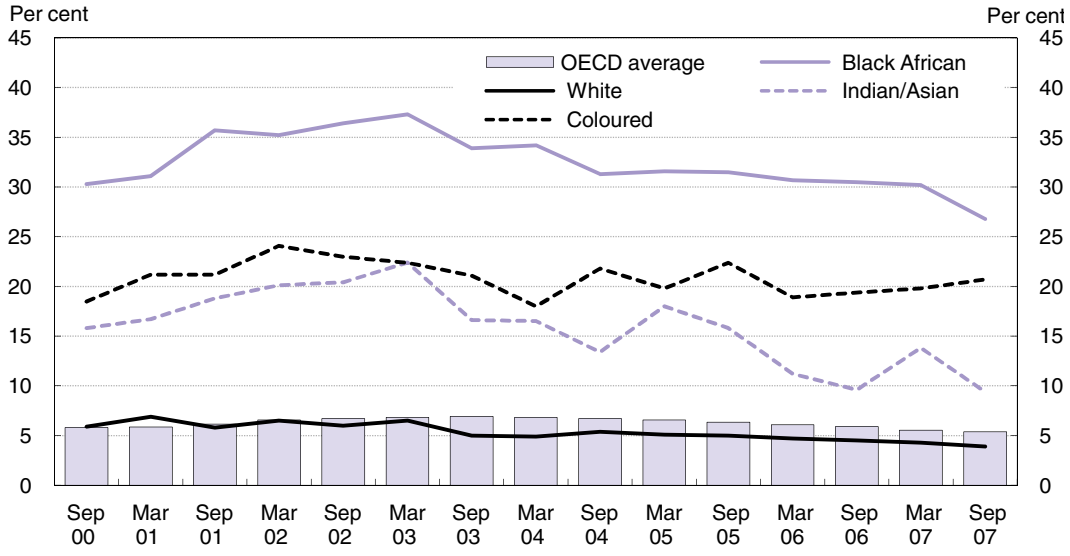
	Male	Female	Total
All population	20.0	26.7	23.0
By population group:			
Black African	23.1	31.2	26.8
Coloured	20.0	21.5	20.7
Indian/Asian	8.6	11.0	9.4
White	3.5	4.5	3.9
By province:			
Western Cape	16.3	17.6	17.0
Eastern Cape	19.9	26.9	23.1
Northern Cape	20.2	33.2	25.7
Free State	19.2	30.8	24.3
KwaZulu-Natal	27.8	30.6	29.1
North West	19.5	30.1	24.1
Gauteng	16.7	23.4	19.5
Mpumalanga	16.7	30.3	22.9
Limpopo	24.6	30.5	27.6
By age (September 2006)			
15-24			50.2
25-34			28.5
35-44			18.2
45-54			12.4
55-65			6.9

Source: Statistics South Africa (2007), *Labour Force Survey,* September 2007 and September 2006.

The unemployment rate for whites is under 4%, which compares favourably with OECD countries, while other groups all have elevated levels, with the most extreme problem being seen for blacks. The relative ranking and magnitudes of unemployment for different racial groupings (according to the apartheid era classifications) has remained very stable in recent years (Figure 3.2).

Not surprisingly, in view of the high overall rate of unemployment and its concentration in certain groups, a high proportion of unemployment is of long duration (Figure 3.3). Many workers in the more privileged groups never experience unemployment, while approximately half of the unemployed report never having worked. This to a large extent reflects the heavy concentration of youth in total unemployment, but average spells of unemployment, particularly for rural blacks, are very long, and some less-skilled blacks may never experience anything but unemployment (Kingdon and Knight, 2004b).

Figure 3.2. **Unemployment rates for different racial groups, 2000-07**



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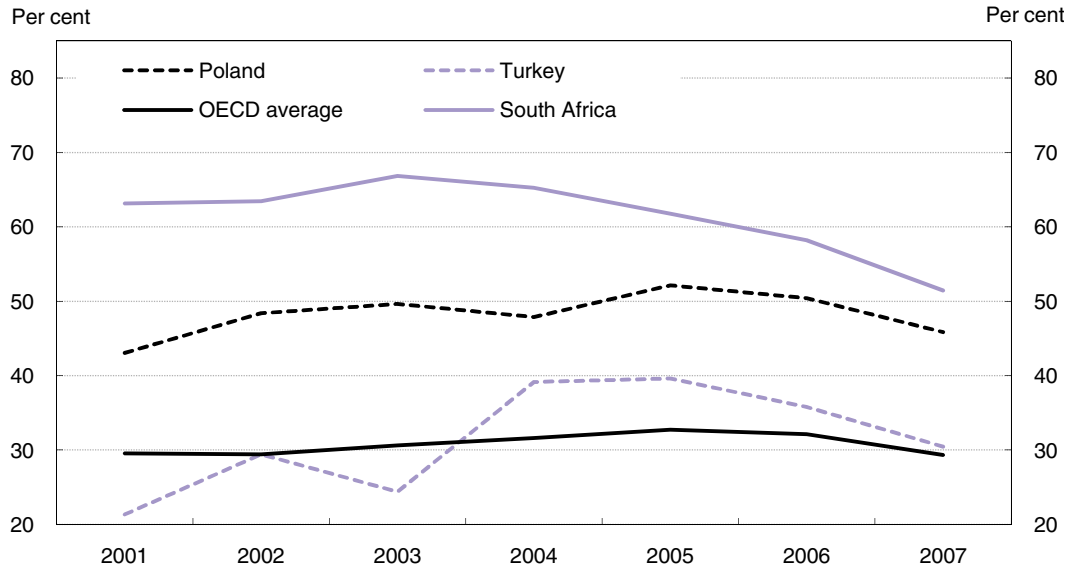
Source: Statistics South Africa, *Labour force Survey*; and OECD, *Economic Outlook* database No. 82.

Figure 3.3. **Long-term unemployment**
As a percentage of total unemployment



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Note: Duration of job seeking > 1 year.

Source: Statistics South Africa, *Labour Force Survey*; and OECD, database on *Labour Force Statistics*.

Overall labour market flows are surprisingly large, but some flows appear to be blocked

Using the *Labour Force Survey* panel data, Banerjee *et al.* (2006) find a surprising amount of churning between different labour market states (formal employment, informal

employment, unemployed, and not economically active. On the other hand, flows out of informal into formal employment are found to be rare, as are flows into employment for youth. Overall, the picture is of a group of people in the formal sector, who may move from job to job with relative ease, and a large excluded group who move only between unemployment, informal employment, and discouraged or not economically active status.

High unemployment has resulted from a surge in the supply of less-skilled labour…

While discontinuities in data sources create difficulties of interpretation for a number of labour market variables (see Box 3.1), it is clear that the working age population, and especially the number of blacks of working age, has expanded substantially since the early 1990s (Table 3.2); the sharp increase in labour supply is in part a function of demographic trends.[3]

Moreover, in some respects the composition of the working-age population has shifted in ways that are unfavourable from an unemployment perspective. While the age and gender structure of the population have not changed much since 1995, the racial composition has altered significantly. The black working-age population has increased faster than that for other racial groups since the early 1990s, and blacks in South Africa have by far the highest probability of being unemployed. Meanwhile, whites, who experience very low unemployment rates, have actually seen a reduction of about 25% in their working age population since the end of apartheid, with emigration playing an important role.[4]

Apart from demographic shifts, the share of the working-age population wanting employment also appears to have increased. The statistics certainly show a substantial rise in labour force participation rates since the mid-1990s: the official estimate of the participation rate (on a comparable basis, using the narrower, ILO definition for unemployment) was 46% in 1995 and 56.5% in 2007. There is a particular problem in interpreting these data, however, which is that, as noted in Box 3.1, the bulk in the rise in the labour force participation rate comes in 2000, at the break point between two discontinuous data sources. In any event, it is notable that participation rates remain low compared to OECD economies and most other middle-income countries (Figure 3.4). South Africa's high unemployment is not just an artefact of aberrantly high estimates of the participation rate; indeed, in the long-run, achieving labour utilisation rates typical of advanced countries, an important part of the process of raising living standards, will require substantial increases in labour force participation from current levels.

Moreover, the composition of the increase in participation rates has, like that of the growth of the working-age population, tended to push up unemployment. Participation rates have in particular risen for two groups, women and the young, which have a higher-than-average probability of being unemployed. Looking only at the latter factor, the unemployment rate in 2007 was about 2½ percentage points higher than it would have been if the age structure of the labour force had remained as it was in 1995, because the increase in participation rates has been most marked among the young. Overall, for the period 1995-2005, Banerjee *et al.* (2006) estimate that about 31% of the increase in unemployment can be explained purely by changes in the composition of the labour force in terms of gender, ethnicity, and age group.

The significant increase in labour force participation, above all among blacks, and especially black women, is somewhat surprising given the high rates of unemployment,

Box 3.1. **Data constraints**

A major difficulty in analysing South Africa's labour market performance (and indeed some other aspects of the economy) since the early 1990s is that there is no single consistent data source covering the entire period. One principal source of labour market data, the *October Household Survey (OHS)*, began in 1995, a year after the transition to democracy, and ended in 1999. Its successor, the *Labour Force Survey (LFS)*, conducted in March and September of each year, began in 2000. Censuses are conducted every 5 years, but the pre-democracy censuses are not fully comparable with the post-apartheid ones, and there are data for only two of the latter so far, 1996 and 2001. There have also been surveys of employers: the *Survey of Employment and Earnings*, discontinued in 2005, and the *Survey of Quarterly Employment*, which replaced it. The latter two provide measures only of formal sector non-agricultural employment, however, and these partial data tend to underestimate systematically overall employment growth.

A particular problem pertains to the year 2000, the first year of the LFS. An initial LFS (with a restricted sample) was conducted in February 2000, with a second in September/October. Of the measured employment growth of 3.08 million over the twelve-year period between October 1995 and September 2007, nearly half, 1.51 million, occurs in the 4-month interval between October 1999 and February 2000, when the changeover from the OHS to LFS takes place. It is not clear why such a sudden surge in employment would have taken place at that time. There was relatively strong real GDP growth (4.2%) in the year 2000 relative to previous years, though still only at about potential, and the LFS for September of that year actually shows slightly lower employment than in February. One statistical factor known to be at play is the improvement in coverage of employees in the informal sector. If all of the measured increase from October 1999 to February 2000 were an artefact of the statistical shift from the OHS to the LFS, then employment growth during 1995-2007 would have been not 2.2% a year but 1.2%. Probably the true value falls between the two, especially since 1995 also looks somewhat anomalous, giving rise to an 8.5% drop in employment between 1995 and 1996. The 1995 estimate uses weights derived from the 1991 Census.* If weights from the 1996 Census are used instead, total employment in 1995 would be about 9.5 million, resulting in a smoother and more plausible trend over the period 1995-99.

A similar issue arises with labour force participation – indeed, the discontinuity is even more marked in this case. The OHS data show a gradual rise in the labour force participation rate from 46.0% to 51.5% between 1995 and 1999. The rate then jumps to 61.5% in the first LFS in February 2000, and is still 58.7% in the first full LFS conducted in September of that year. The jump between the two series is in fact almost equal to the whole of the measured rise in labour force participation between 1995 and 2007.

	October 1999 OHS	February 2000 LFS	% change	Average % change 1995-99
Employment (000s)	10 369	11 880	14.6	1.6
Economically active (000s)	13 527	16 213	19.9	3.5
Labour force participation rate (%)	51.5	58.7	14.0	2.3
Unemployment (narrow; 000s)	3 158	4 333	37.2	10.0

Source: Statistics South Africa.

Another important problem is the absence of a reliable time series for wage data. Both the OHS and the LFS only classified earnings in ranges, preventing the calculation of precise averages. And the 2000 discontinuity problem is again marked for wages, which are shown as dropping 38% in real terms between October 1999 to February 2000, then more than doubling between February and September 2000, before falling back almost to the same level in the following March. The September 2000 seem to have been affected by a problem of outliers which probably reflects misrecording (Burger and Yu, 2007), but overall, the picture that emerges from the OHS-LFS interface is that the latter captured a large number of low-paid, especially informal sector, workers (as well as unemployed individuals) not included in the former.

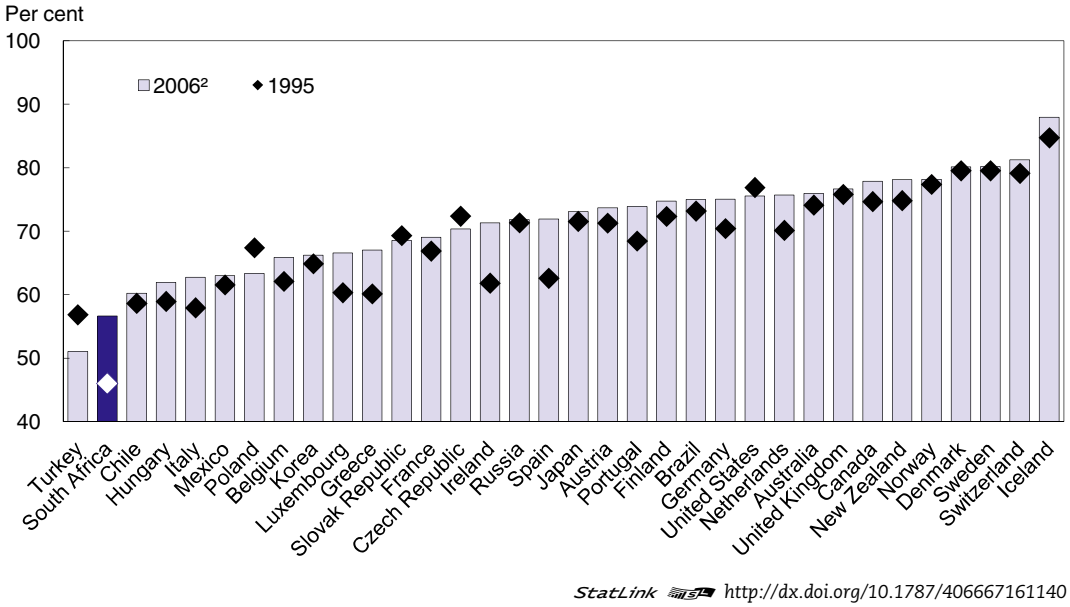
* Another issue with the 1995 OHS was that security concerns prevented full sampling in KwaZulu-Natal, leading to a likely overestimation of employment (Banerjee *et al.*, 2006).

Table 3.2. **Working-age population and labour force**
15-65 years,[1] thousand

	October 1995	September 2007	Annual growth
Population of working age	**26 444**	**30 413**	**1.2**
Male	12 766	14 682	1.2
Female	13 678	15 708	1.2
Black African	19 158	23 797	1.8
Coloured	2 444	2 767	1.0
Indian/Asian	745	808	0.7
White	4 097	2 986	–2.6

1. For 1995, 15+.
Source: Statistics South Africa, *Labour Force Survey*, September 2007, and *Household Survey*, October 1995.

Figure 3.4. **Labour force participation rates, 1995 and 2006**
Persons aged 15-64 years[1]



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1. 15-60 for Brazil, for South Africa 15-65 in 2006 and 15+ in 1995.
2. 2005 for Luxembourg.

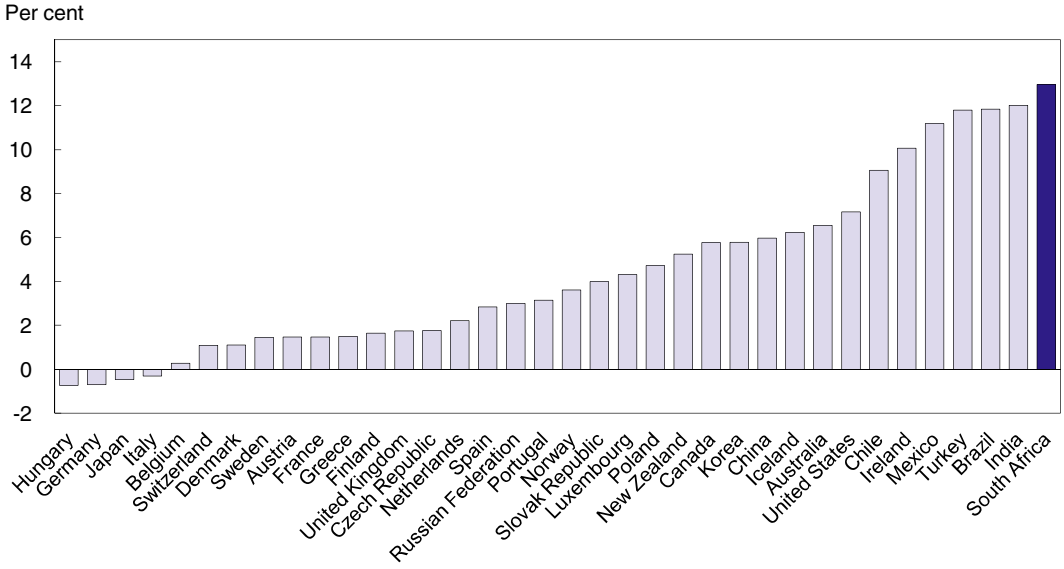
Source: OECD, database on *Labour Force Statistics*; ILO, *Laborsta* database and national statistical institutes; and OECD calculations.

since given difficulties in finding employment one would expect, other things being equal, higher rates of discouraged job-seekers withdrawing from the labour force. One explanation may be that, with unemployment rising for males, a growing number of women joined the labour force to try to sustain family incomes.

... which was not fully absorbed into employment

Taking into account growth of the working-age population and rising participation rates, over the space of about 5 years South Africa saw an increase in the number of people of working age willing to work of nearly 40%. This sort of increase has few precedents, either in South Africa or elsewhere, and there are many economies that would have trouble smoothly integrating such an increase in job-seekers into employment (Figure 3.5).[5]

Figure 3.5. **Working-age population growth in selected countries, 1995-2000**
Persons aged 15-64



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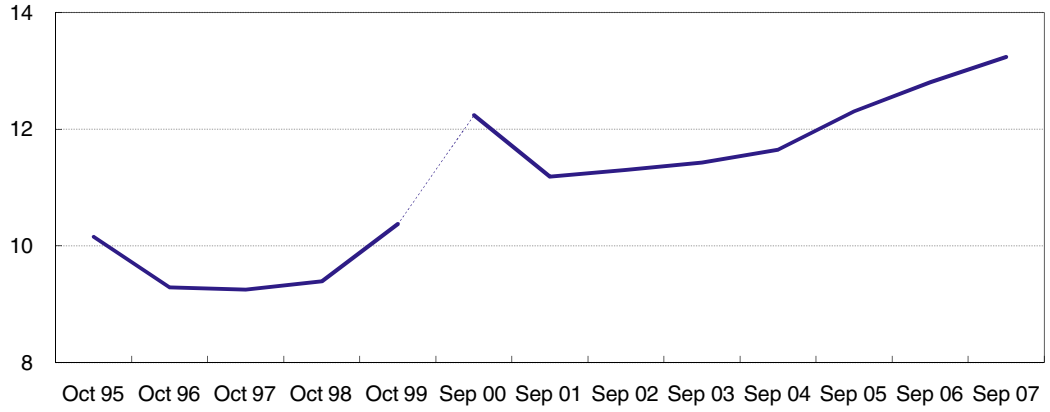
Source: OECD, database on *Labour Force Statistics*; and United Nations (2006), *World Population Prospects*.

The success of the South African labour market in absorbing the surge was clearly limited, however. Whatever the precise increase in labour force participation rates, it is clear that of the roughly 5 million increase in the labour force that the data suggest occurred between 1995 and 2007, only about 3 million were absorbed into employment, with the remaining 2 million being reflected in the increase in unemployment.[6] Employment growth has not been strong enough.

In fact, some data actually indicate a decline in formal employment up to 2002, which led to increasing talk of South Africa suffering from jobless growth (*e.g.* Wakeford, 2003).[7] In fact, however, the best available measures of total employment show some growth over the periods 1995-99 and 2000-07, with, as noted in Box 3.1, a break in the series in 2000, when employment is shown as jumping sharply (Figure 3.6). There have been significant losses of employment over the past 13 years in certain sectors, notably mining and agriculture, but these were outweighed by growth in other areas, especially construction, financial services, retail, and the state sector (especially community and social services and utilities). The size and persistence of the increase in unemployment since the early 1990s shows that the problem is not merely cyclical – on average, economic growth since 1994 has been roughly equal to estimated potential growth. Within that period, however, unemployment did rise strongly in the period 1995-2002, when growth was below potential, and has subsequently declined significantly (though much less than it had earlier risen) during the period in which actual growth has been above potential. The asymmetry in unemployment performance over the economic cycle indicates a substantial degree of hysteresis: the unemployment rate ratchets up sharply in cyclical downturns, but falls only slowly in cyclical upswings.

This asymmetry between employment performance in strong and weak growth periods in South Africa means that, even if total employment has in fact risen, there may

Figure 3.6. **Employment, 1995-2007**
Millions, 15-65 years



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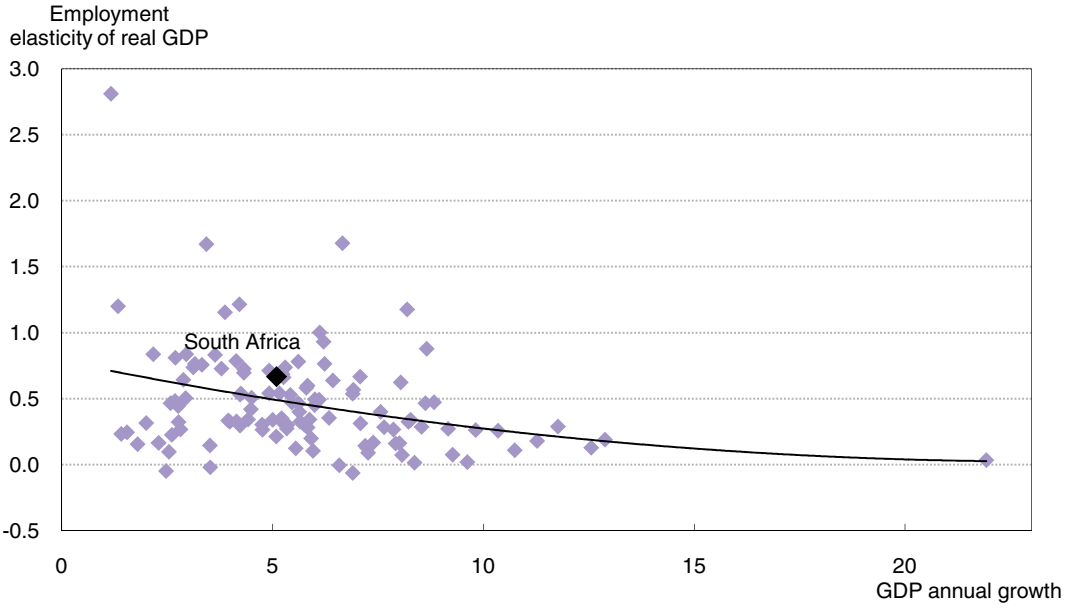
Source: Statistics South Africa: *October Household Survey* 1995-99, September *Labour Force Survey* 2000-07.

be something to the proposition that South Africa has had jobless growth, or more correctly insufficiently employment-intensive growth.

At least relative to other countries, however, the employment intensity of growth since 2003 does not in fact seem to have been a particular problem. South Africa's employment elasticity of real GDP growth during the period 2003-07 was somewhat better than average (Figure 3.7). On the other hand, international comparisons may be misleading, in that there appears to have been a widespread fall in the employment intensity of real GDP growth in recent years (IMF, 2007; UNDP, 2006).[8]

Figure 3.7. **Employment intensity of growth, 2003-07**



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Source: OECD calculations based on *WEO database*, April 2008.

While in some sense the increase in unemployment must mean that real wages have moved upwards relative to the market-clearing level, it does not seem to be the case that excessive real wage increases have pushed employment leftwards along the labour demand curve, resulting in higher wages and lower employment. A good deal of evidence (*e.g.* Banerjee *et al.;* 2006; Burger and Yu, 2007; Woolard and Woolard, 2006) indicates that real wages have been stagnant or falling on average over most of the post-apartheid period.[9] The pattern, therefore, is rather that with labour supply increasing, real wages have not fallen by as much as would have been necessary to prevent unemployment from rising.[10]

Part of the sharp increase in unemployment in the 1990s may be attributable to unfavourable exogenous factors on the labour demand side. Employment growth, especially for less-skilled workers, was held back by the relatively poor growth performance of the mining and manufacturing sectors, two major employers of less-skilled labour. As concerns mining, until about 2003 prices of South Africa's key export commodities (precious metals, iron ore, coal, and diamonds) were low in historical terms. Moreover, the depletion of South Africa's gold reserves has meant that output and employment in that industry have remained on a long downtrend virtually regardless of price developments. Moreover, the need to go deeper to extract remaining reserves has required more capital-intensive methods, giving rise to another source of labour shedding. As to manufacturing, South Africa has been just one of many countries affected by the integration of China and India into the global economy in the past 20 years, exposing cost- and price-sensitive tradables industries to overwhelming competition from other emerging economies with a cheaper but better-suited labour force. On top of that, the reduction of trade barriers undertaken in the context of South Africa's accession to the WTO heightened this external competition in some sectors. Discontinuous data sources again make analysis over long periods difficult, but Statistics South Africa's Survey on Employment and Earnings indicates that between 1998 and 2001 formal employment in mining and manufacturing shrank by about 9%.

Even if such idiosyncratic factors were creating obstacles to achieving full employment, especially of less-skilled workers, this cannot be a fully satisfactory explanation for the persistence of high unemployment over more than a decade. There have to be structural features of the South African economy which have prevented a better matching of labour demand and supply, contributing to the hysteresis in unemployment rates.

Reasons for the inability to absorb the increase in labour supply

The labour force surge and the inability to absorb it both owe something to the legacy of apartheid…

Under apartheid, the majority black population was restricted in the choice of where to live. It was generally not possible to live in the main urban centres, and there were numerous episodes of forced relocations. Under the pass law system, urban blacks were concentrated in townships situated outside city centres, implying long commutes for workers with jobs in the cities. Others were restricted to black African "homelands" far from major cities and situated on low-productivity land. Blacks were also prevented from engaging in certain economic activities, even within homelands.[11]

It is therefore not surprising that the advent of democracy saw a release of pent-up labour supply. Restrictions on residency, accumulation of financial and human capital and choice of occupation were removed. Opportunities for job search increased, and blacks moved in large numbers to the cities, and began to seek jobs that had been closed to them in the past.

Some aspects of the situation inherited from the apartheid era hampered the absorption into employment of the big increase of labour supply in the 1990s. One such aspect was the spatial allocation of the black population. As noted above, blacks were largely confined to remote agriculture-dominated "homelands" and segregated townships scattered around the main urban areas. The result was that at the beginning of the democratic era, blacks generally lived far from the main sources of employment growth and/or faced long (and dangerous) commutes to their place of work. As noted in Chapter 1, South Africa was at that time much less urbanised than would have been expected for a country of its income level, and urban public transport was, and remains, underdeveloped.

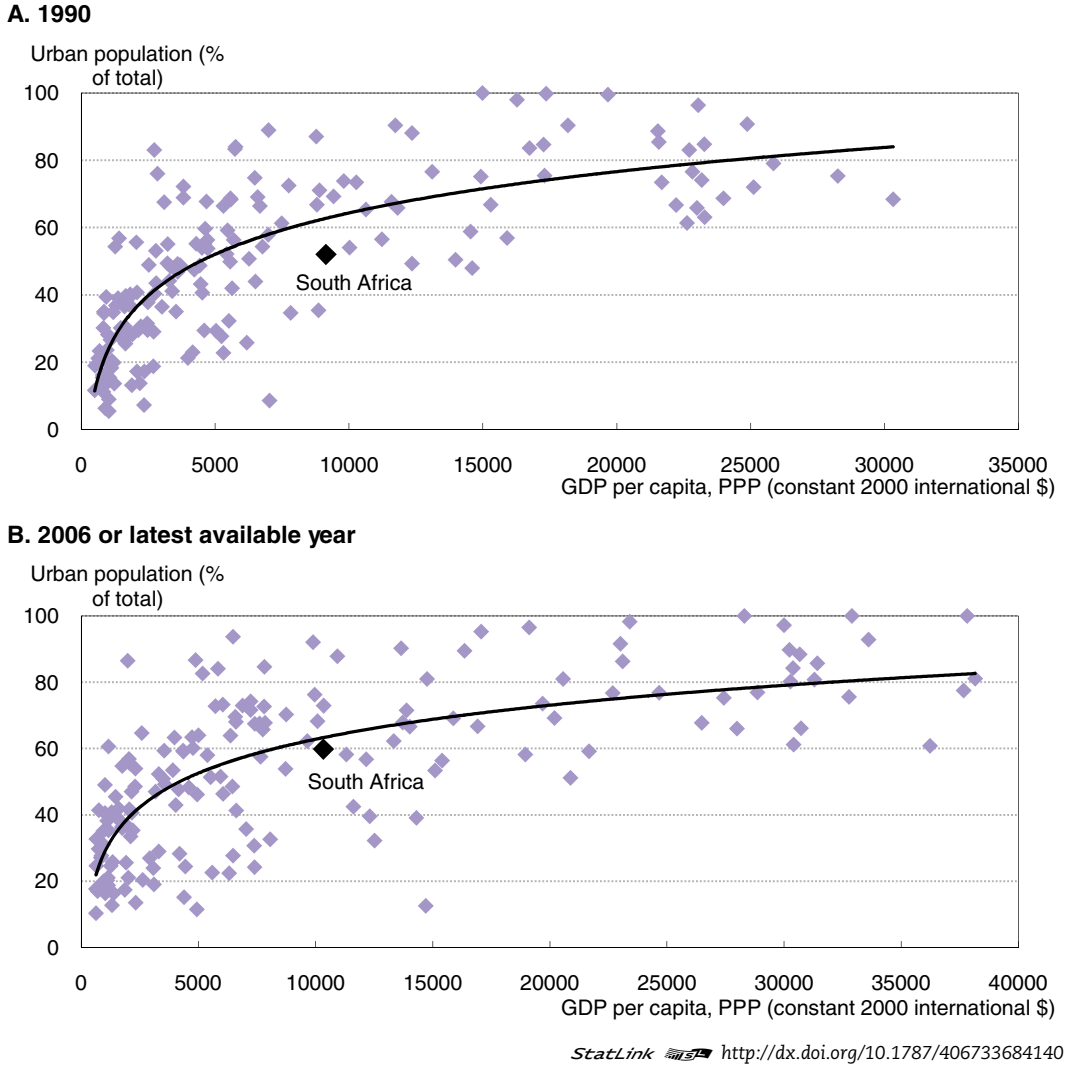
The implications for labour markets of this spatial pattern of settlement are that search costs and reservation wages are likely to be unusually high. This inhibits the efficient functioning of the labour market and raises the equilibrium unemployment rate, an effect aggravated by the existence of capital market imperfections – it will not generally be easy, for instance, for a poor unemployed job seeker to get a loan to travel from his or her rural dwelling to the city to search for work.

Since the mid-1990s there has been a gradual alleviation of the spatial misallocation problem. The pass laws were repealed, and urbanisation rates have increased significantly. One sign of the increased mobility of workers may be the inversion of the previous pattern in which rural unemployment rates were higher than urban rates.[12] With people in rural areas increasingly able to move to the cities to seek employment, the extreme excess supply of labour outside the cities has eased somewhat. This may be taken as a sign that South Africa is becoming more normal in relation to the standard model for developing economies, in which in equilibrium potential rural migrants to cities are indifferent between low local incomes and the probability adjusted returns from either well-paid formal sector work in the city or urban unemployment.

Nonetheless, the internal migration process is still incomplete. Despite the increase in the past 14 years, the urbanisation rate in South Africa remains slightly below what would be expected given the country's per capita income level (Figure 3.8). Regulations, especially at the municipal level, have hindered the provision of adequate housing in urban and peri-urban areas for working class blacks (World Bank, 2008). And while improvements are being made to transport infrastructure, these have not been targeted at enhancing the speed and safety of commutes from former townships to urban centres. A forthcoming OECD Territorial Review of the Western Cape region confirms that even for this relatively low-unemployment region, the problem of spatial misallocation is contributing to labour market dysfunction (OECD, 2008).

Another aspect of apartheid which may still be contributing to poor labour market outcomes is the suppression of entrepreneurialism among blacks. One dimension of this was the stifling of the informal economy through strict regulations. Attitudes towards the informal sector on the part both of government and of the population appear to bear the marks of that tradition. In many developing and middle-income countries, the informal economy plays an important role as an absorber of labour excluded from the formal sector.

Figure 3.8. **Urbanisation**



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Source: World Bank, WDI *database.*

The extreme level of unemployment is partly a reflection of the fact that the informal sector does not play this role in South Africa to the same extent as elsewhere.

Another prominent aspect of the unemployment problem in South Africa is the mismatching of labour demand and supply by skill level. As already noted, unemployment is most extreme for the less-skilled, while there is evidence of shortages of skilled labour. This tendency is far from unique to South Africa – in much of the OECD also, labour demand has shifted over the past two decades in favour of those with more skills, widening the wage gap between skill levels and resulting in a concentration of unemployment among the less-skilled. The pattern is, however, particularly marked in South Africa, and understanding why the economy has not evolved in a direction that uses abundant factors more intensively is one of the challenges in analysing the labour market dysfunction in South Africa.

Nonetheless, the prevailing skills mismatch can be attributed in part to the low skill level of a major part of the population, and that in turn is partly another legacy of the

apartheid era. Although access to education began to improve – in part as a result of protests – in the latter years of the apartheid regime, the system was based on limiting the accumulation of human capital of the majority black population. Even for those blacks with access to schooling, resources were scarce and the quality of education was generally low. The strong excess supply of unskilled workers in the post-apartheid era is in part a function of that system.

... but little has happened to address the hindrances to employment arising from the apartheid era...

One striking aspect of the unemployment problem in South Africa is that while it is overwhelmingly a problem for less-skilled blacks, and while this is a group which suffered the most from the apartheid-era legacies referred to above, surprisingly little has been done to unwind these legacies.

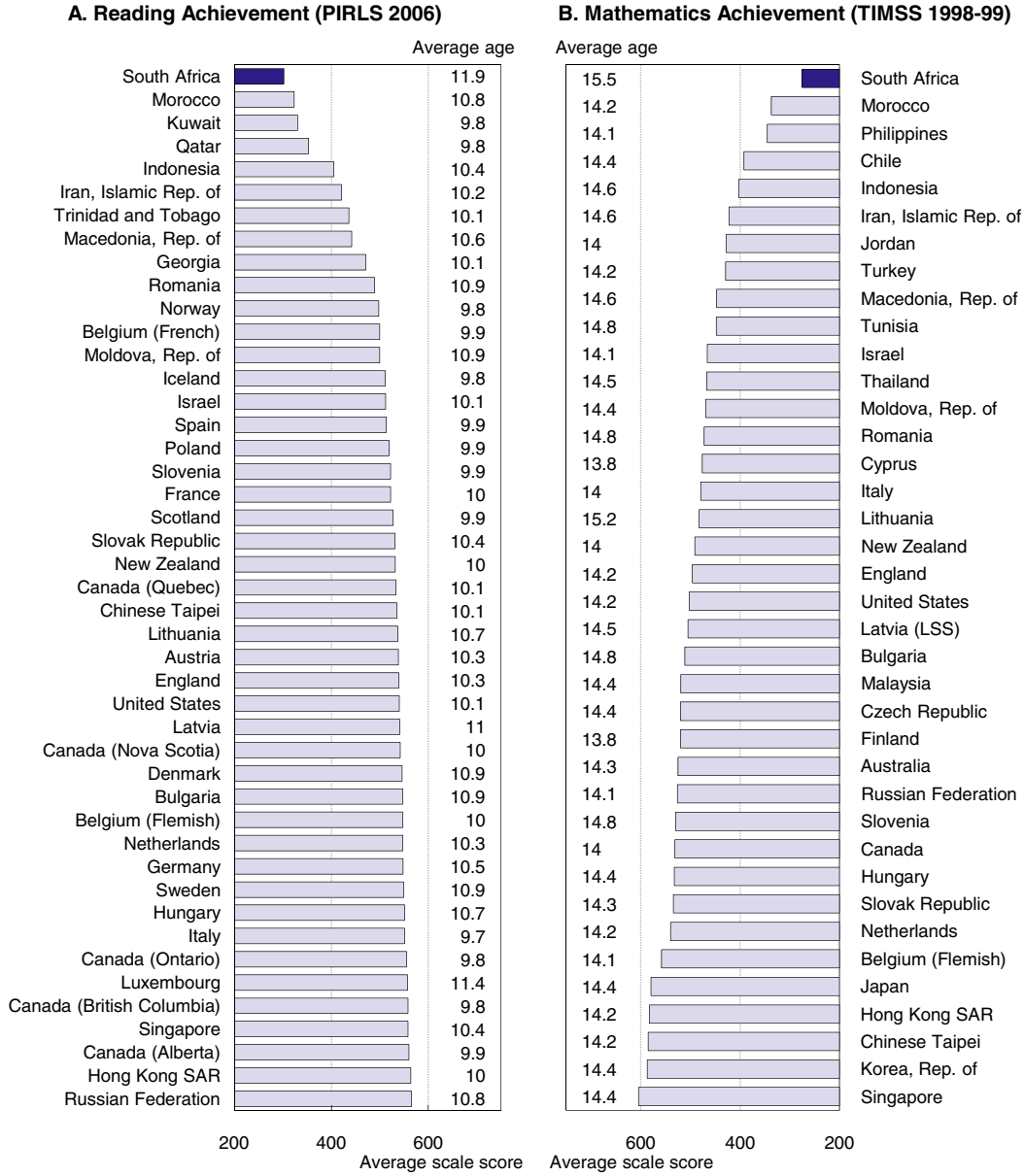
As regards the spatial allocation problem, for instance, the democratic governments since 1994 have tried to increase low-cost housing. To maximise the number of dwellings to be constructed from a limited budget and/or to offset the high costs of meeting infrastructure standards, however, this housing has to a large extent been built far from urban centres, and therefore has done relatively little to bring black workers closer to the source of jobs. Meanwhile, it remains difficult for blacks to settle in peri-urban areas to mix urban employment and informal agricultural activities (World Bank, 2008). In addition, urban public transport remains underdeveloped relative to other middle-income countries like Brazil or Chile. This may, however, be due in part to the relative absence of high-density urban centres in South Africa, itself partly a legacy of apartheid, under which the majority black population was largely excluded from living in the major cities. The biggest project currently underway, the Gautrain – linking Johannesburg, Pretoria, and Johannesburg airport, rather than the city centres and the surrounding townships – does not directly target the transport problems of the black working class.

Again, while black entrepreneurialism, including *via* the informal sector, was stifled during the apartheid era, there is little sign that the authorities see informal activities as an instrument for absorbing part of the excess supply of less-skilled labour. One aim of *AsgiSA* is the elimination of the "second economy", and many restrictions (at the sub-federal level) persist making it hard for informal businesses to operate. While efforts to eliminate informality may be understandable in the sense that formal sector jobs on average have higher pay and better conditions, such efforts cut against the imperative of making rapid progress in reducing unemployment.[13]

... especially in the area of education...

Probably the most important failure to erase labour market effects of the apartheid era relates to education. Concerning the tendency of the education system to fail blacks, some progress has been made, but serious problems remain. The democratically elected governments since 1994 made a major effort to increase access to education, and enrolment rates did rise substantially. There are doubts, however, about the quality of the education being provided to the majority of students. In international tests of literacy and maths and science learning since the late 1990s, average scores for South Africa have trailed the pack – which included non-OECD as well as advanced countries, including some from Africa – by some distance (Figure 3.9). Moreover, the range of scores for South Africa was greater than for all other countries tested. Students from the best schools are

Figure 3.9. **International Tests of Scholastic Achievement**



Source: IEA, *Progress in International Reading Literacy Study* (PIRLS 2006); and IEA, *Third International Mathematics and Science Study (TIMSS), 1998-99.*

performing at levels typical of OECD countries, while others are at or below the levels seen elsewhere in sub-Saharan Africa.

In the crucial area of mathematics and science, the government has set itself ambitious goals for increasing exam pass rates, but the goals are not being met, and the number of passes even fell between 2005 and 2006. Moreover, some 70% of exam passes are accounted for by just 11% of schools, the former white, coloured, and Asian schools (Centre for Development and Enterprise, 2007).

The generally poor (and not clearly improving) results in the post-apartheid education system may be in part a by-product of the understandable effort to make the system more

democratic. One factor was the expansion in the number of teachers in the 1990s, in order to deliver greater access to schooling for black children. The certification of a large number of new teachers appears to have been associated with a relaxation of standards, given the shortage of experienced and well-qualified teachers. In some cases, individuals having themselves just received their high-school diploma (the "matric") were employed to teach that same curriculum. At the same time, in order to rebalance the teaching corps in favour of the majority black population, there were efforts to encourage white teachers to quit or retire, which worsened the shortage of trained teachers. Despite the acute shortage of well-trained teachers, anecdotal evidence suggests that it can be difficult for qualified teachers from abroad to get work visas to teach in South Africa.

Key problems in the education system include the lack of training of teachers; a shortage of texts and basic infrastructure (school buildings, windows, running water, electricity); teacher absenteeism; the impact of HIV/AIDs; and the continued disparity between the former white schools and others, especially the former black schools. On this last point, the mixed public-private system, in which individual schools in the state-funded system can charge fees and supplement the numbers and/or pay of teachers, is an important element maintaining the disparities in outcomes and opportunities between different parts of the schooling system. Public spending per pupil has been broadly equalised across the system, an important step towards addressing pre-existing disadvantages (Department of Education, 2003), but disparities in total (*i.e.* public plus private) spending remain very large.[14]

A possible reflection of a deterioration in the quality of education since the mid-1990s is that, according to a probit analysis of the chances of finding employment, completing high school apparently conveys less of an advantage than it did before. Whereas in 1995 the impact of gaining the matric was significant, by 2005 that was no longer the case – in the later year, to get a significant boost to the probability of getting a job, a post-secondary qualification was needed (Table 3.3).[15, 16]

... and other factors are also contributing to the unemployment problem

While the failure to unwind patterns of disadvantage carried over from the apartheid era has contributed to the rise and persistence of unemployment, the failure of unemployment to fall more decisively, especially in the context of several years of robust economic growth, suggests a lack of labour market flexibility. Among OECD countries there is considerable evidence on the role of several sources of rigidity in explaining variations in employment performance. Factors which have been found to play a significant role in at least some cases include the generosity of unemployment insurance, tax wedges, the level of minimum wages, and union power.

Of these factors, some appear to have limited relevance for South Africa. Unemployment insurance was only introduced in 2001, after the big surge in unemployment, and replacement rates are not particularly high from an international perspective. Tax wedges are likewise modest by comparison to most OECD countries.

Employment protection legislation (EPL)

One factor that is frequently mentioned as a problem for business in South Africa, however, is employment protection regulation. Evidence from surveys such as the World Bank's *Doing Business* or the World Economic Forum's *Competitiveness Index* suggest that firms see South Africa's labour market as highly regulated, especially as regards firing.

Table 3.3. **An employment equation for South Africa, 1995 and 2005**
Dependent variable: probability of being employed

Independent variable	1995		2005	
	Marginal effects	*x*-bar	Marginal effects	*x*-bar
Coloured	0.146***	0.113	0.082***	0.0948
Asian	0.218***	0.031	0.2202***	0.0279
White	0.281***	0.140	0.3037***	0.1074
No education to incomplete GET	–0.011***	6.602	–0.0030	7.0179
Complete GET	–0.012***	1.416	0.0110*	1.7300
Matric	0.031***	0.319	0.0167	0.3830
Diploma	0.163***	0.103	0.2123***	0.1034
Degree	–0.001	0.067	0.0646**	0.0821
Observed probability		0.698		0.400
Predicted probability (at x-bar)		0.751		0.380
Number of observations (unweighted)		42 166		43 631
Chi		5 068.6		3 398.3***
Pseudo R		0.184		0.167

Notes:
*** significant at the 1% level; ** significant at the 5% level; and * significant at the 10% level.
Other independent variables included region, age group, gender, and urban or rural.
Estimates are based on the expanded definition of unemployment.
The education variable is a set of splines, where Incomplete GET refers to those with a Grade 8 or less. Complete GET refers to individuals who have completed either Grade 9, 10 or 11 and Matric refers to those who have successfully completed Grade 12.
Source: Statistics South Africa, *October Household Survey* (1995), *September Labour Force Survey* (2005); and OECD calculations.

These findings helped motivate the decision to compute the OECD's Employment Protection (EPL) indicator for South Africa.

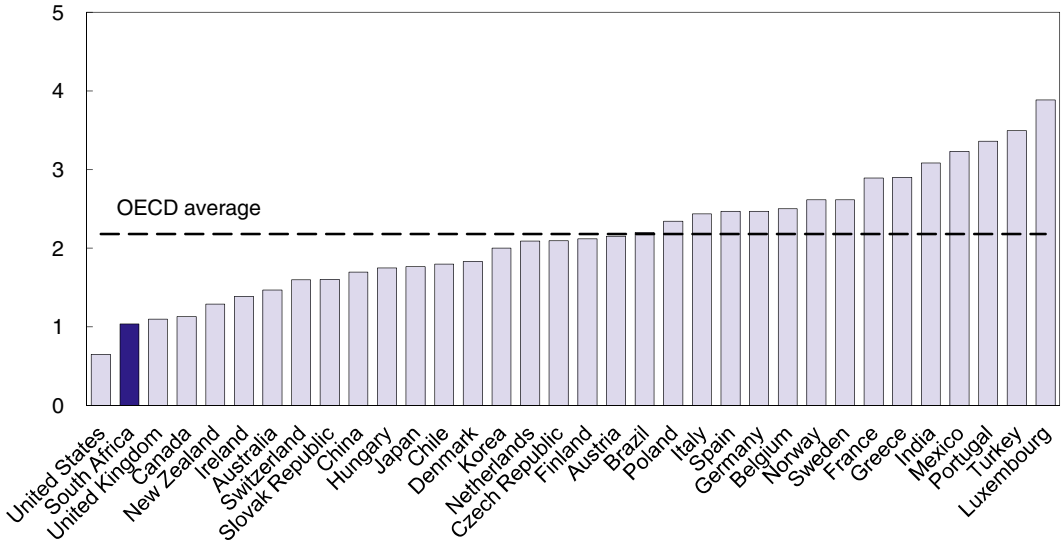
OECD research on the effect of EPL seems to suggest that it generally reduces the flows into and out of unemployment, with little effect on the level of the unemployment rate, but with a positive impact on the average duration of unemployment spells (OECD, 2004). There is also some evidence that restrictive EPL may hinder resilience to shocks (see Blanchard and Wolfers, 2000). Excessively restrictive EPL can also create a distortion favouring greater use of non-standard jobs, short-term contracts and inefficiently low levels of training. Also, while EPL is generally found to have little effect on the employment rates of prime-age men in OECD economies, a number of studies suggest that stricter EPL tends to decrease the employment rates of both youth and women. Since South Africa is characterised by a very high average length of unemployment spells, extensive use of short-term contracts, inadequate training, susceptibility to shocks (commodity prices, real exchange rate swings, etc.), and extreme levels of youth and female unemployment, inspection of the EPL regime is worthwhile, even if it is probably an exacerbating factor and only a relatively small part of the explanation for the elevated level of the overall unemployment rate.

The nature of the EPL indicator and the components and weights are set out in Annex 3.A1. In brief, the EPL indicator describes employment protection legislation *via* 18 questions gathered into three main groups: employment protection of regular workers against individual dismissal; regulation of temporary forms of employment; and specific requirements for collective dismissals. Compared to other available survey measures of employment regulation, it is more focused on legislative provisions than implementation,

and attempts to capture the statutory facts rather than business (or other) perceptions of the EPL environment.

Overall, EPL in South Africa appears to be relatively flexible, with respect both to the average of OECD countries and to those other non-OECD member economies (Brazil, Chile, China, and India) for which the indicator has been calculated (Figure 3.10). South Africa's labour legislation seems to live up to its creators' aim of providing for "regulated flexibility" (Cheadle, 2006). Within the overall indicator, it is true that ease of firing is one area where South Africa shows up as being less flexible, but even in this case, the score is below the average for OECD economies (Figure 3.11).

Figure 3.10. **Employment protection legislation**
Overall score, indicator scale of 0-6 from least to most restrictive, 2006[1]



StatLink http://dx.doi.org/10.1787/406734734058

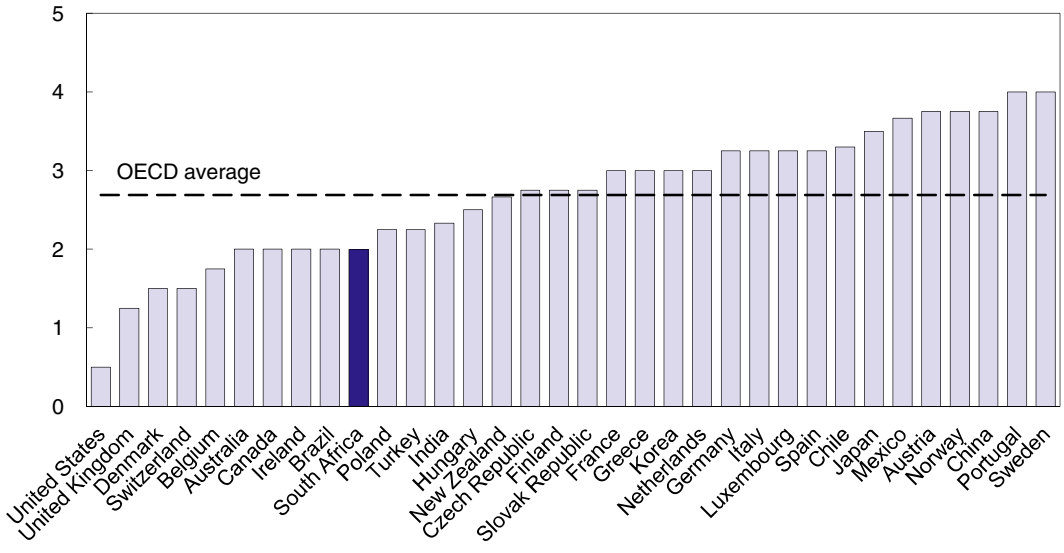
1. 2007 for South Africa, 2003 for Chile and 2004 for Brazil.

Source: OECD (2007), *Going for Growth;* OECD (2005); *OECD Economic Surveys: Brazil;* and OECD (2007), *OECD Economic Surveys: India*.

Notwithstanding the scoring of South Africa's employment protection legislation as relatively flexible, there is, as noted above, a widespread perception that the labour market is highly regulated and that firing in particular tends to be difficult and costly. The primary explanation for this apparent discrepancy most likely lies in the way EPL is implemented. The main institutions arbitrating cases relating to dismissals, the CCMA and the labour courts, are both seen as slow and cumbersome.

To some extent, these perceptions have a clear basis in reality. Although most cases are heard quickly by the CCMA, the institution is overburdened. The growing use of combined conciliation and arbitration ("conarb") hearings has helped speed up resolution, but for most dismissals conarb cannot be imposed on the parties, and one or other party often has an incentive to delay.[17] Conarb proceedings currently make up about a quarter of total wrongful dismissal cases settled by the CCMA. The pattern of reviews of CCMA decisions suggests that employers seek to string out the process to exert pressure on

Figure 3.11. **EPL – ease of firing**
Indicator scale of 0-6 from least to most restrictive, 2006[1]



StatLink http://dx.doi.org/10.1787/406742680011

1. 2007 for South Africa, 2003 for Chile and 2004 for Brazil.

Source: OECD, *Going for Growth* (2007), *OECD Economic Surveys: Brazil* (2005), *OECD Economic Surveys: India* (2007).

dismissed employees to give up rather than going to the end of the process. In addition, a common complaint is that CCMA arbitrators are formalistic in their approach, preferring to apply mechanically the Codes of Practice (which set guidelines on fair procedures, but allow for exceptions) rather than judging the substance of the case.

Another possibility is that, even in implementation, the South African system is not particularly overburdened by labour market regulation, and that business perceptions to the contrary are distorted. There have been a few high-profile cases of wrongful dismissal challenges going through numerous stages and taking years to resolve. The ultimate judgement may even be to reinstate a worker fired years earlier. Such cases attract a disproportionate amount of attention and concern. For the most part, cases taken to the CCMA are heard and resolved fairly quickly. The average time for achieving a judgement in CCMA arbitration cases is about 7 weeks. Even if it is true, however, that perceptions are distorted by a few highly visible but atypical cases, such misperceptions would remain important, since hiring strategies will be affected by beliefs about ease of firing if the need arises.

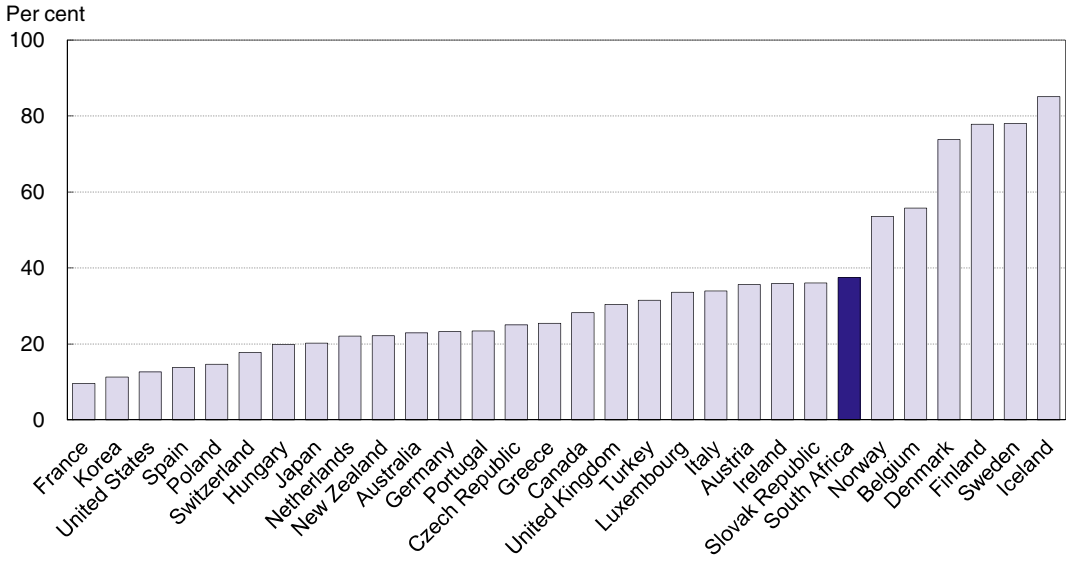
Union wage differentials are large, suggesting a sharing of product market rents

Another institutional feature which is widely seen as playing an important role in South Africa's labour market outcomes is the trade unions. The vast literature on unions finds a range of effects on labour markets. Unions generally raise the relative wages of unionised workers, which other things being equal reduces economic efficiency. Union wage premia were estimated for the United States by Gregg Lewis (1963), and subsequently for a wide range of countries and periods (*e.g.* Blanchflower and Bryson, 2003 and 2004). Apart from this well-documented monopoly role, however, Freeman and Medoff (1984) note that unions also serve as an instrument for collective voice.[18] The collective voice role

allows worker discontent to be articulated and channelled into improved working conditions and productivity. A good deal of evidence suggests that unions are associated with lower quits, higher training, and greater pension savings. Relatedly, despite the union wage premium effect, the empirical evidence of the impact of unions on profits is mixed.[19] The net welfare impact of unions is therefore ambiguous, and can vary across time in given places and among countries.

Unionisation rates in South Africa are not particularly high, being about average both in comparison to OECD countries and relative to other large middle-income countries (Figure 3.12). Union density grew considerably starting in the 1970s, but has been little changed since the mid-1990s.

Figure 3.12. **Trade union density**



StatLink http://dx.doi.org/10.1787/406817612043

Note: 1999 for Turkey. 2001 for Austria, Belgium, Denmark, Finland, France, Greece, Hungary, Iceland, Ireland, Luxembourg, Norway, Poland, Portugal, Spain and Switzerland. 2002 for Australia, Canada, Czech Republic, Germany, Italy, Japan, Korea, Netherlands, New Zealand, Slovak Republic, Sweden, United Kingdom and United States. 2005 for South Africa.

Source: OECD and Statistics South Africa.

One institutional feature which could allow unions in South Africa to play a more important monopoly role than elsewhere, however, is the system of bargaining councils. In industries with bargaining councils, collective bargaining agreements between firms and unions are extended across the rest of the sector. In principle, this is a powerful instrument for increasing the power of unions and magnifying their effect on wages and other labour market outcomes, with a possible amplification of insider-outsider problems.

In practice, however, there is some doubt about the extent to which collectively bargained wages are transmitted to non-union workers *via* the bargaining councils. A multivariate analysis of wage determination reported in Table 3.4 indicates a strong union wage premium, especially for lower-paid workers. The impact of membership of a bargaining council is found to be insignificant in the private sector.[20]

Table 3.4. **Union and bargaining council wage premia – earnings function estimates**

Dependent variable: log of monthly earnings

Variable	OLS	Quantile:				
		0.1	0.25	0.5	0.75	0.9
Private sector bargaining council (BC) member	0.03	0.05	0.01	0.02	0.02	–0.01
Public sector BC member	0.28**	0.32**	0.33**	0.26**	0.26**	0.19**
Union	0.23**	0.35**	0.31**	0.27**	0.21**	0.15**
Number of observations	14 746	14 746	14 746	14 746	14 746	14 746
Adjusted R^2	0.543	0.230	0.332	0.393	0.406	0.394

** Significant at the 1% level.

Note: Variables not shown here are race, gender, experience, education, occupation, sector, location and a set of province dummies.

Source: Statistics South Africa (2005), *Labour Force Survey*, September.

Nonetheless, even if union wages are not in fact being extended across sectors with bargaining councils, the fact that about a third of workers are unionised and receiving substantial wage premia has significant implications for economic efficiency. Other things being equal, employment in unionised firms will be less than otherwise. The impact on unemployment is less straightforward, since there could be a competitive secondary labour market which absorbs workers excluded from unionised firms (by having a lower wage than otherwise), but clearly this does not happen to the full extent in South Africa. Indeed, to some extent the problem of unemployment in South Africa can be seen as the product of an unwillingness to allow real wages to fall far enough to clear the labour market. To that extent, having a part of the primary labour market paying large union wage differentials decreases the wage that would clear the secondary market, and probably results in more unemployment than would be the case if the union premium were smaller.

Again, some part of the large union wage premium is likely to be linked to the existence of substantial product market rents. While data limitations prevented an examination of this proposition, studies of other countries suggest that the existence of product market rents tends to permit labour to extract a share of those rents – wages are higher (controlling for quality of worker and other relevant characteristics) where firms can earn excess profits.[21] Such rents not only make it possible for firms to pay wages above the competitive level without going out of business, but also make strikes or other forms of withheld effort more costly, making firms more willing to pay a premium over the market-clearing wage rate.

In this context, product market regulation can have significant labour market effects. Rent-sharing between firms and insiders may explain the finding that highly restrictive product markets have negative employment impacts (Nicoletti and Scarpetta, 2005; Fedderke and Naumann, 2005). As detailed in Chapter 2, South Africa's product market is characterised by high mark-ups and concentration in many sectors, and relatively extensive state involvement.

Another factor related to the high degree of product market regulation is the government's drive to develop and expand industrial policies. Already, industrial policy, such as the support for the chemicals and auto industries, has contributed to the capital- and skill-intensive nature of growth, to the detriment of employment of less-skilled labour.[22]

Sectoral minimum wages probably have little impact on employment overall

Even in OECD economies with national minimum wages, the impact on unemployment is a matter of dispute (OECD, 2004). It is clear both theoretically and empirically that minimum wages that are set too high in relation to average wages will reduce demand for less skilled workers. But the empirical magnitude of this employment-depressing effect is unclear, with some studies finding no significant impact (*e.g.* Card and Krueger, 1997), while others finding strong effects (*e.g.* Deere *et al.*, 1995; Neumark and Wascher, 1995). Overall, the literature for OECD countries suggests small effects.

South Africa has no national minimum wages. Beginning in 2003, minimum wages at a sectoral level came into effect for sectors with no bargaining council. This covers a relatively small number of employees – notable examples of sectors with minimum wages include domestic workers, agriculture, and retail trade.

To date there has been little work on the employment effects of the sectoral minimum wages. But there is no discernible break in the relative employment performance of these sectors relative to others since the introduction of the minimum wages, and no sign that wages for those earning the minima have increased much in relation to average wages. Moreover, the number of workers covered by the sectoral minima is relatively small. It is therefore not surprising that minimum wages are not generally cited as an important factor in restraining overall employment and sustaining the high unemployment rates.

Social benefits are increasingly important, but their impact on unemployment is uncertain

A final feature of the South African context which is sometimes seen as a significant explanatory factor in the high overall rate of unemployment is the large number of recipients of social grants, especially for pensions. There has been a rapid increase in the incidence of such benefits, with some 12 million South Africans now receiving them. Moreover, some are generous, with pensions paying up to twice the average wage. To the extent that such benefits allow individuals to survive without working (historically, the alternative to employment was certainly extreme hardship, and sometimes starvation), they may discourage search and raise reservation wages. Some research (*e.g.* Bertrand *et al.*, 2003) suggests that this effect is important. As against that, other studies (*e.g.* Posel *et al.*, 2004; Edmonds *et al.*, 2003) find that the payment of pensions to an elderly family member is actually associated with greater job search by younger family members. More research is needed on the net effects on search and reservation wages. In any case, social benefits were not important in the 1990s, and so cannot plausibly explain the big increase in unemployment since the mid-1990s. Moreover, they have more than just a labour market impact, playing an important direct role in alleviating poverty. It is possible, however, that their greater importance in recent years has had some role in hindering the reduction of unemployment since 2000, by making it possible to choose to remain unemployed and still survive in a household supported by grants. The fact that the number of discouraged workers – that is, those reporting that they want work but are not actively seeking a job – has risen even as the pace of decline of the narrow definition of unemployment has quickened may be one sign of such an effect.

Policies to tackle unemployment

South Africa's extreme levels of unemployment are above all the product of an excess supply of unskilled labour (at prevailing wage rates). Achieving the government's goal of

halving unemployment from 2004 levels would involve moving something like 2 million low-skilled individuals off the unemployment rolls. This will require a substantial increase in the demand for unskilled labour, a major reduction in the supply of such labour, or some combination of the two.

To some degree *AsgiSA* recognises the need for such a combination. Some of the language on industrial policy suggests that one motivation is stimulating labour-intensive activities, and the concern with the volatility and level of the exchange rate indicates a recognition of the danger of macroeconomic conditions holding back demand for unskilled labour. But since another thrust of the industrial policy thinking is to encourage capital- and skill-intensive sectors, and since no clear interventions are identified to address exchange rate volatility or misalignment, it is not clear, overall, that there is much in *AsgiSA* that would have a significant positive impact on the labour demand side of the unemployment problem.

The policy directions that follow represent tentative suggestions of actions that seem to warrant consideration and further discussion, based on the main factors identified as explaining the scale of unemployment in South Africa and the experience of OECD countries in this area. The persistence of very high unemployment, concentrated in one segment of the population, even in the face of several years of robust economic growth, suggests that a range of policy actions may be needed to meet the *AsgiSA* goals.

Upgrading human capital

There are many problems in the education system: undertrained and demotivated teachers; severe shortages of books and computers in most schools; poor school infrastructure; the impact of HIV/AIDS; and the fragmentation of the school system along ethnic/language lines. Most of these will take a long time to be addressed.

Some solutions are relatively straightforward, if costly and gradual: for example, increasing and reorienting education expenditures *via* increased numbers of books and computers in schools and improved infrastructure. Increased efforts could be made to attract trained teachers and/or teacher trainers from abroad (especially from low-income countries with a relative abundance of individuals with the necessary skills, such as India).

Other more difficult reforms may also be warranted. For example, the mixed public-private state system, in which individual schools can charge fees and hire more or better teachers, has meant that the huge disparities in outcomes between different regions and ethnic groups have continued. It may be worth considering moving to compulsory education to age 18 with free public education and no private co-funding of public schools. This would facilitate the evening out of teacher-pupil ratios and quality of teaching within the public system and reduce the number of unskilled school-leavers. It might also facilitate moving trained teachers to where they are most needed. All this would address the relegation of so much of the majority black population to unemployment, low-paid informal employment, or unskilled manual labour in the formal sector.

The low performance in international reading and maths and science tests of students in African language schools suggests that teaching of English may need to be strengthened, at least at secondary school level, and perhaps that objectives other than cultural identity should be considered in deciding on the language of instruction.

Concerning public training schemes, there is no doubt a role for them to play in raising the human capital of the workforce. Given the size of the unemployment problem, the fact

that so many of the unemployed have been out of work for a long time, and the track record of these programmes to date, it is doubtful they can be counted on to contribute much to meeting the government's goal of halving unemployment by 2014. Existing training initiatives like the Joint Initiative for Priority Skills Acquisition (JIPSA) and the National Skills Development Programme (the NSDP, which funds the SETAs) are relatively small-scale and/or beset with implementation problems.[23] In the case of the NSDP, there appears to be scope to increase its flexibility and reduce administrative costs. Public training schemes could perhaps play a more important role as an active labour market programme, by offering training to the unemployed, but with the acceptance of such training being a condition for receipt of state benefits (including any new forms of assistance with search or mobility, as below).

Encouraging mobility

A number of measures may be possible to ease capital market constraints on rural-urban migrants/jobseekers, including subsidised education/training loans or job search loans (maybe like student loans in some places, with repayment only if employed).

There may be a need to attach a higher priority to the development of infrastructure aimed at addressing the residual problem of spatial misallocation of workers. Shorter safer commutes for workers would help to reduce reservation wages, and an increased availability of urban housing for working class blacks would reduce search costs and improve job matches.

Better implementation of employment protection legislation

While South Africa's EPL appears to be relatively flexible, it seems that implementation of the laws is fuelling perceptions that the system is in fact quite rigid, especially as regards firing. There are actions that could be considered to address such perceptions, which may have restrained hiring (especially in the cyclical upturn since 2003).

The overburdening of the CCMA appears to have contributed to the use of formalistic judgements and long delays in some cases. Measures to streamline the case load of CCMA may merit consideration. For instance, access to the CCMA could be restricted to non-managerial workers. Managers are typically better protected by their employment contracts, and can have recourse to the courts if needed.

Ways might also be found to shorten and simplify arbitration procedures for wrongful dismissal at the CCMA. For example, greater use of "conarb" procedures, perhaps expanding the provisions for compulsory conarb hearings, might help to reduce average times for resolution of cases. Also, employers, who most often apply for review of CCMA rulings, could be charged a significant fee to appeal.[24]

It may also be useful to look for ways to restrict the number of reviews of wrongful dismissal cases by the Labour Courts. The large number of cases and long processing times to some extent frustrate the original rationale for establishing the CCMA: to provide quick and simple judgements on wrongful dismissal and unfair labour practices. Reforms might also be possible to help speed up the functioning of the labour courts, which can be a major source of delay in some cases. For example, increased computer resources for the courts could pay dividends in faster processing times.

Improving competition and product market regulation

One promising avenue on the labour demand side may well be to foster more competition throughout the economy. Not only is this associated with greater innovation and productivity growth over the long term (as discussed in Chapter 2), but the shrinkage of product market rents accruing to a few large entrenched incumbent firms would weaken the power of labour market insiders, and would be expected to lead to increased employment in these sectors, as well as in other sectors using the output of industries with weak competition (such as monopolised network industries) as inputs. Moreover, such an initiative would go in the same direction of creating new opportunities for historically disadvantaged groups, and would thus be consistent with the democratisation of South Africa.

Other measures to boost demand for less-skilled labour

Another possibility for reducing the segregation of the labour market and increasing demand for less-skilled workers would be to develop further the system of wage subsidies for young or first-time workers, called *learnerships* in South Africa. A similar idea that could be explored would be to lengthen the maximum allowable probation period, during which normal labour regulations do not apply. Certainly the calamitous unemployment rates for youth and less-skilled blacks suggest that more could be done to give such marginal workers a foothold in the job market.

Notes

1. President Mbeki himself, writing in ANC Today (20-26 March 2005), questioned whether the ILO definition of job search was used as strictly as in other countries, giving rise to an overestimated unemployment rate for South Africa (cited in Meth, 2007).
2. In addition to being generally higher, unemployment rates for the less-populous rural provinces are also more variable than urbanised provinces such as Gauteng or Western Cape, for instance: between March and September 2007 Limpopo and North West Provinces recorded falls in their recorded unemployment rate of 6 and 8 percentage points respectively.
3. South Africa's rapidly growing population in the 1990s was a function of high fertility rates outweighing high mortality rates and net negative (recorded) immigration. It is widely thought that immigration from neighbouring countries has been far greater than the official figures (estimates of the foreign-born population are in the millions – for example, Schüssler, 2006 presents some indications of the scale of unrecorded immigration), and the recent anti-immigrant riots underline that foreign workers are perceived as aggravating the unemployment problem.
4. Gross self-identified emigration averaged about 10 000 people per year during the period 1994-2003. The numbers are not broken down by racial group, but emigrants are heavily skewed towards professional and skilled occupations, and have moved above all to the UK, the US, Australia, Canada, and Continental Europe (Statistics South Africa, 2005) – they are thought to have been predominantly white. Also, host country data on foreign residents suggests that self-identified white emigration is a substantial underestimate of the true amount.
5. Israel is one such country having seen a similar increase in the labour force. For example, from 1990 to 1995 the growth in Israel's labour force was 27%, while unemployment, after initially rising, fell from 9.6% to 6.3%. In this case, however, the increase came mostly from immigration of relatively skilled workers, which were easier to absorb into employment, and there was no parallel to the negative labour demand shocks hitting South Africa (decline in mining, growing external competition in manufacturing).
6. As noted in Box 3.1, the employment estimate in 1995 may be too high by about 0.5 million, in which case true employment growth from 1995 to 2007 would be correspondingly greater. Estimated unemployment in 1995 suffers from the same problem, however, so that on a

comparable basis, the growth in the number of unemployed would be somewhat larger than 2 million.

7. The *Survey of Employment and Earnings* (SEE), discontinued in 2005, was a survey of formal sector businesses excluding agriculture and a range of other industries. Growth of employment in the informal sector and the excluded businesses, such as non-bank financial institutions, largely accounts for the discrepancy in the employment growth picture between the SEE and the *October Household Survey* and the latter's successor, the *Labour Force Survey* (Stryker *et al.,* 2001).

8. There is a question of whether it is more appropriate to look at gross employment elasticities of growth or partial elasticities, taking into account other variables. Partial elasticities are potentially more appropriate for looking at causation (if the multivariate regression is well-specified), but as a measure of the overall employment-friendliness of growth, whatever the cause, gross elasticities are useful.

9. Burger and Yu (2007) estimate that overall real earnings in the formal sector declined until about 2000, were little changed until 2002, and began to rise thereafter, being slightly higher in 2005 than in 1995. Within that overall trend, skilled workers fared better than those with low skills. Woolard and Woolard (2006) find that real earnings for unskilled labour dropped by roughly a third between 1995 and 2003.

10. The few attempts to estimate the employment effects of changes in real wages in South Africa suggest that wage elasticities are fairly typical of estimates for other countries. Fields *et al.* (1999) found that the overall wage elasticity for formal sector private employment was about –0.53 in the period 1994-98, at the median of rates reported by Hamermesh (1993) for a large range of countries. This suggests that real wages would have had to fall substantially in the second half of the 1990s to prevent the rise in unemployment that occurred.

11. Apartheid legislation authorised the "reservation" of many skilled jobs and managerial positions for whites; qualified blacks could legally be excluded from most senior-level jobs. The Industrial Conciliation Act of 1924, which governed many aspects of labour relations, as amended by the Native Labour (Settlement of Disputes) Act (No. 48) of 1953 redefined the term "employee" to exclude all blacks, depriving them of any labour law protection. The Industrial Conciliation Act (No. 28) of 1956 enabled the minister of Labour to reserve categories of work for members of specified racial groups. In effect, if the minister felt that white workers were being pressured by "unfair competition" from blacks, he could recategorise jobs for whites only and increase their rates of pay. Moreover, apart from the formalised job discrimination, the separate educational system for blacks was designed to prepare blacks only for relatively low-skilled work.

12. The trend towards falling relative unemployment in rural areas *vis-à-vis* urban ones is noticeable until 2005, when Statistics South Africa stopped reporting urban/rural unemployment numbers.

13. This is not to say that the authorities are making no effort to develop entrepreneurialism. *AsgiSA* does include potentially useful microfinance initiatives and an important emphasis on reducing the regulatory burden on SSMEs.

14. In former white schools, about 40% of total teacher salaries on average are paid by fees, against an average of only 5% in former black schools. Fees at the upper end of the scale – for former white schools in wealthy areas – are in the region of median annual incomes for black adults.

15. The equation reported represents the second stage of a two stage model. First, a participation probability model was estimated using a full sample of potential labour market participants. Then, for the reduced sample of labour market participants an employment probability model was estimated. The equations were estimated for 1995 (using the *October Household Survey*) and 2005 (with the September 2005 *Labour Force Survey*) an attempt to yield a temporal analysis of labour market changes in the post-*apartheid* period. Independent variables are race, gender, age, and education, as well as a location dummy and a set of province dummies.

16. It is also notable that the penalty for having incomplete high-school education, which is statistically significant in 1995, becomes less so in 2005. Combined with the results for the matric, one interpretation of this pattern is that the strength of the signal of the matric as reflecting human capital has weakened over time.

17. The legislation currently mandates compulsory conarb hearings only in relation to unfair dismissal or unfair labour practices while on probation.

18. Unions may also, of course, play other roles which are not primarily economic, but which are significant in assessing their overall effects on social welfare. In South Africa, for example, unions have a historical role as a locus for resistance against the former apartheid regime.

19. While the empirical evidence on the effect of unions on profits is mixed, the downtrend in private sector unionisation rates in recent decades may suggest that indeed unionised firms are driven out of business or pushed to deunionise, which would indicate that the wage-raising effect of unions dominates any productivity-raising effects.

20. Part of the explanation of this pattern may be that in practice unions bargain both at the sectoral level, setting wage minima for the sector, and at the firm level, negotiating premia for workers in unionized companies. This would suggest that the measured union wage differential is in fact an underestimate of the power of unions to raise wages.

21. The absence of micro datasets with worker and job characteristics and precise wage information prevents a rigorous study of such inter-industry wage differentials, but some fragmentary evidence exists. For example, the cement company PPC, a firm with substantial monopoly power, is a past winner and perennial leader in surveys of best company to work for in South Africa. Other winners, including the large banks, have similarly tended to come from highly concentrated industries with elevated mark-ups.

22. It could be argued that if for one reason or another the labour market is not competitive, then state support for an industry could make the difference between there being some (albeit capital-intensive) jobs or none, so that assistance to capital-intensive industries could have been employment-enhancing. But even then, it would then need to be established that given amounts of assistance could not have had a bigger employment impact by being targeted at industries making more intensive use of less-skilled labour.

23. Criticisms of the SETAs have been legion seen their inception. Some of the problems with the administration of the SETAs, including low take-up by firms, low learnership completion rates, and mismanagement are discussed in Grawitsky (2007).

24. From April 2006 through January 2008, nearly 98% of objections to CCMA awards were filed by employers.

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ANNEX 3.A1

The assessment of EPL in South Africa

Labour market rigidities are often cited in surveys as an important obstacle to business in South Africa. In this context, the application of the OECD's indicator of employment protection legislation (EPL) is of interest. The EPL indicator has been applied to all OECD member countries (first in 1998, and then again in 2003), and a number of non-members (Brazil, Chile, China, and India). Computing the indicator for South Africa thus allows its EPL to be benchmarked against a range of advanced, middle-income, and developing countries.

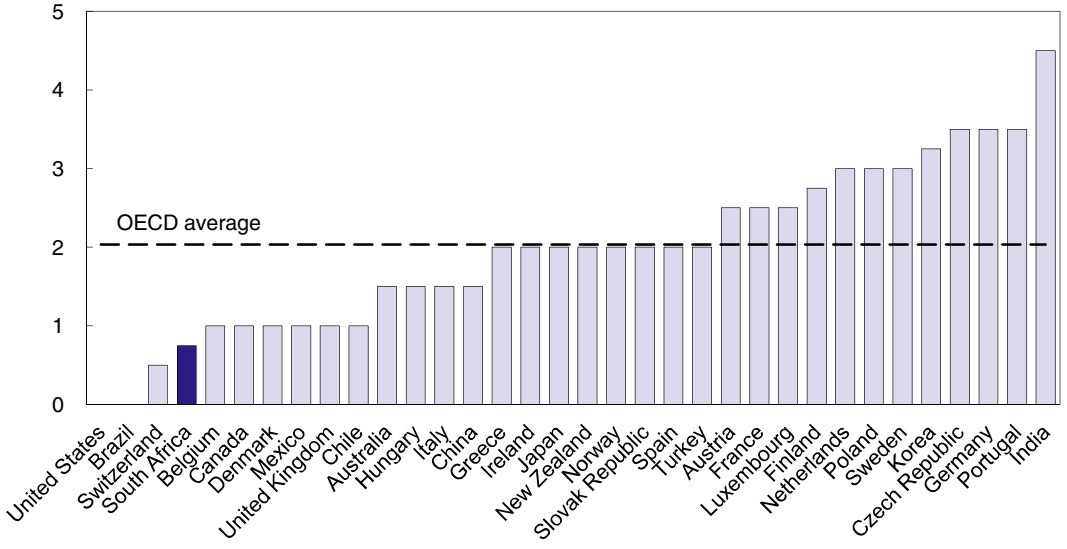
Overview of the construction of the EPL indicator

The EPL indicator has a pyramidal form, with 22 detailed items at the bottom and an overall score at the top. The 22 basic items can be classified in three main areas: *i)* protection of regular workers against individual dismissal; *ii)* regulation of temporary forms of employment; and *iii)* specific requirements for collective dismissals. Scoring is based primarily on labour legislation, but also tries to take into account judicial practices and court interpretations of legal and contractual provisions. A four-step procedure is used to construct summary indicators of EPL strictness that allow meaningful international and intertemporal comparisons to be made, (see OECD, 1999, Chapter 2, Annex 2.B for details). The 22 first-digit inputs are initially expressed either in units of time (*e.g.* delays before notice can start, or months of notice and severance pay), as a number (*e.g.* maximum number of successive fixed-term contracts allowed), or as a score on an ordinal scale specific to each item (0 to 2, 3, 4 or simply yes/no). These first-level measures of EPL are first converted into cardinal scores normalised to range from 0 to 6, with higher scores representing stricter regulation. The three remaining steps consists in forming successive weighted averages, thus constructing three sets of summary indicators that correspond to successively more aggregated measures of EPL strictness. The last step of the procedure involves computing, for each country, an overall summary indicator based on the three highest-level subcomponents: strictness of regulation for regular contracts, temporary contracts and collective dismissals. The summary measure for collective dismissals was assigned a lower weight than those for regular and temporary contracts, as the collective dismissals indicator only reflects *additional* employment protection trigged by the collective nature of the dismissal. In most countries, these additional requirements are quite modest.

Results of the EPL assessment of South Africa

The *procedural inconveniences* sub-component is designed to capture how burdensome the procedures for dismissal are for firms. The two items comprising this sub-component relate to the nature of the required procedures (for example, whether notice has to be given in writing or only orally) and delays before the notice period may begin. South Africa shows up as having very flexible arrangements in this area compared both to most OECD and other non-OECD countries (Figure 3.A1.1).

Figure 3.A1.1. **Procedural inconveniences**
Indicator scale of 0-6 from least to most restrictive, 2006[1]



StatLink http://dx.doi.org/10.1787/406872381703

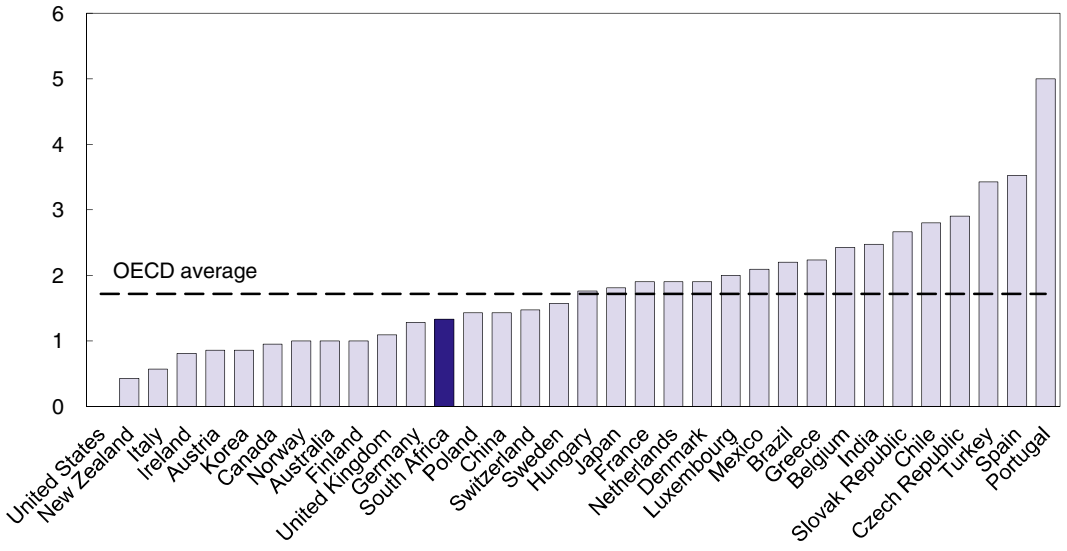
1. 2007 for South Africa, 2003 for Chile and 2004 for Brazil.

Source: OECD (2007), *Going for Growth;* OECD (2005), *OECD Economic Surveys: Brazil*; and OECD (2007), *OECD Economic Surveys: India*.

The indicator on *notice and severance pay for no-fault dismissals* measures the required notice period and severance pay for different levels of tenure (9 months, 4 years, and 20 years). Especially on account of having no mandatory severance pay for tenure of less than one year, and having only 4 weeks notice for workers with as much as 20 years tenure, South Africa again is among the countries with relatively high flexibility in this area (Figure 3.A1.2).

A third sub-component relates to *difficulty of dismissal*. It is built up from measures of the restrictiveness of the definition of unfair dismissal, trial periods, compensation for unfair dismissal, and the possibility of reinstatement in the case of a finding of unfair dismissal. Largely on account of the last two elements, South Africa is found to be relatively less flexible as regards ease of dismissal than it is in other areas of the overall indicator. Even here, however, it is still less restrictive than the OECD average, and at or below the level for other non-OECD economies for which the data are available (Figure 3.A1.3).

Figure 3.A1.2. **Notice and severance pay for no-fault individual dismissals**
Indicator scale of 0-6 from least to most restrictive, 2006[1]

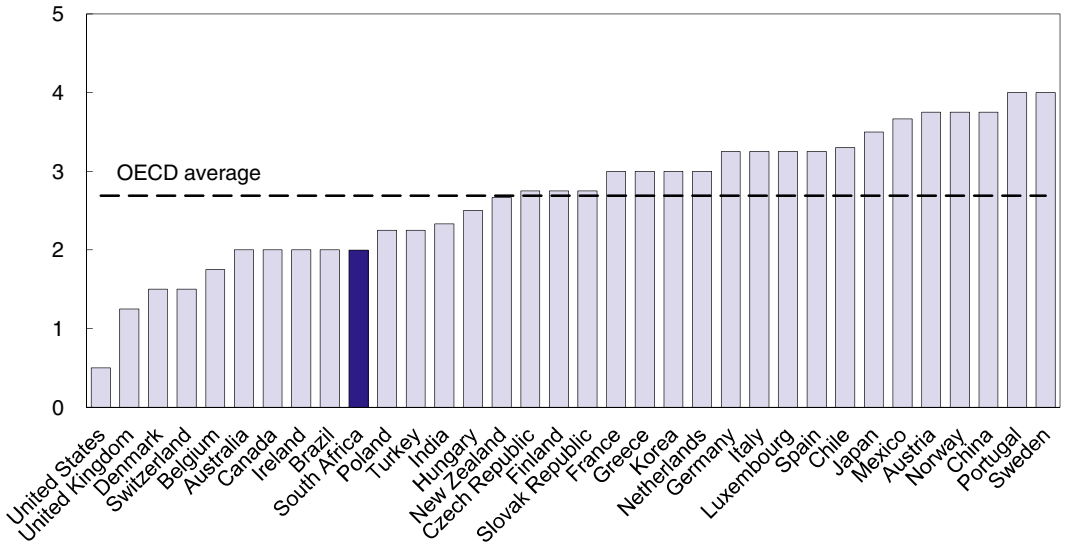


StatLink http://dx.doi.org/10.1787/406883545410

1. 2007 for South Africa, 2003 for Chile and 2004 for Brazil.

Source: OECD (2007), *Going for Growth;* OECD (2005), *OECD Economic Surveys: Brazil*; and OECD (2007), *OECD Economic Surveys: India*.

Figure 3.A1.3. **Difficulty of dismissal**
Indicator scale of 0-6 from least to most restrictive, 2006[1]



StatLink http://dx.doi.org/10.1787/407024888384

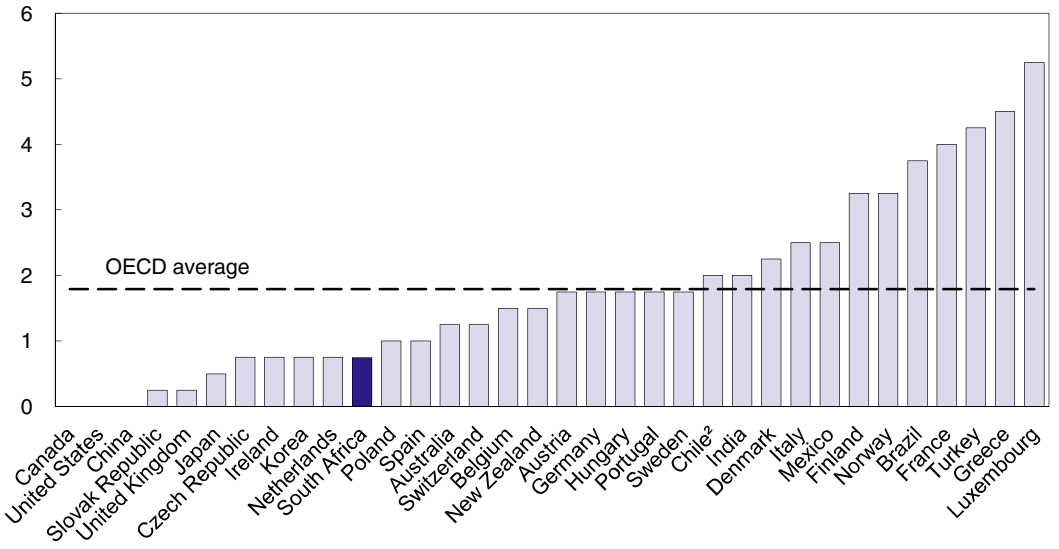
1. 2007 for South Africa, 2003 for Chile and 2004 for Brazil.

Source: OECD (2007), *Going for Growth,* OECD (2005), *OECD Economic Surveys: Brazil*; and OECD (2007), *OECD Economic Surveys: India*.

Flexibility as regards temporary employment is assessed *via* sub-components on *fixed term contracts* and *temporary work agencies*. South Africa does not require specific reasons for using fixed term contracts, and does not impose limitations on the number of contract renewals. The main restrictive element arises from the provision that workers who have had several successive fixed term contracts and who had a reasonable expectation of further renewal may interpret the non-renewal of the contract as dismissal. Overall, however, South Africa again scores as relatively flexible in this area (Figure 3.A1.4).

Figure 3.A1.4. **Fixed term contracts**

Overall score, indicator scale of 0-6 from least to most restrictive, 2006[1]



StatLink http://dx.doi.org/10.1787/407057108464

1. 2007 for South Africa, 2003 for Chile and 2004 for Brazil.
2. The scores estimated for fixed-term contracts are taken to apply to temporary-work agencies as well.

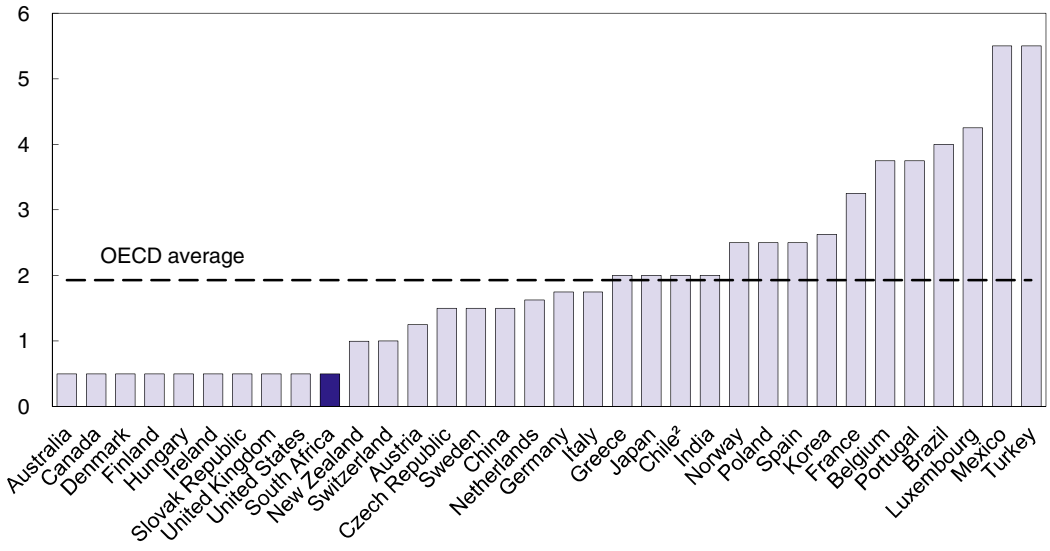
Source: OECD (2007), *Going for Growth*; OECD (2005), *OECD Economic Surveys: Brazil*; and OECD (2007), *OECD Economic Surveys: India*.

The use of temporary work agencies is widespread in South Africa, and the legal restrictions in this area are minimal, making South Africa particularly liberal in comparison with many OECD and non-OECD countries (Figure 3.A1.5).

The final sub-component of the overall indicator concerns *collective dismissals*. In South Africa EPL imposes no additional delays for collective relative to individual dismissals, but representatives of unions with workers employed in the organisation must be notified. Also, in enterprises owned by or linked to the state, the negotiation of social plans is common, which restricts the possibility for collective dismissal in that sector. Again, however, overall South Africa emerges as less restrictive than all but one OECD country in this area, though less liberal than middle-income peers Brazil and Chile (Figure 3.A1.6).

Figure 3.A1.5. **Temporary work agency employment**

Overall score, indicator scale of 0-6 from least to most restrictive, 2006[1]



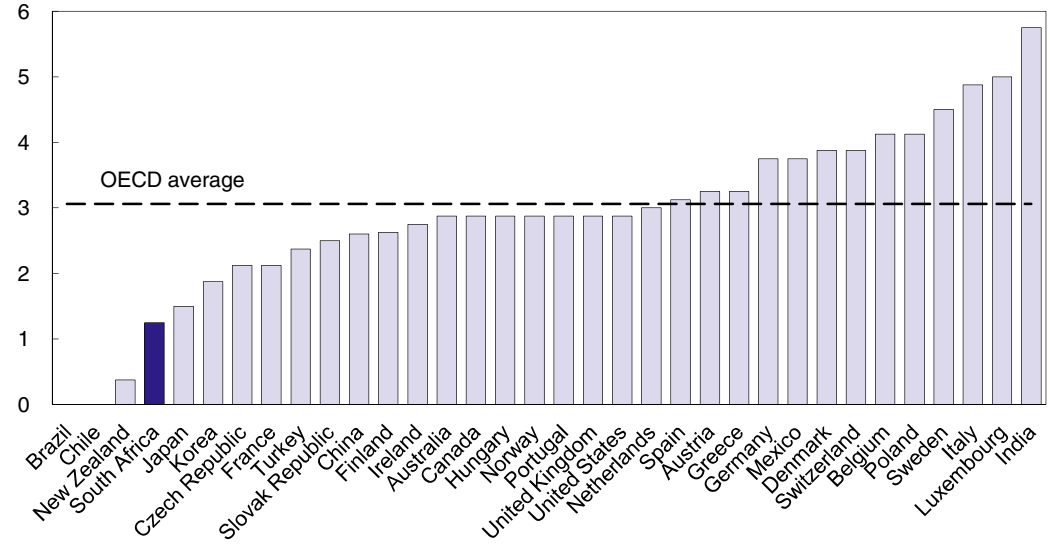
StatLink http://dx.doi.org/10.1787/407062802332

1. 2007 for South Africa, 2003 for Chile and 2004 for Brazil.
2. The scores estimated for fixed-term contracts are taken to apply to temporary-work agencies as well.

Source: OECD (2007), *Going for Growth*; OECD (2005), *OECD Economic Surveys: Brazil*; and OECD (2007), *OECD Economic Surveys: India*.

Figure 3.A1.6. **Collective dismissals**

Overall score, indicator scale of 0-6 from least to most restrictive, 2006[1]



StatLink http://dx.doi.org/10.1787/407128114105

1. 2007 for South Africa, 2003 for Chile and 2004 for Brazil.

Source: OECD (2007), *Going for Growth*; OECD (2005), *OECD Economic Surveys: Brazil*; and OECD (2007), *OECD Economic Surveys: India*.

Glossary

AsgiSA	Accelerated and Shared Growth Initiative – South Africa
BBBEE	Broad-based Black Economic Empowerment
BEE	Black Economic Empowerment
BER	Bureau of Economic Research
CAC	Competition Appeal Court
CCMA	Commission for Conciliation, Mediation and Arbitration
Conarb	Combined conciliation and arbitration procedure
CPI	Consumer price index
CPIX	Consumer price index excluding mortgages
DBSA	Development Bank of South Africa
DoC	Department of Communications
DoT	Department of Transport
DME	Department of Mineral and Energy
DPE	Department of Public Enterprises
DTI	Department of Trade and Industry
EPL	Employment protection legislation
ERP	Effective rates of protection
FDI	Foreign direct investment
FET	Further Education and Training
FIFA	Fédération Internationale de Football Association
FSB	Financial Services Board
GDP	Gross domestic product
GEAR	Growth, Employment and Redistribution Strategy
ICASA	Independent Communications Authority of South Africa
ILO	International Labour Organisation
IMF	International Monetary Fund
IPPs	Independent power producers
IRCC	Import Rebate Credit Certificates
LFS	Labour Force Survey
JIPSA	Joint Initiative for Priority Skills Acquisition
MIDP	Motor Industry Development Programme
NEER	nominal effective exchange rate
NERSA	National Energy Regulation of South Africa
NFLS	National Freight Logistics Strategy
NIPF	National Industrial Policy Framework
NPA	National Ports Authority
NSDP	National Skills Development Programme
OHS	October Household Survey

PIRLS	Progress in International Reading Literacy Study
PMR	Product market regulation
PPI	Producer price index
PPP	Purchasing power parity
RCA	Revealed comparative advantage
RCP	Road Carrier Permit
RDP	Reconstruction and Development Programme
REDs	Regional Electricity Distributors
REER	Real effective exchange rate
RIA	Regulatory Impact Assessment
SARB	South African Reserve Bank
SARCC	South African Rail Commuter Corporation
SEE	Survey of Employment and Earnings
SETAs	Sector Education and Training Authorities
SLP	Social and Labour Plan
SMEs	Small and medium-sized enterprises
SMMEs	Small, micro- and medium-sized enterprises
SOEs	State-owned enterprises
TFP	Total factor productivity
UNIDO	UN Industrial Development Organization
USAASA	Universal Service and Access Agency of South Africa
WEF	World Economic Forum
WTO	World Trade Organisation

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