South Africa: what's behind the growth slowdown?

François Faure

South Africa's short and medium-term growth prospects remain very uncertain. The external factors that contributed to the economic slowdown in recent years are expected to become more favourable, as Chinese growth stabilises and commodity prices pick up. Internal factors, in contrast, risk having a generally negative impact on total factor productivity (TFP) and on the investment capacity of companies and households.

The South African economy is currently experiencing a period of very slow growth combined with relatively high inflation and rising public and external debt. Given the deterioration in the country's macroeconomic fundamentals, S&P's and Fitch have just downgraded the sovereign debt in foreign currency to speculative grade.

Deteriorated macroeconomic fundamentals

Real GDP growth has slowed from a little more than 3% in 2011 to only 0.3% in 2016. Excluding consumption and investment by public administrations, growth contracted. Recent studies on South Africa's economic slowdown are unanimous: according to the South African Reserve Bank (SARB) and the IMF, the country's growth potential has eroded from more than 4% in 2007 to about 1.5% today (chart 1).

Lower potential growth

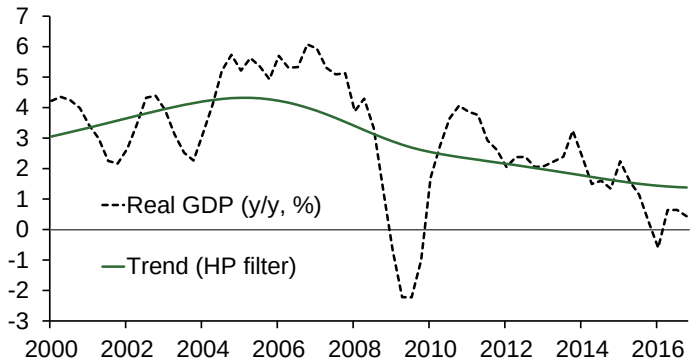


Chart 1 Sources: Stats SA, BNP Paribas

At the same time, core inflation has doubled, from 3% in early 2011 to 6% at year-end 2016 (chart 2). Non-farm payroll employment has slowed sharply, rising only 0.3% a year over the past five years, compared to 1.3% in the 2000s. This is far too low to absorb the increase in the active population (nearly 600,000 individuals a year[1]) and to curb structural unemployment, which reached 27% of the active population at year-end 2016[2]. Moreover net job creations were concentrated primarily in public administrations and not in the private sector.

Inflation and unemployment

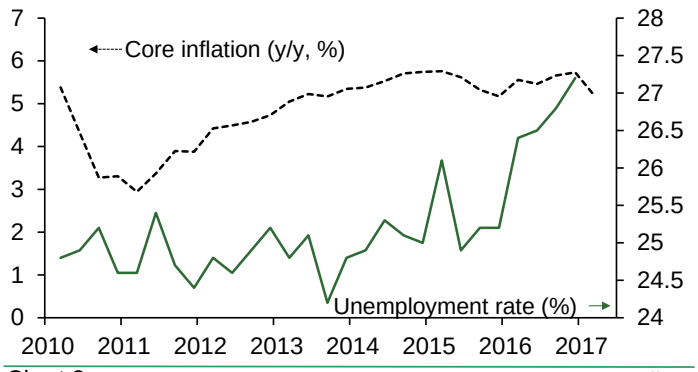


Chart 2 Sources: Stats SA, BNP Paribas

The public debt ratio rose to 51% at the end of 2016, an increase of 10 points of GDP since 2011, and a total of 25 points since the 2008-09 financial crisis. Yet the primary budget deficit (i.e. excluding interest payments on the debt) was trimmed from a little more than 3% of GDP in 2011 to an estimated 1.3% of GDP for the fiscal year ended 31 March 2017. Yet these efforts were cancelled out by higher debt servicing charges. The massive depreciation of the rand, which lost 40% against the dollar from year-end 2011 to year-end 2016, also triggered a sharp increase in foreign currency debt (as a share of GDP)[3]. In addition to government debt state-owned companies liabilities, rose from 6% to 18% of GDP. Thus public debt is estimated at around 70%.

[1] *To absorb the increase in the active population, the employment in the non-agricultural private sector would have to increase by about 2.5% per year.*

[2] *According to the World Bank, the unemployment rate including discouraged individuals no longer seeking work was 33% at year-end 2015.*

[3] *The share of foreign currency debt is 10% (mostly in dollars).*

Lastly, even though the terms of trade have improved since 2014 (thanks to lower oil prices in 2014-2015 and the rebound in metal prices in 2016), the current account deficit still amounted to 4% of GDP in 2016. An aggravating factor of this external imbalance is that it is a reflection of the shortage of domestic savings more than overinvestment. Given the structural deficit in the balance of direct investments, external debt has also increased sharply in recent years. It is now equivalent to 154% of export revenues, compared to only 70% before the financial crisis.

Most of the emerging countries, and the commodity producing countries in particular, have reported economic slowdowns since the global financial crisis of 2008. Can South Africa's economic slowdown be blamed solely on the downturn in the commodities super cycle? Or to the contrary, does it reflect structural weaknesses?

Public finances

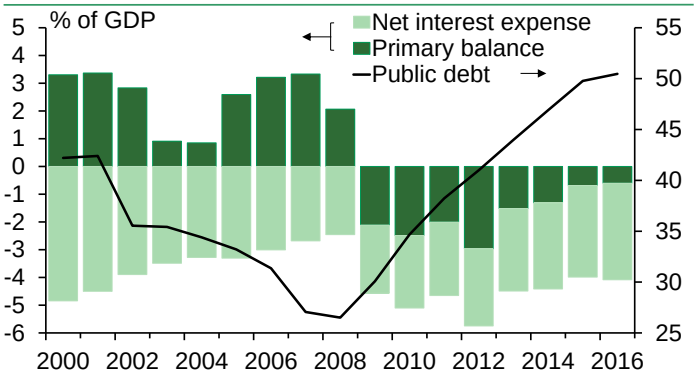


Chart 3 Sources: SA National Treasury,IMF, BNP Paribas

External factors behind the economic slowdown

China and the commodities cycle

Like all economies dependent on commodity prices, the South African economy has been exposed to two highly correlated external shocks since 2011: 1) the slowdown in Chinese demand for commodities, which has become the leading destination for South African exports in recent years and 2) the ensuing decline in iron ore prices (chart 4). In volume terms, however, production in the mining sector has been fairly resilient (only down 1.5% in 2016 from the 2011 level), despite labour unrest in 2012 and 2015 and the closing of mines. Moreover, this sector accounts for only 7% of output and 3% of employment. From an accounting perspective, the sector's direct impact on GDP growth was rather small.

In contrast, the decline in commodity prices had a major indirect impact on revenues. Using a structural VAR model (explicitly integrating interdependence coefficients between the mining sector and other sectors of the economy), IMF economists calculate that a 10% decline in the export prices of South African mining products reduces growth by 0.2 points of GDP after two quarters[4].

For the main mining products exported by South Africa (iron ore, copper, nickel, platinum and coal), prices declined by 60% on average between 2011 and 2016. The negative impact on GDP is estimated at a cumulative total of about 1.5 points of GDP over the period 2011-2016.

Yet the decline in commodity prices also coincided with major power shortages, which means the impact of lower commodity prices was probably overestimated. It is hard to evaluate with any precision the contribution of external factors to the slowdown in growth. Yet we can reasonably say that they accounted for less than half of the impact.

Growth and commodity prices

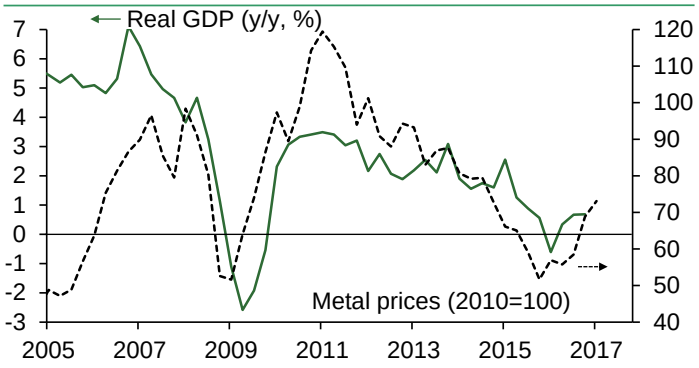


Chart 4 Sources: Stat, SA, IMF

Inelasticity of exports

Looking beyond the impact of China and the commodity price cycle, export performances have been very disappointing over the past five years.

[4] *See IMF Services Report on Article IV consultations – July 2016*

Obviously, exports of mining products were largely to blame[5]. But the same can be said for manufactured goods, which contracted 20% over the period (chart 5), resulting in a loss of market share of nearly 15% relative to the other emerging countries (chart 6). Such a poor performance cannot be attributed solely to the slowdown in imports by South Africa's main trading partners (growth remained strong for its neighbouring countries[6], which account for 13% of total exports).

Exports by product category

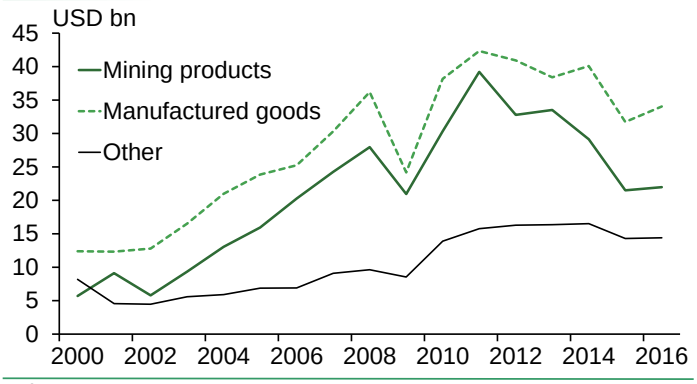


Chart 5 Source: SARB

Trends in market shares for manufactured goods

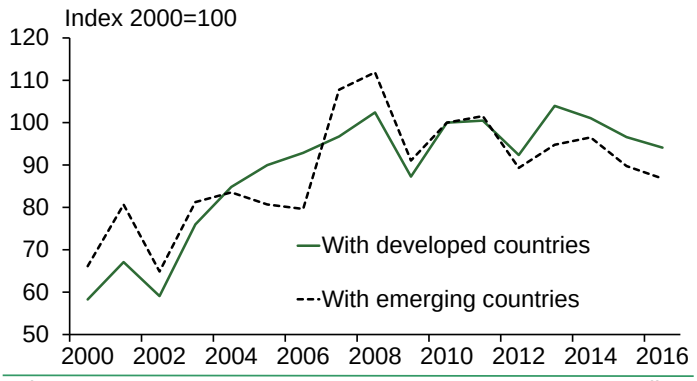


Chart 6 Sources: SARB, UN COMTRADE, BNP Paribas

Exports of manufactured goods have been hurt by the lack of non-price competitiveness. Before the financial crisis of 2008-2009, econometric studies show that the price elasticity of exports was already low. Since the crisis, price elasticity has weakened even further, since the depreciation of the real exchange rate (chart 7) did not trigger an improvement in export market share.

[5] *They contracted 44%, and their share of total exports dropped from 41% in 2011 to 31% in 2016.*

[6] *Botswana, Lesotho, Namibia, Swaziland*

According to a recent IMF study, the factors of non-price competitiveness (product diversification, material constraints such as power shortages and strike days) explain part of the inelasticity of export prices to the change in real exchange rates[7].

Internal factors behind the slowdown in growth

An analysis of the internal factors of growth sheds additional light on the previous analysis of external factors. The breakdown of growth by supply-side components[8] shows that capital accumulation continued to be a support factor, but that the South African economy is intrinsically less productive.

Real effective exchange rates

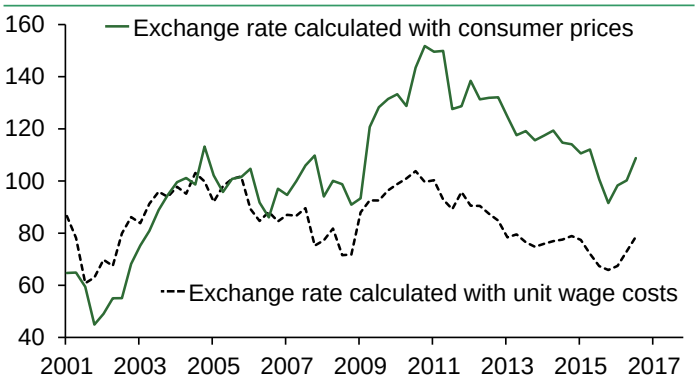


Chart 7 Sources: Stats SA, SARB, BNP Paribas

Slowdown in productivity

With the end of apartheid in 1993, economic growth accelerated rapidly in South Africa's non-farm private sector, thanks to 1) stronger capital accumulation and the positive contribution of employment in the second part of the 2000s, and 2) an upturn in total factor productivity (TFP), which had accelerated from the early 1990s to reach a strong 3% a year in the 2000s (chart 8)[9].

[7] *Rahul Anand, Roberto Perrelli and Boyang Zhang "South Africa's exports performance: any role for structural factors?" IMF Working Paper 16/24.*

[8] *This breakdown uses a production function approach.*

[9] *TFP is measured by looking at the difference between GDP growth and that of production factors (capital stock and employment), which are weighted, respectively, by the share of profits and the share of the total payroll as a % of production.*

Growth accounting

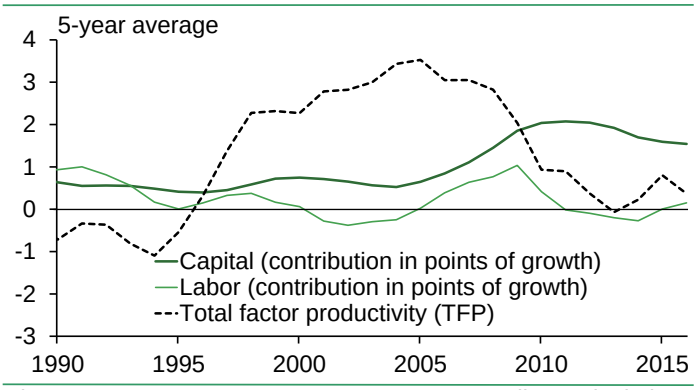


Chart 8 Sources: SARB, BNP Paribas calculations

Electrical power generation and industrial output

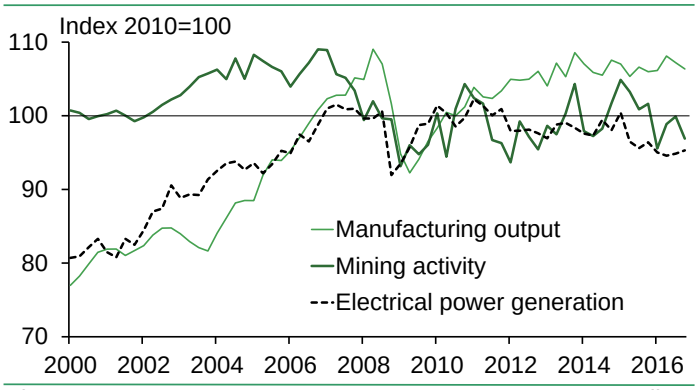


Chart 9 Sources: Stats SA, SARB, BNP Paribas

The 2008 financial crisis cut short this positive momentum. TFP slowed sharply and employment has contracted. Although growth remained in positive territory, it was due solely to investment. As a matter of fact, the overall investment ratio held steady at about 20% of GDP.

A slowdown in TFP is often associated with stronger constraints that erode potential growth. TFP aggregates all production factors other than capital accumulation and employment, i.e. not only productivity gains (or losses) due to technical progress that are not incorporated in capital and to the streamlining of production processes, but also those due to structural effects, such as the reallocation of production factors towards other sectors in which productivity is higher than in the economy as a whole. Moreover, the calculation method for TFP also integrates ruptures in production due to exogenous factors (weather conditions, power shortages, and political and social unrest that paralyses activity).

In the case of South Africa, there are three clearly identified explanations for the slowdown in TFP.

First, industrial output was hit by major electrical power shortages (chart 9).

Second, capital stock in capital-intensive sectors (mining, energy, and transport) has increased very rapidly in recent years[10]. Capital productivity in these sectors tends to be lower than in the other sectors, such as manufacturing, construction, and even agriculture.

According to World Bank calculations[11], this sector reallocation of capital was responsible for a shortfall in growth of about 0.3 points of GDP a year in 2012-2015 (with a peak at 0.5 points of GDP in 2015). In the 2000s, in contrast, the sector reallocation of capital had generated gains of about 0.5 points of GDP. This structural effect alone accounts for a third of the slowdown in TFP.

Third, the decline in TFP went hand in hand with the deterioration in the business climate in a broad sense (rising political and social risks, uncertainty over economic policy and the erosion of competitiveness). We can see a deterioration in the World Bank's governance indicators on political stability and regulatory quality (chart 10). Similarly, the latest IMF report warns that uncertainty over economic policy is hindering growth.

Total factor productivity and business environment

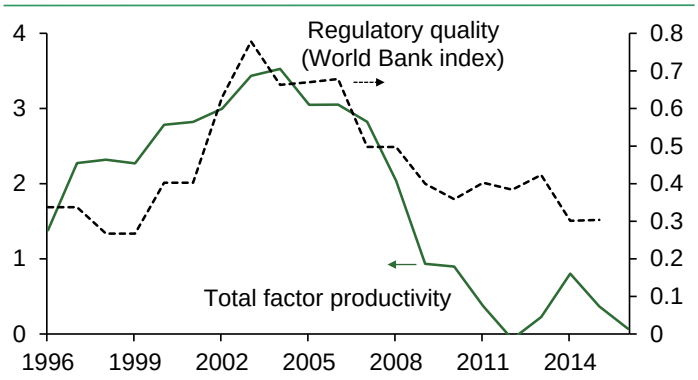


Chart 10 Sources: SARB, BNP Paribas

[10] *Between 2011 and 2016, capital stock increased 67% in energy, 22% in transport, and 20% in mining.*

[11] *"Private Investment for Jobs" South Africa Economic Update - World Bank - January 2017*

Financial constraints on corporate and household investment

Although investment has been the main support factor for growth in recent years, it is mainly due to infrastructure spending (chart 11a).

Inversely, investment by private non-financial companies has weakened (chart 11b), notably in the manufacturing sector [12]. Although the sluggishness of investment by private companies is probably due to the downward revision of growth forecasts, it also reflects the deterioration in their solvency.

Investment ratio

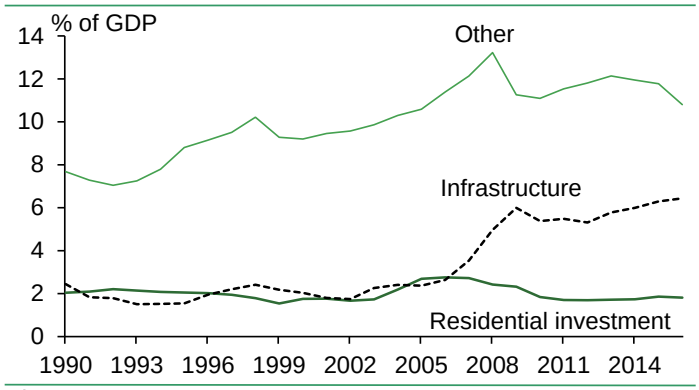


Chart 11A

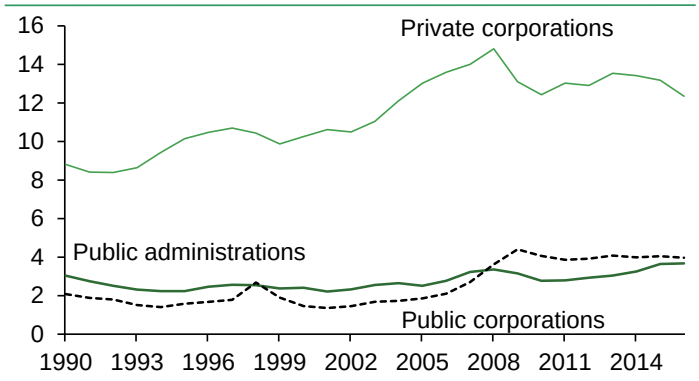


Chart 11B Sources: SARB, BNP Paribas

The interest coverage ratio (interest expenditure/EBITDA) has narrowed to 2.5 in 2016, from close to 4 in 2011. In transport and in business services, interest coverage fell below the warning threshold of 2 in 2016.

[12] *In this sector, the investment ratio dropped from 29% of value added in 2008 to 20% in 2016.*

Despite workforce adjustments, real wages increased much faster than productivity (+50% vs. 9% in the manufacturing sector) (chart 12). As a share of value added, EBITDA of non-financial companies has eroded from 50% to 45%. At the same time, the debt ratio (the ratio of domestic loans to value added) increased sharply, from 62% to 74%. Faced with the deterioration in their solvency, it is not surprising that companies were more reticent to invest.

Real wages vs. productivity in the manufacturing sector

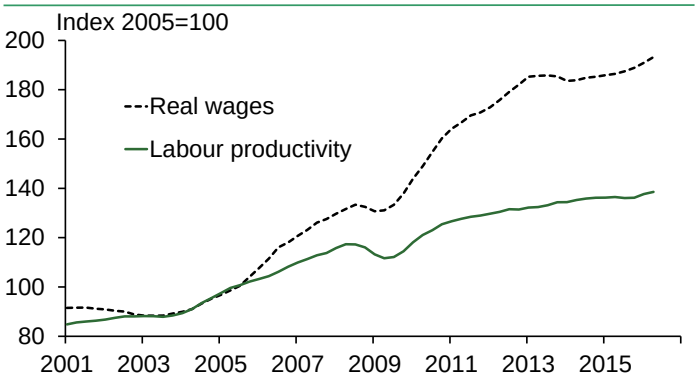


Chart 12 Sources: Stats SA, SARB, BNP Paribas

The household investment ratio has also eroded. Unlike companies, households have deleveraged, with the debt to gross disposable income ratio dropping from 85% in 2008 to 75% in 2016. Since 2013, however, debt servicing charges have increased with the upturn in interest rates (household loans are largely in variable rate instruments), and new loan production to households has levelled off.

Weak human capital

Against a backdrop of widespread poverty, high inequality and an HIV prevalence rate are also key factors behind poor productivity trends and low participation rates in the labor market. In spite of some significant improvements since 1994, South Africa still ranks 123 out of 138 countries in the 2016-2017 Global Competitiveness report of the World Forum (worse than Bangladesh, Burundi and even Zimbabwe) for health and primary education attainments. Completion rates for secondary and tertiary education remain low, fueling skill mismatches and limiting the development of higher value-added activities.

A rigid labor market with conflictive labor relations

Prolonged strikes directly weigh on total factor productivity, and the well above productivity wage increases negotiated by labor unions, together with high firing costs and skill mismatches, create strong insider/outsider dynamics. Therefore, high unemployment and low labor force participation rates are structural issues, as is shown by their limited responsiveness to upward shifts in growth.[13] Barring deep reforms in the bargaining process and labor market structure, there is even reason to suspect that the labor force's contribution to potential growth will continue to weaken. The employment tends to adjust more during the downward phases of the business cycle than during the upward phases[14], meaning that each cyclical downturn increases the – already very high - structural unemployment rate.

Conclusion

South Africa's short and medium-term growth prospects remain very uncertain. External factors that contributed to the economic slowdown in recent years are expected to be more favourable, as Chinese growth stabilises and commodity prices pick up. Internal factors, in contrast, will generally have a negative impact on total factor productivity and the investment capacity of companies and households. Investment in infrastructure in recent years should normally help boost potential growth. But despite currency depreciation, the competitiveness of exports has deteriorated, and higher interest rates are undermining corporate and household's balance sheets. Lastly, the lack of human capital, job market rigidities, a deteriorating business climate and political tensions have altered the country's image in the eyes of non-resident investors.

21 April 2017

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[13] *see IMF article IV staff report July 2016*

[14] *Ibidem*

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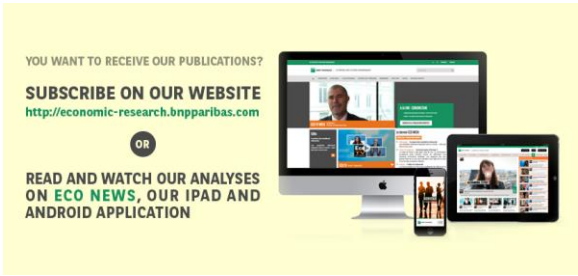
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