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Trade and Uneven Development: Opportunities and Challenges



The role of development finance for industry in a restructuring economy: a critical reflection on the Industrial Development Corporation of South Africa

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The role of development finance for industry in a restructuring economy: a critical reflection on the Industrial Development Corporation of South Africa

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Abstract

South Africa's low investment rate has been widely recognised as both a symptom and cause of relatively poor industrial performance in the past decade. Investment is particularly important as restructuring requires the rapid growth of new activities if potential gains are to be realised, especially with a view to increasing employment and a more diversified industrial base. The IDC played a crucial role in shaping the apartheid economy, and has an equally important role to play in addressing the apartheid industrial legacy and the fundamental transformation of the economy. This transformation includes both broad-based growth and employment generation, and black economic empowerment.

The paper reviews the rationale for development finance for industry in light of recent debates on the importance of investment. It then evaluates the role of the IDC over the past decade with specific reference to the patterns of financing and the changing structure of the South African economy. In addition, the appraisal addresses the role of the IDC in industrial policy formulation and implementation with specific reference to recent developments.

¹ The paper has benefited from extensive discussions with Shakeel Meer and Jorge Maia.

1. Introduction: role of development finance

The financial sector plays a particularly important role in economic development as it channels resources from sectors where there is a surplus to those where there is a deficit (Arestis and Demetriades, 1997; Weiss, 1995; World Bank, 1988). It therefore selects firms and groups of economic activities which will receive resources for investment, and potentially acts a catalyst for structural change in an economy. However, there are many reasons why financial sectors tend to follow, instead of lead, developments in the real economy. Crucially, the financial sector relies on information to assess risk and this means that it tends to fund projects in sectors which are well developed in the economy, on which much is known, and where there are readily available examples (see Stiglitz, 1993 and 1998). This implies an intrinsic bias against products which are undeveloped, but where there is potential, and a bias against groups of agents (for example, small and medium black-owned and run businesses) on which relatively little is known because historically banks have not focused on them.

As such, the financial sector tends to be conservative, reinforcing existing patterns of economic flows, and yet it is potentially critical for new ventures for which access to finance is necessary to break the self-financing constraint. The particular problems with information also have reinforcing tendencies. In many sectors, linkages between firms engaged in similar inter-locking activities are important for the success of each. A network of firms ensures that complementary products are produced and that a skills-base is developed. Failure to finance one project therefore means that others are less likely to succeed (and to attract finance).

Most economists would agree that financing of investment is an area where the assumption of efficient markets is least warranted (Stiglitz, 1993, 1998; Rodrik, 1999). The nature of finance, and in particular the importance of information, mean that market 'failures' are intrinsic to the financial sector rather than being rare and temporary aberrations that can be 'corrected'. Indeed, it is misguided to refer to intrinsic factors in the organisation of production as 'market failures' (Sawyer, 1991). Instead, the implications of the inherent characteristics of the financial sector should be recognised and built-into economic policies. The far-reaching interventions in the financial system by East Asian governments such as in South Korea and Taiwan were a very important part of their ability to support large-scale investments in developing new industrial capabilities (Harris, 1988; Rodrik, 1999; Wade, 1990; Amsden, 1989).

The fundamental reorientation of the South African economy means patterns of finance are particularly important. This relates both to the need to promote balanced growth and development, with employment creation and more equitable outcomes, and to the importance of financing the development of 'sectors of tomorrow'. But, the intrinsic nature of the financial sector, highlighted here, suggests it will not respond adequately to these imperatives.

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² See Levine (1997) for a review of the debates.

³ A good example is the development of the internet which would never have received finance from commercial sources.

⁴ In addition, the state placed strong regulations on financial institutions and, as a result, commercial banks often played a similar role similar to and alongside DFIs. Some governments decided how many banks could exist and what they could do.

Development finance institutions such as the IDC thus have a crucial role in increasing investment rates, through lending where the orientation of private institutions means the private sector will not extend finance (or only on onerous terms).⁵ In addition, private institutions only consider private returns and not the linkage (and positive externality effects) of projects, nor the wider development impact. The 'insider' position of institutions such as the IDC may also, in itself, improve the prospects of certain projects through ensuring the appropriate connections with other branches of government (including use of incentives and the provision of necessary economic infrastructure).

The international experience – development finance for industry

Mechanisms for ensuring development finance for industry have played a significant role in industrialisation in many, if not most, countries. While much of recent attention is focused on the experiences of the East Asian newly industrialising countries, countries such as the USA employed proactive industrial policies including finance (Chang, 2002). Even today, the USA provides high levels of financing for priority areas such as R&D in space and defence industries, and pharmaceuticals.

The challenges of 'catch-up' by the follower countries in industrial development indicate even greater returns from effective financing of industrial development. Rather than focusing on pushing back the technological frontiers, rapid industrialisation can be achieved through the adoption and adaptation of existing technologies, coupled with rapid accumulation of physical and human capital. Key to this process is the flow of finance to potential areas of high growth meaning that development finance is key to the 'rise of the rest' (Amsden 2001).

The rapid growth and extraordinary success of the East Asian economies has been identified as mainly due to a publicly co-ordinated approach to industrial development ensuring investment in building production capabilities and developing targeted industries (Amsden, 1997; Lall, 1994). It is characterised by strategic co-ordination through various bodies or institutions to 'govern the market' (Wade, 1990). Malaysia had the Malaysian Industrial Development Authority (MIDA), Korea had the Economic Planning Board (EPB), Taiwan had the Council for Economic Planning and Development (CEPD), and Singapore had the Economic Development Board (EDB). For the most part these institutions had the same overarching goal, to achieve industrial catch up.

The difference between the East Asian late-industrialising countries and those of Latin America or Africa is that the goal of development and rapid industrial growth was elevated to a national priority. This extended to the state acting relatively autonomously from potentially competing interests in the elite, and ensuring quite

• more efficient carrying out of operations in existing industries....

to that end that the economic requirements of the Republic may be met and industrial development within the Republic, southern Africa region and the rest of Africa may be planned, expedited and conducted on sound business principles.'

[The Industrial Development Amendment Act, no.40, 2001]

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⁵ The IDC's governing legislation states its role as:

^{&#}x27;To facilitate, promote, guide and assist in the financing of

[•] new industries

widely distributed economic development, unlike the unequal distributions that often characterise processes of industrialisation. The 'developmental state' acts as an economic catalyst, playing an active and even aggressive role in the industrialisation process by emphasising the mobilisation of finance (both domestic and foreign) and by targeting it into investment that would raise productivity (Chang, 1996).

Despite a move during the 1990s to liberalisation of trade, the capital account, and financial sector, development finance institutions continue to be critical both in providing support to targeted industries and in setting performance requirements and in disciplining the behaviour of large firms to ensure that it was in line with government's industrial development goals (Amsden, 2001). Their role in many ways epitomise the model of the developmental state – being strong technocratic institutions implementing a long-term development agenda, using their knowledge base and acting as policy levers (Chang, 1996).

The importance of development finance institutions as catalysts for industrial development stretches across the second tier of industrialising countries and is not limited to East Asian countries. There are case studies from Brazil, Mexico, India and Chile (Amsden, 2001). The difference with the East Asian late industrialisers was that these were not generally part of an effectively coordinated and sustained industrial development programme.

The importance of investment and the challenges of development finance for industry in South Africa

There is widespread agreement that investment is crucial for the nature and pace of growth. Broadly, investment means the use of resources to generate new or additional productive capacity that will produce a stream of goods and services for future consumption. Cross-country studies of growth have consistently found investment to be a significant determinant, especially investment in infrastructure, machinery and equipment (Easterly and Rebelo, 1993; De Long and Summers, 1993; Temple, 1998). The high levels of growth attained by newly industrialising countries have also been characterised as 'investment-led' (see, for example, Rodrik, 1995). The South African government placed investment at the core of the macroeconomic strategy, GEAR. Yet, few direct mechanisms were put in place to increase investment. It was largely assumed that macroeconomic stabilisation would in itself encourage investment, recognised in recent references to GEAR as a stabilisation strategy rather than a growth plan.

In addition, investment is particularly important in South Africa as the economy undergoes protracted and painful restructuring associated with liberalisation. Restructuring implies some sectors contract, and production shifts to sectors in which the economy is more competitive and/or has greater future potential. Without new investment, productive capacity in potential growth sectors does not expand, while other sectors contract. The economy gets the 'pain' with little of the 'gain'.

The recent South African investment record is poor, with the ratio of gross fixed capital formation (GFCF) to gross domestic product (GDP) falling to 15.1 per cent in 2000 (Figure 1). This was the lowest level for more than 20 years, although in the past two years the investment rate improved slightly once more, to reach 16.5 per cent

in 2004. However, in the 1970s, it had averaged 26.9 per cent. By comparison, high growth countries such as Malaysia have had investment rates over 30 per cent and, even with the financial crisis of 1997, the rates did not fall below the 20 per cent level which economists often refer to as a minimum to achieve higher growth rates.

Per cent

Figure 1. Investment and real interest rates in South Africa

Source: South African Reserve Bank data.

While there are many factors contributing to the fall in investment, the stubbornly low investment rates in the 1990s coincided with an increase in the real cost of borrowing (the interest rate corrected for inflation) as monetary policy was tightened in order to reduce inflation (Figure 2). This mechanism works by putting downward pressure on lending and, through this mechanism, putting downward pressure on demand and prices.

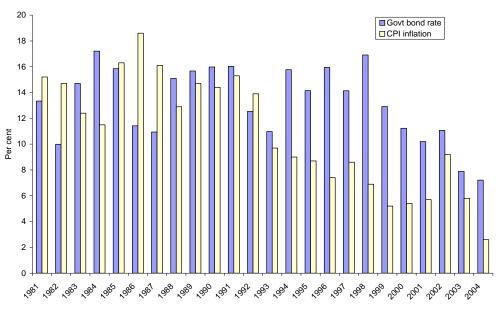


Figure 2. Inflation and nominal interest rates

Source: South African Reserve Bank data.

The South African investment record is poor by comparison with other middle-income countries Indeed, it can be argued that South Africa faces an investment crisis. Higher growth in 2004 and 2005 has been driven by consumption spending, with a widening trade deficit financed by largely short-term capital inflows. For these growth levels to be maintained it is crucial that there are higher levels of investment in upgrading and expanding the productive capacity of the economy.

The private sector accounts for the majority of investment in South Africa, with a share of 70.3 per cent in 2004. While private investment rates have not been strong in the 1990s, weaker investment has been due also to lower levels of investment by the government and public corporations (Figure 3). The share of the general government in total investment fell from 17.9 per cent in 1990 to a low of 14.4 per cent in 2003, and the share of public corporations dropped by a far greater extent, from 16.5 in 1990 to a low of 9.7 per cent in 2001. Public corporations investment improved marginally in recent years, while investment by general government increased to account for 18.9 per cent of total investment in 2004.

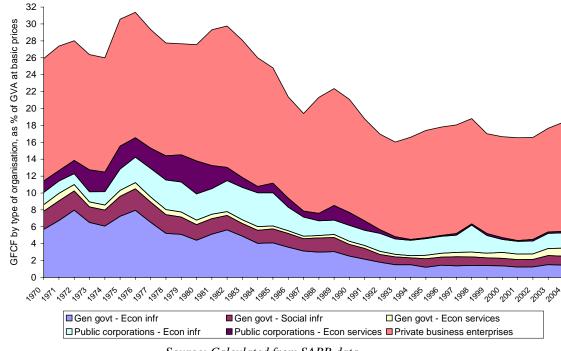


Figure 3. Investment rates, as % of gross value-added

Source: Calculated from SARB data

The value of economic infrastructure under the control of the government and public corporations, including roads, bridges, dams, water supply, telecommunications and electricity increased in real terms at an annual average rate of just 0.4 per cent from 1994 to 2001. This is far below the rate of growth of the economy, and far below the target growth rates. The rate of growth is low despite the increased investment by Telkom in telecommunications, classified under public corporations.

Recent research findings indicate how important weak government investment in economic infrastructure is. Consistent with many international studies, public investment in economic infrastructure such as roads, rail, ports, telecommunications

and electricity in South Africa has been found to crowd-in private investment (Perkins et al., 2005). It does this by lowering the costs of private business. Firms can get product to market more easily, have better communications with customers and suppliers, and can more readily access services. In addition, government investment creates demand for input industries, which is growth enhancing if an economy is not at full employment. The findings strongly indicate that private investment will increase significantly with the planned higher levels of capital spending by government and state-owned enterprises led by Transnet and Eskom.

2. Performance

2.1 The evolving role of the IDC

The IDC is one of the oldest development finance institutions for industry in a developing country. It was established in 1940,⁶ and has played a central role in shaping South Africa's industrial development since then. Under apartheid the IDC channelled finance to strategic industries such as in fuels, basic chemicals and basic metals. As such, it was a crucial public institution in the minerals energy complex which has dominated South Africa's industrial development (Fine and Rustomjee, 1996), and was key to the apartheid state's strategy for manufacturing (Clark, 1994). The IDC supported mega projects in these areas and also held significant equity stakes in the major companies, including the formerly state-owned enterprises such as Sasol and Iscor.

With the concerns about a balance of payments constraint to growth and the move to liberalisation in the early 1990s, the IDC focused on industries it identified as internationally competitive. For example, the Import Replacement and Export scheme (which ran from 1988-1990) approved 319mn for 272 projects. The mega projects approved in the 1990s were also generally export oriented, although still closely linked to natural resource processing.

Other schemes in the 1990s included the Low Interest Finance for Export scheme (which ran from 1991 to 1999), and the World Player scheme (running from 1995 to 1998) for investments required by firms to improve international competitiveness. The IDC had also undertaken research which supported and evaluated the tariff liberalisation programme committed to by South Africa in 1993 in the Uruguay round of GATT.

In line with the general approach to economic policy adopted by government, the IDC increasingly followed an independent and commercial orientation in the second half of the 1990s. This included support for BEE acquisitions to change the profile of industry ownership in South Africa. At the same time, objectives of diversifying activity across the nine provinces and supporting small and medium enterprises were pursued, but generally without specific schemes for concessionary interest rates.

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⁶ By comparison, Brazil's equivalent, BNDES, was established in 1952.

⁷ Other schemes included: the Multishift scheme, 1990-1997; a Jobs scheme providing low interest for employment, from 1993; the Orchards scheme for high value agriculture, from 1994; and an Agroindustries scheme from 1998.

A major thrust in recent years has been financing projects in other African countries. The IDC's mandate was first extended to SADC and then to the continent as a whole. As a result, major projects have been financed by the IDC such as the Mozal aluminium smelter in Mozambique.

Our evaluation reviews the main patterns in IDC financing in the past decade, before assessing its impact on the economy against the role for development finance.

2.2 Continuity, commercialisation and development: an appraisal of the IDC over ten years

Overall IDC financing has fluctuated over the past decade (Figure 4), with declines in recent years, particularly in the number of deals. In terms of the sectoral profile, there are strong elements of continuity with the value of financing being concentrated in machinery & metals, mining, and chemicals & other mineral products. In terms of number, agriculture, forestry & fishing is the largest sector. The outcomes in terms of employment creation and labour/capital intensity are due to both the within and across sector distribution of financing. For example, within the metals and chemicals sectors are very labour-intensive activities in metal fabrication and the manufacture of plastic products.

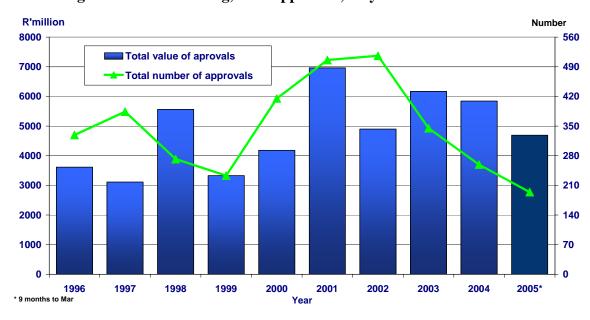


Figure 4. IDC financing, total approvals, July 1995 - March 2005

The major peaks are to do with mega projects, however. The peaks in terms of value in 1998 and 2001 reflect the large finance deals for Mozal I and Mozal II. However, even taking these into account, financing has fallen back in recent years (and especially in terms of number).⁸ It is also notable that the increase in the numbers of approvals in 2001 and 2002 did include a larger proportion of poor risks, reflected in much higher impairments in 2004.

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⁸ Note that the data for financial year 2005 is only for nine months. In addition, the data have not been corrected for cancellations, as this data is only readily available for a shorter period.

If we take actual finance extended, a similar pattern emerges, albeit at a lower level (Figure 5). The fact that IDC rates were not necessarily favourable compared with commercial banks also meant that clients with approved IDC finance could then obtain similar or better terms from commercial banks (for example, for BEE acquisitions).

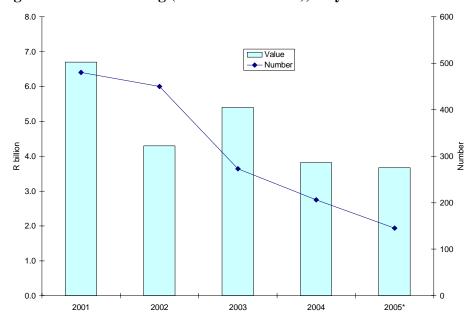


Figure 5. IDC financing (after cancellations), July 2000 - March 2005

At the same time as moving to commercial financing terms, the IDC did target the wider spread finance across South Africa, to SMEs and for BEE. Within South Africa, most financing goes to Gauteng, the Western Cape and KwaZulu-Natal, as would be expected given the size of the economies in these Provinces. SME financing has accounted for more than 80 per cent of the number of approvals in most years, although a much smaller proportion of finance by value. BEE financing increased sharply over the decade to account for close to half of IDC's deals (in both number and value terms).

The value of financing to projects in other African countries has also increased significantly over the decade, representing a major area of activity for the IDC. These projects have tended to be in minerals and heavy industries, reflecting the IDC's historic strengths. The magnitude of the development impact of these projects, however, depends on linkages with South African producers of capital equipment and services, and on linkages within the host countries.

The IDC therefore appeared to be achieving its goal of increasing overall financing, including for BEE ventures, while moving to a more commercial orientation. It also performed relatively well in terms of jobs and exports created, both criteria by which the IDC has assessed the impact of financing for some years. Both measures increased

⁹ The IDC's recent vision of 'Leadership in Development' is in part a recognition of these tensions.

to a peak in 2001 (Figure 6). From this high point, jobs have fallen by less than exports, with close the 20 000 jobs being created in 2004. 10

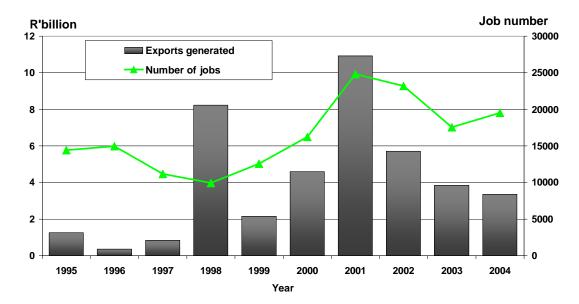


Figure 6. Jobs and exports from IDC financing, July 1995 - June 2004

However, the overall pattern begs questions as to the nature and impact of the IDC's financing, while the recent developments raise questions about the sustainability of a strategy which appears to set up the IDC as a competitor to commercial banks. This has been recognised in the IDC's recent vision of 'Leadership in Development'.

2.3 Development finance role?

An understanding of the IDC's development impact requires a more careful appraisal of patterns of financing in the context of the challenges of industrial development in South Africa. For example, mega projects in basic metals can have a significant development impact if there are strong economic linkages with the local economy. This, in turn, depends on the behaviour of the major firms which control such projects.

We now more closely examine the different dimensions of the IDC's financing in order to better understand its impact. In section 3 we then draw the different threads together and assess the pattern of financing in light of the industrial development trajectory.

The geographic spread of financing

By province, the financing is in line with industrial activity with the largest proportions of financing going to Gauteng, Western Cape and KwaZulu-Natal (Figure 7). The proportion of financing by value to projects in other African countries is increasing rapidly, and here the IDC is making a major contribution. This raises additional questions as to the relationship between financing projects in other countries and industrial growth in South Africa. Development finance is an important

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¹⁰ Jobs are measured as direct employment created.

potential means of building economic integration in the continent, based on recognition of complementarities.

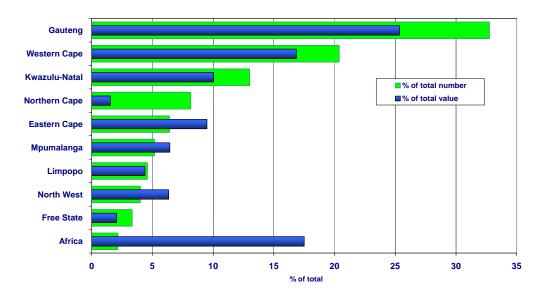


Figure 7. IDC financing by Province, July 1996 - March 2005

The increasing emphasis of the IDC on financing development in the more rural and less developed provinces has led to major projects in the Eastern Cape, Limpopo and Northern Cape, although Gauteng is still the leader. It is important, however, to adjust the figures for the different size of provinces, by GDP and population. This reveals that the Northern Cape has received the greatest financing by number relative to its population and the Eastern Cape is marginally ahead in financing by value relative to GDP (Figures 8 and 9).

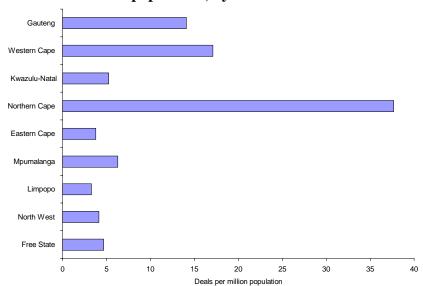
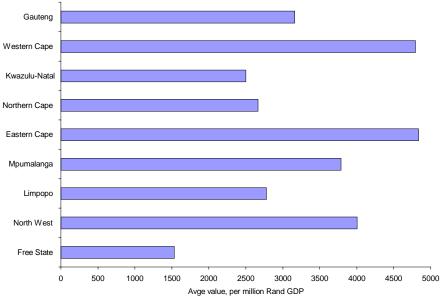


Figure 8. IDC average number of approvals June 1996 – March 2005 per million population, by Province

Figure 9. IDC average value of approvals June 1996 – March 2005 per million Rand GDP 2003, by Province



Financing in Africa

The IDC's financing activities across the continent have increased rapidly and, by the end of June 2004, the IDC had 89 financing deals under consideration or in implementation in other African countries. In addition, the IDC provides finance to African buyers of South African capital goods and related services.

The IDC's heavy orientation to mining and basic metals projects in other African countries partly reflects the institution's historical strengths. The size of the benefits to the African countries in which such projects are located depends on the extent to which they develop local linkages, both upstream to suppliers and downstream in the further beneficiation of the products. In the absence of such developments the gains will be limited. As a major actor in industrial development in the region, and particularly in Mozambique, the IDC is well placed to influence the outcomes. As well as financing, the IDC plays a central role in links with the South African government and with Eskom.

In addition to their financing role, the IDC has also undertaken research on industrial policy for various African governments, including Tanzania, Ghana, Ethiopia and Uganda in conjunction with UNIDO. This suggests a wider role in using the IDC's considerable expertise and experience as a source of best practice for development agencies in the continent.

Small and medium enterprises

The number of approvals to small and medium enterprises has more than halved from the peak in 2001 (Figure 10). And, SMEs have also recorded a declining share in the total number of approvals. From 1996 to 2002 SMEs had always accounted for more than 80 per cent of the total number of approvals, and in most years above 90 per cent. While the majority of the IDC's financing (by number) goes to SMEs (defined

as having total assets of less than R30mn, turnover of less than R50mn and fewer than 100 employees), by value SMEs are clearly less significant.¹¹

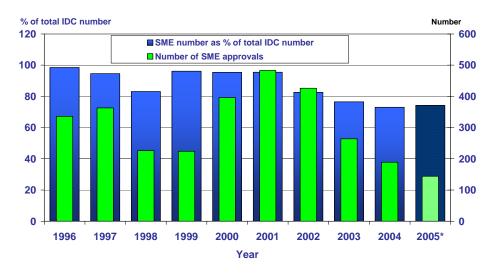


Figure 10. IDC financing to SMEs, July 1995 - June 2005

Of the finance approved to SMEs, the largest number of approvals in the past decade has gone to agriculture, followed by chemicals, while the largest share by value is chemicals (Figure 11). Machinery & metals and mining & quarrying, so important in the overall value of IDC approvals, are much less significant in the value of IDC approvals to SMEs. As a result, financing of SMEs is relatively more labour-intensive. The number of jobs in SMEs stands at 6.65 jobs per million Rands of IDC finance (or R150 000 of finance per job).

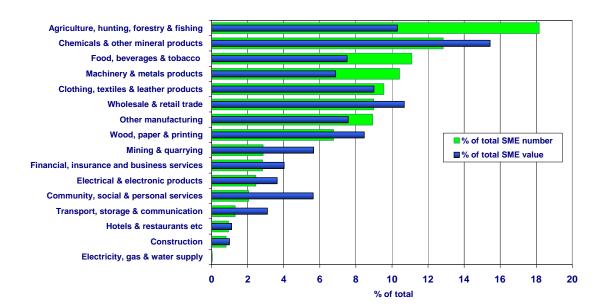


Figure 11. IDC financing to SMEs, by sector, July 1995 - June 2005

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¹¹ We use the definition applying over the period assessed. The definition used by the IDC has been revised in the past year. The new definition is more closely in line with that used by government, and specifies an SME as being a firm having fewer than 200 employees, turnover of less than R36mn, and assets of less than R39mn. (The IDC takes a proportionate average of firms size on these three dimensions).

The importance of SMEs in the total number of approvals means that the SME decline is the main reason for the overall decline in IDC financing by number. The pattern is of concern, given the need to identify small and medium firms whose potential to achieve rapid growth is being blocked by financing constraints, and where private sector financial institutions are generally poor in responding.

Black Economic Empowerment

IDC financing to BEE has climbed steadily in value terms accounting for close to half of all financing approved in 2004, and even higher than this in 2005 (Figure 12). In terms of number, BEE deals account for a similar proportion, and have followed the same pattern as observed overall, with a drop from the 2001/02 peak. Given the increasing impact of charters in mining and liquid fuels, and the procurement of state-owned enterprises, the numbers of BEE deals would be expected to increase as firms supplying these markets sought to transform and at the same time invest in upgrading their capital stock. This appears not to have been the case, in so far as the use of IDC's financing facilities are concerned. In addition, in the earlier years BEE acquisitions accounted for a greater proportion of activity, compared with the increased emphasis on expansionary BEE deals in recent years.

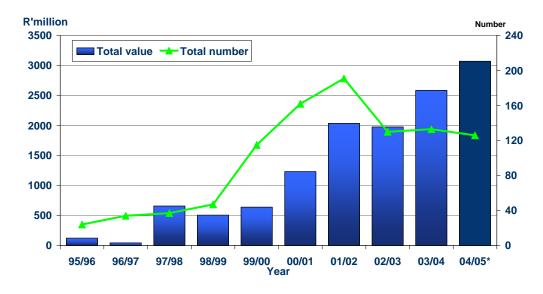


Figure 12. IDC financing to BEE, July 1995 - March 2005

By value, a small number of BEE deals in mining and transport, storage & communication dominate the overall picture (Figure 13). This is to be expected as the IDC has played a role in the changes in ownership of major corporation at the 'commanding heights' of the economy. In terms of number, the patterns are similar to those of overall financing.

Chemicals & other mineral products Wholesale & retail trade Clothing, textiles & leather products Wood, paper & printing Food, beverages & tobacco % of total number Machinery & metals products ■% of total value Financial, insurance and business services Other manufacturing Mining & quarrying Community, social & personal services Agriculture, hunting, forestry & fishing Transport, storage & communication Hotels & restaurants etc Flectrical & electronic products

Figure 13. IDC financing to BEE, by sector, 1995 - 2004

In recent years, just over half of BEE finance has been for acquisitions (Figure 14). When cancellations are taken into account, the total share of BEE approvals drops slightly to 38 per cent, but this is largely due to the reduction in the number of BEE acquisitions. The share of expansionary BEE increases to 22 per cent. The low rate of cancellations of expansionary BEE projects may reflect the fact that these find it difficult to source finance from the formal banking sector. In addition, commercial bank financing for BEE acquisitions has been increasing over time.

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12

15

% of total

18

21

24

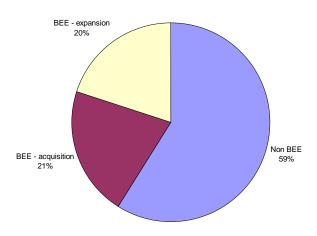
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Construction

0

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Figure 14. Distribution of gross value of approvals, July 2002 – June 2004



Of even greater importance is the finding that expansionary BEE transactions were three times more job creating than the average for non-BEE transactions (Table 1).

Expansionary BEE deals are also predominantly to SMEs and 41 per cent have been located in designated areas (that is, poorer provinces).

Table 1. Job creation per type of transaction, July 2002 to June 2004

Type of transaction	No. of jobs created	No. of jobs per mn	
	(net)	Rand approved	
BEE – acquisition	961	0.6	
BEE – Expansionary	20 698	8.8	
Non BEE	18 990	2.9	
Total	40 649	3.9	

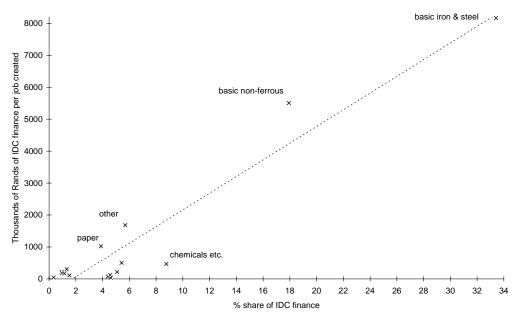
As the charters begin to take greater effect, together with the BBBEE regulations being promulgated by DTI, procurement pressures are an increasingly important driver. Pressure is already coming from large SOEs such as Transnet and Eskom, as well as from mining houses and Sasol. Currently the indications are that BEE procurement is predominantly directed towards services such as catering, waste management, security and maintenance (Chabane, 2004). There are also indications that because of the absence of a link between BEE and local content, business is going to BEE importers and distributors at the expense of local firms.

3. Evaluation

To assess the impact of the IDC requires going beyond a description of the financing patterns. To consider the effect of the IDC we can ask what would be the case in its absence. If other institutions would have financed most of the activities on similar terms then the IDC's impact would not, in fact, be very large regardless of the total value of its financing. If the opposite is true, in other words if the orientation and intrinsic nature of the private financial system mean that few of the activities and entities would have received financing in the same form, then the IDC is clearly of huge significance.

And, IDC finance was crucial in the development of the metals and chemicals sectors in the 1990s. Investment in IDC projects in non-ferrous metals and basic iron & steel alone accounted for approximately 25 per cent of total manufacturing investment from 1992 to 1997. The IDC provided R14.1bn out of the R25.4bn of investment in these projects, implying a very significant level of support to these sectors (Figure 15). The 1993 to 1995 period alone included finance for Columbus Stainless Steel, Alusaf/BHP Billiton Hillside, Saldanha Steel, Hulett Aluminium, Namakwa Sands, Titanium slag.

Figure 15. Relationship between share of sector in IDC finance and IDC finance provided per additional job created (1993-1998)

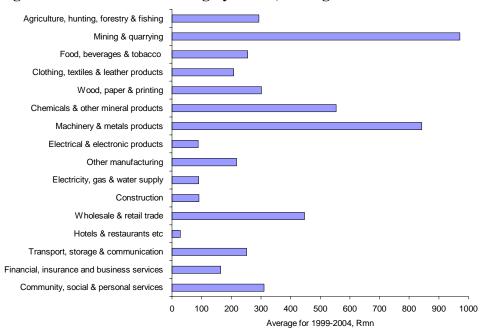


Source: Calculated from IDC Annual Report, 1998

It is important to be clear that concern with capital intensity is not equivalent to a position against mega-projects. Rather, we need to critically assess the role that such projects can and do play in the economy in order to understand their contribution. This depends partly on the behaviour of the firms in question. The contribution of a steel plant or aluminium smelter will depend on the linkages it develops with downstream industries, the prices charged, quality of products, scheduling of deliveries, and collaboration in product development. The IDC itself is in a crucial role, as a major financer, in influencing the possible local economic linkages. Such a role requires a proactive approach to following up on downstream linkages and opportunities.

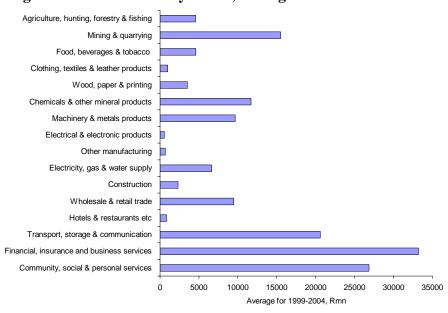
In recent years there has not been such an unbalanced pattern in favour of capital-intensive industry. But the machinery & metals, mining & quarrying and chemicals sectors continued to account for the largest share of total IDC finance from 1999-2004 (Figure 16).

Figure 16. Total IDC financing by sector, average value for 1999 - 2004



This compares with the investment patterns for the economy as a whole, which reflect much higher proportions of investment to service sectors (Figure 17). However, the IDC's particular focus means that it should not necessarily be expected to fit closely with average national investment patterns due to its priorities. The appropriate question is whether IDC's patterns of investment properly reflect the areas of opportunity with regard to growing more labour-intensive and downstream value-adding activities as part of altering the development trajectory.

Figure 17. Total GFCF by sector, average value for 1999 - 2004



Crucial to the IDC's impact is therefore its *strategic role* in shaping the structural development of the economy in a way which is more labour-intensive, and reversing

some of the inherited bias to capital-intensive and resource based industrialisation. The increasing share of services is part of this, yet within manufacturing there is an important challenge in growing downstream, smaller-scale and more labour-intensive activities. In addition, realising the opportunities also means addressing the behaviour of the existing dominant firms, whose pricing effectively limits the competitiveness of downstream firms. These challenges complement those of increasing expansionary BEE financing.

The IDC's roles include being a financial institution, an industrial policy actor, and a development agency.

IDC as financial institution

Higher investment is crucial for sustainable higher rates of growth and employment generation. Conversely, failures to increase investment rates will mean being caught in a relatively low growth trap. The intrinsic failures of the private financial sector mean the IDC has a crucial role to play in financing fixed investment, however, the decline in IDC financing in recent years is cause for concern. But, higher investment rates will not be achieved, however, by providing finance where it would equally be extended by commercial banks.

This implies careful identification of the IDC's role in relation to the private financial sector, and in relation to the development needs of the country. This includes the IDC's importance in financing expansions in fixed investment, especially of BEE and SME borrowers, and the IDC's different appetite for risk, both because of its different knowledge base and because of its different objectives. The IDC's role therefore involves the application of criteria by its Strategic Business Units (SBUs) and the use of their knowledge together with research and analysis in order to develop sector strategies. It also implies an effective screening and approval process with clear and well understood criteria. The setting and revision of criteria will be aided by a regular review of the outcomes, in the form of the behaviour and performance of those who receive IDC finance, to feed back into the planning and goal setting process.

The move towards charging market related rates and the increased emphasis on the financial performance of the IDC implies tension with the IDC's development role. Market-related criteria mean lower interest rates for the less risky borrowers, with higher levels of collateral. This conflicts with the role of financing projects in new industries or niches, new entrants, and the BEE and SME mandates of the IDC.

The shareholdings in large resource-based firms also offer the IDC an opportunity to be a more active shareholder particularly in taking positions which are in the longer-term interests of both the firm and the country, but which mean being critical of short-termist strategies by management. While a stake of five to ten percent may be deemed too small, the IDC's role in the economy provides it with the means to punch above its weight (Table 3). Such an approach may be seen as rather interventionist, but it is consistent with the weight of financing institutions in countries such as Germany, as well as East Asian economies. BEE procurement will similarly increase opportunities for increased expansionary BEE finance. In addition, procurement from SMEs where appropriate will stimulate broader-based industrial development.

Table 3. State shareholding in major upstream resource-based manufacturers

Company	PIC Shareholding (Dec 2004)	IDC shareholding (31st March 2005)	Total
Mittal Steel SA	2.6%	8.8%	11.4%
Highveld Steel &			
Vanadium	0.2%	-	0.2%
Columbus Stainless Steel	-	12.0%	12.0%
Sasol	13.5%	8.0%	21.5%
AECI	9.4%	-	9.4%
BHP Billinton	5.2%	1.5%	6.7%
Hullet Aluminium	-	30.0%	30.0%
SAPPI	11.4%	6.6%	18.0%

IDC as industrial policy actor

As already described, the IDC has historically been a very powerful industrial policy actor (in both designing and implementing industrial policies). This role has diminished somewhat in recent years, partly due to the different orientation of industrial policy. The IDC has instead been a vehicle for the management of various incentive programmes. The increased emphasis on a more activist policy agenda, engaging with the development trajectory of the South African economy, suggests a need for the IDC to play a larger, but different, role once more. Major developments include:

- Government's capital expenditure programme
- The design and implementation of Customised Sector Programmes by the DTI
- The Department of Science and Technology's Advanced Manufacturing Technology Strategy, which by its nature is oriented towards new industries, subsectors and activities
- Provincial growth and development plans, which include the development of industrial clusters.

The IDC's knowledge and position close to industry is crucial for maximising the positive returns from these initiatives.

The IDC as development agency

The combination of the IDC as a centre of knowledge and information on industrial development, as an actor in industrial policy formulation and implementation, and as a development financer places it in a particularly important role as a development agency.

The IDC's knowledge and research role has also been extended in its work in advising on industrial policy for other African countries, such as Eritrea, Uganda, Ghana, Ethiopia. This provides potentially rich synergies with its financing role, and requires understanding the links, including with infrastructure financing and potential complementary South African exports (such as of capital goods) with major projects across the continent.

In addition to its core development finance role, identified above, it is the ongoing development of the IDC's knowledge base and links across government and the private sector which will enable it to realise its development role. The IDC is in a unique position in being able to anticipate and assess industrial development challenges and to make links with stakeholders across government departments, provincial and metropolitan governments, public institutions and the private sector in order to frame the issue and identify appropriate actions.

4. Conclusions and way forward

The closer specification of the IDC's strategic role, and how to set and measure progress against the objectives set out in the Industrial Development Amendment Act (2001) implies a careful assessment of the nature of its operations and impacts on the economy. This includes analysing where commercial banks are least likely and able to respond to opportunities in the allocation of finance for investment, and where private sector decisions are unlikely to be consistent with the economy's long-term development potential. Such an approach is consistent with the role development finance institutions have played in late-industrialising countries, as both leaders and key implementing agencies of governments' industrial policies.

Such an approach implies understanding the nature and impact of projects. While increasing the geographic spread of economic activity is important, there needs to be recognition that projects should be pursued with equal vigour both in the economic powerhouses and in the poorer provinces. Only certain types of activities are suited to predominantly rural provinces, while many industries serving local demand need to locate close to their major markets.

Similarly, in terms of sectoral allocation of finance, the development contribution of very large mining and metals projects in South Africa and across the continent depends to an important extent on the linkages with the local economy. This includes the use of local capital equipment and construction firms, and suggests that provisos need to be included in contractual arrangements. In addition, the contribution of such projects depends on the extent to which the dominant firms which control these activities exert market power to realise short-term profits as against long-term growth in local economic activity and demand. The IDC potentially has a crucial role to play in engaging strategically with such firms in the national interest.

BEE financing has grown strongly reflecting the lead role taken by the IDC in this regard. And, there have been important shifts from the initial dominance of acquisitions towards a greater share of expansionary BEE financing. The performance of expansionary BEE deals supports this evolution, with lower cancellations and much better employment creation impacts than non BEE financing. By number, BEE deals are distributed quite widely, while by value, deals have been concentrated in mining & quarrying and transport, storage & communication. With increased emphasis on BEE procurement, by government, state-owned enterprises and large firms subject to charters, there are increasing opportunities for BEE financing to expand the productive capacities for firms to meet the procurement opportunities opening up.

As the pressure grows for firms to source from BEE suppliers, there is a need for finance to support investment in expanded capacity. This can either be part of a BEE stake in existing suppliers linked to growth of capacity to meet large new orders, or investment by BEE firms growing to meet the scale of supply required by large buyers such as the mines and SOEs. The barrier that the small size of BEE engineering firms poses to winning large contracts is an obstacle to their winning tenders, and is a major opportunity for the IDC (Chabane, 2004). IDC finance to established firms also provides an opportunity for specifying performance expectations around employment equity, management, and skills development.

For the IDC to play a central strategic role in facilitating and shaping industrial development requires the ongoing development of the knowledge and analytical base within the IDC. It is this information base which uniquely enables the IDC to continuously engage in identifying and meeting development challenges, in South Africa and across the continent. In turn, this information and analytical capabilities derive from the IDC's ongoing interaction with industry, and with government and public institutions. At the same time, safeguarding its autonomy and professionalism is important if it is to truly be part of building a developmental state that can deliver a different future development trajectory to the benefit of all.

The IDC's vision of 'Leadership in development'

The IDC's vision of Leadership in Development articulated in the past year clearly identifies the IDC's role and advantages, namely:

- Ability to understand risk and the potential of clients: its better understanding of sectors and ability to do detailed investment assessment
- Ability to take on higher risk profile than commercial financial institutions
- Ability to take longer-term view
- Its relationship with government and the private sector to understand and realise opportunities
- Willingness and ability to support clients in longer-term, through short-term difficulties
- Support for greenfields and venture capital investments
- The strong balance sheet as a means to fulfilling this role, rather than an end in itself

For the vision to be realised, a forward-looking approach is required which seeks to anticipate challenges and opportunities. The potential benefits from the major increases in the capital expenditure on infrastructure by Transnet and Eskom is a good example. This challenges the IDC as a development finance institution to constantly extend its information and knowledge base to be able to appraise future possibilities, rather than to follow the trajectory of the past.

Many of the challenges in realising this are in the utilisation and ongoing development of the capacities within the organisation, and the concrete understanding and commitment of all those towards the vision. What is not in doubt is that the application of the IDC's institutional capacities will shape economic transformation, employment, the geographical spread of activity, and industrial development across South Africa and Africa more widely.

The IDC's role as the lead industrial development agency places it at the heart of real economy activity and decision-making, as a well-placed strategic resource of government. In addition, it is playing a crucial role in supporting the establishment of local development agencies and in advising other African governments on industrial policy. Both of these broaden the IDC's knowledge base. The challenge is to recognise this base, and to employ it to its full extent in the public interest.

References

Amsden, A. (1989) *Asia's Next Giant - South Korea and Late Industrialisation*. New York and Oxford: Oxford University Press.

Amsden, A. (1997a) 'Editorial: Bringing Production Back in - Understanding Government's Economic Role in Late Industrialization', *World Development* Vol.25, No.4, pp.469-480

Amsden, A. (1997b) 'South Korea: Enterprising groups and entrepreneurial government', in Chandler, A. *et al.* (eds.)

Arestis, P. and P. Demetriades (1997) 'Financial development and economic growth: assessing the evidence', *Economic Journal*, 107, 783-799.

Bond, S. and T. Jenkinson (1996) 'The Assessment: Investment Performance and Policy', Oxford Review of Economic Policy. 12(2), 1-29.

Chabane, N. (2004) 'Private Procurement and the Development of Black SMMEs in Ekurhuleni', paper presented at Symposium on Sustainable Manufacturing, Ekurhuleni, July 2004.

Chandler, A. Jr., F. Amatori, T. Hikino (eds.) (1997) *Big business and the wealth of nations* Cambridge: Cambridge University Press

Chang, H-J (1996) *The Political Economy of Industrial Policy* New York: St. Martin's Press

Chang, H.J. (2002) Kicking Away The Ladder – Development Strategy in Historical Perspective, Anthem

Clark (1994) Manufacturing Apartheid

De Long, J.B. and Summers, L. (1993) 'How strongly do developing economies benefit from equipment investment?', *Journal of Monetary Economics*, 32, 315-415.

Demirguc-Kunt, A. and Levine, R. (1999) *Bank-based and market-based financial systems: cross-country comparisons*. Research on Domestic Financial Systems Working Paper no 2143, World Bank.

Development Bank of Southern Africa (2003) Development Report 2003

Dornbusch, R. and A. Reynoso (1989) 'Financial Factors in Economic Development', *American Economic Review Papers and Proceedings*, 79 (2)

Easterly, W. and Rebelo, S. (1993) 'Fiscal policy and economic growth', *Journal of Monetary Economics*, 32, 417-458.

Fagerberg, J. (1988) 'International competitiveness', *The Economic Journal*, 98, 355-374.

Fagerberg, J. (1994) 'Technology and growth rates', *Journal of Economic Literature*, XXXII, 1147-1175.

Fine, B. and Z. Rustomjee (1996) *The Political Economy of South Africa- from Minerals-Energy Complex to Industrialisation* London: Hurst

Fry, M. (1997) 'In favour of financial liberalisation', Economic Journal, 107, 754-770

Fry, M. (1995) *Money, Interest and Banking in Economic Development*, Baltimore: John Hopkins University Press

Harris, L. (1988) 'Financial reform and economic growth: a new interpretation of South Korea's experience' in Harris, L. (ed.) *New perspectives on the Financial System*. London: Croom Helm.

IDC (2001a) Core Economic Indicators. Sandton: IDC.

IDC (2001b) Annual Report. Sandton: IDC.

IDC (2000) Annual Report. Sandton: IDC.

IDC (1997) Annual Report. Sandton: IDC.

Lall, S. (1994) 'The East Asian Miracle Study: Does the Bell Toll for Industrial Strategy?' *World Development*. 22(4), 645-654

Levine, R. (1997) 'Financial development and economic growth: Views and agenda', *Journal of Economic Literature*, 35, 688-726.

Machaka, J. and S. Roberts (2003) 'The DTI's new 'Integrated Manufacturing Strategy'? Comparative industrial performance, linkages and technology', *South African Journal of Economics*, 70(4), 679-704.

Machaka, J. and S. Roberts (2004) 'Addressing the apartheid industrial legacy: local economic development and industrial policy in South Africa – the case of Ekurhuleni', paper presented at Wits-Ekurhuleni Symposium on Sustainable Manufacturing, 10-11 June 2004. http://www.wits.ac.za/sebs/csid/ekurhuleni.html

NACI/DST (2003) Advanced Manufacturing Technology Strategy

Pack, H. (2000) 'Research and Development in the Industrial Development Process', in Kim, L. and R. Nelson (eds.) *Technology, Learning, and Innovation – Experiences of Newly Industrializing Economies*. Cambridge: CUP.

Perkins, P., J. Fedderke, J. Luiz (2005) 'Infrastructural investment in long-run economic growth: South Africa 1875-2001', *South African Journal of Economics* (forthcoming)

Phele, T, S. Roberts and I. Steuart (2004) 'Industrial strategy and local economic development: manufacturing policy and technology capabilities in Ekurhuleni', paper presented at DPRU/TIPS Annual Forum, 13-15 October, Cape Town.

Roberts, S. (2004) 'Investment in South Africa – a comment on recent contributions' *Development Southern Africa*. 21(4), 743-756.

Rodrik, D. (1995) 'Getting interventions right: how South Korea and Taiwan grew rich', *Economic Policy*, 20, 53-108.

Rodrik, D. (1999). *The New Global Economy and Developing Countries: Making Openness Work*. Washington: Overseas Development Council.

Sawyer, M. (1991) 'The economics of shortage: a post-Kaleckian approach' in Michie, J. (ed.) *The Economics of Restructuring and Intervention*, Aldershot: Edward Elgar

Singh, A. (1997) 'Financial liberalisation, stock markets and economic development', *Economic Journal*, 107, 771-782.

Stiglitz, J. (1993) 'The Role of the State in Financial Markets', World Bank Economic Review (Proceedings of the World Bank Conference on Development Economics)

Stiglitz, J. (1998) 'More instruments and Broader Goals: Moving Towards the post-Washington Consensus', 1998 WIDER Annual Lecture, Helsinki

Temple, J. (1998) 'Equipment investment and the Solow model', *Oxford Economic Papers*, 50, 39-62.

TIPS (2000). 'Determinants of Investment in South Africa: A sectoral approach', paper produced as part of Department of Trade and Industry Policy Support Programme.

Wade, R. (1990) Governing the Market: Economic Theory and the Role of Government in East Asian Industrialisation Princeton University Press

Weiss, J. (1995) *Economic Policy in Developing Countries: the reform agenda*, Hemel Hempstead: Prentice Hall.