2000 Annual Forum

at Glenburn Lodge, Muldersdrift

Effects of Fiscal, Monetary, and Exchange Rate Policy on the Structure of South African Growth and Employment

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September 2000

Paper presented at the TIPS Forum 2000: Paths to Growth and Employment in South Africa. Glenburn Lodge, 18-20 September 2000.

INTRODUCTION

South Africa emerged from the apartheid era in 1994 with an urgent need to complement its political liberation and its opening to global trade and investment with economic gains that would benefit all members of the population. As the nation moves into the 21st century, however, its economy is stagnant, unemployment approaches 30% of the economically active population, and there are enormous racial, gender, and location-specific disparities in levels of income and wealth.

Reducing these disparities will require increasing employment, since unemployment is concentrated to a large degree among those who are poor. This will require action on many fronts, including efforts to make labour markets function more efficiently at the same time as they assure more equity in the distribution of benefits. It will also require reducing distortions in capital markets that favour more capital-intensive types of activities. It will require better education and training so that the work force can become more employable and productive. Finally, it will require a macroeconomic policy framework that encourages economic growth along the lines of South Africa's emerging comparative advantage and increases employment of South African workers, especially those who have been disadvantaged by the policies of the past.

The major thesis of the paper is that the macroeconomic policy environment has favoured financial stability over economic growth and that this has been an important element in the failure of the economy to meet the targets of the government's macroeconomic program: Growth, Employment, and Redistribution (GEAR). Most disturbing, the level of employment in the formal sector has declined steadily during the past five years.

A second part of this thesis is that the macroeconomic policy environment has been particularly disadvantageous for small, medium, and micro enterprises (SMMEs), that these enterprises employ more labour, on average, than larger enterprises, and that this has been an important factor limiting the expansion of employment. Furthermore, the supply-side measures that were supposed to ease problems resulting from the transition of the South African economy are not seen as having been particularly effective for the SMMEs.

The paper begins with a review of the problems that South Africa faces as it emerges from the period of apartheid and tries to grapple with the multiple objectives of reducing poverty, increasing employment, restructuring the economy in a more open direction, and raising the rate of economic growth – all this in the face of major constraints. The paper then goes on to examine the macroeconomic goals and policies embodied in GEAR and how these have been met. The paper then takes an alternative, longer-term perspective, as it looks at experience over the past 15 years with two critical variables: the rate of interest and the exchange rate. It also looks at the more recent experience with the 1998 financial crisis to see what light this can shed on policy choices. The subsequent section examines evidence regarding the degree of labour intensity in small versus larger firms in different sub-sectors of the economy – both directly and

taking into account secondary input-output linkages. The paper then goes on to describe the findings of a recent survey of SMMEs in Gauteng Province regarding the effects on these firms of macroeconomic policy and supply-side measures. The overall all conclusions of the paper are then reviewed in the final section.

HISTORICAL BACKGROUND[1]

To some extent, the problems of poverty and unemployment in South Africa are inherited from the earlier era of apartheid. Racial segregation resulted in a highly segmented labour market, which reduced both efficiency and equity. African workers under apartheid were not free to move from sectors, occupations, and locations in which wages were low into those where wages were higher. The result was a significant disparity in wages and income.

Once restrictions on the rights of Africans to unionise were lifted in 1979, resulting in a rapid growth in union membership, real wages of African workers in manufacturing rose approximately 50%, while the wages of White workers remained relatively constant. This resulted in some catching up of Africans to Whites – overcoming some of the discrimination of the past. But it also occurred at a time when the demand for lower skill levels, in which Africans were heavily represented, was falling, while that for higher skill level positions, dominated by Whites, was rising (Bhorat and Hodge, 1999). With stagnant demand and an African labour force growing at about 2,8% per year (Sadie, 1991), rising wages for African workers contributed to growing unemployment. Indeed, by 1995, 50% of Black workers, the vast majority of them Africans, were without formal sector employment.

The situation would not have been so bad if the employment gap had been filled by rural agriculture or the urban informal sector, as occurred in most of sub-Saharan Africa, but once again the legacy of apartheid was felt. In rural areas, land was very unevenly distributed under apartheid. Furthermore, the government systematically encouraged capital-intensive agriculture and discouraged subsistence farming. This left many Africans crowded onto the homelands with land resources totally inadequate to their needs. Thus it was no accident that the 1991 population census found that in all the homelands -- both the TBVC countries and the self-governing territories -- African unemployment rates were higher and had risen more sharply over the previous decade than in the rest of South Africa.

Nor was the urban informal sector a better employment cushion. In the cities and towns, the relatively low level of informal activity reflected the restrictions that were placed on Blacks in a whole range of urban activities (Kirsten, 1988). The Central Statistical Service (CSS) estimated, in fact, that in 1989 less than a 20% of the Black labour force was involved in statistically unrecorded activities, of whom 12% worked on a full-time basis.

[1] Much of the material in this section is taken from Stryker, Cassim, Rajaratnam, Bhorat, Leibbrandt, and Plunkett.

Growth of employment was also limited because agricultural and manufacturing production was protected from imports by high tariff and non-tariff barriers, and capital flows were highly restricted, discouraging the importation of private capital. In part this was a reaction to the sanctions imposed on the apartheid regime from outside. It also reflected an isolationist mentality that South Africa could go it alone. But whatever the reasons, the result was a failure to renew ageing equipment, growing obsolescence of technology, and management that was increasingly isolated from new ideas in relation to the evolving the global economy.

Over the years, the dependence of the South African economy on exports of gold, platinum, and diamonds led to overvaluation of the rand in relation to what the exchange rate should have been if there were a more diversified export base. In addition, protection against imports resulted in further overvaluation, as well as a bias against exports and in favour of import-competing activities. As a result, many South African products were not competitive in neighbouring countries or on the world market. To make exports competitive, the government relied on cash rebates to exporters under the General Export Incentive System (GEIS), a scheme that was highly biased in favour of larger, less labour-intensive firms.

Very early on, the new government renewed the commitment that South Africa had already initiated to reopen itself to the global economy and to join the newly created World Trade Organisation. This had a number of important implications. First, it implied that tariff rates, which were at very high levels, would be reduced, that the structure of tariff rates would be simplified, that quantitative restrictions on trade would be eliminated, and that the General Exports Incentive Scheme (GEIS) would be replaced by supply-side incentives consistent with WTO membership. The result of these reforms was a "cold bath of competition" from imports pouring into the South African economy. Especially hard hit was the clothing and textile industry, which had been highly protected before, and, even though it had a transition period somewhat longer than the rest of the economy, nevertheless underwent a very painful adjustment. Throughout the entire economy firms were faced with the necessity of cutting costs and becoming competitive. This resulted in the laying off of workers and the rehabilitation or renewal of equipment. On top of this there was a continuation of the long-term decline in sectors that had traditionally employed a considerable amount of low and semi-skilled labour – sectors such as agriculture, mining, and construction.

To compensate for trade liberalisation, the South African government announced its intention to introduce WTO-friendly "supply side" measures to lower costs and move toward higher value-added production. As part of this effort, the old Regional Industrial Development Programme (RIDP) was to be replaced by a new tax-based incentive scheme related to human resource development, labour absorption, and regional and sectoral priorities. Tax and other incentives were provided through accelerated depreciation allowances and tax holidays on new investment and through a number of special programs to encourage industrial innovation, strengthen the relationship between industry and educational institutions, facilitate access by firms to needed technologies, promote increases in productivity, and develop best practice work organisation. Special

programs were created for small, medium, and micro enterprises (SMMEs) to facilitate their access to loans and other supply-side incentives (Government of the Republic of South Africa, 1996, pp. 12-14). SMMEs also benefited from the new export finance guarantee scheme, implemented in November 1996, the small/medium manufacturing development program, the technology and human resources for industry program, and the support program for industrial innovation.

While initial attention was on cross-cutting programs, this shifted during 1996 to sectoral/cluster studies conducted by IDC and the Department of Trade and Industry (DTI). The goal of these studies was to identify clusters of industries that were likely to be particularly competitive or non-competitive with trade liberalisation (NEDLAC, pp. 20-24, 39, 40). A key issue was the extent to which more labour-intensive small and medium enterprises would be encouraged more through general incentives or by specific incentives geared to promoting clusters of activities in which they might play a role.

It was recognised that restructuring the South African economy away from excessive dependence on primary product exports, particularly minerals, and on goods produced for the domestic market behind high protective barriers would require a depreciation of the real exchange rate. This was welcomed to some extent because it would soften the blow resulting from tariff reductions. However, it was also recognised that a reduction in restrictions on capital flows ran the risk of an outflow of capital, which could cause a depreciation of the rand beyond that needed on current account and result in severe disruptions in the economy. Thus the Reserve Bank felt compelled to maintain high interest rates, partly to discourage capital outflows as capital restrictions were weakened, and partly to encourage inflows of capital to finance the current account deficit that was anticipated, at least in the short run, as a result of the trade reforms.

Interest rate policy was also being used by the Reserve Bank to dampen inflation, which was of concern because of the unsustainable situation regarding fiscal deficits, which reached 8% of GDP by 1992/93. Thus a critical element in the Growth, Employment, and Redistribution (GEAR) strategy elaborated by the government in 1996 was to reduce these deficits to no more than 3% of GDP in order to take some of the pressure off of monetary policy, lower interest rates, and stimulate growth and investment. Fiscal prudence was also thought to encourage foreign investors who might be interested in investing directly in South African industry and agro-industry (Government of the Republic of South Africa, 1996, p. 10).

Although there were some efforts towards tax reform, the main thrust of reducing fiscal deficits fell on the expenditure side. Tightened expenditures not only would relieve inflationary fiscal deficits but also would release resources required for capital formation. This was to be achieved through a restructuring of the public service, holding the annual increase of the government wage bill to no more than 2%, and strict containment of spending on other goods and services and on current transfers. This would allow an increase of discretionary spending of a capital nature within the government's Reconstruction and Development Program of up to 8% per year. Critical to this program were reprioritisation within the health and education budgets, expenditures on municipal

infrastructure, restructuring of the welfare system, land reform, and small business support policies (Government of the Republic of South Africa, 1996, pp. 8-9).

The other main element of the government's reform program involved labour market policies. These sought to provide greater flexibility in wage determination and conditions of employment at same time that basic protection of workers was to be extended to a larger portion of economy. At the same time, there was to be continued promotion of productivity improvements aimed at increasing the skills of a broad spectrum of workers in both the formal and informal sectors (Government of the Republic of South Africa, 1996, p. 17).). The major instruments of this policy were the Labour Relations Act, the Basic Conditions of Employment Act, the Skills Development Act, and the Skills Development Levy Act.

What is clear from this analysis is that a wide variety of policies have been employed in South Africa over the past few years to stimulate economic growth and employment. Some of these have related directly to the labour market. Others have dealt with the structure of private sector incentives, especially in relation to the global economy, and the macroeconomic elements of GEAR. The policies employed have consisted essentially of two types. The first have been policies that affect the general economic environment in which private sector firms operate – policies such as the exchange rate, interest rates, tax structures, and tariff rates – both as these influence the firms directly and as they affect the overall structure and rate of economic growth. The other policies have applied more specifically to individual firms and have generally required specific approvals or administrative procedures involving those firms.

The main thesis of this paper can be set out in the following terms:

1. The general policy environment has not been conducive to a high rate of economic growth, nor to a pattern of growth that favours the SMMEs.
2. The employment of labour relative to output is greater in SMMEs than in larger firms.
3. SMMEs are influenced more by the general policy environment than by firm-specific incentives.
4. The result has been very sluggish expansion of employment.

The policies discussed here are not, of course, the only ones that influence the growth of output and employment. Nevertheless, they are an important element in the failure to absorb more labour into a productive South African economy.

MACROECONOMIC POLICY: GEAR

The new South African government was strongly committed to increasing employment, reducing poverty, and improving opportunities for those who had been disadvantaged under apartheid. At the same time, there was a fervent desire to foster economic growth and earn the respect of potential overseas investors by reducing fiscal

deficits, lowering the rate of inflation, maintaining exchange rate stability, decreasing barriers to trade, and liberalising external capital flows.

Reductions in tariffs and elimination of quantitative restrictions on trade was set in motion by the WTO agreement, signed in 1995 and to be fully implemented by 1999, with the exception of the clothing and textile industry, which had eight years rather then five to comply. For the most part, South Africa was well ahead of schedule in its compliance with the agreement. In addition, South Africa negotiated a trade agreement with the European Union and is a member of the African Customs Union (SACU), the Southern African Development Community (SADC) trade protocol, and the Indian Ocean Rim Initiative (NEDLAC, p. 38). To offset the disruptive effects of these agreements the supply-side measures described earlier were put into effect.

Macroeconomic policies were incorporated in 1996 by the new government into a strategy to promote Growth, Employment, and Redistribution (GEAR). This strategy was firmly committed to the achievement of macroeconomic balance: a lower budget deficit and lowering the rate of inflation. The second important objective was to get the economy on a 6% growth path by the year 2000, driven by improved performances in fixed investment and non-gold exports. The third important objective was redistribution through job creation resulting from economic growth and labour market reforms. In addition, there were to be attempts to increase access to social services by changing priorities and improving efficiency.

Employment creation under GEAR was to be achieved in three major ways. First, economic growth would account for about one-third of increased job creation in both formal and informal sectors. Second, labour-intensive government programmes to build infrastructure and maintain public works in rural and urban areas would account for another quarter of new jobs. The rest of new employment creation would arise from "institutional reforms in the labour market, employment enhancing policy shifts, and private sector wage moderation". Stronger growth of more labour-intensive components of industry, facilitated by shifts in industrial policy, was considered vital, as was continuation of the thrust of economic policy towards greater openness and competitiveness within the global economy. The challenge facing labour market policy, therefore, was "to promote dynamic efficiency, skill enhancement, and the expansion of reasonably remunerated employment – while at the same time supporting a labour-intensive growth path which generates jobs for the unemployed, many of whom are unskilled and have never had previous employment." (Government of the Republic of South Africa, 1996, p. 18).

The GEAR strategy compared two scenarios: one relating to how the economy could be expected to perform over the medium term, if no policy changes were implemented; and the other relating to how the economy would perform if key policy changes were made. The government identified the following policy changes as necessary for higher economic growth and job creation:

- to reduce the fiscal deficit and contain debt service obligations, lower inflation, and hence free up resources for investments;

- to maintain an exchange rate policy with the objective of keeping the real effective rate stable at a competitive level;
- to maintain consistent monetary policy to prevent inflation;
- to further liberalise the capital account of balance of payments;
- to further reduce import tariffs;
- to introduce tax incentives to stimulate new investments in labour absorbing projects;
- to increase the pace of restructuring of state assets;
- to engage in infrastructural investment to address service deficiencies and backlogs
- to introduce greater flexibility within the collective bargaining system.

GEAR provided quantitative estimates of the results of the two scenarios, as shown in Table 1. The core scenario (C) represented the results of unchanged policy while the integrated scenario (I) embraced the results of policy change.

As can be seen from the table, substantially higher growth was to be achieved under the Integrated Scenario over the medium term, with the main driving force behind growth being government's macroeconomic strategy, which was to be based on the premise that if the fiscal deficit could be reduced, real interest rates would decline, and greater investment would be encouraged and jobs created. It is important to note that, though the integrated scenario allowed for much higher growth and rising employment over the period, unemployment would only begin to decline marginally under this scenario to some 32.6% in 2000 from roughly 33% in 1995. Hence it is only from the year 2000 onwards that one would see a reduction in the rate of unemployment.

The GEAR strategy was sharply criticised as restricting economic growth to a level that was likely to have little impact on prevailing levels of unemployment, inequality, and poverty (ILO Review, pp. 29-45). In particular, the strategy was held to be deflationary because it called for a decline in government expenditures without corresponding policy measures to promote the expansion of investment or exports (Gibson and van Seventer). As shown below, these criticisms appear to be more applicable to the implementation of GREAT than to its conception. For example, expansion of investment was to be induced through less crowding out of private investment by the public sector and by lowering the rate of inflation and real rates of interest. Exports were to be stimulated by maintaining the real exchange rate at a competitive level, liberalising the capital account, and reducing further import tariffs.

TABLE 1
CORE (C) VERSUS INTEGRATED (I) SCENARIO PROJECTIONS 1996-2000

CHARACTERISTICS	C versus I 1996	C versus I 1997	C versus I 1998	C versus I 1999	C versus I 2000	C versus I Average
FY Fiscal deficit (% of GDP)	5,1 5,1	4,5 4,0	4,0 3,5	3,5 3,0	3,0 3,0	4,0 3,7
Real Government Consumption (% of GDP)	19,8 19,9	19,5 19,5	19,1 19,0	18,6 18,1	18,1 18,1	19,0 19,0
Average Tariff (%)	10,0 10,0	9,0 8,0	9,0 7.0	8,0 7,0	8,0 6,0	8,8 7,6
Average real wage growth, private sector	0,8 -0,5	1,5 1,0	1,7 1,0	1,3 1,0	1,4 1,0	1,4 0,8
Average real wage growth, government sector	4,8 4,4	0,4 0,7	0,4 0,4	0,3 0,8	0,0 0,4	0,2 1,3
Real effective exchange rate (% change)	-9,6 -8,5	0,7 -0,3	0,1 0,0	0,11 0,0	0,0 0,0	-1,8 -1,8
Real bank rate	7,0 7,0	6,0 5,0	5,0 4,0	4,5 4,0	3,7 3,0	5,2 4,4
Real government Investment growth	2,6 3,4	2,4 2,7	2,2 5,4	2,2 7,5	2,4 16,7	2,4 7,1
Real parastatal investment growth	3,0 3,0	2,5 5,0	2,5 10,0	2,5 10,0	3,0 10,0	2,7 7,6
Real private investment growth	6,3 9,3	4,2 9,1	4,4 9,3	5,8 13,9	7,1 17,0	5,6 11,7
Real non-gold export growth	9,6 9,1	7,5 8,0	6,4 7,0	5,5 7,8	5,3 10,2	6,9 8,4
Additional foreign direct investment ($mn)	155	365	504	716	804	509
RESULTS	C versus I 1996	C versus I 1997	C versus I 1998	C versus I 1999	C versus I 2000	C versus I Average
GDP Growth	3,3 3,5	2,0 2,9	2,5 3,8	2,9 4,9	3,3 6,1	2,8 4,2
Inflation (CPI)	8,4 8,0	10,9 9,7	9,6 8,1	9,3 7,7	9,1 7,6	9,5 8,2
Employment growth (non-agricultural formal)	0,9 1,3	1,0 3,0	0,8 2,7	0,9 3,5	1,3 4,3	1,1 2,9
New jobs per year ('000)	97 126	101 252	84 246	103 320	134 409	104 270
Current account deficit (% of GDP)	1,8 2,2	1,3 2,0	1,1 2,2	1,1 2,5	1,6 3,1	1,4 2,4
Real export growth, manufacturing	12,5 10 **,3**	10,4 12,2	7,5 8,3	6,6 10,5	5,4 12,8	8,5 10,8
Gross private savings (% of GDP)	20,5 20,5	20,7 21.0	20,8 21,2	20,8 21,5	20,6 21,9	20,7 21,2
Government dissavings (% of GDP)	3,1 3,1	2,6 2,3	2,0 1,7	1,4 0,7	0,9 0,6	2,0 1,9

Source: Growth, Employment and Redistribution, A Macro-Economic Strategy

Implementation of GEAR has not been nearly as successful as was hoped. One reason was the global economic crisis, which spread to South Africa in 1998, but even before this it was apparent that GEAR was not on track. Table 2 shows the evolution of some key variables from 1995 to 1999. Except for 1996, real GDP has consistently grown more slowly than even the core scenario projected by GEAR. Furthermore, outside of agriculture, which was favoured by good weather but continued to decrease its

TABLE 2
EVOLUTION OF KEY MACROECONOMIC VARIABLES

Variable	1995	1996	1997	1998	1999
Growth of real GDP (%)	3.1	4.2	2.5	0.6	1.2
Growth of non-agricultural, formal employment (%)	-1.1	-0.7	-1.7	-3.8	-2.0
Growth of labour productivity (%)	5.3	4.0	4.3	4.8	3.3
Average real wage growth, private sector (%)	0.9	1.7	2.3	8.7	2.3
Average real wage growth, government sector (%)	4.0	0.9	3.5	2.7	-2.1
Government surplus (% of GDP)	-4.9	-4.9	-4.6	-3.3	-2.5
Growth of real Gross Fixed Capital Formation by private business enterprises (%)	10.9	7.4	4.7	-2.9	-4.4
Predominant overdraft rate (%)	20.5	21.7	22.0	22.7	17.6
Inflation (% change in CPI)	8.7	7.4	8.6	6.9	5.2
Real rate of interest (%)	11.8	14.3	13.4	15.8	12.4
Gross private savings (% of GDP)	16.5	15.8	14.5	14.3	14.8
Gross inflows of Foreign Direct Investment (R millions)	4502	3515	17587	3104	8411
Real export growth, manufacturing (%)	10.4	9.3	5.5	2.3	0.0
Real effective exchange rate (% change)	-1.5	-6.3	6.4	-9.3	-5.1
Current account deficit (% of GDP)	-1.5	-1.3	-1.5	-1.6	-.004

Source: South African Reserve Bank, *Quarterly Bulletin*, various issues.

employment, real GDP in 1996 grew by only about two percent, followed by only slight improvement the following year before the impact of the financial crisis in 1998. Formal non-agricultural employment continued to decline throughout the period 1995-99, as South African firms continued to shed labour in order to become more competitive. This is revealed by the continued increase in labour productivity, which seems to have been uninfluenced by the financial crisis. Except for 1998, growth in real wages was less than the growth in labour productivity, resulting in some decline in unit labour costs.

Growth of real wages in the public sector was even more restrained that in the private sector. This helped to halve the size of the fiscal deficit in relation to GDP from 4.9% in 1995 to 2.5% in 1999. Although reduced fiscal deficits were supposed to lead to greater investment by the private sector, this did not seem to take place. Growth of real Gross Fixed Capital Formation by private business enterprises declined steadily from 1995 to reach a low of –4.4 in 1999. One of the reasons may have been high real rates of interest. Taking the predominant overdraft rate of interest minus the rate of inflation as a measure of the real rate of interest facing private firms, this rate climbed to a peak of close to 16% in 1998 and was never lower than about 12%. Whatever the sensitivity to interest rates, the ratio of gross domestic investment (GDI) to GDP continued to decline to its current low of 14.6 percent – far below the level of 27 percent attained during the 1970s. The ratio of gross domestic savings to GDP was even lower – reaching an all time low of 13 percent in the fourth quarter of 1998.[2] Meanwhile, the government's broad share of gross domestic fixed investment (GDFI) has only been about 12 percent, compared with 25 percent in 1986, and the share of net foreign direct investment (FDI) has only been about 1.2 percent (NEDLAC, pp. 63-77). Although net FDI shows sizeable

[2] South African Reserve Bank, *Annual Economic Report 1999*, plus additional data obtained from the Reserve Bank.

fluctuations from year to year, gross inflows of FDI indicate some improvement in South Africa's ability to attract this type of investment. Nevertheless, FDI is dwarfed by portfolio and other types of foreign investment, which are much more susceptible to short-term shifts in capital flows.

With respect to the balance of payments, gold exports continued to decline in absolute value and as a percentage of exports of goods and services, while non-gold merchandise exports reached about 30 percent of GDP compared with 16,7 percent in 1995. Most of this increase was in chemicals, iron and steel, and non-ferrous metals -- sectors that employ relatively little labour. Furthermore, the export performance of the manufacturing sector was particularly disappointing, as its rate of growth fell from over 10% per annum in 1995 to 0% in 1999. This was in spite of an almost continuous depreciation of the rand.[3] Despite this poor export performance, the current account deficit has been kept within reasonable limits in relation to GDP.

Even aside from the global financial crisis, GEAR appears to have been overly optimistic, for employment creation and other projections were way below target even before the crisis spread to South Africa in the first half of 1998. Employment in the formal sector has in fact been declining rather steadily, which has to be a real source of concern in the context of the very high unemployment that exists in South Africa today. The question arises, therefore, as to whether an alternative set of macroeconomic policies might do more to stimulate growth, especially in sectors and among firms that are more labour-intensive. As we shall see later in this paper, such firms are likely to be smaller in scale and located in sectors that have a comparative advantage in low cost labour. This would suggest the importance of lowering the real rate of interest for firms that depend heavily on bank borrowing and of allowing the real rate of exchange to seek its equilibrium level in the face of the fundamental changes that are going on in the South African economy.

The latter is especially important given the decline in world gold prices and South Africa's recent reforms in trade policy. Falling gold prices suggest the need to reallocate resources into other sectors – into production of nontradables, import-competing products, and non-gold exports. The most important mechanism for doing this is depreciation of the real exchange rate. Lowering of tariffs and elimination of non-tariff barriers has a very similar effect on the balance of payments and requires a similar response. Without a thorough analysis, however, it is difficult to know where the equilibrium level of the real exchange rate should be, given these fundamental changes in the economy.

AN ALTERNATIVE PERSPECTIVE

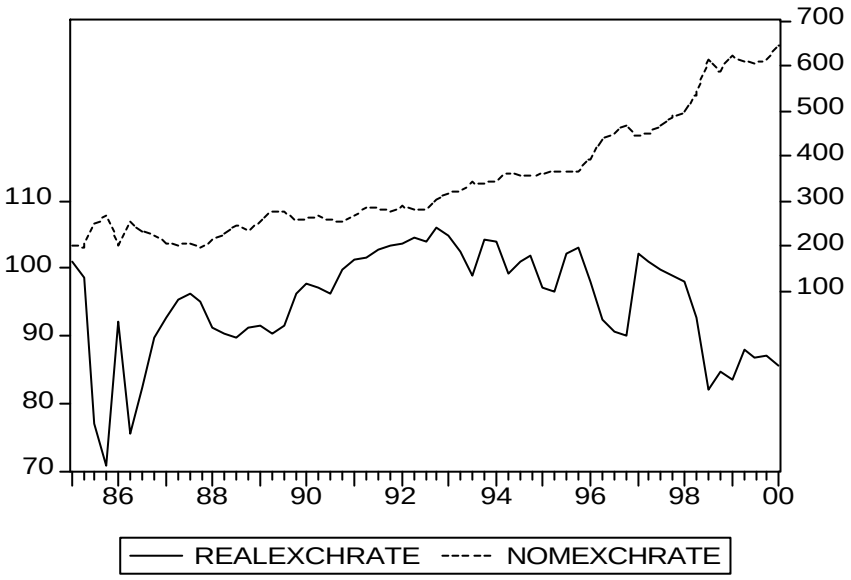
It is useful to look at the data over a longer period in order to put the more recent experience in perspective. The evolution of the nominal and real effective exchange rates

[3] The real effective exchange rate (REER) is measured as the ratio of the deflated value of a basket of currencies of South Africa's major trading partners to the deflated value of the rand. Thus a downward movement of the REER is equivalent to a depreciation in the real value of the rand.

is presented in Figure 1. Whereas the nominal exchange rate is expressed in terms of rand/U.S. dollar, the real effective exchange rate (REER) is measured as the ratio of the deflated value of a basket of currencies to the deflated value of the rand. A downward movement of the REER is therefore equivalent to a depreciation in the real value of the rand.

As is evident, the nominal value of the rand in terms of the U.S. dollar depreciated fairly continuously after 1988, with substantial acceleration of that depreciation in 1993

FIGURE 1
NOMINAL AND REAL EFFECTIVE EXCHANGE RATE
OF THE SOUTH AFRICAN RAND, 1985-2000

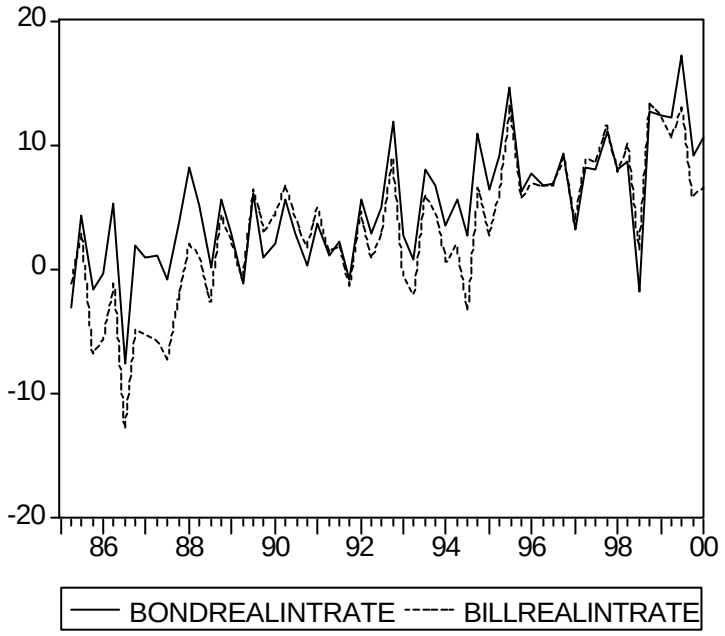


Source: South African Reserve Bank
Notes: [1]Nominal exchange rates are in rand per U.S. dollar. Real effective exchange rates are expressed as the deflated value of the rand divided by the deflated values of a basket of currencies of South Africa's major trading partners.

and perhaps again in 1998. The real value of the rand, on the other hand, appreciated with some fluctuations from 1985 until it reached a peak in the fourth quarter of 1992. Thereafter the real value fell until, by the beginning of the year 2000, it was approximately 19% below its peak value seven years earlier. This was during a period when the price of gold on the world market fell by 23% and South African markets were opened wide to increased competition from abroad. The combination of declining terms of trade, tariff reduction, and trade liberalisation required a substantial depreciation of the REER to restore equilibrium. Whether this was sufficient remains uncertain, especially given the fact that the REER today is approximately at the same level as in 1985, when gold exports were more robust and imports more restricted.

The broader picture is shown in Figure 2 for long-term treasury bonds and 90-day treasury bills. Real rates of interest are calculated as nominal rates minus the rate of inflation as measured by the rate of change of the Consumer Price Index (CPI).

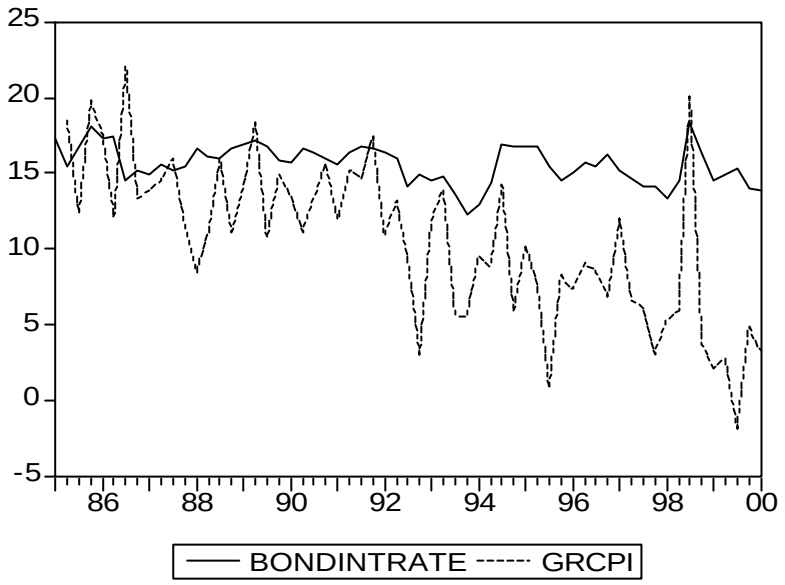
FIGURE 2
REAL RATES OF INTEREST FOR 10 YEARS AND OVER TREASURY BONDS AND 90-DAY TREASURY BILLS[1]



Source: South African Reserve Bank
Notes: [1]Real rates of interest were calculated by subtracting from nominal rate of interest the rate change of the Consumer Price Index.

The two rates track each other fairly well. They both show a strong upward trend from 1985 until 2000, when the real bond rate was in the vicinity of 10%. The reason for the upward trend is that the nominal rates tended to remain relatively constant whereas the rate of inflation fell fairly steadily during this period. For example, as shown in Figure 3, the interest rate on treasury bonds remained relatively constant, averaging a little more than 15%, while inflation fell from about 15% to about 5%.

FIGURE 3
NOMINAL RATE OF INTEREST ON 10 YEARS AND OVER TREASURY BONDS AND THE RATE OF CHANGE OF THE CONSUMER PRICE INDEX



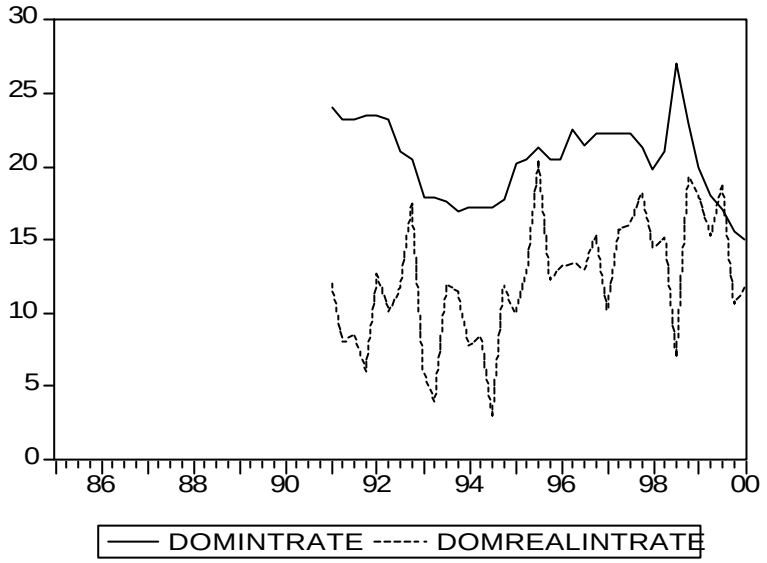
Source: South African Bank

The picture is little altered if one looks at a rate of interest that reflects better the cost of borrowing for private business, except that this cost is obviously somewhat higher than the cost of government borrowing. One such rate is the predominant overdraft rate on current accounts. Although this series is only available back to 1991, it shows a trend similar to those for the bond and bill rates. As seen in Figure 4, the nominal rate of interest fluctuated from 15% to 27% percent. The real rate fluctuated as well, but there was a definite upward trend, with the real rate averaging 12.4% in 1999.

One might ask at this point why real interest rates have been allowed to rise to the point where they would seem to be an adverse impact on business, especially for smaller firms, which are unable to take advantage of supply side incentives to the same extent as larger firms.[4] In part this seems to be because the South African monetary authorities have used monetary policy not only to promote domestic monetary stability but also to influence capital flows and the balance of payments. One reason for this is the liberalisation that has teken place on external capital account, raising fears of a capital exodus.

[4] The reasons for this are discussed later in the paper.

Figure 4
Nominal and Real Predominant Overdraft Rates
of Interest on Current Accounts, 1991-2000[1]



Source: South African Reserve Bank
Notes: [1]Real rate of interest was calculated by subtracting from nominal rate of interest the rate change of the Consumer Price Index.

The vulnerability of the South African economy to short-term capital outflows is especially acute because of the choice made by the government to finance its borrowing needs through the issuance of domestic bills and bonds rather than through external borrowing. This has had the advantage that debt service payments denominated in rand have not risen with depreciation of the currency. On the other hand, it has had the disadvantage that it made the economy more vulnerable to the vagaries of short-term capital movements prompted either by exogenous forces or by uncertainties regarding the future pace of depreciation of the rand.

At the beginning of the year 2000, the loan debt of the national South African government totalled R 390.5 billion. Of this 93% was in the form of government bills and bonds denominated in rand, and less than 7% was denominated in foreign currency. Of the total domestic loan debt, R208 billion was held by the non-monetary private sector, an unknown proportion of which was made up of non- residents. Other outstanding public debt consisted of the bonds issued by local authorities, public enterprises, and other public-sector borrowers, which amounted to about R74 billion (South African Reserve Bank, *Quarterly Bulletin*, June 2000). Other relatively liquid capital consisted of stocks and bonds issued by the private sector, as well as bank deposits.

Although the value of liquid capital in South Africa that could be shifted abroad is sizeable, it also appears for the most part to have been relatively stable, at least in terms of annual changes. Over the past five years, annual purchases of portfolio investment by foreigners increased fairly steadily from R10,651 million in 1995 to R82,389 million in 1999, with only a small dip in 1998, the year of financial crisis. At the same time, there was a fairly steady increase in South African purchases of foreign portfolio investment from R1,631 million in 1995 to R31,344 million in 1999, with a modest upward bump in 1998. Movements of other forms of capital were somewhat more volatile, though smaller in magnitude, but did not reveal a large overall outflow in 1998.

The quarterly data, on the other hand, indicate less stability. As shown in Table 3,

TABLE 3
QUARTERLY MOVEMENTS OF PORTFOLIO AND OTHER NON-DIRECT INVESTMENT, 1998-99[1]
(R billions)

	1998				1999			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Foreign liabilities								
Portfolio	26.5	22.5	-1.1	2.5	10.9	26.2	29.9	15.5
Other non-direct	-1.4	-2.3	1.4	8.9	-1.1	-3.0	-9.2	-4.8
Foreign								
Portfolio	-7.1	-11.3	-5.5	-6.2	-5.8	9.4	5.0	-7.6
Other non-direct	-5.1	.0	3.8	-1.4	-2.1	-2.3	-3.9	-2.4

Source: South African Reserve Bank, *Quarterly Bulletin*, various issues.
Notes: [1]An increase in liabilities (inflow of capital) is indicated by a positive sign; an increase in assets (outflow of capital) is indicated by a negative sign.

there was a sharp decline in the inflow of portfolio capital during the third and fourth quarters of 1998. Coupled with a persistent purchase of portfolio investment abroad, this resulted in a net outflow of portfolio capital in each of these quarters. However, net inflows of other non-FDI capital increased, lessening the overall net outflow to R1.4 billion in the third quarter. By the fourth quarter, net flows of non-FDI capital were positive once again, though they did not return to their pre-crisis levels until the second quarter of 1999.

The decline in portfolio capital inflow led to an increase in the nominal rate of interest on treasury bills from 16.0% in the second quarter of 1998 to 21.6% in the third quarter. During the same period, the rate on bonds rose from 14.6% to 18.3%. The predominant rate of interest on overdrafts, which most affects business, rose at the same time from 21.1% to 27.0%. It averaged 23.0% during the fourth quarter, and then fell fairly steadily during 1999, to reach 15.5% in the fourth quarter of 1999 (South African Reserve Bank).

The most important target for monetary policy is the Reserve Bank's official money-market lending rate, the rate on repurchase transactions. This rate rose

substantially, by more than 700 basis points from April to August 1998. This was a clear signal that the Bank was employing restrictive monetary policy in order "to stabilise the foreign exchange market and prevent a continuous spiral of depreciation and price increases from developing" (South African Reserve Bank, *Annual Economic Report 1999*).

The 1999 Annual Economic Report of the South African Reserve Bank makes it quite clear that the Bank reacted first and foremost to the threat of financial stability resulting from an exogenous decline in short-term capital inflows rather than to the immediate danger of economic recession.[5] Thus a major part of the burden of adjustment was thrown on those dependent on borrowed capital. As a result, GDP fell in the third quarter of 1998, especially in the goods-producing, or tradables, industries because of the slackening of demand. Of particular interest in the 1999 Annual Report is the following statement:

> Price movements in the South African securities market had been severely disrupted by the international financial turmoil of 1998. Market movements became highly volatile and began to correspond more closely with movements in emerging markets than those of mature markets. Money-market interest rates had increased sharply when the rand was under almost incessant downward pressure around the middle of 1998. This helped stabilise the foreign exchange market and, in a more general sense, all the other financial markets…. The rise in nominal bond yields from the early months of 1998 was apparently driven mainly by a reassessment of risk associated with investment in South Africa and, possibly, by higher expectations of inflation. (South African Reserve bank, *Annual Economic Report 1999*).

This statement suggests the limited ability of the authorities in South Africa to use monetary policy to achieve both internal and external stability. The fact that foreign portfolio investors face substantial risks associated with variations in the exchange rate means that they are not likely to be very sensitive to changes in interest rates alone. This implies that very substantial interest rate changes may be necessary to influence capital flows in periods of crisis, with potentially devastating effects on the domestic economy. Very high interest rates were in fact resorted to in 1998 only after the Reserve Bank tried unsuccessfully to defend the rand, increasing its net open foreign currency position from $12.8 billion at the end of April 1998 to $23.,2 billion at the end of September. Interest rates peaked in early September and thereafter the currency crisis subsided, but it is difficult to say how much this was due to Reserve Bank monetary policy and how much to a general improvement in international financial conditions.

What is clear is that had the international situation not ameliorated, the cost to the domestic economy would have been very severe. Part of the reason may have been because of the shifts that occurred in the Bank's policy. By attempting to defend the rand, when most speculators were betting against it, the monetary authorities undoubtedly increased the degree of uncertainty regarding future depreciation, and thus the risk premium associated with holding South African securities. This made the use of

[5] The Bank believed that financial instability would in the long run be even more detrimental to the economy than a rise in interest rates.

monetary policy less effective than it would have been if the rand had been allowed to depreciate as a result of market forces. Such a depreciation would have increased to cost to foreign investors of selling their portfolio assets and converting the proceeds into foreign currency. This would have helped to dampen speculative outflows and would have meant that less of the adjustment would have had to be made in the domestic economy. There would have been some impact of depreciation on the real economy and on inflation, of course, and this has to be weighed against the advantages of allowing depreciation to take place. In the end, of course, depreciation of the rand did ensue, but in a pattern that was difficult to predict and unlikely to reduce the risk premium associated with holding rand-denominated portfolio investment.

This is evident from Table 4, which shows the monthly evolution of the nominal and real effective exchange rates of the rand. Form January 1998 to April 2000. The

TABLE 4
MONTHLY MOVEMENTS OF THE NOMINAL AND REAL EFFECTIVE EXCHANGE RATES, Jan 1998 - Apr 2000
(AVERAGE FOR THE MONTH)

Month	NEER	REER
Jan 1998	88.42	99.70
Feb	87.83	98.7
Mar	87.18	97.94
Apr	85.83	97.31
May	84.90	96.57
Jun	81.35	92.82
Jul	70.07	80.78
Aug	60.75	81.24
Sep	70.21	82.09
Oct	72.25	84.87
Nov	75.23	88.93
Dec	71.80	84.60
Jan 1999	70.76	83.50
Feb	70.65	83.58
Mar	70.78	83.67
Apr	72.36	85.32
May	71.88	85.59
Jun	73.70	87.97
Jul	73.74	88.2
Aug	72.15	86.22
Sep	72.75	86.67
Oct	71.43	85.41
Nov	72.09	86.70
Dec	72.51	87.11
Jan 2000	72.70	“
Feb	72.00	“
Mar	70.95	“
Apr	69.65	“

Source: South African Reserve Bank, *Quarterly Bulletin 2000,* p. S-105.

Table shows a dramatic drop of the nominal effective exchange rate (NEER) in July 1998, followed by gradual recovery starting in September. The exchange rate resumed its depreciation in December of that year, and thereafter drifted up and down until by April 2000 it was at its lowest point. The real effective exchange rate (REER) followed a similar pattern, though its overall depreciation was somewhat less than for the nominal rate.

How much further the rand would have fallen if the monetary authorities had chosen not to intervene remains to be seen, as does the impact that this would have had on the outflow of capital, the rate of inflation, and GDP. What is clear is that the growth of GDP and of employment over the last five years has been far below the predictions of GEAR. This would seem to be at least partly attributable to the rising real rate of interest that has ensued for the last 15 years despite the progress that has been made in reducing fiscal deficits. The rest of this paper deals with the impact of this increase, especially on SMMEs.

SMALL, MEDIUM, AND MICRO ENTERPRISES

Due to obstacles originating in the past, the small, medium, and micro enterprise (SMME) sector is severely underdeveloped in South Africa. Even before the apartheid era, economic development of the country, based on extractive industries, was organised in an relatively oligopolistic fashion. Under apartheid, with formidable discouragement to entrepreneurial activity for the majority of the population, only few SMMEs got off the ground.

As part of its recasting of the legislative and fiscal environment for labour in the mid-1990s, the government announced the macroeconomic framework for growth, employment, and redistribution (GEAR) in June 1996. The promotion of SMMEs was considered to be a key element in the government's strategy for employment creation and income generation. The "White Paper on National Strategy for the Development and Promotion of Small Business in South Africa" and the subsequent National Small Business Act of 1996 aim to create an enabling environment for small business development, with various programmes and institutions established to give effect to this strategy.[6]

[6] GEAR points to 6 different channels for helping small and medium enterprises. The Centre for Small Business Promotion, attached to the Department of Trade and Industry, offers various services. The Ntsika Enterprise Promotion Agency provides non-financial assistance. Khula Enterprise Finance Limited offers wholesale loans. Khula Credit Guarantee Limited provides loan guarantees. A pre-shipment export finance guarantee facility is intended to expand access to working capital. The Competitiveness Fund can offer small firms consultancy advice on technology and marketing. There is also other work now being done on big-small business linkage programmes and identification of partnerships between large and small firms.

Role in Generating Employment

Many economic observers see small and medium sized firms as the main employment generators in the South African economy. This notion is based on the perception that the employment intensity - defined here as the number of jobs per unit of output - in SMMEs is higher than in large firms. Other related reasons, many of which overlap, include:

- The inability of the formal economy to absorb new entrants to the labour markets (less than 5 percent of those leaving school find work in this sector). Therefore, self-employment is seen as a viable option.
- The absence of specialised training of most school-leavers, combined with the poor skill base of the majority of the potential workforce, results in a pool of mainly semi-skilled labour. Self-employment again is a viable alternative.

An empirical study was undertaken as part of the Equity and Growth through Economic Research/Public Strategies for Growth with Equity project, financed by the U.S. Agency for International Development, which sheds some light on this observation (Stryker, Cassim, Rajaratnam, Bhorat, Leibbrandt, and Plunkett). The question was whether small firms with less than 50 employees generate more direct and indirect income and employment per unit of final demand of the goods that it produces compared to large firms. The analysis was undertaken using a provisional input-output table for the year 1995, updated from the one published by CSS for the year 1993, which distinguishes small firms and large firms for each identified production activity. Based on cross-sectional CSS data for 1995, the input-output framework allows derivation of economy-wide and sector-specific coefficients and multipliers by size class for 44 SIC industry sectors.

While the conclusions should be treated with due caution, in part due to the difficulties in accounting for intermediate inputs, there is substantial evidence that supports the hypothesis of the greater labour intensity of SMMEs, both in terms of their direct hiring and in terms of their linkages with other firms. In two-thirds of the subsectors, the labour absorptive capacity of small firms is higher than for larger firms Interestingly enough, small firms also seem markedly more profitable, based on a higher gross operating surplus per unit of output. This could be expected to the extent that management is a relatively fixed cost and is spread over many more units of output in a larger firm.

Table 5 shows sector specific coefficients for selected variables. In the first row of column 1, for example, we see that the value added of small enterprises in agriculture (with less than 50 employees) per one million rand worth of output is 0.33 million rand, while for large enterprises it is 0.58 million. Small agricultural enterprises maintain relatively more jobs than large enterprises. Other sub-sectors where small enterprises appear to maintain significantly more jobs per unit of output than large firms are food, textiles, clothing, leather products, furniture, paper and paper products, printing and publishing, pottery and earthenware, machinery, motor vehicles and parts, other

construction, and community and social services. Sub-sectors in which both large and small firms employ a substantial number of workers in relation to the value of output

TABLE 5
SECTOR-SPECIFIC DIRECT MULTIPLIERS (1995)

		value added		wage costs		imports		employment		value added ('000 R)	
		per R million		per R million		per R million		per R million		per job	
SIC (old)	Sector	small	large	small	large	small	large	small	large	small	large
1	agriculture, forestry and fishing	0.33	0.58	0.12	0.10	0.06	0.04	24.70	18.69	13.46	31.21
21	coal mining	0.45	0.44	0.11	0.23	0.12	0.12	2.30	5.51	194.12	79.93
24	gold mining	0.68	0.73	0.16	0.49	0.06	0.05	5.65	18.39	120.90	39.69
22/3/7/8	diamond and other mining	0.51	0.47	0.19	0.20	0.07	0.07	6.77	5.88	74.78	80.67
311/2	food	0.20	0.21	0.12	0.11	0.09	0.08	5.72	3.41	34.40	60.77
313	beverages	0.07	0.25	0.04	0.09	0.10	0.08	1.18	1.72	62.60	144.93
314	tobacco products	0.21	0.57	0.08	0.11	0.10	0.06	3.35	3.30	61.74	172.12
321	textiles	0.26	0.33	0.16	0.17	0.15	0.13	8.59	5.13	29.72	64.46
322	clothing	0.48	0.45	0.40	0.38	0.14	0.15	22.80	19.43	20.87	23.09
323	leather products	0.43	0.34	0.23	0.12	0.10	0.11	10.60	5.49	40.57	62.67
324	footwear	0.32	0.34	0.26	0.28	0.15	0.15	11.75	13.41	27.54	25.05
331	wood and wood products	0.42	0.40	0.32	0.26	0.08	0.08	13.60	16.38	30.65	24.13
332	furniture	0.45	0.39	0.39	0.32	0.12	0.13	18.64	11.24	24.08	34.73
341	paper and paper products	0.33	0.37	0.19	0.14	0.11	0.10	6.06	2.87	54.17	129.50
342	printing and publishing	0.50	0.44	0.30	0.25	0.06	0.06	7.41	4.63	66.99	95.85
351	industrial chemicals	0.28	0.31	0.10	0.11	0.15	0.15	1.75	1.91	159.29	164.17
352	other chemical products	0.33	0.37	0.23	0.23	0.12	0.12	5.17	3.94	64.35	94.37
353/4	petroleum refineries	0.13	0.24	0.06	0.08	0.35	0.30	2.41	0.96	54.78	252.28
355	rubber products	0.25	0.35	0.14	0.21	0.22	0.19	4.99	4.32	50.41	81.84
356	plastic products	0.36	0.36	0.23	0.21	0.20	0.20	7.68	6.63	46.77	53.74
361	pottery, china and earthenware	0.43	0.45	0.45	0.48	0.08	0.08	38.34	19.83	11.30	22.86
362	glass and glass products	0.37	0.48	0.21	0.25	0.08	0.07	0.72	5.15	517.27	93.07
369	other non-metallic minerals	0.50	0.54	0.30	0.30	0.09	0.09	12.09	8.31	41.45	65.10
371	basic iron and steel	0.41	0.43	0.18	0.22	0.09	0.09	3.48	3.39	117.51	125.66
372	basic non-ferrous metals	0.16	0.29	0.07	0.11	0.16	0.13	1.60	1.91	98.19	149.97
381	metal products	0.42	0.36	0.28	0.22	0.12	0.13	7.81	6.17	53.51	58.99
382	non-electrical machinery	0.29	0.25	0.23	0.20	0.17	0.18	5.61	3.98	52.04	62.84
383	electrical machinery	0.66	0.73	0.47	0.53	0.05	0.06	13.91	10.32	47.25	71.02
384	motor vehicles and parts	0.48	0.32	0.25	0.15	0.13	0.18	7.42	3.18	64.99	100.08
385	other transport equipment	0.21	0.24	0.13	0.18	0.14	0.14	2.56	2.90	83.27	84.45
386-390	other industries	0.22	0.36	0.13	0.20	0.30	0.11	4.22	8.05	52.70	44.47
41	electricity, gas and steam	0.00	0.51	0.00	0.13	0.00	0.02	0.00	1.97	0.00	258.04
42	water supply	0.00	0.34	0.00	0.12	0.00	0.08	0.00	1.97	0.00	171.64
51	building construction	0.31	0.31	0.25	0.26	0.08	0.08	7.78	12.52	40.41	24.50
52/53	civil engineering and other construction	0.38	0.35	0.24	0.26	0.07	0.08	19.53	6.61	19.57	52.51
61/2	wholesale and retail trade	0.59	0.52	0.37	0.31	0.03	0.03	6.71	8.54	87.39	61.45
63	catering and accommodation services	0.29	0.46	0.16	0.36	0.04	0.03	3.09	7.74	94.92	59.63
71	transport and storage	0.47	0.52	0.23	0.32	0.05	0.05	4.05	5.95	115.24	87.12
72	communication	0.00	0.70	0.00	0.35	0.00	0.04	0.00	7.03	0.00	100.20
81/8200	finance and insurance	0.00	0.58	0.00	0.52	0.00	0.02	0.00	9.36	0.00	62.50
831/2/3	business services	0.62	0.40	0.10	0.16	0.01	0.06	0.51	8.84	1215.12	45.60
9330	medical, dental & other health services	0.46	0.33	0.12	0.21	0.05	0.07	4.53	12.15	100.92	27.00
9700/9800	other community & social services	0.28	0.46	0.21	0.38	0.06	0.05	34.22	7.03	8.27	66.05
99	other	0.13	0.13	0.11	0.11	0.11	0.11	3.07	2.72	43.89	49.59

Source: J. Dirck Stryker, Fuad Cassim, Balkanapathy Rajaratnam, Haroon Bhorat, Murray Leibbrandt, and Daniel Plunkett, "Increasing Demand for Labour in South Africa," Draft Final Report, Equity and Growth through Economic Research/Public Strategies for Growth with Equity (EAGER/PSGE) project, October 1999.

include agriculture, forestry, fishing, clothing, wood and wood products, furniture, pottery and earthenware, non-metallic minerals, electrical machinery, construction, and health services.

When input-output linkages are taken into account, the relative importance of SMMEs in creating employment increases. For the entire economy, small firms directly employ 7.06 workers for each R million rand in output, compared with 6.72 workers for large firms. Including input-output linkages raises these figures to 14.48 workers for small firms and 12.91 for large firms. Table 6 presents the details for these and other variables by sub-sector. The ordering of the multipliers does not change very much from Table 5 to Table 6 but their size does change markedly.

Given the limitations of the data, conclusions have to be viewed with caution. The direct impact of small and large firms, as shown in Table 5, is based on solid data from published data sources, and there is no doubt about the direction of the results. Small enterprises are on average more employment intensive and generate more GDP per job than large firms. The return to capital per unit of output is relatively higher, while the import intensity is lower. It is also clear, however, that the average wage per job in small firms is lower than in large enterprises.

If we account for backward linkages, the picture changes to some degree. On the one hand, the relative employment intensity of small enterprises is enhanced. By comparing Table 5 with Table 6, it appears that on average small enterprises employ relatively more worker than judging by the direct employment/output ratios. In terms of the other variables, notably contribution to GDP, wage income, and imports, the earlier conclusions are reversed. For those variables the backward linkages of small enterprises are less favourable in that relatively more imports are required and relatively less value added and wage income is generated.

Impact of Macroeconomic Policy on SMMEs

It is clear that this analytical framework can make an important contribution to the analysis of the employment effects of macroeconomic policy in South Africa by disaggregating both small versus large firms and sub-sectors. What is needed, in addition, is empirical analysis of the impact of alternative policies on firms by size-class and sub-sector. While no solid empirical analysis has, to our knowledge, been undertaken on this, there is some survey data, which has only very recently been collected, which sheds some light on this issue. This is the enterprise survey, financed and undertaken by the World Bank in partnership with the Greater Johannesburg metropolitan council in the Greater Johannesburg metroplitan area in the province of Gauteng in November 1999.

Among SMMEs, insufficient demand and the high cost and lack of availability of capital were listed as two of the four most important constraints on business expansion[7](Chandra and Rajaratnam). The larger SMMEs rely more on bank capital and

[7] The other two were crime and lack of infrastructure.

TABLE 6
SECTOR-SPECIFIC TOTAL MULTIPLIERS (1995)

			output		income		labour income		import		employment	
	SIC (old)	Sector	small	large	small	large	small	large	small	large	small	large
1	1	agriculture, forestry and fishing	2.16	1.73	0.79	0.87	0.35	0.24	0.16	0.10	32.59	23.61
2	21	coal mining	1.81	1.82	0.78	0.78	0.29	0.41	0.20	0.20	6.49	9.75
3	24	gold mining	1.33	1.28	0.82	0.85	0.23	0.55	0.09	0.08	7.39	19.87
4	22/3/7/8	diamond and other mining	1.82	1.87	0.84	0.82	0.36	0.39	0.15	0.15	10.79	10.16
5	311/2	food	2.45	2.43	0.78	0.78	0.38	0.37	0.20	0.19	19.40	17.14
6	313	beverages	2.82	2.47	0.73	0.78	0.36	0.35	0.25	0.20	10.65	9.40
7	314	tobacco products	2.29	1.70	0.78	0.88	0.32	0.24	0.20	0.11	10.68	7.29
8	321	textiles	2.14	2.03	0.70	0.74	0.39	0.37	0.26	0.23	14.95	11.29
9	322	clothing	1.69	1.73	0.75	0.74	0.54	0.53	0.21	0.22	27.01	23.85
10	323	leather products	2.04	2.20	0.80	0.77	0.41	0.33	0.19	0.21	17.32	13.23
11	324	footwear	1.98	1.96	0.70	0.70	0.45	0.47	0.25	0.25	18.13	19.68
12	331	wood and wood products	1.95	1.98	0.83	0.82	0.53	0.48	0.15	0.16	21.99	25.09
13	332	furniture	1.81	1.89	0.79	0.76	0.58	0.53	0.19	0.21	24.92	18.18
14	341	paper and paper products	2.10	2.03	0.78	0.79	0.40	0.34	0.20	0.19	12.33	8.74
15	342	printing and publishing	1.85	1.94	0.85	0.84	0.49	0.46	0.13	0.15	12.37	10.10
16	351	industrial chemicals	2.05	2.00	0.71	0.72	0.31	0.31	0.26	0.24	6.62	6.57
17	352	other chemical products	2.01	1.95	0.74	0.76	0.44	0.43	0.23	0.22	10.36	8.83
18	353/4	petroleum refineries	1.94	1.82	0.55	0.60	0.27	0.26	0.43	0.37	7.37	5.29
19	355	rubber products	2.01	1.87	0.65	0.70	0.34	0.37	0.32	0.27	10.28	8.89
20	356	plastic products	1.81	1.82	0.69	0.69	0.39	0.37	0.28	0.28	11.57	10.54
21	361	pottery, china and earthenware	1.86	1.83	0.82	0.83	0.65	0.66	0.15	0.14	42.95	24.28
22	362	glass and glass products	2.01	1.84	0.81	0.84	0.44	0.44	0.17	0.14	6.12	9.64
23	369	other non-metallic minerals	1.72	1.66	0.82	0.83	0.47	0.46	0.15	0.14	16.04	11.94
24	371	basic iron and steel	1.94	1.91	0.81	0.82	0.39	0.42	0.17	0.16	8.15	7.93
25	372	basic non-ferrous metals	2.34	2.14	0.70	0.75	0.33	0.34	0.27	0.23	7.56	6.96
26	381	metal products	1.86	1.94	0.78	0.76	0.48	0.43	0.20	0.22	12.06	10.75
27	382	non-electrical machinery	1.99	2.06	0.72	0.70	0.47	0.46	0.26	0.27	10.95	9.65
28	383	electrical machinery	1.55	1.37	0.88	0.89	0.59	0.61	0.10	0.09	16.61	12.23
29	384	motor vehicles and parts	1.72	1.94	0.78	0.70	0.41	0.36	0.21	0.28	11.06	7.92
30	385	other transport equipment	2.20	2.14	0.69	0.70	0.40	0.43	0.25	0.24	8.46	8.52
31	386-390	other industries	1.89	1.97	0.61	0.77	0.33	0.43	0.37	0.20	9.36	13.56
32	41	electricity, gas and steam	1.00	1.84	0.00	0.91	0.00	0.31	0.00	0.08	0.00	5.82
33	42	water supply	1.00	2.11	0.00	0.80	0.00	0.33	0.00	0.16	0.00	6.50
34	51	building construction	2.10	2.11	0.79	0.79	0.53	0.55	0.17	0.17	15.90	20.73
35	52/53	civil engineering and other construction	1.96	2.01	0.80	0.79	0.47	0.50	0.16	0.17	25.43	12.84
36	61/2	wholesale and retail trade	1.65	1.74	0.90	0.89	0.53	0.50	0.07	0.08	10.34	12.71
37	63	catering and accommodation services	2.34	2.02	0.84	0.88	0.39	0.53	0.13	0.10	11.05	13.81
38	71	transport and storage	1.81	1.73	0.82	0.84	0.42	0.49	0.13	0.11	8.40	9.88
39	72	communication	1.00	1.39	0.00	0.92	0.00	0.47	0.00	0.07	0.00	9.49
40	81/8200	finance and insurance	1.00	1.65	0.00	0.93	0.00	0.74	0.00	0.04	0.00	13.77
41	831/2/3	business services	1.43	1.79	0.83	0.77	0.21	0.36	0.04	0.11	3.07	13.62
42	9330	medical, dental & other health services	1.85	2.05	0.85	0.81	0.31	0.44	0.12	0.15	9.23	17.97
43	9700/9800	other community & social services	2.15	1.86	0.82	0.86	0.47	0.58	0.14	0.10	41.11	12.17
44	99	other	2.32	2.32	0.78	0.78	0.49	0.49	0.20	0.20	12.03	11.68

Source: J. Dirck Stryker, Fuad Cassim, Balakanapathy Rajaratnam, Haroon Bhorat, Murray Leibbrandt, and Daniel Plunkett, "Increasing Demand for Labour in South Africa," Draft Final Report, Equity and Growth through Economic Research/Public Strategies for Growth with Equity (EAGER/PSGE) project, October 1999.

are constrained more by high interest rates than the smaller firms, for which access to bank credit is more of an issue. As a necessary condition for the addition of 10 employees, almost 80% of the SMMEs cited the need for increased demand, while 44% required a fall in interest rates. Of the small, as opposed to very small and micro, firms, approximately two-thirds had borrowed from a bank within the past five years. High

interest rates in 1998 were cited by 38% of the SMMEs as having prevented their expansion or inhibited their ability to repay old or acquire new debt.

The survey also demonstrated the problems posed for using supply-side measures to offset the detrimental effects of macroeconomic policies on SMMEs. According to the survey results, only 10-20% (depending on the program) of the SMMEs are even aware of the existence of these government programs. A much lower percentage of the firms had actually made use of the programs. Instead, the SMMEs cite policy stability, lower interest rates, and skills development (education and training) as the most important actions that national government can take to aid them. Safety/security and infrastructure are the most important actions that could be taken by local government.

CONCLUSIONS

The results of the analysis undertaken in this paper suggest that the South African Reserve Bank has pursued a monetary policy that has emphasised financial stability over economic growth. In particular, high interest rates have been maintained as a way of avoiding capital flight, excessive pressure on the exchange rate, and high inflation. This policy has largely been successful, in part because declining fiscal deficits have avoided a situation in which there was pressure on South Africa's capital market to finance large government needs. However, the downside is that high interest rates have had a detrimental effect on economic growth.

Real rates of interest have been climbing in South Africa for at least the past 15 years. The major reason for this is the persistence of fairly high nominal rates of interest at the same time that inflation has been falling. As a result, the real rate for most borrowing by overdraft within the last year or so has averaged about 15%.

A major question is whether rising real rates of interest are currently necessary to avoid a capital outflow. It may be that the increased uncertainty in recent years regarding future depreciation of the rand has increased the risk premium associated with portfolio investment in South Africa. This is linked with the more general problem that the South African government has chosen to finance its deficit out of domestic rather than external borrowing. While this has reduced the cost of debt service at a time when the rand has been depreciating, it has made this debt more vulnerable to short-term capital movements, such as those that occurred in 1998.

Perhaps the most important consequences for the South African economy have been the adverse impact that high interest rates have had on the expansion of SMMEs. A recent survey suggests that the SMMEs are quite sensitive to rising interest rates, especially the larger ones, which depend more on bank credit. Furthermore, it is difficult to offset the effects of high interest rates, which pervade the economy, with supply-side measures, which tend to be firm-specific and to require approvals and administrative procedures that are expensive and time-consuming for smaller firms. Given the labour-intensive nature of many of the SMMEs, the result is a failure of employment to expand at the rate that would be possible if more growth-oriented policies were pursued.

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