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THE ROLE OF DEVELOPMENT FINANCE IN THE INDUSTRIALISATION OF THE SOUTH AFRICAN ECONOMY[1]

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Abstract

South Africa's democratic transition in 1994 brought with it great hope and expectation for better inclusion of the previously disadvantaged into the economy. Post-apartheid outcomes in the South African economy have however been very poor. The economy inherited by the first post-apartheid government was a resource-based economy with high levels of concentration and vertical integration. One of the most striking features of the past 24 years has been the strong 'path dependency' in the economy, with sectors that had flourished as a result of state support during apartheid continuing to dominate the economy (Bell et al., 2018). In order to achieve structural transformation and diversification away from these resource-intensive industries necessitates 'patient capital' for new businesses to develop because of the time needed to build the scale required to be competitive in many areas, the requirements of learning and capabilities development, and the challenges of entrants in taking on powerful incumbents. Solving the problems of poverty and inequality in South Africa is thus closely intertwined with providing finance in the economy, particularly for those who had been previously excluded. This paper provides an assessment of the financing landscape in the economy, focusing specifically on the role of development finance institutions in South Africa, given the need for structural transformation as well as better inclusion of the previously disadvantaged. In particular, the paper provides an in-depth analysis of how three leading development finance institutions (the Industrial Development Corporation (IDC); Development Bank of Southern Africa (DBSA); and National Empowerment Fund (NEF)) have fared in providing funding for industrialisation, looking at both the orientation and mandate of these institutions, as well as the kind of funding they have provided in the economy both in terms of scale as well as types of funding.

JEL Classifications: F36, G23, O14, D6

Key words: development finance, industrialisation, structural transformation, South Africa, inequality

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Contents

1 Introduction

South Africa's democratic transition in 1994 brought with it great hope and expectation for better inclusion of the previously disadvantaged into the economy. Post-apartheid outcomes in the South African economy have however been very poor. The economy failed to grow substantially in the 24 years since democracy, with year-on-year GDP growth at a high of 5.5% in 2006, and average growth standing at less than 3% for the period (based on SARB data). In 2017, the official unemployment rate, which excludes discouraged workseekers, stood at 26.7% with 38.6% of youth unable to find employment[2]. Outcomes among the African population have been the poorest. South Africa also remains one of the most unequal countries in the world (World Bank, 2018). At the heart of these poor outcomes and high inequality has been a failure to change the structure of the economy.

During apartheid, the national industrial policy and development finance system – with the Industrial Development Corporation (IDC) as a key implementing agent – prioritised a number of large scale, capital-intensive projects. As a result, the economy inherited by the first post-apartheid government was a resource-based economy with high levels of concentration and vertical integration. One of the most striking features of the past 24 years has been the strong continuity in the structure of the economy, with the legacy of support for capital-intensive and resource-based industries living on (Bell et al., 2018). Thus, while the non-resource-based manufacturing sectors of the economy have performed poorly[3], there has been a strong performance of energy-intensive industries linked to the minerals-energy complex (MEC), such as basic iron and steel, non-ferrous metals and basic chemicals. Together with this, concentration in the economy has remained extremely high, with a few large firms dominating many sectors of the economy. Worse still, by some measures, the economy has become even more concentrated. Notably, the high levels of concentration have often meant increased barriers to entry and limited participation in the economy despite measures undertaken mainly by competition authorities to strengthen competition. This has contributed to persistent inequality and increasing unemployment.

There has thus been strong 'path dependency' in the economy, with sectors that had flourished as a result of state support during apartheid continuing to dominate the economy (Bell et al., 2018). The economy continued to grow in line with its traditional resource base as a result of both direct and indirect support for these sectors from the state. South Africa's main industrial financing institution, the IDC, served to reinforce path-dependency in the trajectory of its funding in the first decade after democracy, with 56% of IDC funding allocated to heavy industries such as metals & machinery, mining & quarrying, and chemicals & other mineral products in the period 1995 – 2005 (Maia et al., 2005). Furthermore, the post-apartheid economic policy choices of trade liberalisation together with tight macroeconomic policy and inflation targeting have served to reinforce the status quo. These outcomes in the economy are reflected in South Africa remaining one of the most unequal countries in the world (World Bank, 2018).

It is clear that for these outcomes to improve things need to change. Part of the challenge is to industrialise and grow sectors of the economy that were not supported during apartheid (Chabane et al.,2006). The challenge is enormous, especially in the context of the rapidly changing world economy characterised by increasing globalisation, the emergence of fiercely competitive producers in the global marketplace, particularly from East Asia, and enormous technological change. The past decade has seen growing consensus re-emerging globally

[2] Quarterly Labour Force Survey QLFS Q3: 2017
[3] Under-performance of overall productive sectors relatively to other sectors (i.e. services) was reinforced by the integration of SA in the global economy and removal of protective measures post 1994.

and at home on the importance of industrialisation for development.[4] A more complex productive structure enables countries to engage in high-productivity activities that leads to faster development (Felipe, et al., 2012). Thus, South Africa's economy needs to move away from its resource and energy-intensive orientation towards more diversified sectors. Industrialising the economy however requires purposeful effort, particularly in a highly concentrated economy like South Africa, with a strong orientation towards its traditional sectors.

Manufacturing is key, because of its generally more sophisticated and higher value-adding activities, and because manufacturing sectors have been found to have "special 'growth-pulling' or 'growth enhancing' properties" (Tregenna, 2008). Evidence from other countries suggests that the high levels of growth in newly industrialising countries has been driven largely by high levels of investments in manufacturing, amongst other sectors (Jun, 2002). Cross-country research has emphasised the significance of investments in industrial development, economic growth and employment creation (Temple, 1999; Team, 2005; Beil, et al., 2005; Gylfason and Zoega, 2006). The financial sector thus has a significant role to play in promoting growth and industrialisation of the South African economy by providing capital for investment, particularly to segments of the population that have historically been excluded.

There is a need for 'patient capital' for new businesses to develop (Amsden, 1989, Roberts, 2016), because of the time needed to build the scale required to be competitive in many areas, the requirements of learning and capabilities development, and the challenges of entrants in taking on powerful incumbents. Solving the problems of poverty and inequality in South Africa is thus closely intertwined with providing finance in the economy, particularly for those who had been previously excluded.

This paper provides an assessment of the financing landscape in the economy, focusing specifically on the role of development finance institutions in South Africa, given the need for structural transformation as well as better inclusion of the previously disadvantaged. In particular, the paper provides an in-depth analysis of how three leading development finance institutions (the Industrial Development Corporation (IDC); Development Bank of Southern Africa (DBSA); and National Empowerment Fund (NEF)) have fared in providing funding for industrialisation, looking at both the orientation and mandate of these institutions, as well as the kind of funding they have provided in the economy both in terms of scale as well as types of funding.

Section 2 of the paper reflects on the literature regarding the role of both the private sector (banks and capital markets) and public sector (development finance) in industrialisation. Section 3 outlines the financing landscape for industrialisation in the South African context, by looking at the orientation of the commercial sector and the impact of increasing financialisation on investments in the economy, thus framing the critical role required of DFIs in the South African context. Section 4 outlines the methodology used for analysing the role of three development finance institutions (IDC, DBSA and NEF). Section 5 and 6 provides an analysis of these three DFIs, looking both at institutional indicators as well as the scale and type of funding provided by them in the economy. Section 7 provides some overall reflections on development finance institutions in South Africa.

[4] The process of industrialisation is the movement of factors of production to higher productivity and more complex activities (see, for example, McMillan et al. 2017). Changes in overall output per worker can be due to improvements within sectors and shifts in factors of production (labour and capital) across sectors, from lower productivity to higher productivity activities (McMillan & Rodrik, 2011).

2 Importance of finance for industrialisation

The process of industrialisation requires that small and medium sized enterprises (SMMEs) achieve economies of scale in order to reap competitiveness benefits, and create markets through niche opportunities as part of a larger drive towards diversification and capabilities expansion. Financial and capital markets allocate resources for these purposes, and good financial institutions can potentially induce rapid industrialisation (Miwa & Ramseyer, 2006). However, often SMMEs are undercapitalised, and commercial banks are reluctant to grant loans without significant monetary commitment from the entrepreneurs due to the perceived riskiness of start-up ventures.

In many countries where market mechanisms are not providing the adequate finance for industrialisation and development, countries have created complementary and specialised financial institutions –development financial institutions (DFIs) – to provide the much needed industrial finance. Development finance can be defined as the provision of finance to those market segments/projects that are not well served by the financial and capital markets, and/or whose social benefits exceed their commercial ones (Thorne and du Toit, 2009). These are typically high-risk low-return[5] market segments, yet with high developmental prospects, making it unattractive for financial and/or capital markets to service.

Private commercial funders typically focus on short- to medium-term financing, generally refraining from playing a role in the long-term financing spectrum. Longer-term loans, or "patient capital" is however critical given the time to build the scale that is required to be competitive in many industries, particularly when taking on powerful incumbents (Roberts, 2016). This makes development finance key for provision of 'patient' capital, particularly for new and small entrants that are likely to incur losses in their first few years of operations (Chavis et al., 2011; Ncube et al., 2016).

Development banks have played four roles throughout their histories: i) providing complementary capital to under-serviced sectors; ii); new venture support; iii) providing countercyclical funding during economic downturns[6]; and iv) responding to specific challenges (Mazzacuto et al., 2016). Evidence from modern DFIs shows that they are still active in these four areas (Mazzacuto et al., 2016).

Private markets have been found wanting in funding industrialisation in a number of other ways too. In some countries, instead of focusing on financing new and innovative firms, banks protected existing firms and the stability of their profits (Da Rin and Hellmann, 2001). The literature also notes the implications of the short-term nature of securities markets in the provision of industrial finance (Stiglitz, 1993). Securities markets have been linked to profit-hunting by firms, rather than investment in productive assets, termed financialisation (UNCTAD, 2016).[7] This trend is evident in developing countries too, with the share of profits in GDP rising, while capital accumulation has been slowing down (UNCTAD, 2016).[8] The role

[5] Some propositions could present high returns, however the returns may still be low relative the risk the private financial sector is willing to take.

[6] As far as countercyclical lending is concerned, DFIs provide finance in periods of economic recessions when private sector investments are low, in order to boost economic activity. For instance, the Brazilian Development Bank and Asian Development Bank provided countercyclical lending in response to the 2008 global financial crisis (Griffiths and Smith, 2012 as cited in Qunta, 2015; and Guzowska and Strak, 2010). In South Africa too, the Industrial Development Bank played a countercyclical role in response to the 2008 crisis, setting aside a R6 billion fund to assist companies negatively affected (Qunta, 2015).

[7] Financialisation can be defined as "the increasing role of financial motives, financial markets, financial actors and financial institutions in the operations of the domestic and international economies" (Espstein, 2005, p3).

[8] For instance, in India, in the early years of the post-independence period, various commodity shortages tended to make trading in commodities a more profitable proposition than investment in industry, tending to shift investments from the real economy to the easily tradable financial instruments (Patil, 2001).

of development finance institutions is critical to directing finance to productive opportunities, where the real economy has become increasingly financialised and private markets have retreated from financing (Dodgson et al., 2011).

DFIs have formed an integral part of most countries' developmental trajectories (Marois, 2016), facilitating industrialisation and post-war reconstruction by providing long-term finance in European countries (Siraj, 2004 as cited in Qunta, 2015). DFIs that have been most successful have provided game-changing interventions that alter the growth trajectory of their countries (Gumede et al., 2011), providing leadership in development coalitions to coordinate the application of private and public sources of finance in strategic investments.

However there have been a range of criticisms of DFIs, including inefficiencies (Shirai, 2002)[9], support for projects having little or no development benefit, such as the building of hotels (Carter et al., 2016), and attracting business away from commercial banks, rather than providing a complementary role. For instance, Lazzarini et al. (2014), find that BNDES in Brazil is lending to firms, even though the performance and investment decisions of those firms are not conditional on the new loans, probably because they could fund their projects with other sources of capital.

The thinking on the importance of DFIs has changed over time. Not so long ago (i.e. in the 1950s) there was a clear case for the need for development banks, but this has changed to a view that they create more inefficiencies and distortions, leading to a more general and limited role for these institutions (Gutierrez et al., 2011 in Mazzacuto et al., 2016). Beginning in the 1990s and gaining momentum after the global financial crisis though, development banks once again became popular, with for instance the European Commission highlighting the role that DFIs can play in catalysing long-term finance, countering the procyclicality of the macro economy and promoting the green economy and innovation (Moslener et al., 2017).

Furthermore, development banks can play a key role in structural transformation by nurturing knowledge development, investing in infrastructure, promoting strategic trade, prioritizing investments in existing key sectors, and providing coherence to economic policies (Mazzacuto et al., 2016). In countries that have achieved innovation-led growth, public banks have played a risk-taking and lead investment role across the innovation chain, from basic research to early-stage seed financing of companies to financing commercialisation and entry. Thus, development banks can shape and create markets by targeting financial resources and supply-side measures to particular technologies, firms and sectors (Mazzacuto et al., 2016).

Development finance institutions also help to expand infrastructure development (Gumede et al., 2011). One of the key barriers to entry for small businesses is lack of enabling infrastructure. Infrastructure reduces the production costs of the private sector and hence increases productivity (Gumede et al., 2011). Thus infrastructure investment has the ability to stimulate demand in other economic activities through the multiplier effect. Furthermore infrastructure finance is important in the context of regional integration and industrialisation. Studies have indicated that regional transport infrastructure is one of the key hindrances to scaling up industrialisation in the region (see Baloyi and Zengeni, 2015; and Ncube et al, 2016). Gumede et al. (2011) argue that in successful developmental states, infrastructure

[9] Shirai (2002) argues that corrupt officials and weak institutional environments were the reasons for the poor performance of development banks in China. In South Africa too, studies have noted that state-owned development entities and development banks are characterised by poorly controlled spending which results in poor delivery in terms of development (Qunta, 2017), which necessitates stringent oversight (Erasmus et al, 2016).

development goes beyond building transportation routes, for example, and is seen as a tool for long-term economic investment that is integral to a country's industrialisation.

3 The financing landscape for industrialisation in South Africa

During apartheid, the IDC played a significant role in the industrial development of the South African economy (Maia et al, 2005; and Mondi and Bardien, 2013). Besides providing funding to the private sector for industrial ventures, particularly small and medium enterprises, the IDC also undertook a number of large-scale projects considered to be of national strategic importance. These are outlined in section 4. In addition, the IDC also developed various instruments to support industrial development, including export credit facilities, low interest loans, and payment holidays (Mondi and Bardien, 2013). To some extent, the IDC also provided patient capital by, for instance, adopting a long-term approach to its investment activities recognising that certain projects would not achieve profitability in the early years of operation (Mondi and Bardien, 2013). However, the South African economy did not meaningfully diversify[10] (Fine & Rustomjee, 1996), and the economy inherited by the first post-apartheid government was thus a commodity-based economy.

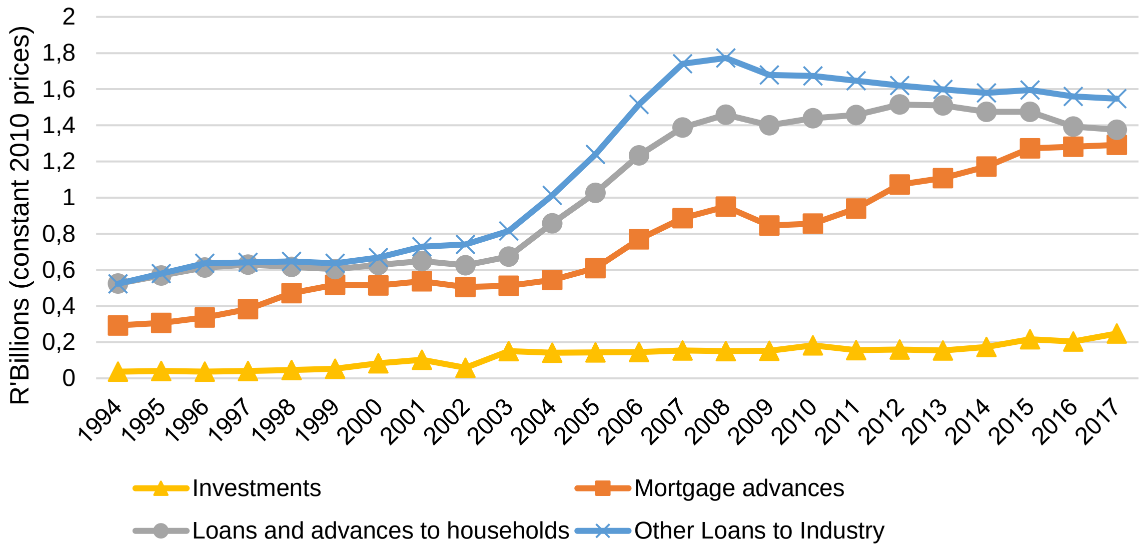
Post-apartheid, there has been a challenge with reorienting industrial support towards more diversified industrial activities. Production has become increasingly concentrated in capital-intensive upstream industries centred on the country's abundant resource endowments. The development of downstream linkages has remained relatively weak, despite stated government objectives of increasing beneficiation, strengthening local value chains and supporting more labour-intensive (and downstream) activities (Maia, et al, 2005; Bell et al., 2018). This has been accompanied by a private banking sector whose lending has been oriented towards private consumption, rather than towards productive fixed investments that are important for economic growth (Bosiu et al, 2017).

Credit extension to businesses by banks

South Africa's extension of credit has grown sharply since 1994, increasing at a compounded annual rate of 9.67% in real terms between 1994 and 2007 (Figure 1). Most of this growth came in the period between 2001 and 2008 and has largely been as a result of increased credit extended to households as well as "other loans to industry" (which covers instalment sales credit, leasing finance and other loans and advances not covered by the aforementioned categories (see appendix 1)). In contrast, credit for investments has remained relatively stagnant in the period.

Figure 1: Credit Extension by all monetary institutions, 1994-2017

[10] Although there have been some changes during the course of apartheid, such as the emergence of several manufacturing industries (e.g. value addition to agricultural output through processing, the development of chemicals sub-sectors, the textiles and clothing sub-sector, etc.); the changing composition of the mining sector, particularly in later years, beneficiation of specific mineral resources, etc; the rise of services sectors such as finance and insurance, as well as retail and wholesale services, dominated by conglomerates, etc.



Source: SARB
Note: All monetary institutions include both public and private lenders

Specifically, it has been consumer demand and mortgage lending driving the growth in credit with borrowing for consumption purposes. Loans for mortgages have tripled since 1994; Griffith-Jones and Karwowski (2015) note that this growth was due to the excessive growth[11] in the price of residential housing which made it necessary for consumers to seek alternative means of funding above and beyond their personal savings. The rate of credit growth during the 2000s was significant, and was helped by increases in consumer and investor confidence, a decreased fear of political instability, and greater growth. This was aided on the supply side as banks promoted the use of credit facilities and retailers encouraged consumers to make use of credit cards to boost their spending (Faulkner, et al., 2013). Though "other loans to industry" also grew strongly, these were utilised in the finance and insurance sector for sales credit while another significant portion funds community, social and personal services (Bosiu et al, 2017).

In the period immediately after the 2008 recession, the growth in credit extension plateaued with loans to households and "other loans to industry" falling from their peaks in 2008. Nevertheless, the level of loans to households and "other loans to industry" has remained far higher than loans for investment purposes typically granted to businesses. Furthermore, credit for investments has remained relatively stagnant with only a marginal increase over the period 1994 to 2017. This suggests a low appetite for loans for investment from the commercial banking sector in relation to loans for consumption by households. Furthermore, South Africa's monetary policy stance since the early 2000s – using interest rates for inflation targeting purposes – has done little in the way of inducing productive investment. Bell et al. (2018) argue that using more direct levers to deal with inflation, such as higher and differential reserve requirements, could have resulted in lower interest rates in the economy.

Financialisation of the South African economy and impact on industrialisation

In the corporate sector, a significant proportion of financing for capital formation derives from retained profits. Traditionally, firms reinvested significant portions of profits to increase capital stock and the productive capacity of the firm. By contrast, financialisation sees an increase in firms' financial operations, with a push for increased income derived from financial assets, and

[11] This was itself driven by the fast rising credit extension for real estate purchases.

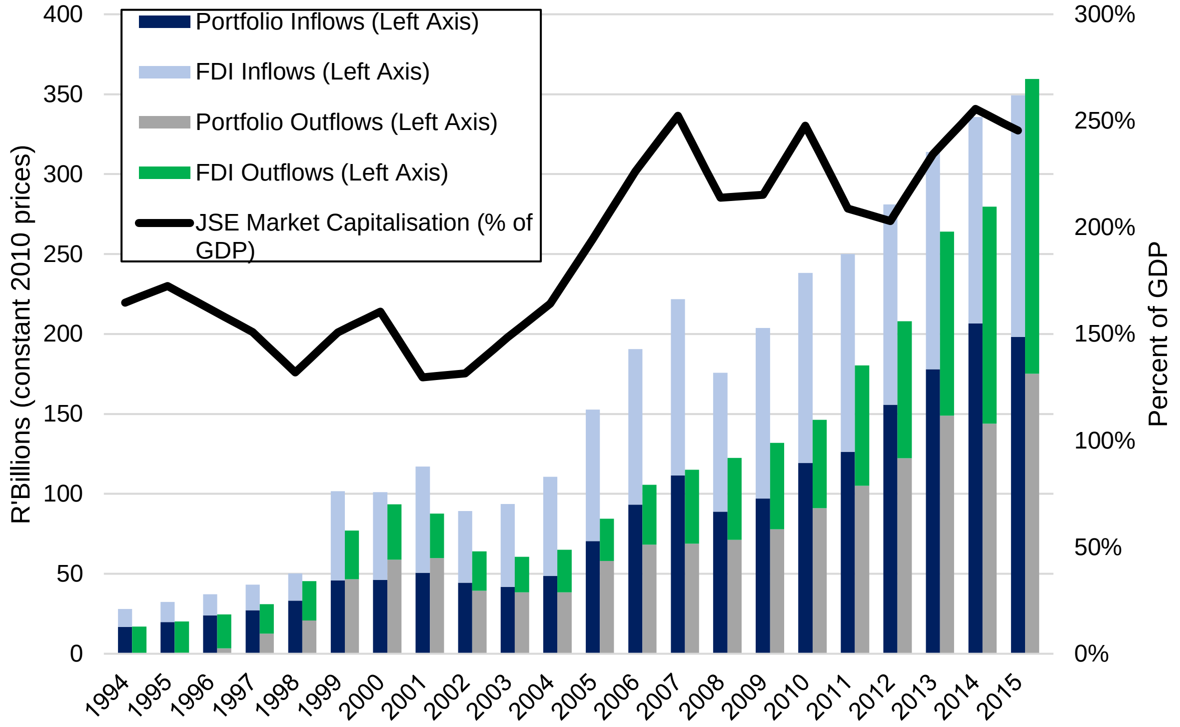
a shorter time horizon associated with the interests of institutional investors. Thus, financialisation impacts on the investment decisions of non-financial firms, as they tend to allocate an increasingly larger share of savings towards investments in financial assets.

The financialisation of South Africa's economy began with the creation of a sophisticated financial system during the apartheid regime and has continued well into the democratic era (Newman, 2017), with the relaxation of capital controls since 1994. There were tight exchange controls in the late 1950s and early 1960s that effectively blocked the sales of South African securities by non-residents culminating in a parallel exchange rate system called the 'blocked rand' (Farrell & Tondai, 2004). Changes to controls on non-residents began in 1996 with controls on residents remaining intact as part of a staggered liberalisation agenda (Kahn, 2015).[12]

The relaxation of capital controls after 1994 (Mohamed, 2012; Isaacs, 2016) and increased rate of capital liberalisation during the 2000s[13] led to growth in portfolio inflows and outflows contributing to South Africa's financial assets as a percentage of fixed capital stock growing sharply (Bell et al., 2018). This, along with high domestic interest rates as well as a boom in the stock market, resulted in a significant rise in short-term capital inflows as foreign investors sought higher returns from emerging economies. Post the financial crisis of 2008, South Africa placed no direct controls on capital inflows or banks, but instead further relaxed controls on resident outflows (Kahn, 2015). This increased openness coupled with low levels of reserves has made South Africa more susceptible to global financial movements and portfolio flows (Kahn, 2015). By 2015, the market capitalisation of listed domestic companies in South Africa had risen to around 250% of GDP (Figure 2 below), while the market capitalisation of comparator/upper-middle income countries as a share of GDP remained below 100% since 2003.

Figure 2: Market Capitalisation, portfolio flows, and FDI flows

[12] Based on a presentation by Brian Kahn titled "Capital Flow Management in South Africa" to the IMF Conference on Managing Capital Flows: Lessons from Emerging Markets for Frontier Economies, Mauritius, March 2, 2015.
[13] For example, increases in the ability of domestic firms to outwardly invest increasing from R50 million to R750 million in Africa with the limit to invest in other countries rising to R500 million (see Chipeta, 2012).



Source: Bell et al. (2018) (Adapted from SARB Data)

Literature has linked increasing financialisation to profit-hunting by firms rather than investment in productive assets, diverting firms' focus from the accumulation of physical assets with long-term horizons to shorter-term financialised assets with quick payoffs. The increasing financialisation of the economy therefore works against industrialisation as firms may prioritize short-term profits over investment in capabilities (Bell et al., 2018). The role of development finance in South Africa is key given the challenges outlined above.

4 Data and methodology

Multilateral lenders have encouraged industrial DFIs to calculate economic as well as financial rates of return (World Bank, 1989). This allows one to assess the costs, subsidies and benefits of DFI operations. Consideration of costs and benefits have to be balanced with what the DFI is attempting to achieve. The balance involves critical assessment of support incentives (subsidies, tax exemptions, etc) received from government, against other developmental outcomes such as the ability to transform the structure of the economy and provide 'patient' capital and other forms of concessions. However, the South African DFI space is different from other countries, since the two main DFIs in South Africa provide funding in the economy mainly without financial support from the government. We analyse how the positioning of DFIs in South Africa, including their self-sustainability, impacts on their ability to fulfil their developmental objectives.

The measurement of performance of DFIs should focus on the impact of DFIs on industrial policy objectives, for instance, on the impact of funding on structural transformation and facilitation of sustainable entry. At the same time, there are efficiencies to be considered, for instance, reduction of non-performing loans. While there are arguments around the inefficiencies associated with development banks, too much of an emphasis on good financial performance may comprise the potential to impact substantially on industrial development. Chen et al. (2017) recognize that losses due to non-performing loans can be offset by other ensuing benefits and therefore an industrial policy can still be rational. The idea is for DFIs to take a calculated chance on a number of enterprises/projects, whilst appreciating that a significant number of them might fail, but the few that succeed become effective competitors that can innovate and structurally transform the industries in which they operate.

Key indicators

The DFIs selected for this study are the Industrial Development Corporation (IDC), the Development Bank of South Africa (DBSA), and the National Empowerment Fund (NEF). These were chosen given their importance in the development landscape of South Africa. The study makes use of data from annual reports of the DFIs, data sourced from the DFIs, as well as interviews and correspondence with key members of the DFIs (see appendix 2 for list of interviews). The performance of the DFIs were tracked along a number of metrics and indicators that were chosen given their relevance to understanding DFI performance in the context of industrialisation.

In looking at how DFIs have performed in providing finance in the economy, we analyse the following indicators over the period of 1994-2017, where possible:[14]

- *Strategy and mandate*: we considered the strategy and mandate of the DFIs since it plays a defining role in what sectors and projects are prioritised by the DFIs
- *Quantity of approvals and disbursements*: shows the magnitude of disbursements in the economy over time; allows us to reflect on whether DFIs are providing countercyclical funding during downturns; allows us to reflect on the gap between approvals and disbursements
- Types of funding:
    - *Sectoral disbursements*: Is funding being provided in line with government's industrial development priorities, and for diversification/industrialisation?
    - *Loan versus equity funding and loan duration*: Are DFIs providing longer-term funding/patient capital? Why might DFIs decide between debt and equity financing?
    - *Size of businesses funded and type of businesses (expansions, start-ups, etc)*: Is funding oriented towards larger and established businesses, or are DFIs funding smaller and new businesses, and helping entry?
    - *Black industrialist funding*: What proportion of DFI funding goes towards black industrialists in the economy?
- *Self-sustainability, source of funds, and financial indicators*: where do the DFIs source their funding from, and does this pose a constraint on supporting the industrialisation of the South African economy?
- *Interest rates versus private sector interest rates*: are the DFIs providing concessional funding or are the rates they charge for their funding greater than that of commercial banks and why?

5 An analysis of the IDC's role in financing industrialisation

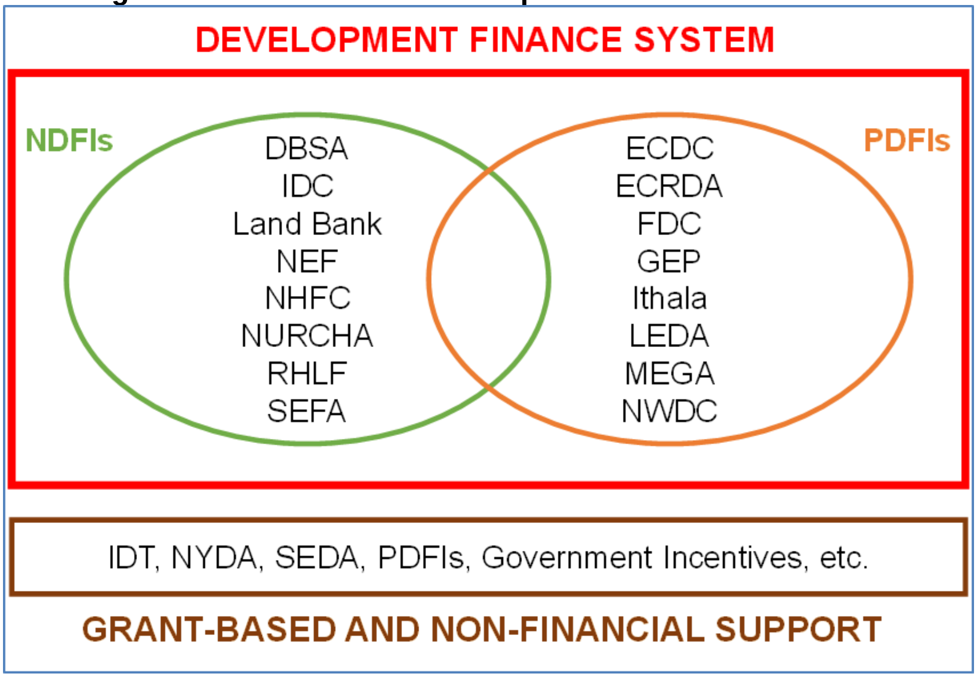
5.1 Locating the IDC in the Development Finance System

The DFIs in South Africa's post-1994 landscape can be divided into two categories – those that mainly provide loan and equity financing as part of their development activities, and those that support development through grant-based funding and other non-financial assistance (CCRED, 2017). The Development Finance System (DFS) refers specifically to entities in the first category, as outlined in the 2008 National Treasury Review of development finance institutions (National Treasury, 2008). While there are about sixteen DFIs (provincial and

[14] Data was not available for all of the indicators below for each of the DFIs for the specified time period.

national) that form the DFS, our study focuses on only national DFIs (Figure 3) because of their nationwide coverage and relatively big size compared to provincial DFIs. The study further focuses on development finance as it relates to industrialisation. Thus out of the eight national DFIs, only three form the basis of this study; the largest two (IDC and DBSA) and the NEF. Together with the Land Bank and SEFA, the five DFIs account for more than 90 per cent of total development finance in South Africa (National Treasury, 2008; and authors' own calculations).

Figure 3: South Africa's Development Finance Institutions



Source: CCRED, 2017

Note: DBSA (Development Bank of South Africa), IDC (Industrial Development Corporation), NEF (National Empowerment Fund), NHFC (National Housing Finance Corporation), NURCHA (National Urban Reconstruction and Housing Agency), RHLF (Rural Housing Loan Fund), SEFA (Small Enterprise Finance Agency), ECDC (Eastern Cape Development Corporation), ECRDA (Eastern Cape Rural Development Agency), FDC (Free State Development Corporation), GEP (Gauteng Enterprise Propeller), Ithala (Ithala Development Finance Corporation), LEDA (Limpopo Economic Development Agency), MEGA (Mpumalanga Economic Growth Agency), NWDC (North West Development Corporation)

The DFIs that form part of this study were created to promote social and economic development through the provision of finance that supports job creation, small business development, industrial development and infrastructure development.[15] Individual DFIs have specialised areas of operation (see Table 1). The IDC and DBSA are Schedule 2 entities, meaning they are major public entities financed fully or substantially from sources other than the National Revenue Fund, taxes or other statutory money. These include returns on investments, and borrowings from other institutions such as private financial institutions, other DFIs, international financial institutions, etc. A more comprehensive discussion of sources is provided in the sections analyzing the IDC and DBSA below. In contrast, the NEF is a schedule 3A entity which is financed fully or substantially from the National Revenue Fund, taxes or other statutory money. Schedule 2 entities typically enjoy the most autonomy of all the public entities and are expected to generate profit and declare dividends, while schedule 3A entities

[15] The DFIs were developed in an ad hoc manner by different arms of government, and there has been a notable increase in the number, role, scope of operations and importance of these institutions (National Treasury, 2008).

are not. Different sources of funding have different implications for financial sustainability and industrial development, as discussed in the sections under the IDC, DBSA and NEF below. .

Table 1: Selected DFIs' Shareholders and Financing Activities

<table>
<tr><th>DFI</th><th colspan="3">Shareholder department</th><th colspan="2">PFMA schedule</th></tr>
<tr><td>Development Bank of Southern Africa</td><td colspan="3">National Treasury</td><td colspan="2">Schedule 2</td></tr>
<tr><td>Industrial Development Corporation</td><td colspan="3">Economic Development Department</td><td colspan="2">Schedule 2</td></tr>
<tr><td>National Empowerment Fund</td><td colspan="3">Department of Trade and Industry</td><td colspan="2">Schedule 3A</td></tr>
<tr><td>Small Enterprise Finance Agency</td><td colspan="3">Subsidiary of IDC, but under executive authority of Department of Small Business Development</td><td colspan="2">Schedule 2</td></tr>
<tr><th colspan="6">Type of financing</th></tr>
<tr><th>DFI</th><th>Loan</th><th>Equity</th><th>SMMEs</th><th>Bridging or procurement</th><th>Infrastructure</th></tr>
<tr><td>Development Bank of Southern Africa</td><td>Yes</td><td>Yes</td><td></td><td></td><td>X</td></tr>
<tr><td>Industrial Development Corporation</td><td>Yes</td><td>Yes</td><td></td><td>X</td><td>X</td></tr>
<tr><td>National Empowerment Fund</td><td>Yes</td><td>Yes</td><td>X</td><td>X</td><td></td></tr>
<tr><td>Small Enterprise Finance Agency</td><td>Yes</td><td>No</td><td>X</td><td>X</td><td></td></tr>
</table>

Source: Based on annual reports and National Treasury information

South Africa's two main DFIs – the IDC and the DBSA – are self-sustaining with virtually no capital injection from government. In fact, both the IDC and DBSA have had to maintain financial sustainability through prudent financial and human resource management (Jafta, 2017). IDC forms the focus of this report because it is not only the largest DFI in the country, but the only major financier of industrialisation, and is therefore discussed first.

5.2 Mandate and funding strategy of IDC over time[16]

In the discussion below, we reflect on the IDC's mandate and strategy over time in order to frame the discussion on whether and how the IDC is funding industrialisation in the economy in 5.3 and 5.4 below. The IDC was established in 1940 with the mandate to act as an industrial financier, both to finance new industries and upgrade existing ones (IDC Act No. 22, 1940). From the 1940s through to the 1960s, the IDC funding strategy supported import substitution and expansion of industrial capacity (Edwards, Cassim & van Seventer, 2009; Jafta, 2017). The Afrikaner National Party had come to power in 1948 with a mandate that prioritised the development of large-scale strategic projects considered too big to undertake by the private sector (Mondi and Bardien, 2013). As a result, during the 1950s the IDC funded capital-intensive industries such as the South African Coal, Oil and Gas Corporation (Sasol) and the Phosphate Development Corporation (Foskor) (one of the world's largest producers of phosphate and phosphoric acid) (Fine and Rustomjee, 1996; Mondi and Bardien, 2013; and Fumbata 2016).

In the 1960s and 1970s, there was a strong emphasis on export-oriented industrialisation from the IDC, with export incentives being provided (Bell, 1997). The 1980s and early 1990s saw increased pressure on the apartheid government (Mondi and Bardien, 2013; Jafta, 2017), but also resulted in an intensification of IDC activity, with investments in pulp and paper, chemicals, glass, metal products, electrical machinery and car parts, and the motor industry

[16] See appendix 3 for a more full discussion of the IDC's mandate and funding strategy over time.

(Mondi and Bardien, 2013). In 1988, the South African Iron and Steel Industrial Corporation (Iscor) was privatised and listed by government, and IDC acquired some of its shares (IDC, 2016). The export incentive system was also reinforced (Fumbata, 2016; Black and Roberts, 2009).

Post-apartheid economic policy to 2007 was dominated by orthodox laissez-faire economic reforms (Zalk, 2014), with removal of import controls and export subsidies (Edwards et al., 2009). Between 1994 and 2007, investments through the IDC were mainly made in three manufacturing sector groups: motor vehicles; clothing and textiles; and a variety of upstream sectors, specifically steel, petrochemicals and aluminium (Zalk, 2014 as cited in Fumbata, 2016).[17] The IDC also increased funding to small and medium-sized business[18] (but without meaningful concessionary interest rates[19]) and for black empowerment[20] (National Treasury, 2008; Mondi and Roberts, 2005).

There was a shift in industrial policy from 2007 commencing with the approval of the National Industrialisation Policy Framework (NIPF) and its implementation plan, the Industrial Policy Action Plan (IPAP) in 2007 (DTI, 2007a & 2007b). In the 2010-2017 period, and in line with the increased emphasis on sectoral focus in NIPF, the IDC restructured its Strategic Business Units (SBU) to coordinate and deepen investments in the sectors identified in the IPAPs. Some SBUs were phased out (i.e., franchising, financial services, etc), while others were introduced (i.e., green industries). The current operations of the SBUs span across two distinct areas: the mining and manufacturing sector; and agro-processing and new industries. A breakdown of current SBUs and sectors they cover is provided in appendix 4.

In addition to deepened sector focus, the mandate of IDC was extended over time to cover the entire African continent, SME development, rural development, counter-cyclical funding to companies in distress, and clean and renewable energy technologies (Jafta, 2017). This culminated in the adoption of Project Evolve in April 2014, a strategic initiative aimed at achieving a more focused approach to industrial development within the IDC's mandate in line with policy, among other things (IDC, 2015). The new strategy prioritised the following value chains: metals, metal products, machinery and equipment, transport equipment and mining; chemicals, plastics and pharmaceuticals; as well as agro-processing and agriculture (IDC, 2015).

Schemes: In order to supplement its strategies, the IDC has had a number of special schemes targeting developmental mandates including job creation, empowerment of women, youth and black industrialists, funding of innovation, and increasing competitiveness in manufacturing. These schemes offer various kinds of concessional funding. Most of the schemes are aligned to the identified sectors and SBUs, and ensure customised funding with more favourable terms than the normal IDC funding. This is done to ensure that areas where specific interventions are needed receive subsidised pricing by ring-fencing a portion of capital for specific purposes and sectors. IDC's list of special schemes is presented in Table 2. Most of the schemes in the

[17] The Motor Industry Development Programme (MIDP) was introduced in 1995 to assist the automotive sector (Black and Roberts, 2009). The clothing and textiles industry was supported under the Duty Credit Certificate Scheme (DCCS), from 1995 to 2009, where exporters were allowed to earn import rebate credits depending on export levels (Black and Roberts, 2009) (Fumbata, 2016).

[18] A number of agencies were established for small business support in 1995 and 1996, such as the Centre for Small Business Promotion, Ntsika Enterprise Promotion Agency, the National Small Business Promotion and Khula Enterprise Finance (Black and Roberts, 2009).

[19] Correspondence with IDC official indicated that there were some schemes targeted at SMEs, which offered concessionary rates.

[20] The IDC funded the first BEE mobile phone transaction in the 1990s (Jafta, 2017)

list were established in the 2010-2017 period, however there were schemes in place before 2010.

Table 2: IDC's Schemes

Scheme	Purpose	Concessions
Gro-e-scheme	Launched in 2011 to offer financial and non-financial support to youth enterprises that contribute towards the creation of jobs and growing South Africa's economy. Businesses should still fall within IDC's list of priority sectors.	• Interest rate of up to prime minus 3% • Real After-Tax Internal Rate of Returns (RATIRR) of 6% equity • Capital and interest payment holidays • No prescribed owner contribution
Unemployment Insurance Fund (UIF) scheme*	Launched in 2010 to assist companies in distress and prevent shedding of jobs. The funds covers all the industrial sectors supported by the IDC.	• Agreed fixed interest for five years plus 1%. After five years the interest rate reverts to a concessionary variable rate linked to prime
Manufacturing Competitiveness Enhancement Programme (MCEP)*	To promote competitiveness in manufacturing while ensuring job retention in the sector by assisting manufacturing companies with working capital, not start-ups. Only applicable to manufacturers under Standard Industrial Classification Code 3.	• It is priced at 4% fixed. No fees apply
Youth Pipeline Development Programme	To improve the readiness of potential applicants and thereby increase their probability for IDC consideration.	• Interest rate is Prime, repayable after IDC's normal debt
Agro Processing Competitiveness Fund (APCF)*	Established in 2010 to facilitate increased competition, growth and development in the agro-processing and beverage sector. Applicant must be non-dominant players in the market	• Interest free loans • Zero return quasi equity • Maximum repayment period is 10 years
EIB SME and MIDCAPS Fund	To assist SMEs and MIDCAP companies to access loan financing for CAPEX, medium and long term working capital. MIDCAP means companies that have up to 3000 employees.	• Normal IDC Risk pricing less 0.3% • Longer repayment periods (8-12 years)
Clothing and Textiles Competitiveness Programme (CTCP)*	Approved in 2009 to stabilise employment and to improve overall competitiveness in the clothing, textiles, footwear, leather and leather goods manufacturing industries	
Leather and footwear	To improve the competitiveness of manufacturers in the sector. Funding is for plant and equipment or supporting technology that will result in a substantial improvement in competitiveness	• Prime minus 5% interest rate
Technology Venture Capital Fund*	To provide funding and business support to small companies at early stages of commercialisation (not development) of innovative products, processes and technologies across all sectors which have the potential to make a significant developmental impact on the South African economy.	• Minimum RBTIRR of 3% plus upside
Green Tourism Incentive Programme*	To encourage privately-owned tourism enterprises to move towards cleaner and renewable energy sources.	• Grant of up to R 1 million
Downstream Steel Industry Development Fund*	Announced in May 2017 to improve the ability of this industry to compete on the international stage. The Fund is available to foundries, valve and pump manufacturers, steel fabricators and capital equipment manufacturers including black industrialists, to help the core of our manufacturing	• IDC pricing less a discount of 1,5% for large and medium companies and 2% for very small and small companies

	industry to survive difficult global economic conditions.	

Source: IDC Website

Note: Schemes marked with an asterisk are off-balance sheet; this list is not exhaustive

IDC schemes are classified into two categories: on-balance sheet and off-balance sheet (marked with an asterisk (*) in the table above). The former represent schemes initiated and funded by the IDC, while the latter represent schemes that IDC administers on behalf of other stakeholders, noting that the IDC was involved in the conceptualisation of some off-balance sheet schemes. Off-balance sheet schemes are funded by other stakeholders, such as government departments, but managed by the IDC. On-balance schemes are more relevant for our purpose since our study focuses on IDC's own funds.

All schemes are essentially used as a vehicle to expand development impact, and reflect both IDC and government's emphasis in terms of desired impact. However on-balance schemes are small relative to IDC's total funding. For instance total approvals under on-balance schemes accounted for about 6% of total IDC approvals in the 2011-2017 period.

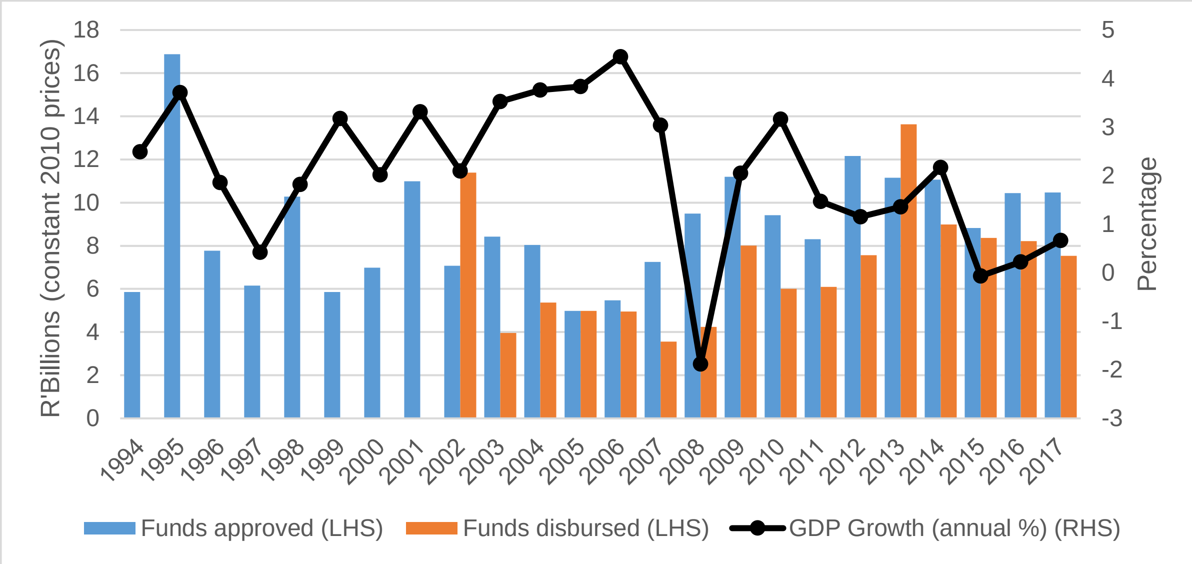
5.3 Funding for Industrialisation

This section considers where funding provided by IDC to businesses in the economy was geared towards industrialisation of the economy. We consider this by looking at funding from various perspectives, including the magnitude of funding and which sectors have received the most funding by the IDC. We focus on disbursements rather than approvals in the discussion below since this represents money that has entered into the economy.

Magnitude of funding

Disbursement data is only available from 2002 onwards. Real disbursements have generally been increasing in the period 2002-2017, and particularly from 2008 onwards when the country began to pursue a more purposeful industrial strategy, and the economy experienced a downturn. To put the scale of IDC funding into perspective though, we look at IDC's assets relative to DFIs in other countries. The combined assets of IDC and DBSA amount to just over 5% of GDP, while the assets of the Chinese CDB and Brazilian BNDES account for about 14 and 16% percent of GDP respectively (Naqvi, 2018). This is on the back of relative capitalisation support received from the state over the years (i.e. no capitalisation in the case of IDC, BNDES enjoys continuous capitalisation from fiscal transfers and FAT – a workers' fund). In addition, IDC disbursements account for a low proportion of private sector gross fixed capital formation, at below 2% throughout most of the period from 2002 to 2017, except 2002 and 2013 (see appendix 5).

Figure 4: IDC Funds Approved and Disbursed (2010 prices): 1994-2017



Source: IDC Data, authors' calculations
Note: Disbursement data is only available from 2002 onwards in the IDC annual reports. The GDP growth rates have been calculated to coincide with the financial year-ends reported by the IDC. For example, the IDC's year-end between 1994 and 2003 was between Q3 and Q2 before changing to being between Q2 and Q1 after 2005 (with the reported year-end of 2005 being from Q3 to Q1).

Nonetheless, the downturn in the South African economy from 2008/2009 was accompanied by an increase in the amount of funds disbursed by the IDC, highlighting its countercyclical role in the economy. This has been one of the strategic objectives of the IDC, particularly keeping companies in business and saving jobs by providing funding to companies affected by the cyclical downturn in the economy and drought-affected industries (IDC, 2012).

The figure above highlights a disparity between the real funds approved in each year and the real funds disbursed. Typically, the figures for approvals and disbursements do not correlate due to the lag time. When the IDC approves funds for large projects, it sets out various milestones that the recipients need to meet in order to qualify for the funds to be disbursed. This results in the staggering of disbursements over a number of years depending on the complexity of the projects for which funds were approved and whether the various milestones have been met. There is also a notable time lag between when a project is approved and when funding for the project begins to be disbursed, and this can be attributed to project preparation time and meeting of conditionalities prior to the first drawdown of funds.[21]

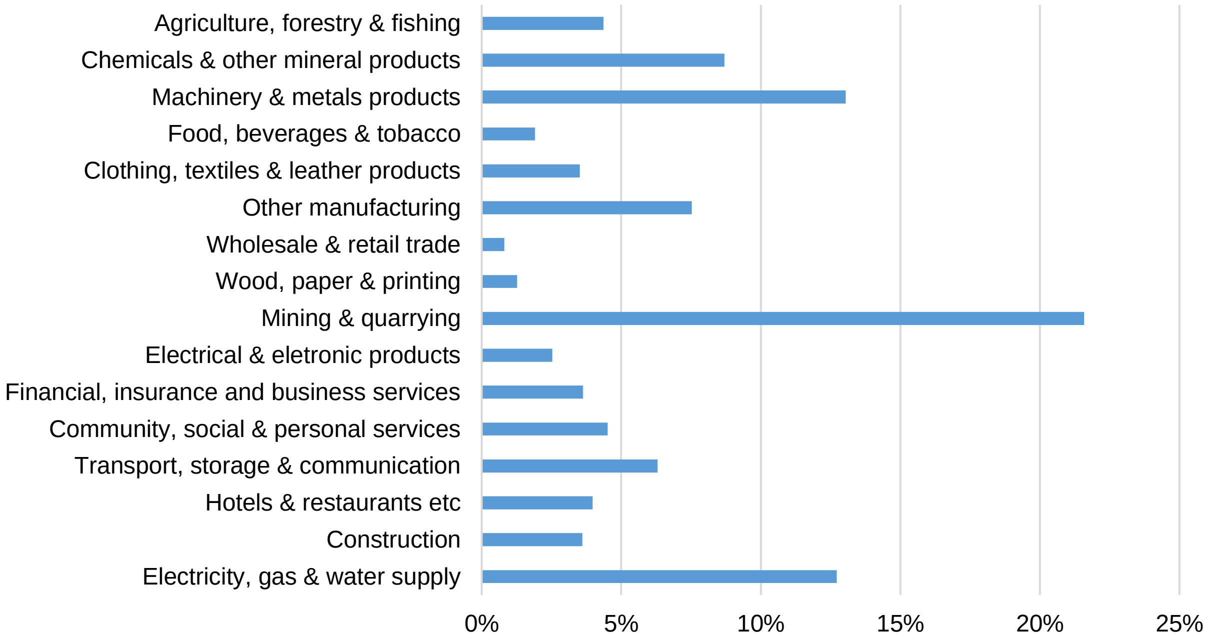
Funding sectors linked to structural transformation

We are particularly interested in which sectors the IDC is providing funding to, given the need for structural transformation and industrialisation. The literature on structural transformation highlights the importance of manufacturing and related services sectors (engineering, design, etc) for transformation (Rodrik, 2016; Hoekman, 2017).

Data from the IDC is only available from 2008 onwards.

Figure 5: Sector share of IDC Aggregate Funding (2008-2017)

[21] Interview with IDC, 28 June 2018.



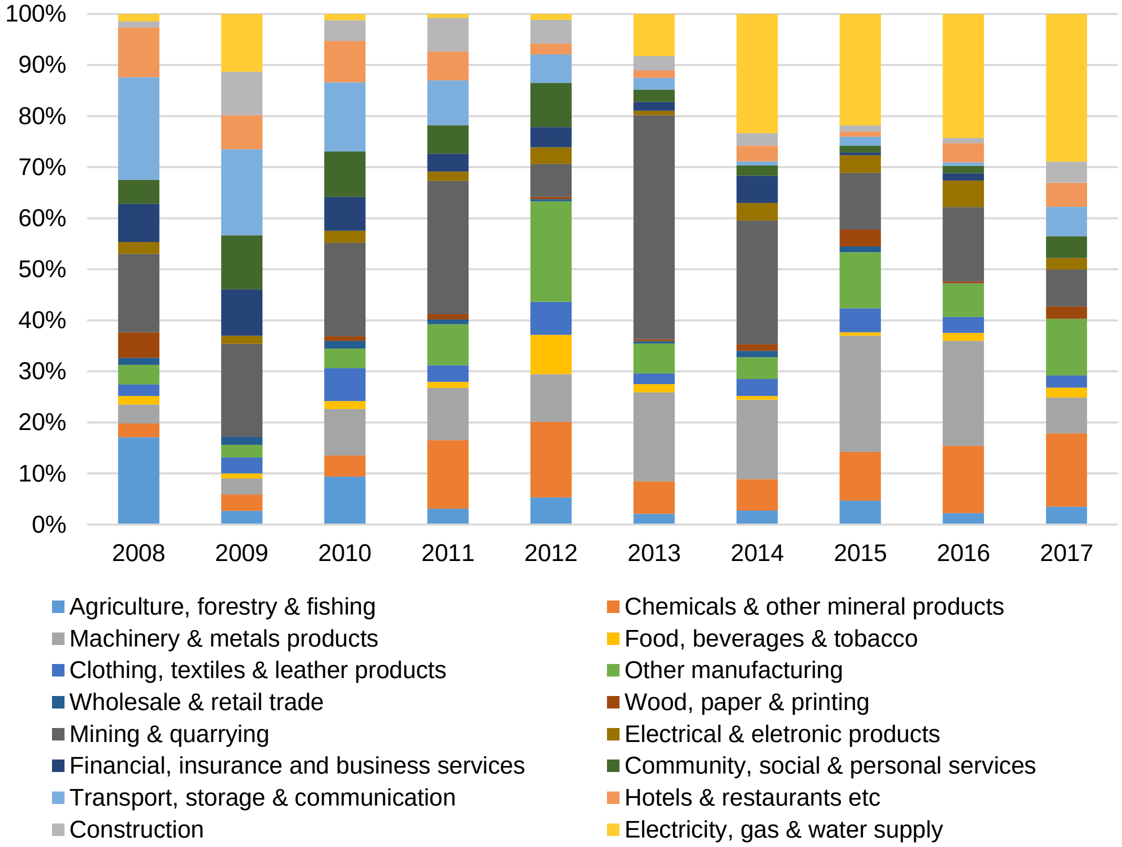
Source: IDC Data, authors' calculations

The figure above shows that IDC funding has continued to provide support to upstream industries relative to more diversified and labour-absorbing downstream industries. Overall, between 2008 and 2017, sectors that received the most funding are mining and quarrying; electricity, gas and water supply; machinery and metals products; and chemicals and other mineral products (Figure 5), with following sub-sectors receiving the highest chunk of funding within the main sectors: gold and uranium ore mining; electricity, gas and steam; basic iron and steel; and other chemicals and man-made fibres (see appendix 6). We note that funding of more upstream or capital-intensive sectors is not by itself problematic but is rather dependent on the linkages built with downstream producers in terms or price and quality of products, and collaboration in product development.

Looking at sub-periods, in the period between 2008 and 2012, there was a focus on mining and quarrying, hotels and restaurants, transport, storage and communication, some agriculture and several services-related sectors (Figure 6), that is, manufacturing sectors did not feature prominently.[22] Key investments included funding for Gautrain, Neotel, CNBC Africa, Kliptown hotel, etc. However, funding to these sectors fell towards the beginning of the 2010s. Services-related sectors in particular were phased out in response to the release of IPAP and a requirement to refocus on the core mandate of industrial development (Jafta, 2017). In the period from 2013, there was a shift in the sectors being funded. Funding to mining and quarrying has been declining since 2013, while funding to electricity, gas and water supply has been increasing.

Figure 6: IDC Sectoral Funding (2008 – 2017)

[22] It is nonetheless also important to understand these outcomes in the context of broader macroeconomic and sectoral issues. For instance, during a period characterised by recessionary conditions (2008/09) and highly unsatisfactory conditions in the manufacturing sector at large, demand for mineral commodities remained in a largely upward trajectory on the back of massive fixed investment activity in China. Hence, support for mining activity counteracted the adverse conditions in manufacturing. Similarly, with manufacturing employment under tremendous strain, pursuing alternative opportunities for job creation probably became quite important.



Source: IDC Data, authors' calculations

The increase in funding for energy has largely been due to major funding of renewable energy in response to government's Renewable Energy Independent Power Producers Procurement (REIPPP) programme. [23] So, although funding for energy remains important, the energy mix has been diversified significantly. There has also been an increased importance of machinery and metals products since 2013,[24] while funding to the chemicals and other mineral products sector has also been significant.

In the main though, IDC funding is still concentrated in more upstream sectors.[25] The IDC recognizes this and acknowledges that while some of the funding, for instance in the machinery and metals sector and chemicals sector targets capital-intensive rather than labour-intensive industries over the next five years, they note that one of the biggest challenges is to ensure that the capital-intensive projects they fund develop ancillary and downstream industries (IDC, 2017 & 2018).

[23] The Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) resulted in IDC funding projects such as KaXu Solar One (CSP) and Sunrise Energy, including funding of communities' shareholding in renewable energy projects (Jafta, 2017).
[24] Key investments include the acquisition of Scaw; a R7 billion multi-model OEM project in East London, set to house diverse OEMs and localise the assembly of passenger cars currently being imported; partnership with Chinese vehicle manufacturer BAIC Group to establish a new car plant in Port Elizabeth; funding of first-tier plastic components supplier to Toyota; establishment of a photovoltaic module manufacturing plant at the East London IDZ; R50 billion funding to four manufacturers to build 1 064 locomotives for Transnet; and R550 million support to Bell Equipment to bolster their efforts to export to North American markets.
[25] We note that funding required for capital-intensive upstream projects is far more than that required for medium-sized downstream projects.

"Patient capital" and concessional funding

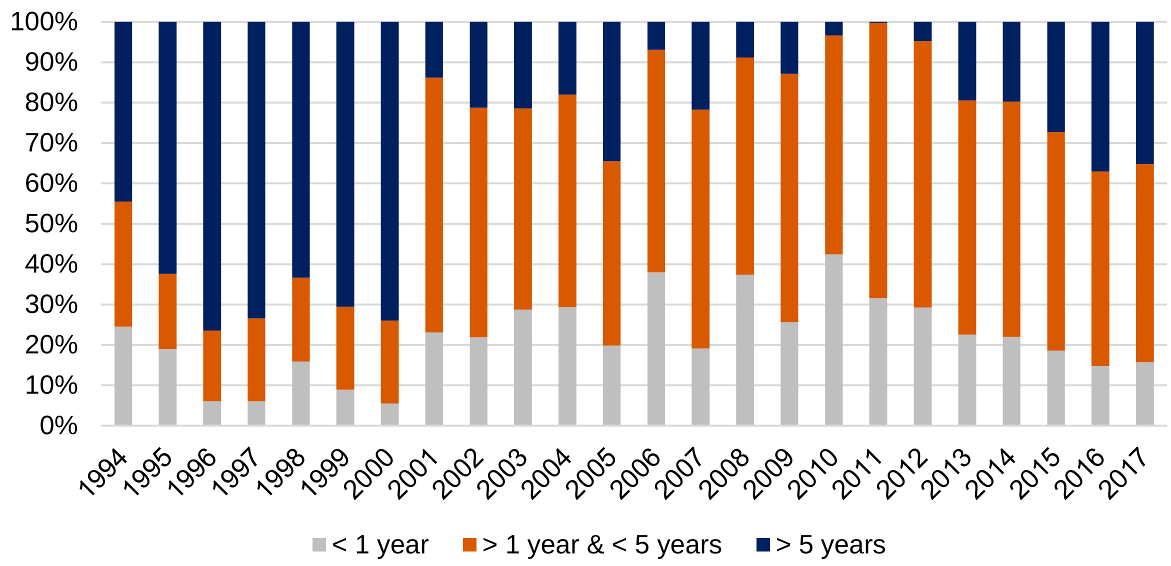
Access to finance is essential for firms that would like to grow and innovate, but the type of funding also impacts on the investments made (Mazzucato and Semieniuk, 2017). Innovation is risky and typically has long lead times, and thus requires patient finance (Lazonick and Mazzucato, 2013). Patient capital can be defined as long-term equity or debt whose providers do not aim to capture benefits in the short-term and who maintain their investment even in the face of adverse short-term conditions for the firm (Deeg and Hardie, 2016).

IDC funding for businesses in the economy can take the form of equity or loan funding. Equity funding can be thought of as "patient capital", since maturity is effectively unlimited in equity investments (Deeg and Hardie, 2016). The IDC's choice of loan or equity funding is dependent on a number of factors, including the due diligence process when assessing the funding application. The IDC only takes equity in a business if it is needed, that is, if it deems that providing loan funding is not sufficient for the business to succeed, or for strategic reasons, and generally prefers to take less than 50% equity in any given business.[26] Furthermore, the IDC's model is generally to use equity divestments to fund equity funding, and borrowings to fund loans.[27] This is because of the constraint of its funding model. The payback periods attached to the IDC's borrowings serves as a constraint to the use of these funds for investing in equity. The source of IDC's funding therefore has an impact on its decision on whether to provide equity- or loan-based funding. Futhermore, the IDC's equity investments are crucial to the IDC maintaining a good balance sheet, which in turn helps the institution to borrow money. Therefore, the level and mix of equity funding is important for the IDC. We reflect further on the funding model of the IDC in 5.4 below. On average over the period, loan funding accounted for 60% of funding, while equity funding accounted for 40% of funding from 2008. The period from 2013 to 2017 has seen loan funding taking on more importance than equity funding, implying greater borrowings by the IDC.

Loan tenure is determined on the basis of the period required for the customer's business to reach maturity, for example, a customer in the Green Industries sector will be assigned a longer loan tenure as these are long-term projects (IDC, 2013). Analysis of IDC's loan book indicates that the majority of loans mature in 1-5 years, particularly since 2001 (Figure 7). There was a decrease in the share of longer-term (> 5 years) loans since 2001, though there was some reversal of this from 2012 onwards. The longer tenures (>5 years) from 2013 onwards may be related to funding for renewable energy projects. On the whole though, the data shows that most of IDC's loans are for five years or less, and – given the broad categorisation of 1-5 years – it is unclear what the duration of most loans are within this category.

Figure 7: Maturity of IDC's Loan Book (1994 – 2017)

[26] Interview with IDC, 6 July 2018
[27] Interview with IDC, 6 July 2018



Source: IDC Data, authors' calculations

Furthermore, the IDC's interest rates are generally not more competitive than those offered by commercial banks, except where funding is provided under a scheme since schemes were established to provide targeted concessional funding (see Table 3 for scheme interest rates).[28, 29] Schemes however account for less than 10% of total IDC funding, as noted above (calculations based on IDC approvals data). Businesses will often only approach the IDC for loan funding if they have been turned down by the banks. The IDC therefore acts as a lender of last resort for companies and entrepreneurs who fail to meet the private sector's criteria and/or are deemed too risky for the banks to lend to. Thus, the IDC takes on a generally higher risk customer-base which gives some indication as to why their general interest rates are not competitive. The IDC is however a development finance institution, and, as such, should be providing loans more competitively than the private banking sector.

There are other ways though in which the funding provided by IDC can be considered "developmental". The IDC provides "grace periods" of as long as two years in some cases as far as repayments of loans are concerned, though it is unclear what proportion of loans receive grace periods or what the average grace period is. Additionally, funding provided to projects/enterprises is backed up with business support programmes providing pre- and post-investment assistance based on the evaluated needs of each project/enterprise. The IDC therefore views itself as taking more of a proactive role than an arms length funder, and considers itself as a type of "development finance partner" to businesses in which it invests in or provides funding to.[30]

As far as equity funding is concerned, the commercial banking sector does not take equity positions in businesses, while the IDC does. The IDC therefore acts as an "investment partner" to businesses that would otherwise not be able to source funding, though the sectors in which the IDC is taking equity positions are important, since it reflects the IDC's role in industrial development of the country. Appendix 7 shows that more than a quarter of total equity

[28] Interview with IDC, 28 June 2018 and 6 July 2018

[29] According to data provided by the IDC, the IDC's average interest rate on loans which are prime-linked and rand-dominated is discounted by between 0.3 and 1.4 percentage points between March 2008 and March 2018 (not weighted, estimated). This is for all loans and thus includes loans under schemes and interest-free loans (see appendix 8).

[30] Interview with IDC, 28 June 2018

financing in the period between 2008 and 2017 has gone to the mining and quarrying sector, while more than 15% has gone to the macinery and metal products sector.

On the whole, there are a few things to note. While the IDC – unlike private banks – does invest in equity in businesses (a kind of patient capital), it is constrained by its funding model. On the loan side, it is difficult to ascertain the average duration of loans given the loan categorisation, though most loans do fall in the 1-5 year category. The general interest rates offered by the IDC on its loans are however not more competitive than the private banking sector, and this is a real challenge in terms of the instituion supporting riskier investments.

Support to small businesses in the economy

The process of structural change hinges on participation of entrepreneurs. Industrial policy is the tool policymakers have to overcome market failures through assistance to small and medium-sized firms in particular, and focusing investment in human capital (Acs and Naudé, 2013). These firms help the industrialisation of an economy by increasing and contesting the supply side of the industrial economy necessitating responses by incumbent firms (Rypestøl, 2017).

In 1994, the IDC's mandate shifted towards a greater emphasis on SMMEs rather than the large projects the IDC participated in in the past. The IDC's definition of small business has changed several times, making an analysis of funding to SMMEs by the IDC difficult.[31] Since 2002 though, a larger proportion of funding was being approved for larger firms and projects (Maia et al., 2005) and this is corroborated when looking at the number of approvals more closely from 2002 onwards. The number of approvals have actually been decreasing from 2002 to 2017, as the IDC began to focus on fewer, better quality investments with a greater development impact (IDC, 2004). So, for instance, 516 projects were approved in 2002, compared to only 177 in 2017 (see appendix 9), even though the value of disbursements was increasing. The IDC therefore appears to be tending towards financing larger businesses. We note that over this period there were changes in the strategy of the IDC, with the IDC, for instance, not provided funding to some services sectors (which tended to yield a large number of approvals) anymore. Furthermore, the establishment of SEFA as an IDC subsidiary in 2012 meant SEFA was principally focused on the SMME segment.

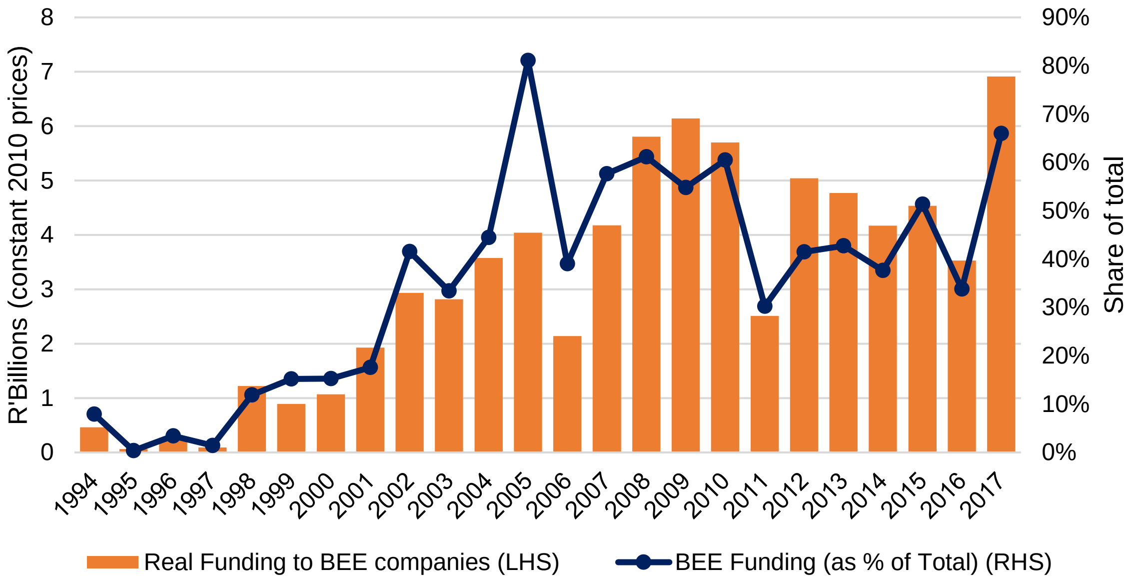
Black Economic Empowerment (BEE) Funding and Black Industrialists

Post-apartheid, South Africa faced the challenge of including previously disadvantaged groups in the economy. As part of a series of programmes aimed at empowering black groups and individuals, black economic empowerment emerged as a concept in the 1990s in order to change the structure and path of the economy. BEE has been a major priority of the IDC since the late 1990s. The IDC's initial approach to BEE funding was to fund acquisitions of shares in existing companies by black shareholders (IDC, 2015). In 2002 the IDC adopted a new BEE policy, seeking to provide concessional loans and equity funding to assist black people with start-ups, expansions and acquisitions of existing companies (IDC, 2003).

[31] Between 1995 and 2000, the IDC defined SMMEs as companies with not greater than R120m in total assets. Thus, fairly large companies were defined as SMMEs in this period. While the definition was adjusted in 2002 to include companies with not more than R30 million in assets, not more than 100 workers, and not more than R50m in revenue, from 2006 onwards the IDC again adjusted the definition to include companies that were larger. From 2006 to 2008, the definition changed to companies with not more than R40m in total assets, 200 employees, and R35m in turnover, and from 2009 to 2010, it changed to companies with less than R55m in total assets, 200 employees, and R51m in turnover.

The data shows that BEE funding sharply increased to 2009[32] [33]. Earlier studies show that most BBE deals between 1995 and 2005 were for acquisitions, even though expansionary BEE financing was the strongest in terms of job creation (Maia et al., 2005; Mondi and Roberts, 2005). The IDC notes that it has moved away from funding pure acquisitions more recently, and has provided R28 billion to black-owned businesses and funded over R53 billion to black-empowered companies in total between 1993 and 2014 (IDC, 2015).

Figure 8: Share of BEE Approvals in Total: 1994-2017



Source: IDC Data, authors' calculations

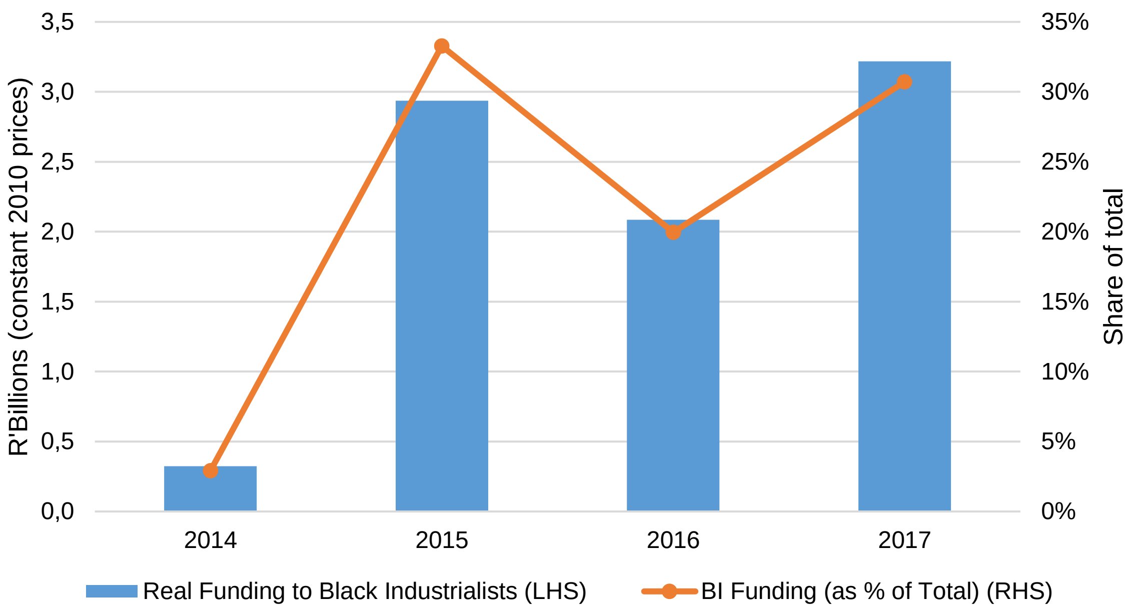
In 2013, in line with the DTIs Black Industrialists Scheme (BIS) which aims to promote the participation of Black Industrialists as manufacturers in key sectors identified in the Industrial Policy Action Plan (IPAP),[34] the IDC enhanced its focus on funding for black industrialists (IDC, 2015). Funding is provided at favourable lending rates. Though the scheme is relatively new, funding (in real terms) under the scheme has increased to around R3.2 billion in 2017. It is useful to consider how large the scheme is by considering its size against total IDC funding approvals by year in the figure below. The scheme is relatively large, with funding approvals of about 31% of total IDC funding approvals in 2017 (Figure 9).

Figure 9: Funding Approvals under the Black Industrialist Scheme (2014 – 2017)

[32] Some transactions up to 2008 included acquisitions of shares in Metropolitan Life, MTN, Tourvest, Protea Hotels, The Reclamation Group, Foodcorp, KWV, FirstRand, Exxaro, and Life HealthCare (IDC, 2015). Furthermore, the IDC has participated in some significant BEE mining transactions. For instance, it assisted with the provision of significant funding for Mvelaphanda Resource Ltd's purchase of a 15% stake in Goldfields; it provided funding for the Savannah Consortium to purchase an equity stake in Acquarius Platinum South Africa Ltd; and it participated as a direct equity holder in Incwala's deal with Lonmin Plc (IDC, 2004).

[33] Several major transactions contributed to the increase in the 2008-2010 period, including funding of R11 million to Nkonzwentle, a small-scale plastics manufacturing company in Nelspruit; R260 million facility to Majestic Silver Training (a BEE company) to develop a manganese mine in the Northern Cape; R64 million Funding for Vektronix, a black empowered electronics manufacturing company; R98 million facility for a BEE consortium for the construction of a Park Inn hotel in Polokwane; and R1.4 billion for a local independent power-producing project (IDC, 2009 & 2010).

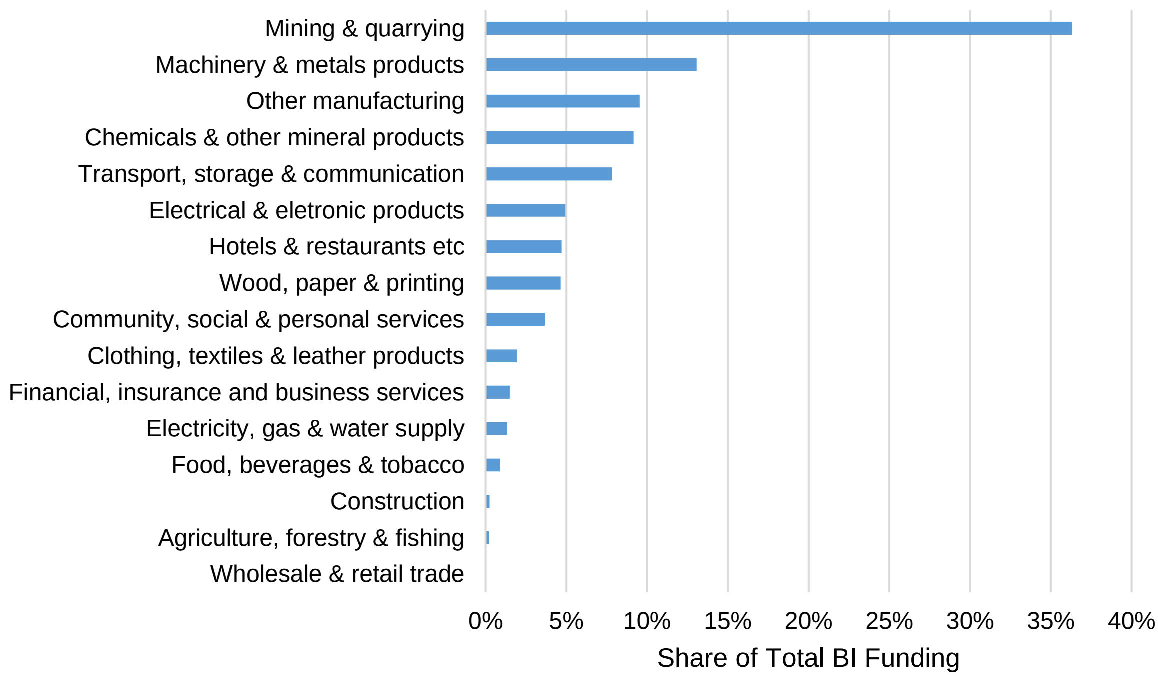
[34] Black industrialists are defined by IPAP as those businesses with >50% black shareholding and management control, a minimum project value of R30 million, and that generate direct employment/jobs.



Source: IDC Data, authors' calculations

In the period between 2013 and 2017, the majority of funding approved for black industrialists was in the mining and quarrying sector, followed by the machinery and metal products sector. Thus, in line with IDC's own funding, BI funding has continued to provide support to more upstream industries relative to more diversified and labour-absorbing downstream industries.

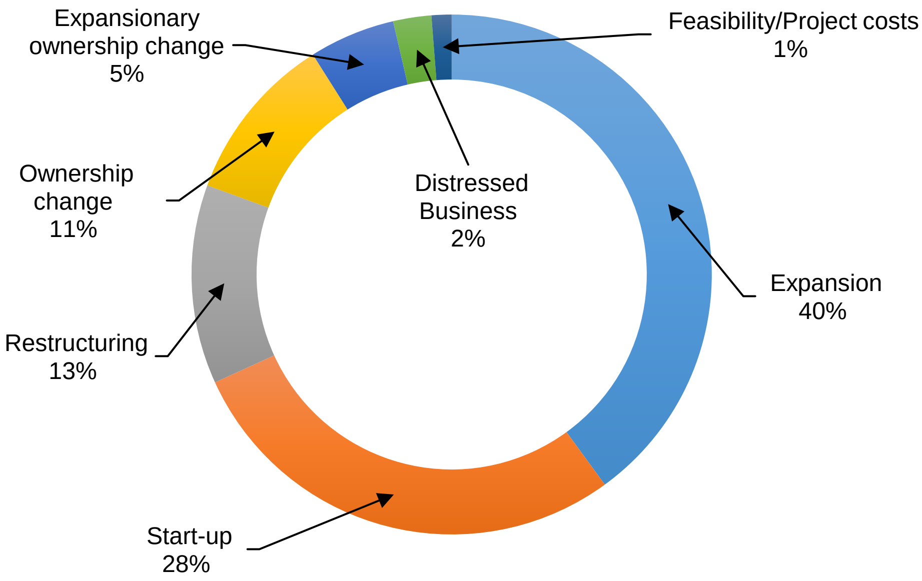
Figure 10: Funding Approved by Sector for Black Industrialists, 2014-2017



Source: IDC Data, authors' calculations

Nonetheless, most (68%) of the BI funding has been for expansions and new start-ups since the inception of the programme (Figure 11). Start-ups and expansions are important for increasing output and employment, with previous studies showing that expansionary BEE financing has been the most job creating (Maia et al., 2005; Mondi and Roberts, 2005).

Figure 11: Black Industrialists Funding by Type, 2014-2017



Source: IDC Data, authors' calculations

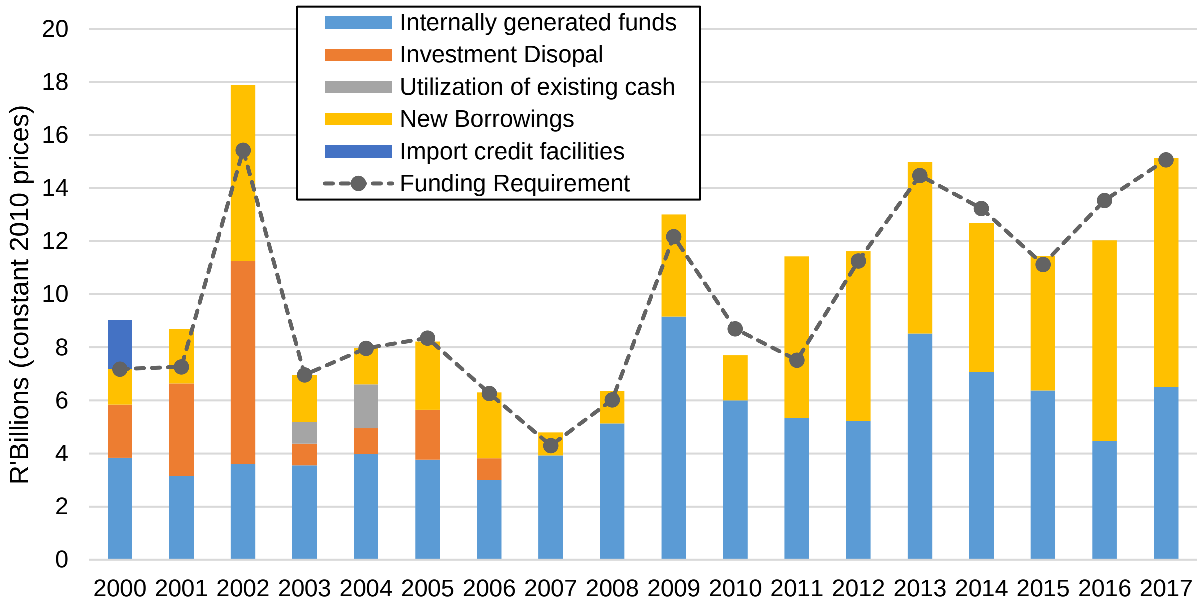
5.4 Sustainability and sources of funds

Unlike most other DFIs around the world, the IDC does not receive funds from government; it last received funds from government budget in 1954 (Mondi and Bardien, 2013). The IDC is thus a "self-sustaining" DFI that relies on borrowings, internal profitability, capital growth and exits from mature investments to maintain and expand its funding. In order to remain self-sustainable, the IDC has to practice prudent financial and human resource management (Jafta, 2017). This does however mean that it faces pressures in remaining self-sustainable.

We use data from the Directors' Report of the Annual Reports of the IDC to draw a picture of sources of funding over time. The figure below shows that the IDC finances its activities mainly through internally generated funds, borrowings, and investment disposals. Internally generated funds are most important to the IDC, and have remained high for most of the period. These mainly derive from dividends, repayment of loans, and advances received. Borrowings have however begun to take on increased importance, and have increased significantly from 2009 onwards (IDC, 2017). Since the IDC's model is to use equity divestments to fund equity investments, and borrowings to fund lending[35], the increase in borrowings from 2010 onwards implies an increased appetite for loan funding. This also coincides with the period in which more targeted industrial policy through the IPAP was being focused on. There were concerns raised in 2010 that the IDC may need to be re-capitalised in order to aid in the successful implementation of IPAP2[36], alluding to the challenges of the funding model.

[35] Interview with IDC, 6 July 2018.
[36] https://pmg.org.za/tabled-committee-report/749/

Figure 12: IDC's Funding Requirements: 2000-2017[37]



Source: IDC Annual Reports

While greater borrowings imply that the IDC can provide more loan funding into the economy, the increased borrowing activities of the IDC means that in recent years, the IDC has had to budget a greater amount to pay back on its borrowings, as shown in appendix 10. This may partly explain the lower levels of both real approvals and real disbursements in the later years (2014 onwards). However, IDC argues that approval and disbursement levels were not constrained by debt repayment obligations as such, but rather by relatively subdued demand-side conditions in the operating environment.[38]

The importance of IDC's investments

The IDC's large and major investments[39] are important for the institution for two primary reasons (IDC, 2011). Firstly, they contribute to a strong balance sheet, thereby allowing the IDC to raise funding at attractive rates, including, for instance, funding from the Unemployment Insurance Fund (UIF) at very low interest rates (IDC, 2011). The ability for the IDC to borrow increasingly larger amounts from international agencies relies heavily on the strength of its balance sheet owing to significant investments in key sectors of the economy.[40] Secondly, the dividend flows from these investments are an important source of funds, allowing the IDC to cross-subsidise its financing activities and to offset impairments associated with the high risk profile of the rest of its investment portfolio (IDC, 2011). Given the importance of these investments to the IDC, it proposed to the shareholder in 2011 that the level of mature equity investments does not reduce to below 30% of the total capital base (IDC, 2011). The implication of the above is that the type of businesses the IDC takes equity in is very important in the context of its financial model.

Borrowings

Borrowings consists of domestic (direct bank loans and issuance of bonds) and foreign borrowings (loans from private banks, DFIs and other multilateral agencies). The availability

[37] The lack of data for investment disposals from 2007 to 2017 was due to the non-reporting of this figure in the Directors'' Report in these later years.
[38] Email correspondence with IDC official
[39] In 2011, these included the 'legacy investments' in Sasol, BHP Billiton, Arcelor Mittal, Kumba Iron Ore and Mozal
[40] https://pmg.org.za/tabled-committee-report/1632/

and cost of funding are subject to fluctuating interest rates, local and international market conditions, pricing and liquidity available in the financial markets. Borrowings have increased post-apartheid, due to reintegration into the global economy and the Domestic Medium Term Note (DMTN) programme launched in 1999 which enables the IDC to issue bonds on the markets[41], as well as the availability of other non-traditional debt financing instruments. Currently, domestic borrowings are particularly important, with 66% of total borrowings emanating domestically in 2017/2018, with bank loans and private placement bonds[42] accounting for 31% and 26%, respectively.

Table 3: IDC's Borrowing Sources 2017/2018

Borrowing sources (R'million)	Budgeted Borrowings for FY 2017/18		Actual Borrowings (1 April 2017 - 1 February 2018)		Budgeted Borrowings for FY 2018/19 (Base)	
Domestic borrowings	**8775**	**68,2%**	**5070**	**66,4%**	**8333**	**66,7%**
Public bonds	*2900*	*22,5%*	*730*	*9,6%*	*2000*	*16,0%*
Bank loans	*3875*	*30,1%*	*2340*	*30,6%*	*2333*	*18,7%*
Private placement bonds	*2000*	*15,5%*	*2000*	*26,2%*	*4000*	*32,0%*
Foreign borrowings	**4098**	**31,8%**	**2566**	**33,6%**	**4167**	**33,3%**
DFI's/Multilateral agencies	*1142*	*8,9%*	*402*	*5,3%*	*1667*	*13,3%*
Bank loans and other	*2956*	*23,0%*	*2164*	*28,3%*	*2500*	*20,0%*
Total borrowings	**12873**	**100%**	**7636**	**100%**	**12500**	**100%**

Source: IDC Corporate Plan Presentation (2018)

Foreign borrowings are an important source of funds for the IDC too, accounting for 34% of total funding in 2017/2018. Borrowings from other international DFIs is important because they generally come with favourable terms and longer time horizons. However, funds from international DFIs are limited, with only about 5.3% of total borrowings in 2017/2018 coming from them.[43] Importantly, the IDC pools together funds from different sources and calculates the weighted average cost of capital, which is then used as a benchmark interest rate for on-lending.

Summary

The IDC's model has thus far ensured that the institution remains financially viable. It is clear though that the IDC's funding model has implications for how the institution functions. There is significant pressure on the IDC to retain a strong balance sheet in order to attract local and international lenders. Furthermore, the cost at which the IDC borrows money impacts on its on-lending rate. Since the IDC has an increasing focus on loans in order to meet its mandate of funding for industrialisation, the rate at which it offers loans is very important. In this regard, the IDC is less competitive than conventional banks. There is thus tension between the IDC's development mandate and its financial sustainability.

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[41] The Domestic Medium Term Note (DMTN) facility has, until 2017, issued bonds worth R28.1 billion (IDC, 2017).
[42] The Public Investment Corporation (PIC) has provided support to the IDC's green efficiency strategy through the provision of a longer term private placement bond. Similarly, in an effort to reduce unemployment, the IDC partnered with the Unemployment Insurance Fund (UIF) through private placement bonds in 2011 to provide funding to assist companies in order to save and create jobs (IDC, 2017).
[43] The DFIs that IDC has bilateral agreements with, according to its 2017 Annual Report, are Kreditanstalt für Wiederaufbau (KfW), African Development Bank (ADB), Agence Française de Développement (AfD)/Proparco, European Investment Bank (EIB), China Development Bank (CDB) and China Construction Bank (CCB).

6 Reflections on the DBSA and NEF's funding for industrialisation

6.1 DBSA

The Development Bank of Southern Africa (DBSA) is a South African government owned DFI, established on 1 September 1983 for the purpose of performing a broad range of economic development functions in South Africa (DBSA, 2012). Its functions at the time included administering loans between the South African government and the homelands. The activities of the DBSA have evolved over time, and have remained consistent with the new constitutional dispensation. Critical infrastructure projects involving provision of access to electricity, water, transport facilities and municipal services have been undertaken to lay solid ground for industrialisation.

6.1.1 Mandate and strategy over time[44]

This sub-section reflects on the DBSA's mandate and strategy over time in order to frame the data analysis in the next sub-section. The initial mandate of DBSA was extended in 1990 to support SMMEs instead of merely creating industrial jobs (DBSA, 2012). However the reincorporation of the TBVC states (homelands) into the Republic in the mid-1990s invalidated the initial agreement establishing the Bank, and prompted a review of its mandate (DBSA, 1995). Subsequently, the new mandate adopted in 1997 was to facilitate the provision of infrastructure finance in order to improve the quality of life of people in South and Southern Africa, focusing on water and sanitation, energy, roads and transport, and telecommunications (DBSA, 1997).

The later part of the 1994 – 2006 period put more emphasis on a proactive response to initiatives and programmes set out in various policies and initiatives of government including the Accelerated and Shared Growth Initiative for South Africa (ASGISA), the SADC's Regional Indicative Strategic Development Plan (RISDP), NEPAD, the gearing up for the 2010 Soccer World Cup, and other initiatives such as the Expanded Public Works Programme and Project Consolidate (DBSA, 2005). Moreover the second half of the 2000s was characterised by heightened shareholder activism and emphasis on maximisation of development objectives over financial returns.

Recently, the DBSA embarked on an extensive organizational review process, which resulted in a more sharpened mandate to concentrate the DBSA on core business of providing finance for infrastructure development. Over the years, overlapping mandates and broad focus meant that activities did not always achieved the requisite outcomes, resulting in unfunded initiatives which contributed to the decline in the surplus available for reinvestment and eroded the capital base of the DBSA (DBSA, 2013).

The mandate and strategies of the DBSA have evolved over time, and have remained consistent with the new constitutional dispensation. Critical infrastructure projects involving provision of access to electricity, water, transport facilities and municipal services have been undertaken. However there has not been explicit strategy to finance infrastructure for industrialisation, leading to gaps in industrial infrastructure finance in South Africa.

6.1.2 Funding for industrialisation

Investment and sectoral funding over time

Overall DBSA financing increased substantially in the period between 1995 and 2017 (Figure 13). Disbursements increased by 211% from R2.8 billion in 1995 to R8.9 billion in 2017. Financing in the years after the first democratic elections in 1994 were low for a couple of

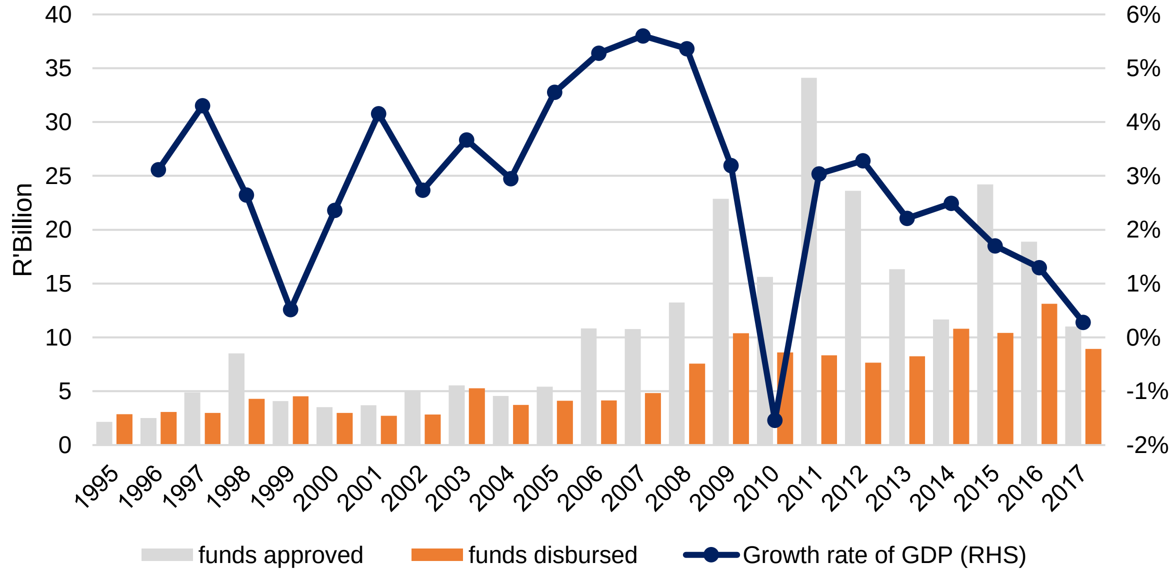
[44] See appendix 11 for more detail on the DBSA's mandate and funding strategy over time.

reasons, 1) there was limited lending to regional governments due to legal constraints on the borrowing powers of the newly demarcated provinces; and 2) projects initiated before the introduction of the new constitution could not be finalised immediately as a result of the transition; (DBSA, 1995). The major challenge for the Bank was the restructuring of the local governments. As a result of uncertainty leading to the demarcation process and the 2001 local elections, the Bank was cautious in lending to municipalities (DBSA, 2001). Local governments have since been DBSA's major clients. Since 2001, financing increased moderately until 2007/8, after which it jumped significantly to higher levels from 2009 onwards.

This was largely driven by the countercyclical approach the DBSA took following the 2008/9 financial crisis (DBSA, 2009). The global financial crisis restricted the interest of commercial banks in municipal funding, and the DBSA was highly successful in the municipal tender market during this period, though private banks re-entered the market later, and were awarded most municipal tenders (DBSA, 2010). This partly explains the fall back of DBSA's financing in 2010. Approvals then increased substantially in 2011, partly as a result of an approval of R7.5 billion for a number of renewable energy projects; the decision by the DBSA to call on a portion of the callable capital; and the Bank concluding an agreement with government to manage the newly announced national R9bn Jobs Fund.[45]

However, disbursements have been significantly lower than approvals since 2006. This is generally expected given that most of the infrastructure projects have a long preparation and lead time. Nonetheless, several other factors contributed to this. Around 2006/7, this was largely due to limited capacity at local government to implement approved projects, while the uncertain economic environment around 2009 caused institutions to delay the implementation of their programmes. From 2011, the contributing factors included: uneven economic recovery and the structurally weak position of many municipalities; the underspend on the public sector infrastructure budget; the reduced ability of clients to take up funding; the upward pricing pressures which resulted in a low conversion of approvals to commitments for the highly contested top 40 municipalities; the prolonged preparation required for new investments in under-resourced municipalities; and the fact that infrastructure development and financing in the rest of Africa is complex and time-consuming.[46]

Figure 13: DBSA Financing Post-Apartheid (2010 Constant Prices): (1995-2017)



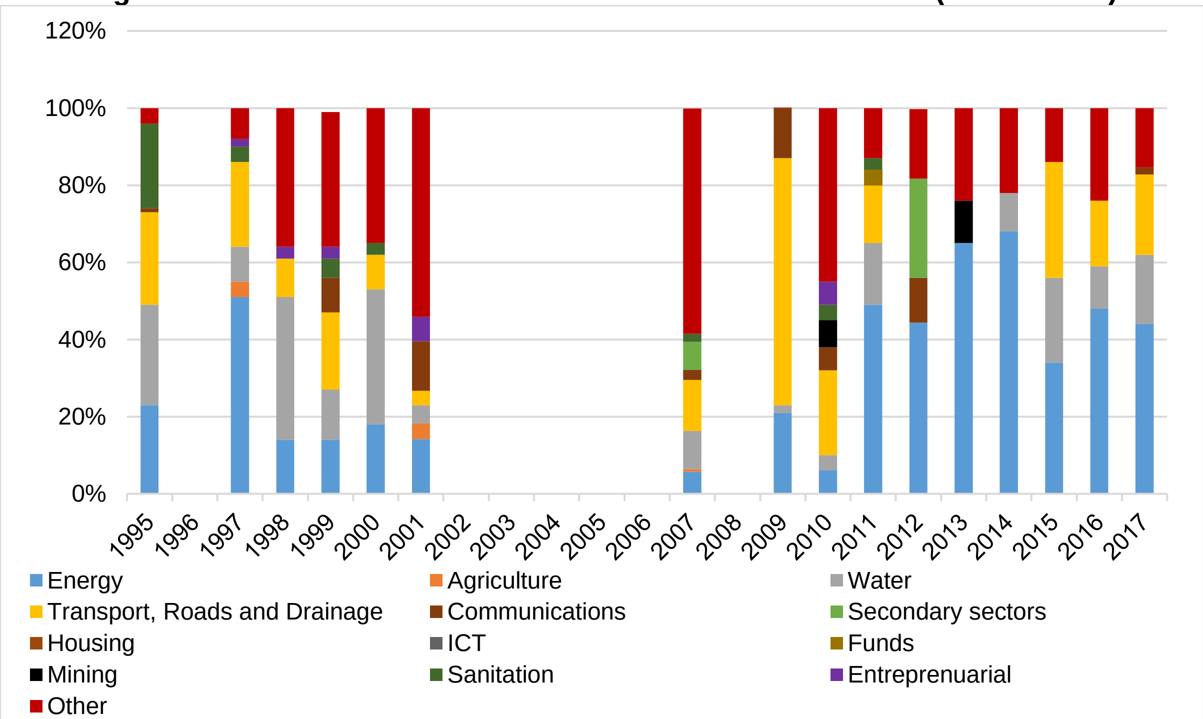
[45] Note that the figures quoted in this paragraph are nominal
[46] See DBSA (2009, 2011 & 2015)

Source: Author's construction based on annual reports

DBSA's main focus has been on the provision of multiple services and social services to households (red below), and support to the energy sector. The former includes reticulation of water, sanitation, electricity and transport services, as well as capacity building services for municipalities. The focus on household services, particularly in the late 1990s and early 2000s is in line with government's mandate that prioritised the provision of infrastructural development finance and the establishment of the Development Fund. It also reflects the heightened shareholder activism and emphasis on maximisation of development objectives, to support communities in dire need of infrastructure and economic development opportunities (DBSA, 2007).

The persistent prioritisation of the energy sector is in line with DBSA's core sectors identified in different strategies. In the 1990s, large investments in energy were due to bulk and connector infrastructure for the provision of electricity. This was mostly due to infrastructure backlogs in South Africa at the time.[47] In the later years, the increased investments in energy were due to heightened focus on renewable energy and liquid natural gas in South Africa. Some of the key renewable energy projects include the !Ka Xu Solar One, Bokpoort Concentrated Solar Power Project, Jeffreys Bay Wind, Kalahari Solar One, De Aar Solar and Droogfontein Solar (DBSA, 2012). Further, DBSA disbursed R1.4 billion to the government's Renewable Energy Independent Power Producers Procurement (REIPPP) programme (DBSA, 2013).

Figure 14: Sectoral Breakdown of DBSA's Total Investments (1995 – 2017)



Source: Author's own construction based on annual reports
Notes: Data was not available from the annual reports for some years in the figure above

[47] In 1995, almost 50% of the South African population did not have access to electricity (DBSA, 1997)

The importance of transport, roads and drainage is also notable across the entire period of analysis. This is especially crucial in the context of regional integration and industrialisation. Studies have indicated that regional transport infrastructure is one of the key hindrances to scaling up industrialisation in the region (see Baloyi and Zengeni, 2015; and Paelo & Vilakazi, 2017. Key transport infrastructure projects that the DBSA has taken in the region include the approval of US$40 million to assist the Tanzania Ports Authority with upgrading the Dar es Salaam port (DBSA, 2009). The port is an important project in the North-South Corridor, and its limitations of have constrained the trading capacity of several countries in the region, (DBSA, 2009). The Bank also supported the improvement of a border post between the DRC and Zambia, paving the way for more efficient trade between the two countries (DBSA, 2010). Further, the Bank approved two groundbreaking major road investments in Zambia and Zimbabwe, advancing regional priority initiatives such as the North-South Corridor (DBSA, 2011).[48] In South Africa, the Tshwane Rapid Transit (TRT) signed a R488 million agreement with the DBSA in 2014 to fund the purchase of 40 Mercedes Benz Compressed Natural Gas (CNG) buses as well as the local content of 131 Volvo diesel buses (DBSA, 2015).

In sum, DBSA's energy investments have been important for expanding access to electricity to majority of South Africans since 1994. Moreover this has been important for industrial enterprises operating within the municipalities that DBSA services. Industrialisation and modern production depends on electricity supplies that are free of interruptions and shortages for businesses and factories to operate efficiently. However more still needs to be done to improve South Africa's energy infrastructure, given that electricity interruptions and shortages remain one of the key challenges industrial enterprises face in various municipalities (Bosiu et al., 2016).

Transport infrastructure has equally been important, especially in the context of regional integration and industrialisation. Key regional transport infrastructure projects have improved regional integration, trading capacity and prospects for industrialistion. However given the relatively small proportion of DBSA funding that goes to the rest of the continent, the investment outcomes have been limited. On the other hand DBSA's overall technological infrastructure finance has been largely insignificant, despite the fact that the efficiency of industries is largely determined by the availability and quality of the supporting technology infrastructure (Tassey, 2008). For example DBSA's information and communication technology (ICT) infrastructure finance has been close to non-existent in relative terms since 1994.

Loan duration and concessional funding

Most of the funding provided by DBSA is debt funding, with 90% of disbursements in the form of loans in the period under analysis from 1995 to 2017, keeping in mind that most of the DBSA transactions are with governments. Though equity funding does emerge in the mid-2000s due to private sector investments in black economic empowerment transactions as well as through private equity funds (DBSA, 2011), it is still relatively insignificant compared to debt.

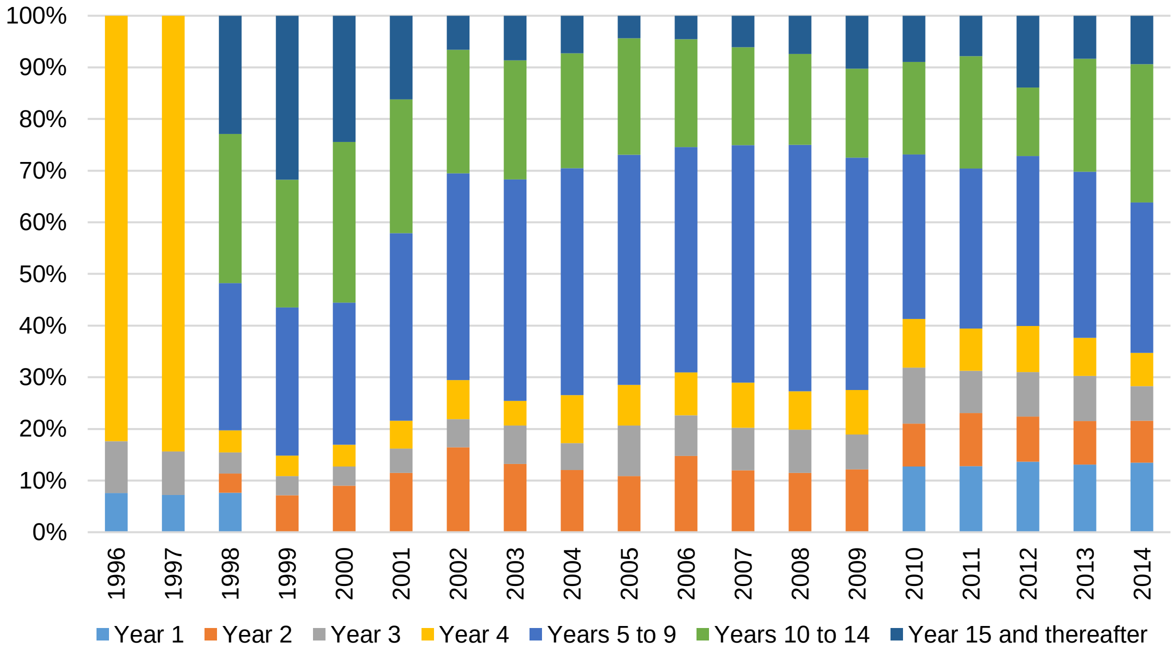
On the loan side, DBSA's interest rates have averaged between 8% and 14% in the 1994-2005 period according to data from its annual reports.[49] For most of the period under review, DBSA's loan book consisted of loans maturing in at most nine years, with most loans

[48] The DBSA signed a loan agreement in the amount of US$262 million with the National Road Fund Agency of Zambia for the rehabilitation of five priority roads (DBSA, 2011). In Zimbabwe, R712 million was provided towards the roads rehabilitation programme developed with the Zimbabwe National Roads Administration (ZINARA) to support the improvements of the Harare–Plumtree and Harare–Mutare road links (DBSA, 2014).

[49] Interest rate data was not publicly available after this period.

concentrated in the 5-9 year band (Figure 15). This is a relatively short financing period given that most of infrastructure projects take longer time periods. In the United Kingdom, the average term of the Infrastructure Index, an index of five infrastructure bonds across different sectors[50], is 20 years.[51] This shows that DBSA's finance is relatively conservative and less patient than expected for a development finance institution. That said, it is also important to be mindful that the duration of DBSA's on-lending is determined by the duration of funding it gets from various sources, that is, assets have to match liabilities. The duration of DBSA's liabilities is largely within the 5-9 years band,[52] thus matching with the duration of most of its investments as shown in the figure below.

Figure 15: Maturity Analysis of DBSA's Loan Investments: 1995 – 2017



Source: Author's construction based on annual reports

6.1.3 Sustainability and sources of funds

Similar to the IDC, DBSA is a Schedule 2 entity which is expected to be financially sustainable. DBSA has remained financially sustainable over the entire period under review. Until 2013, the Bank had not received any funding from government. Treasury approved a R7.9 billion capital injection over a period of three years from April 2013 to March 2016 to support DBSA's refocused mandate to drive its infrastructure funding by supporting municipal lending, the infrastructure plans of state-owned enterprises, regional lending and funding for public-private partnerships.

Understandably, DBSA faces challenges in diversifying both the sources of funding, while improving the terms and conditions of funding including costs, flexibility and access to funds (DBSA, 2011). It is difficult to ascertain a complete picture of DBSA's sources of funding. Nevertheless, most of DBSA's funding is sourced from private financial and capital markets. In 2014, about 60% of the Bank's funding came from debt capital markets, compared to 72% in the previous year (Fumbata, 2016). During 2017/18 financial year borrowings accounted for

[50] Note that the index might be shorter for loans, given that typically have longer durations than loans
[51] Enerst & Young (2016)
[52] Email correspondence with DBSA, 3 August 2018

61% of total funding raised.[53] DBSA also receives concessional funding from other DFIs and bilateral and multilateral institutions such as Agence Francaise de Development, the African Development Bank, Kreditanstalt fur Wiederaufbau (KfW), the Japan International Cooperation Agency (JICA), the Japanese Bank for International Cooperation (JBIC) and the World Bank.

Overall, there is significant room for scaling up DBSA's infrastructure investments to spur industrialisation both in South Africa and the region. However, DBSA has not had an explicit strategy to finance infrastructure for industrialisation, leading to gaps in industrial infrastructure finance in South Africa. Consequently, the IDC has had fill these gaps by allocating funding for infrastructure projects, at the expense of its core mandate of developing industrial enterprises. The inability of DBSA to scale up investments is also largely due to sources of funding. Therefore in the context of regional industrialisation and trade, a regional coalition and collective mobilisation of resources for infrastructure finance is crucial. The DBSA has the necessary technical capacity to spear-head regional infrastructure finance for industrialisation, given sufficient financial resources.

6.2 NEF

The National Empowerment Fund is a schedule 3A government DFI established in 1998. Parliament introduced the National Empowerment Fund Act 105 of 1998 (the Act) which established the National Empowerment Fund Trust (the NEF) to guide the process of crafting a growing, inclusive and employment-generating economy (NEF, 2004, 2005 & 2014). Among the objectives of the NEF are to provide historically disadvantaged persons with the opportunity of acquiring shares or interests in state owned commercial enterprises or in private business enterprises; promoting and supporting businesses run by historically disadvantaged persons; and encouraging the development of a competitive and effective equities market inclusive of all persons in the Republic.

6.2.1 Mandate and strategy over time

The NEF operates under the umbrella of the dti and is governed by the Board of Trustees (NEF, 2004). The NEF's strategy initially sought to achieve its objectives by providing black people with opportunities to acquire shares in both restructured state-owned assets and private business enterprises (NEF, 2004). 2004 marked the first change in the original strategy of promoting BEE through private equity, venture capital, asset management and mass empowerment savings schemes and unit trusts (NEF, 2004). The NEF was allocated an initial R2 billion capital commitment from National Treasury (NEF, 2004), and it created three schemes (NEF, 2004) and launched seven initial products (Table 4):

Table 4: Initial Product Offerings

Pillar	Product	Purpose	Thresholds
Group and Entrepreneurial Schemes	Generator	To assist with the establishment of new BEE businesses	R250 000 — R1m
	Accelerator	To assist with the expansion of existing BEE businesses	R1m — R3m
	Transformer	To assist BEE entrepreneurs with the acquisition of shareholdings in existing businesses	R3m — R10m
	Rural and Community	To assist with the establishment of income generating	R3m — R10m
Market Making	Capital Markets Fund	Invest in enterprises, including those owned by women, that seek to list on the JSE or its junior AltX market	R1m — R10m
	Liquidity and Warehousing Fund	Assist HDP sellers by acquiring and temporarily warehousing their shares before on-selling them to new HDP shareholders	R10m — R50m

[53] Email correspondence with DBSA, 31 July 2018

	Strategic Projects Fund	Acquire equity in large strategic projects and assume the role of the BEE partner for future onward transfer to BEE shareholders	R10m — R50m

Source: NEF (2004)

During the 2005/6 financial year, the BB-BEE landscape and financing environment were reassessed on the basis that black entrepreneurs still remained unable to access capital for their businesses. The organisation restructured its core business divisions into Asset Management and Fund Management. Within the Fund Management Division, two funds were established: the NEF iMbewu Fund and the NEF Corporate Fund (NEF, 2006). The iMbewu Fund handles NEF applications from black entrepreneurs for debt funding below the R3 million threshold and debt funding in excess of R3 million for preferentially procured contracts. The NEF Corporate Fund accepts applications in excess of R3 million and of a more complex nature.

The restructuring of business operations further resulted in new approaches,, including the devotion of considerable attention to the Post-Investment Division to ensure that the NEF is creating sustainable businesses. Adjustments were also made in the funding criteria, with thresholds revised to better accommodate good quality applications received by the NEF (NEF, 2006). Further, some enhancements were introduced to address new BB-BEE issues such as the need to support funding for preferential procurement through a new product offering bridging finance. This was particularly relevant in the logistics sector (NEF, 2006).

By 2008, the NEF had created a new division – the Strategic Projects Fund (SPF) (NEF, 2008). The SPF aimed to provide project finance which allows black entrepreneurs to participate in high growth strategic projects at an early stage without paying a premium for equity. Essentially, it aimed to acquire equity in national strategic projects within South Africa at a stage when the bankable plan is still being developed. This is because historically most BEE deals were concluded through mergers and acquisitions with existing companies, leaving BEE beneficiaries with less value to extract at the completion of transactions, since these companies would either be matured, overpriced or subject to harsh market volatility (NEF, 2008). Most of the SPF projects are of a greenfield nature and fall into one of the following four sectors: (i) business process outsourcing; (ii) mining and mineral beneficiation; (iii) renewable energy; and (iv) agro-processing and tourism (NEF, 2008).[54] However, the overall NEF investment portfolio is generalist, but does strive to mirror the priority sectors as identified by the dti’s industrial policy as well as AsgiSA previously (NEF, 2006).

In addition to the Strategic Projects Funds (SPF), the NEF established the Rural and Community Development Fund (RCDF) as the third operational leg under the Fund Management Division (NEF, 2008). The RCDF is mandated to facilitate the ownership and management by workers, cooperatives and other collective enterprises in sustainable investment projects in local and rural communities.

From 2010 onwards, the NEF shifted its strategy to support the following priorities:

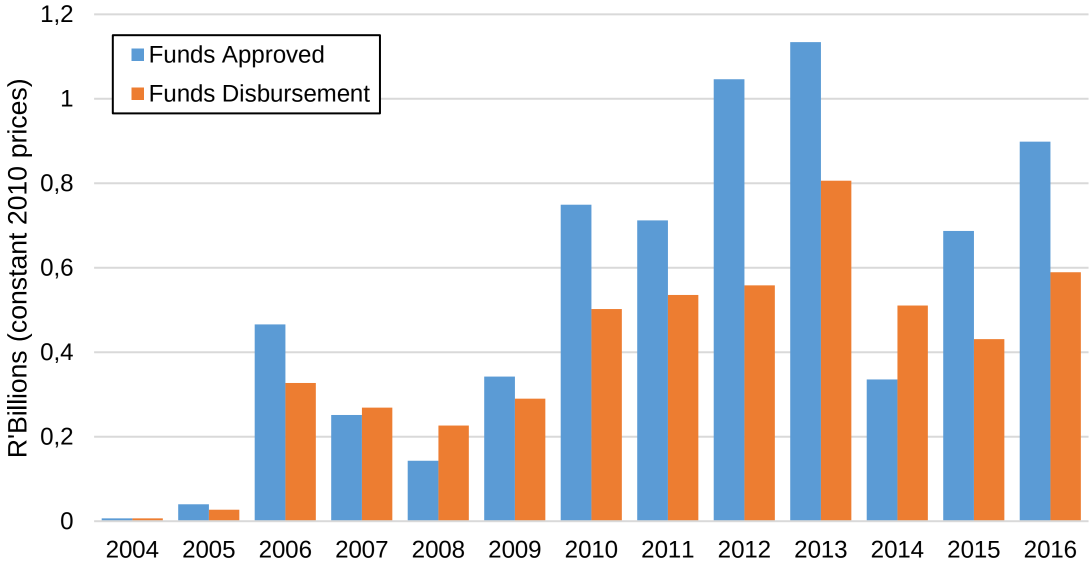
- Increased focus on expansionary BEE where new capacity is created in the economy instead of replacement capital transactions;
- Alignment of sectors to those of the dti, IPAP and AsgiSA, which were identified as arts and culture, tourism, textiles, agro-processing, automotive, chemicals, ICT and aerospace, film industry, exports, business process outsourcing and beneficiation

[54] Some key investments include a 6.2% equity investment in a R1.2 billion Solar Panel Manufacturing plant; and investment in a R80 million biomass manufacturing company called Renu Energy to produce a renewable energy feedstock for power plants in Europe.

- Launch of a Venture Capital Fund aimed at assisting small and medium sized enterprises
- Emerging and black industrialists

The change in priorities resulted in a significant increase in funds approved and disbursed, as shown in the figure below.

Figure 16: NEF Funds Approved vs Funds Disbursed, 2004-2016



Source: NEF Annual Reports

Financial sustainability became an issue of concern though. The NEF was initially capitalised in 2004 by government to the value of R2.4 billion, all of which was fully disbursed by 2010 as planned (NEF, 2014). Since then, the government has not recapitalized NEF.[55] As a result, the NEF has had to self-finance with dividends, interests from its investments[56] and capital generated from loan repayments (NEF, 2014). As a Schedule 3A public entity, the NEF is restricted from borrowing or issuance of guarantees, limiting the scope of funding sources.

By 2014, the organisation was compelled to declare a temporary moratorium on lending due to declining resources and unrealised recapitalisation initiatives (NEF, 2014). This was to curtail the erosion of available resources at a time when the prospects for recapitalisation were uncertain (NEF, 2014). Nonetheless, the moratorium was lifted at the end of the financial year, following the mobilisation of capital to the value of R950 million, through internal reserves (NEF, 2014). In 2016, NEF listed 'recapitalisation risk' as one of its material risks, following a financial crisis the institution experienced in 2014 (NEF, 2014 & 2016).

The moratorium period however provided the institution with the opportunity to reconfigure, resulting in a more efficient deal pipeline which focuses on bankable transactions, and strengthened controls and improved collections capacity (NEF, 2014). The improvements are reflected in the increased return on investment (ROI) compared to 2013.[57] Moreover surplus increased from R113 million in 2013 to R594 million in 2014, although a substantial portion of it was due to value gains from equity investments. The increased surplus was also due to decreased operating expenses. Moving forward, the NEF plans to fulfil the objective of financial sustainability by ensuring investments in transactions with economic merit, through active financial management, portfolio monitoring and support activities (NEF, 2016). The

[55] See NEF (2014, 2015, 2016 & 2017)
[56] NEF has stakes in MTN Group and Uthingo. In 2014, the stakes were 1.5% and 5% respectively.
[57] ROI after impact of impairments was 2.1% in 2014 compared to -7.1% in 2013.

increasing push for financial management of the institution will serve as a constraint as far as providing funding for industrialisation is concerned, as discussed in 6.2.2. below.

6.2.2 Sustainability and Sources of Funding

As highlighted in the previous sections, NEF is classified as Schedule 3A entity by the PFMA. This means NEF is financed fully or substantially from the National Revenue Fund, taxes or other statutory money. Further, it does not enjoy much autonomy like Schedule 2 entities do. As a result, it sustains operations from Treasury/the dti allocations, and inflows mainly from interest on deposit from the banks, portfolio collections, and dividends from listed/unlisted investments. It is restricted from borrowing and/or issuing guarantees. The major source of its funding has been subsidies from government.

Subsidized funding is important and necessary to achieve wider developmental impact, since it enables vulnerable sectors to access concessional finance in the form of lower interest rates and longer time horizons. Unlike with private sector funding, subsidized funding comes at virtually no cost to the DFI depending on the type of subsidy, although the cost is ultimately borne by the tax payers. This is especially true for DFIs that are exempt from tax, as is the case with NEF. The NEF was granted a taxation exemption status under section 10(1)(CA) (i) of the Income Tax Act in 2005 (NEF, 2005). Therefore, since it matters to society how the subsidy is funded, subsidised DFIs are expected to deliver better results in terms of development impact.

In contrast, and as illustrated with the cases of IDC and DBSA, completely financially-independent DFIs battle to deliver maximum development outcomes whilst maintaining financial sustainability. Because they have to recover costs and generate returns for themselves, this restricts their ability to offer concessional lending. For DFIs that are recapitalised by government, without a clear and committed long-term recapitalisation programme, and given competing demands for limited resources, it is easy for government to simply shift priorities. The matter of recapitalising the NEF had been on the table since 2009 (NEF, 2014). Several funding scenarios were explored with government, but none of them materialised. By 2014, the scenarios had been narrowed down to four options (NEF, 2014).[58]

It is important to note that the events leading to the moratorium of approvals in 2014 had little to do with the actual financial performance of NEF. In fact out of the total approvals of over R5.47 billion since inception to 2014, R1 billion had been repaid and reinvested (NEF, 2014), keeping in mind that NEF typically offers longer repayment horizons, over five to eight years on average and up to ten years in the case of industrial and manufacturing projects. In fact, when compared to actual disbursements, the recovery rate was much higher.

By the end of 2016 though, the NEF had still not been recapitalised. This continued to pose significant constraints on NEF meeting its objectives. It had to ensure that it did not approve transactions that it did not have cash for (NEF, 2017), and improve recovery rates to enable ongoing lending. The debt collection ratio increased to 97% in 2016 from 84% in 2015.[59] It was then announced in 2017, that the NEF would become a wholly-owned subsidiary of the IDC in order to meet the demand for funding for black entrepreneurs (NEF, 2017).

[58] (i) Financial recapitalisation through the annual Medium-Term Expenditure Framework (MTEF) application to the value of R2,3 billion submitted to National Treasury through the dti;(ii) A loan facility from the DFI sector to the value of R1 billion; (iii) the possibility of equity allocations of Government's shareholding in nonstrategic entities; (iv) The NEF has applied to the National Treasury for reclassification from a Schedule 3A to Schedule 2 entity under the Public Finance Management Act (PFMA), which will improve their fund-raising ability.

[59] NEF (2016)

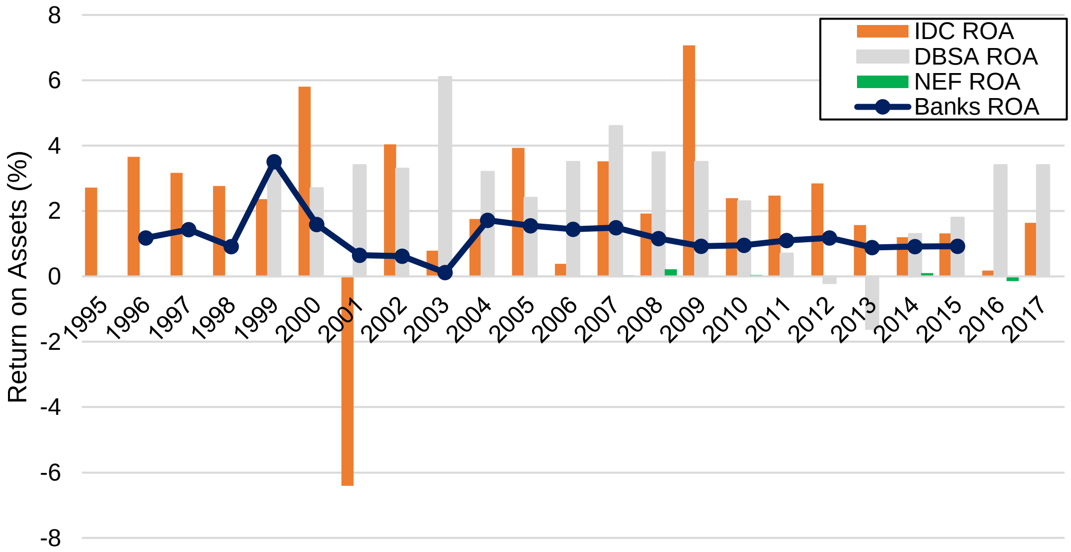
However, it is not clear how transferring NEF to IDC will increase its developmental impact. As highlighted in the previous sections, IDC's own developmental impact is constrained by the fact that it is not subsidised. This compels it to use stringent criteria when assessing applications in order to remain financially sustainable. The NEF is likely to follow the same path despite having previously relaxed criteria to better accommodate the numerous applications which were previously declined due to these thresholds.[60]

7 Financial Indicators

The performance of DFIs, like other financial institutions and businesses, can be measured in terms of their efficiency and how they generate returns relative the total amount of assets they hold. In this section, the three DFIs (IDC, DBSA and NEF) are compared across three measures (profitability; percentage of non-performing loans; and operating efficiency[61]) against a banking sector average. These measures were chosen because they provide a good basis for comparing how the development banks are performing in relation to the South African banking sector.

The figure below compares the return on assets (ROA) of the three DFIs with the commercial banking sector. We expect the profitability ratios of DFIs to be significantly lower than those of banks, as they should be providing finance at a more competitive rate and over longer time periods. However, both DBSA and IDC's returns on assets are greater than that of private banks for most years since 1995. This is an indication that DFIs' pricing follows the principle of high risk and high return, similar to private financial institutions. However, this is not unexpected given that DFIs source funding from private financial markets and therefore take on investments that give appropriate returns. Further, because both IDC and DBSA are schedule 2 entities under PFMA, they are expected to generate profits and declare dividends. The higher returns for DFIs relative to private banks may also partly be as a result of the fact that banks have relatively larger asset bases than DFIs. The NEF's return on assets is extremely low, pointing to the fact that the NEF prioritises returns less than the IDC and DBSA.

Figure 17: Profitability Ratios for IDC, DBSA, NEF and a Banking Sector Average, 1995-2017



Source: IDC Annual Reports, DBSA Annual Reports, NEF Annual Reports and the Global Financial Development Database (June 2017)

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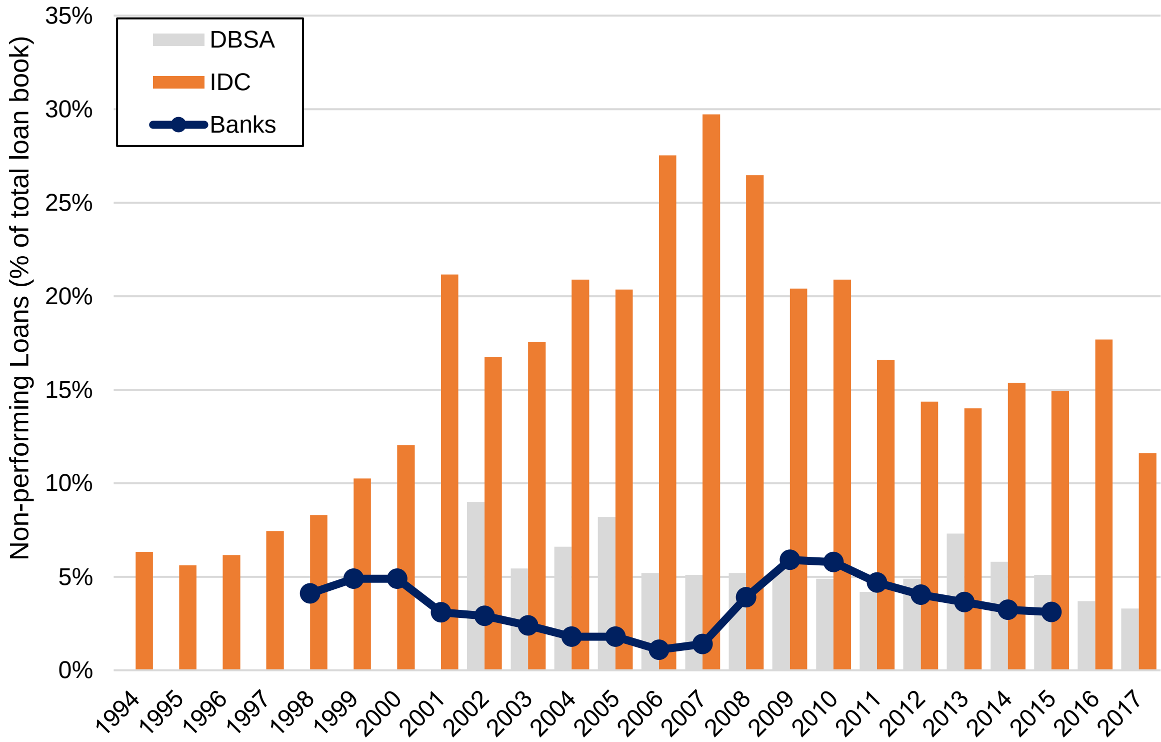
[60] NEF (2006)

[61] The NEF data on non-performing loans as a percentage of their total loan book did not have enough data points to make a comparison.

Note: Data from 1994 for the IDC was removed, as this appeared to be an outlier
Data was only available for the "Banks ROA" from 1996-2015
ROA calculated as Net Profit/Total Assets

We expect DFIs to have higher proportions of non-performing loans, given that they should be providing credit to riskier investments. The DBSA and IDCs non-performing loans are higher than the commercial sectors. In the case of the IDC, it has been suggested that since IDC loans are not more competitive, businesses come to the IDC as a last resort, that is, if they are not able to procure loans from the private banking sector. The fact that IDC has a higher proportion of non-performing loans than the DBSA highlights that the loans provided by the IDC are relatively riskier than the DBSA. This is reasonable, given the DBSA's focus on supporting infrastructure projects rather than dealing directly with small businesses. The decline in non-performing loans by the IDC between 2007 and 2017 could imply that the IDC has become increasingly risk averse though.

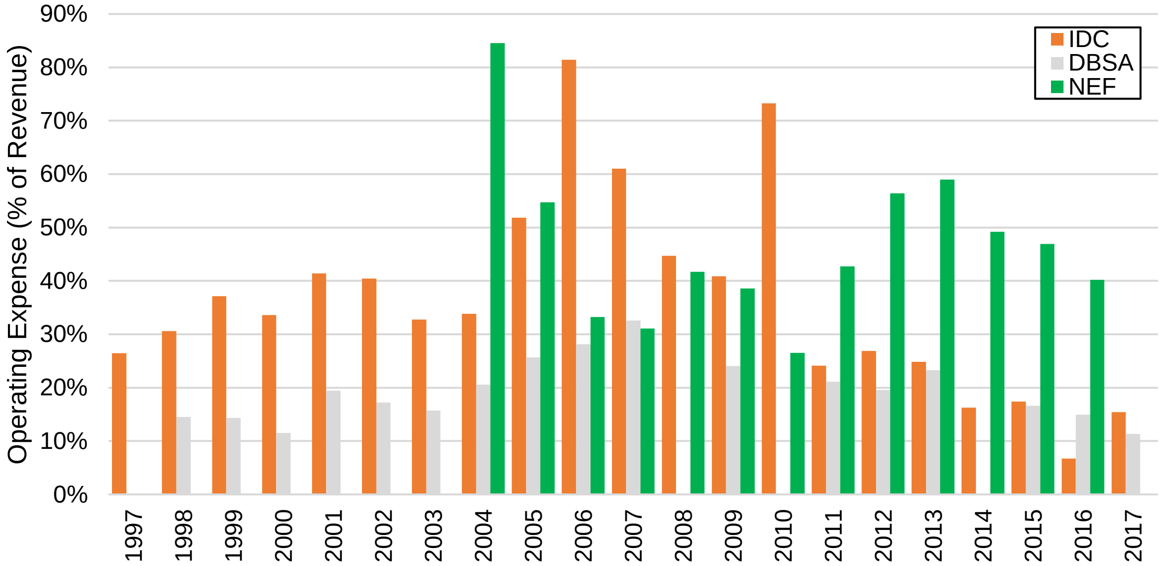
Figure 18: Non-performing Loans for IDC, DBSA and a Banking Sector Average, 1994-2017



Source: IDC Annual Reports, DBSA Annual Reports and the Global Financial Development Database (June 2017)

Next we consider the operational efficiency of the institutions. DBSA performed the best, with operating expenses as a percentage of revenue below 30% for almost all years in the period (Figure 19). Both the DBSA and IDC's operating expenses increased from 2004 to 2006/7 largely due to increases in staff costs. While IDCs operating expenses were increasing until 2006, there has been a notable decline since then and particularly from 2011 onwards when both DBSA and IDC have managed to contain cost and improve efficiency. The NEF's figures for operating efficiency, by contrast, were extremely high in 2004, and remained high between the 2011 and 2017 period. While these costs are expected to be high in the early years of operation as the institution establishes itself, it is worrying that they still remain high.

Figure 19: Operating Efficiency of IDC, DBSA and NEF: 1997 – 2017



Source: IDC and DBSA Annual Reports, Authors' calculations
Note: Data was unavailable for DBSA in 1997, 2008. 2010 and 2014

The level of administrative costs is a concern for the IDC when comparing it to other development financial institutions in the table below.

Table 5: International Comparison of Financial Indicators

Bank	Year	Assets (US$'Billions)	Leverage (Assets/Equity)	Administrative Costs/Operational Profit (%)
CDB	2014	1663	15	22
EIB	2015	624	9	25
KfW	2015	539	24	58
IBRD	2015	276	9	108
BNDES	2015	238	29	16
IDC	2015	9,8	1,5	199
DBSA	2015	5,6	3,0	71

Source: Ferraz and Coutinho (2017) and authors' calculations for South African DFIs

The data above provides some interesting insights. Firstly, while it may be expected that development finance institutions' profitability may be lower than the private banking sector, this is not the case for the IDC and DBSA. The funding models for these institutions appears to result in them being more profit-driven than we would have expected. For the IDC, this is despite the fact that its proportion of non-performing loans is much higher than for the private sector, possibly as a result of the fact that businesses turn to it as a lender of last resort. Finally, when comparing with international DFIs, the IDC could improve its operational efficiency as well.

8 Discussion/Conclusion

The past decade has seen re-emerging consensus, domestically and abroad, on the importance of industrialisation for development.[62] A more diverse productive structure enables countries to engage in high-productivity activities that lead to faster development (Felipe, et

[62] The process of industrialisation is the movement of factors of production to higher productivity and more complex activities (see, for example, McMillan et al. 2017). Changes in overall output per worker can be due to improvements within sectors and shifts in factors of production (labour and capital) across sectors, from lower productivity to higher productivity activities (McMillan & Rodrik, 2011).

al., 2012). In contrast, one of the most striking features of the post-apartheid South African economy is how little the economy has transformed, with upstream and resource-based sectors still most prominent. Changing the structure of the economy is key to dealing with inequality, since persistence in the structure impacts on wealth creation and therefore on inequality (Goga et al., 2018, forthcoming).

The role of the private banking sector in aiding in industrialisation of the South African economy has been limited. The commercial banking sector in South Africa has been oriented towards funding for consumption rather than investment – credit for investments has remained relatively stagnant over the period from 1994 to 2017, with only a marginal increase. Moreover, the South African economy has become increasingly financialised (Issacs, 2016; Newman, 2017; Karawoski, 2017). Literature has linked increasing financialisation to profit-hunting by firms rather than investment in productive assets, thus working against industrialisation.

This paper considers the role of development finance institutions in contributing to changing the structure of the post-apartheid economy away from its traditional resource base and dealing with failures in financial markets to finance risky development projects. The importance of DFIs in the South African context is underlined by the fact that the South African economy is extremely concentrated, with a few large firms dominating many sectors of the economy, leading to increased barriers to entry and limited participation in the economy. This has contributed to persistent inequality.

In this context, development finance needs to work within industrial policy to aid in the promotion and entry of smaller and more dynamic black-owned businesses in downstream diversified sectors. Furthermore, DFIs should be providing patient capital and concessionary finance in order to allow businesses time to build up capabilities. DFIs should essentially take a calculated chance on a number of enterprises/projects, whilst appreciating that a significant number of them might fail, but the few that succeed become effective competitors that can innovate and structurally transform the industries in which they operate.

The IDC and industrialisation of the economy

The paper focuses on the IDC's provision of finance for industrialisation, as the IDC is the main player in this space. The IDC has been in existence from 1940, and was instrumental in providing funding and support to the strategic interests of the apartheid government. Post-apartheid, the IDC has been subjected to a number of policy shifts, though industrial policy became more prominent with the first IPAP in 2007.

Though data is not available on funding by sectoral activities for the 1994 to 2007 period, other studies have shown that IDC funding in this period reinforced the industrial structure by providing funding to traditional upstream, resource-based sectors. In the later period from 2007, IDC funding moved to be more in line with South Africa's industrial policy, but had a somewhat muted effect on industrialisation, as a result of two main factors – being self-sustainable (the funding model), and the nature of and lack of coherence in industrial policy in South Africa.

Self-sustainability and the impact on funding for industrialisation

The IDC is a self-sustainable institution, which needs to generate funds in order to invest funds. This limits its ability to provide funding for industrialisation in the economy. Borrowings from national and international markets are on-lent in the economy; this means that the interest rates at which it is able to lend as well as the duration of loans is dependent on the rate at which funds are borrowed and the duration of funding. In the case of the IDC at least, it was stated that the interest rates offered by the IDC are less competitive than commercial rates.

The funding model of the IDC therefore poses a real constraint to providing cheaper loans and "patient capital" in the economy. The IDC does provide grace periods as far as loan repayments are concerned, though the extent and nature of this is unclear. The fact that the IDC is self-sustainable means that it is governed by a financial logic which makes it much less likely to take on the role of providing a significant amount of risky funding in the economy, and that it can take a lead investment role in financing commercialisation and entry in new and emerging sectors.

This is reflected in the data in a number of ways: First, the sectoral funding shows that finance provided in the economy from the 2008 period continued to provide support to more established upstream industries relative to more diversified and labour-absorbing downstream industries, though there was a shift to more diversified sectors to a limited extent. Overall, between 2008 and 2017, sectors that received the most funding are mining and quarrying; electricity, gas and water supply; machinery and metals products; and chemicals and other mineral products. The following sub-sectors received the highest chunk of funding within the main sectors: gold and uranium ore mining; electricity, gas and steam; basic iron and steel; and other chemicals and man-made fibres.

One of the areas in which non-traditional funding has increased was renewable energy (from 2014 onwards). Through the investments in renewables since 2011 the IDC note that it has played a critical role in de-risking the green economy which has resulted in the private funding sector stepping up their investments while at the same time allowing the IDC to scale back their green economy investments. IDC's success as far as providing funding for the REIPPP programme highlights that the IDC may be well-placed for funding well-designed programmes (we return to a discussion on industrial policy below).

Second, though the IDC has a number of on-balance sheet schemes which provide concessionary financing, the scale of these schemes is small compared to overall financing provided by the IDC. Thus, the amount of concessionary funding that the IDC can provide is quite limited. Third, it is difficult to get a good picture of whether the IDC has had an increasing penchant for funding smaller/riskier businesses as a result of its changing definition of what constitutes a small business. The data does however show that the number of approvals has been decreasing from 2002 to 2017 though the quantum of funding has been increasing. This implies that the IDC has moved towards funding larger businesses, and this is corroborated by data on the size of businesses from 2011 onwards. The IDCs greater focus on bigger businesses should be seen in light of the need for funding entrants in order to aid industrialisation of the economy.

Fourth, the IDC's initial approach to BEE funding was to fund acquisitions of shares in existing businesses by black shareholders, rather than to invest in black businesses. This shifted in 2002 towards funding of start-ups, expansions and acquisitions of businesses. The data shows that through to 2009 BEE funding was rising, though we cannot unpack whether this has been for start-ups, expansions or acquisitions. Funding for black industrialists has come on board more recently (2014), with about 30% of total funding approvals in 2017 being allocated for black industrialists, though this again has been in more upstream industries. While the sectors being funded by the IDC may partly be as a result of the projects that are brought to it, there is a role for the IDC to play in purposefully funding riskier businesses that will aid in the industrialisation of the economy, for instance, even if these are in sectors where there are strong established incumbents and it thus risky.

In sum, neither the quantum of funding, cost of capital or concessionary funding, or type of funding provided by the IDC (sectoral funding; funding for small businesses; funding for BIs) shows that the IDC is well-positioned to *drive* industrialisation in the South African economy.

Part of the problem may however be a lack of coherence in the broader industrial policy environment, and we turn to a discussion of this below. Naqvi (2018) suggests increasing funding to the DFIs in South Africa in order for them to have a greater impact. This could either involve recapitalising and funding them through government borrowing or through a direct tax, or a combination of both.

Industrial policy

While access to finance is critical, it is only one of several factors which determine the success of businesses. A range of studies on barriers to entry facing firms in the South African economy highlights the range of often mutually reinforcing microeconomic factors which stack-up to block greater participation in the economy, and therefore highlight the need for concerted action across different fronts. This requires coordination across different government departments.

Successive post-apartheid governments have however failed to realise a coherent industrial policy with co-ordination between key departments responsible for mining, energy, trade, finance, competition, technology, sector industrial development and procurement (Bell et al., 2018). This, in turn, has meant that DFIs have not been subjected to a clear and consistent set of objectives over time, directing investment needs in the economy clearly. This comes through in the criticisms of DFIs in the 2008 National Treasury Review. It also means that there is perhaps a dearth of well-designed interventions in sectors that can drive industrialisation that the IDC funding can respond to. The IDC's funding of REIPPP projects is perhaps a case in point, highlighting the ability of the IDC to respond to well-designed interventions. With less constraints related to its self-sustainability and better designed interventions, the IDC may well be able to respond better to the challenges that South Africa faces with industrialisation.

The DBSA's role in industrialisation

The DBSA, which primarily funds government infrastructure initiatives, has seen real disbursements in the economy increasing significantly since 1995, with municipalities accounting for the majority of funding. While services to households were the main focus of funding in the period to 2007, more recently the DBSA has focused much more on funding energy projects related to government's REIPPP. It has also supported a range of projects within the transport sector as lack of adequate transport infrastructure is one of the key hindrances to industrialisation in the region.

Industrialisation and modern production depends on supply of electricity that is free of outages for businesses to operate efficiently. DBSA's energy investments have been important for expanding access to electricity to majority of South Africans since 1994. Moreover, this has been important for industrial enterprises operating within the majority of municipalities that DBSA services. However, more still needs to be done to improve South Africa's energy infrastructure, given that electricity outages and shortages remain one of the key challenges industrial enterprises face in various municipalities (Bosiu et al., 2017).

Transport infrastructure has equally been important, especially in the context of regional integration and industrialisation. Key regional transport infrastructure projects including the upgrading of port in the North-South Corridor, the improvement of a border post between the DRC and Zambia, and the major road investments in Zambia and Zimbabwe, have improved regional integration, trading capacity and prospects for industrialisation. However, given the relatively small proportion of DBSA funding that goes to the rest of the continent, the investment outcomes have been limited.

On the other hand, DBSA's overall technological infrastructure finance has been largely insignificant, despite the fact that the efficiency of industries is largely determined by the availability and quality of the supporting technology infrastructure (Tassey, 2008). For example, DBSA's information and communication technology (ICT) infrastructure finance has been close to non-existent in relative terms since 1994.

Therefore, overall, there is significant room for scaling up DBSA's infrastructure investments to spur industrialisation both in South Africa and the region. The inability of DBSA to scale up investments is largely due to it generating its own funds Therefore in the context of regional industrialisation and trade, a regional coalition and collective mobilisation of resources for infrastructure finance is crucial. The DBSA has the necessary technical capacity to spear-head regional infrastructure finance for industrialisation, given sufficient financial resources and technical knowledge gained through previous projects in South Africa and the region.

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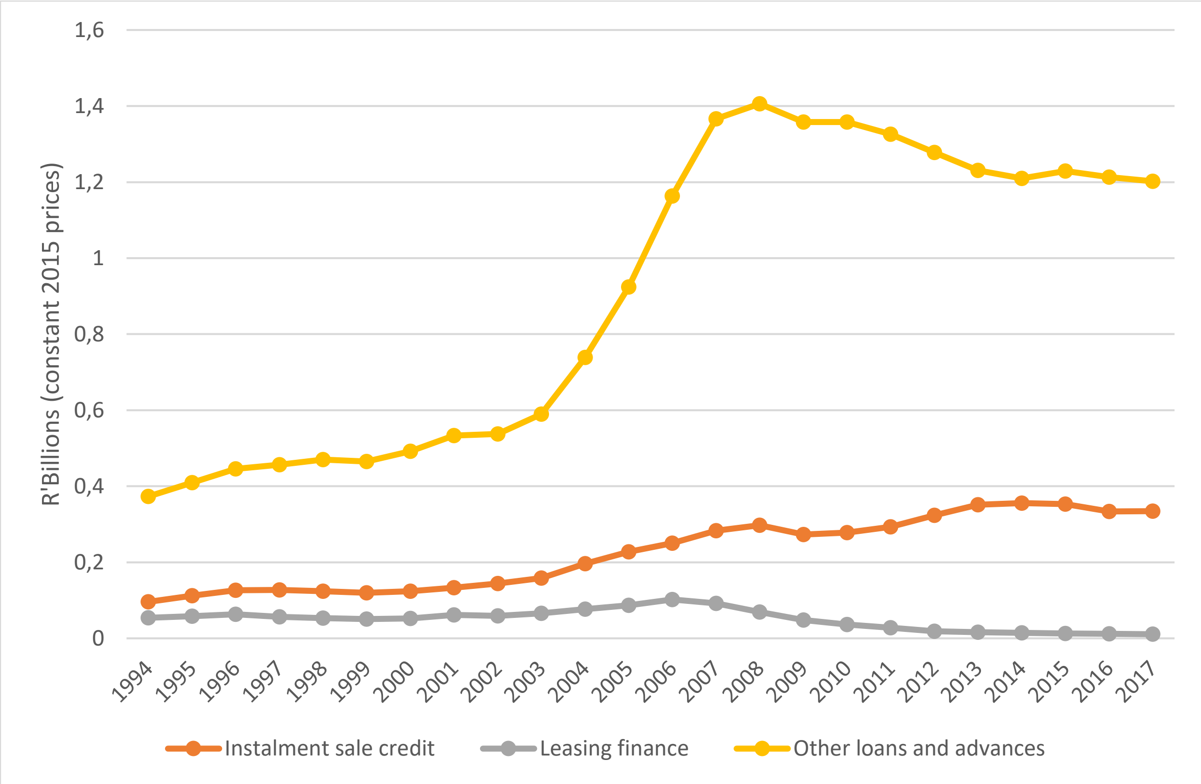
10 Appendix

Appendix 1: Composition of “other loans to industry”



Source: SARB

Appendix 2: Interviews / Discussions

Organisation	Position	Date
Private	Former IDC board member	28 May 2018
IDC	Research & Information	28 June 2018
IDC	Corporate Strategy	4 July 2018
IDC	Corporate Strategy	4 July 2018
IDC	Corporate Strategy	6 July 2018
DBSA	Research Specialist	20 July 2018
DBSA	Specialist: Infrastructure Programme	20 July 2018

Appendix 3: Mandate and Funding Strategy of the IDC over time

World War II to 1994

After WWII, South Africa underwent social and economic transformation and the introduction of a legal system that enforced racial segregation known as apartheid. The IDC was established in 1940 with the mandate to; 1) act as an industrial financier of new industries and industrial undertakings and schemes for the expansion of operations; 2) to provide better organisation and modernisation of operations in existing industries; and 3) to ensure that the industrial development within South Africa may be planned, expedited and conducted on sound principles (National Treasury, 2008; Mondi & Bardien, 2013; and IDC website). The IDC was instrumental in shaping the apartheid economy (Mondi and Roberts, 2005). This was a period of active government intervention in economic development through state enterprises, corresponding with the pre-Washington Consensus era where the state was perceived as an agent of industrialisation and a driving force behind structural change (Fumbata, 2016).

The period from 1940s through to the 1960s was characterised by a funding strategy aimed at encouraging import substitution and expanding industrial capacity (Edwards, Cassim & van Seventer, 2009; Jafta, 2017). The establishment of domestic textile, timber, animal feed and processed industries in the 1940s served to fulfil this strategy (Jafta, 2017; Mondi & Bardien, 2013).[63] As a result of shortages that came about during World War II, the government amended the IDC's mandate, allowing it to establish and operate industrial enterprises. The amended mandate made it possible forthwith for the South African government to use the corporation as a funding agency for large-scale development projects (Mondi and Bardien, 2013). Subsequently the IDC was instrumental in financing more capital-intensive industries in the 1950s such as the South African Coal, Oil and Gas Corporation (Sasol), the Phosphate Development Corporation (Foskor) (one of the world's largest producers of phosphate and phosphoric acid) (Fine and Rustomjee, 1996; Mondi and Bardien, 2013; and Fumbata 2016). The establishment these entities was in fact a response to a new political order. The Afrikaner National Party had come to power in 1948 with a mandate that prioritised the development of large-scale strategic projects considered too big to undertake by the private sector (Mondi and Bardien, 2013).

Throughout the 1960s and 1970s there was strong emphasis on export-oriented industrialisation, as it became clear that the import substitution strategy had a declining contribution to economic growth (Fumbata, 2016; Bell, 1997). The IDC doubled the fleet size of Safmarine vessels from 11 to 23, for shipping of bulk commodities from South Africa (Mondi and Bardien, 2013). In 1972, the Reynders Commission of Inquiry stressed the need for the country to use export-promoting methods and diversify into non-gold exports, resulting in the introduction of direct export measures after a tax allowance was implemented as a way to provide export incentives (Bell, 1997). In this period, the Corporation developed export credit schemes to source new markets for South African manufactured goods. There was also a strong emphasis on infrastructure finance in this period resulting in two key investments: a submarine telecommunications cable between Europe and Cape Town; and the 20 MW Safari-1 nuclear reactor in Pelindaba (Jafta, 2017).

South Africa's industrial landscape experienced readjustments in the 1980s to the early 1990s period as the apartheid government came under intense political pressure, both internally and

[63] Almost 95% of all textiles were imported, thus IDC's first venture was in a wool washing and blending plant in 1941, followed by further investments in cotton textiles plant in 1945 (Mondi & Bardien, 2013). The plant was purposefully situated close to the border of South Africa's largest Black homelands in order to take advantage of a ready pool of Black labour. In the same year (1945), IDC entered into a joint venture with the Masonite Corporation of the USA to manufacture timber for import substitution purposes (Mondi & Bardien, 2013).

externally, to move towards democratic rule (Mondi and Bardien, 2013; Jafta, 2017). This unstable environment only served to intensify the IDC's industrial finance role. 1980s approvals of R6.1bn exceeded those of the previous decade by 240 per cent; with investments in pulp and paper, chemicals, glass, metal products, electrical machinery and car parts continued unabated; and motor industry investments increased markedly with the establishment of a diesel engine facility for heavy vehicles and tractors (Mondi and Bardien, 2013). Furthermore IDC funded South African Iron and Steel Industrial Corporation (Iscor) in 1988 through equity finance (IDC, 2016).

With the mounting pressure on the apartheid government, and perhaps as way of lessening the discontent amongst the black populace, the IDC looked to establish a number of agricultural ventures in the hope that it could create large scale job opportunities, especially for unskilled black workers (Mondi and Bardien, 2013). The Sapekoe tea venture was expanded into coffee production; an oil production facility was established; and vineyards, dates and cherry farms were also established. Towards the end of the 1980s, the government also decided to develop the country's offshore gas fields, with IDC participating in the construction of a gas platform and coastal refinery (Mondi and Bardien, 2013). During this period, the export incentive system was also reinforced, resulting in the introduction of the General Export Incentive Scheme (GEIS) in 1990 (Fumbata, 2016). The Regional Industrial Development Programme (RIDP) was also introduced for the purpose of providing grants and incentives for industries expanding to other regions (Black and Roberts, 2009).

1994 – 2007

In the post-apartheid period, the IDC's pattern of financing has continued with the apartheid's legacy of support for upstream resource-based industries. In the period between 1994 and 2007, South Africa's economic policy was dominated by orthodox laissez-faire economic reforms (Zalk, 2014). Major reforms included industrial restructuring, trade liberalisation and tariff reform following from various economic policy frameworks such as the Growth, Employment and Redistribution (GEAR) and Accelerated and Shared Growth Initiative for South Africa (AsgiSA) (Jafta, 2017; Fumbata, 2016; and Mondi & Bardien, 2013). Moreover, the Industrial Strategy Project (ISP) asserted that South Africa's industrialisation could be stimulated through liberalisation and supply-side incentives (Joffe et al, 1995). Thus in 1994 there was a shift in the country's development strategy from that of export orientation with import controls to openness with tariff liberalisation. The IDC conducted research that evaluated and supported the tariff liberalisation programme the country committed to in 1993 in the GATT (Mondi and Roberts, 2005). The logic for tariff liberalisation was that protection policy was providing an economic advantage to inefficient industries that would be better off competing globally.

In the mid-1990s import controls were removed and export subsidies provided under GEIS were also terminated in line with South Africa's Uruguay Round obligations (Edwards et al., 2009). As a result of these changes in policy, the IDC adopted a new strategic direction and focused on industries that were identified as internationally competitive, financing export oriented mega-projects that had close links to natural resource processing (Mondi and Roberts, 2005; Mondi and Bardien, 2013). This meant support for large and established firms. Assistance was provided successfully to three manufacturing sector groups in period 1994 – 2007: motor vehicles; clothing and textiles; and a variety of upstream sectors, specifically steel, petrochemicals and aluminium (Zalk, 2014 as cited in Fumbata, 2016).[64]

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[64] The Motor Industry Development Programme (MIDP) was introduced in 1995 to assist the automotive sector (Black and Roberts, 2009). The clothing and textiles industry was supported under the Duty Credit Certificate

The country's industrial performance post-1994 continued to be strong in capital-intensive industries, and high levels of concentration and weak competitive rivalry continued, supported by funding from the IDC (Black and Roberts, 2009; and Fumbata, 2016). The IDC's financing activities in the mid-1990s were mostly in large-scale, capital intensive projects such as aluminium and stainless steel plants (Black and Roberts, 2009). From June 1994 to June 1999 over half of the IDC's investments by value were classified as being in basic metals (Roberts, 2007). Notable enterprises financed include Saldanha Steel; Columbus Stainless Steel; and Algorax Automotive Catalytic Converters (Jafta, 2017).

In addition, the IDC also shifted its focus in the 1990s in response to the re-orientation of the political landscape due to political power of the black majority. This included increased funding to small and medium-sized business[65] (but without providing concessionary interest rates), black empowerment[66], supporting economic growth and employment, diversifying across the provinces, redistribution of wealth and spatial development (National Treasury, 2008; Mondi and Roberts, 2005). The early 2000s were also characterised by an increase in the number of sectors that the IDC was funding in response to the need for increased levels of investment, job creation and black economic empowerment (Jafta, 2017). These include franchising, financial services, transport services, construction, education, healthcare, industrial infrastructure. The period 1994 – 2007 also put more emphasis on infrastructure finance, building capabilities, and funding to the rest of the African continent. In 1996, a tax holiday scheme was introduced as well as Spatial Development Initiatives for the coordination of the provision of public infrastructure (Black and Roberts, 2009).

2007 – 2017

The GEAR policy was followed by the adoption of AsgiSA in 2005, and aimed to halve the number of people in poverty by 2014. The focus was on identifying microeconomic blockages and restoring emphasis in industrial policy and government intervention, with the goal of increasing infrastructure spending to 5 percent of GDP per year until 2010 as well as increasing skills development and education (Presidency, 2005).

Against this backdrop, there was a shift in industrial policy from 2007 commencing with the approval of the National Industrialisation Policy Framework (NIPF) and its implementation plan, the Industrial Policy Action Plan (IPAP) in 2007 (DTI, 2007a & 2007b). The NIPF outlined government's industrialisation approach to achieve a shift towards the production of value-added tradable goods and services and diversify to industries that are not resource-based (DTI, 2007a). The first iteration of IPAP (2007) resulted in the finalisation of the revisions for the Automotive Production and Development Programme (APDP); the development of a new programme to support the clothing and textiles industry; and, emphasis on attracting investments in business processing services. The Clothing and Textiles Competitiveness Programme (CTCP) was subsequently introduced in 2009 to enable manufacturers to earn credits that were based on value-added production activities, and improved competitiveness and capabilities (Black and Roberts, 2009).

This 2007 iteration also emphasized the role of industrial finance for the implementation of the NIPF. This led to the re-evaluation of the post-1994 financing mechanisms, highlighting three

Scheme (DCCS), from 1995 to 2009, where exporters were allowed to earn import rebate credits depending on export levels (Black and Roberts, 2009). Other schemes included the Low Interest Finance for Export scheme (between 1991 and 1999), the World Player scheme (between 1995 and 1998), and Life Scheme to promote exports (Fumbata, 2016).

[65] A number of agencies were established for small business support in 1995 and 1996, such as the Centre for Small Business Promotion, Ntsika Enterprise Promotion Agency, the National Small Business Promotion and Khula Enterprise Finance (Black and Roberts, 2009).

[66] The IDC funded the first BEE mobile phone transaction in the 1990s (Jafta, 2017)

areas of intervention: 1) need for financing at a greater scale and more prioritisation of identified sectors; 2) a greater emphasis on more labour-intensive and value-adding activities; and, 3) a focus on stimulating new or quantitatively higher levels of economic activity. The 2010 iteration of IPAP coincided with the launching of the New Growth Plan (NGP) in 2010.[67] Key sectors identified in the 2010 iteration are categorized into three clusters, as below.

Table 6: Key Sectors Targeted by IPAP 2010 iteration

Cluster 1	Cluster 2	Cluster 3
New areas of focus	***Scaling up and broadening of existing IPAP sectors***	***Potential for long-term advanced capabilities***
• Metal fabrication, capital and transport equipment sectors, particularly arising from large public investments; • Oil and gas; • 'Green' and energy-saving industries; • Agro-processing, linked to food security and food pricing imperatives; and • Boatbuilding	• Automotive products and components, and medium and heavy commercial vehicles; • Plastics, pharmaceuticals and chemicals; • Clothing, textiles, footwear and leather; • Biofuels; • Forestry, paper, pulp and furniture; • Strengthening of linkages between cultural industries and tourism; and • Business process services	• Nuclear; • Advanced materials; • Aerospace

Source: DTI (2007b)

The 2010 iteration of IPAP continued to emphasize the role of industrial finance for the implementation of NIPF. It argued that low profitability of sectors with the potential of high economic returns, such as manufacturing, is due to high capital cost and limited availability of financing. Consequently, the DTI sought to convene and identify processes and sources of long-term funding for the IDC to further finance capital at lower cost. Key action programmes were set up firstly to review the IDC's business model and free up resources for labour-intensive and other value-adding sectors identified by the IPAP. Secondly, the government had to identify and create long-term sources of concessional funding for the IDC.

The 2011 through to 2017 iterations of IPAP continued to focus on labour-absorbing tradable sectors. Priority sectors identified for upscaling were the green industries, agro-processing, metal fabrication, capital and rail transport equipment, advanced manufacturing and clothing and textiles and footwear production. The manufacturing competitiveness enhancement programme (MCEP) was set up in 2012 for the purposes of upgrading and improving the competitiveness of labour-absorbing and value-adding manufacturing sectors. Further industries such as software, renewable energy and mineral beneficiation were also considered for development. There was also emphasis on industrial infrastructure development, indicated by the alignment of IPAP priorities with those of the National Infrastructure Plan (NIP) in order to remove bottlenecks hindering industrial development as well as increase domestic demand by sourcing inputs locally. The IPAP also called for an intensified focus on growing exports into the rest of the African continent, leveraging mineral resources and technical capabilities.

In the 2010-2017 period, and in line with the increased emphasis on sectoral focus in NIPF, the IDC restructured its Strategic Business Units (SBU) to coordinate and deepen investments

[67] The NGP seeks to create 5 million jobs by 2020. The following sectors are identified to drive job creation: public investment in infrastructure, the agricultural and mining value chains, manufacturing and services, knowledge and green economies, rural development and regional integration, tourism and certain high-level services. The NGP also emphasizes the importance of export promotion to open up opportunities with the fast-growing economies such as China, India and Brazil.

in the identified sectors. Some SBUs were phased out (i.e., Franchising, Financial Services, etc), while others were introduced (i.e., Green Industries). The operations of the SBUs span across three distinct areas: the services sector; the mining and manufacturing sector; and agro-processing and new industries. A breakdown of current SBUs and sectors they cover is provided in appendix 3.

In addition to deepened sector focus, the mandate of IDC was extended to cover the entire African continent, SME development, rural development, counter-cyclical funding to companies in distress, and clean and renewable energy technologies (Jafta, 2017). This culminated in the adoption of Project Evolve in April 2014, a strategic initiative aimed at achieving a more focused approach to industrial development within the IDC's mandate in line with policy, among other things (IDC, 2015). The new strategy prioritised the following value chains: metals, metal products, machinery and equipment, transport equipment and mining; chemicals, plastics and pharmaceuticals; as well as agro-processing and agriculture (IDC, 2015).

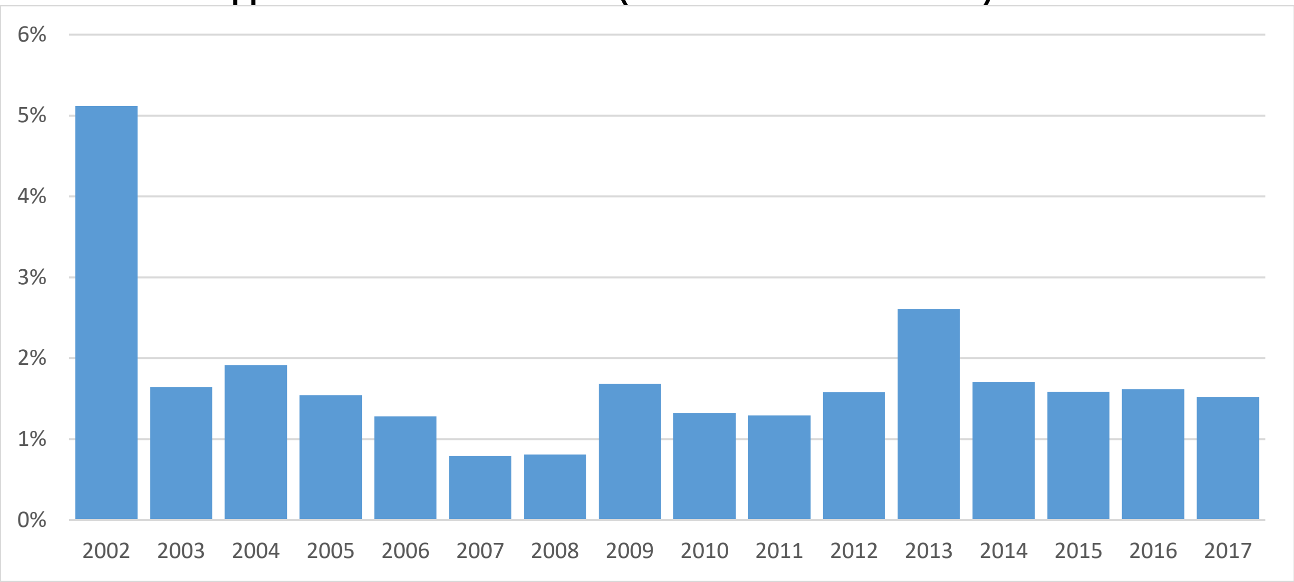
Appendix 4: IDC's Strategic Business Units

Strategic Business Unit (SBU)	Coverage
Agro-processing and Agriculture	Livestock processing, selected field crop processing, integrated horticulture, aquaculture
Automotive and Transport Equipment	Passenger and commercial vehicles, automotive components, shipbuilding and ship repair, rail components and infrastructure as well as medium and heavy vehicles, buses and trucks.
Basic Metal and Mining	Metal products, mining, steel and metals industries.
Basic and Speciality Chemicals	Oil and Gas, Basic Chemicals, Fertilisers, Plastics in its Primary form, Synthetic Rubber, Speciality Chemicals
Chemical Products and Pharmaceuticals	Pesticides and other agro-chemical products; Paints, varnishes and similar coatings; Pharmaceuticals, medicinal chemicals and botanical products; Soaps, detergents, perfumes and toilet preparations; Man-made fibres; Plastic products, including plastics recycling; Medical devices
Clothing and Textiles	Clothing manufacturing; Dyeing, printing and finishing of fabrics; Footwear manufacturing; Household textile production; Leather tanning; and leather product manufacturing; Natural fibre production, including wool and mohair beneficiation; Non-woven textile production; Synthetic fibre production; Spinning of yarns, knitting and weaving of products;
Heavy Manufacturing	Cement, lime, clay, ceramic and stone products, sawmilling and wood products, pulp and paper products, rubber glass and ceramic products, and other non-metallic products and non-metallic recycling.
Industrial Infrastructure	Logistics, energy, Telecoms Broadband, health and water infrastructure
Light Manufacturing and Tourism	Professional and scientific equipment; Television, radio and communication equipment; Furniture production; High impact tourism ventures; Tourist attractions; Niche product offerings; Hotel developments
Machinery and Capital Equipment	Mining and power supply equipment; Earthmoving and construction equipment; Compressors; Pumps; Gas cylinders and tanks.
New Industries	Energy Storage, Fuel Cells, Gas Beneficiation, Renewable Energy Inputs, Medical Devices, Natural Products, Additive Manufacturing and Nano-technology.
Rest of Africa[68]	Agriculture, manufacturing, tourism, minerals and mining, petroleum and energy, transport and other related infrastructure.

Source: IDC Website

[68] This is not a strategic business unit per se, but rather a support department. All of the above SBUs cover financing in SA and in the rest of Africa.

Appendix 5: Fund Disbursed (% of Private Sector GFCF)



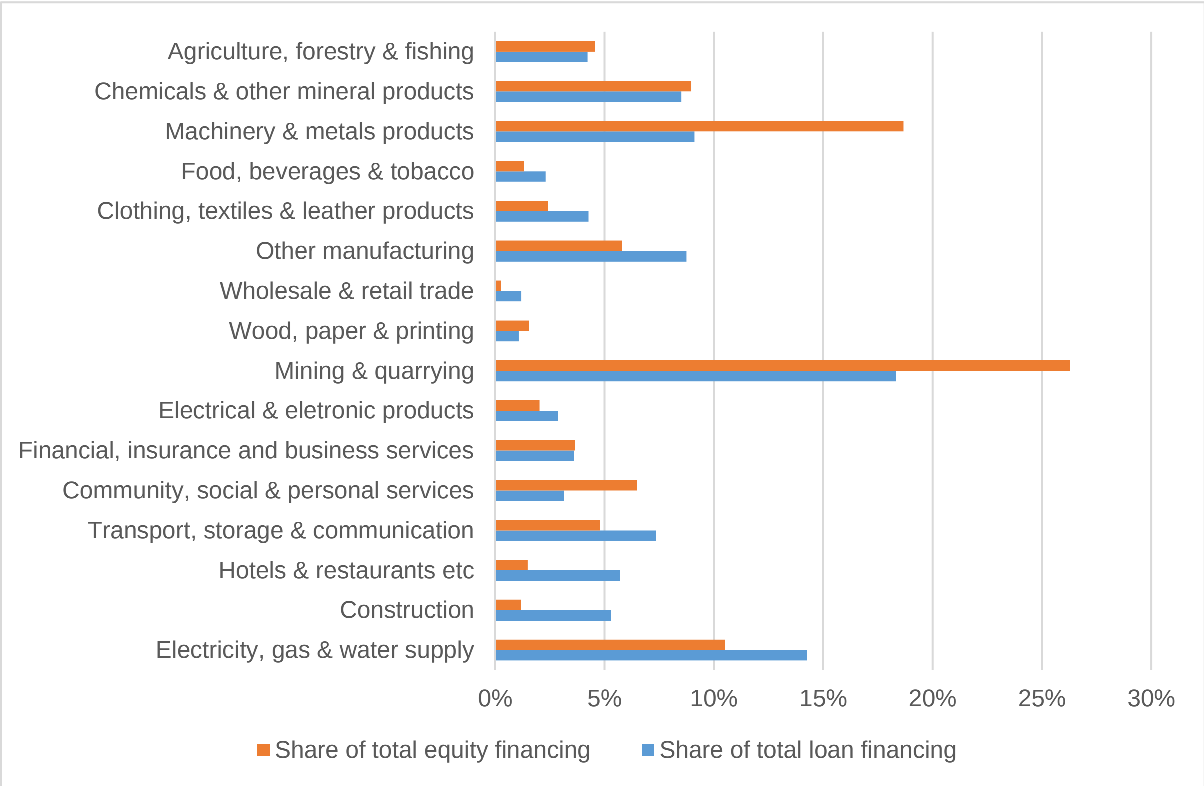
Source: IDC Annual Reports, authors' calculations

Appendix 6: Sub-Sector Breakdown of Largest Sector Disbursements

Aggregate Sectors					
	Chemical and mineral products	Machinery and metal products	Other manufacturing	Mining and quarrying	Electricity, gas and water supply
Total Share of IDC Aggregate Sectoral Funding (2008-2017)	**9%**	**13%**	**8%**	**22%**	**13%**
Disaggregated Sub-sectors					
	Chemical and mineral products	**Machinery and metal products**	**Other manufacturing**	**Mining and quarrying**	**Electricity, gas and water supply**
Coke & refined petroleum products	25,8%				
Basic chemicals	5,9%				
Other chemicals & man-made fibres	68,3%				
Basic iron & steel		40,3%			
Basic non-ferrous metals		6,1%			
Metal products excluding machinery		29,6%			
Machinery & equipment		24,1%			
Beverages			0,2%		
Textiles			12,4%		
Wearing apparel			4,6%		
Leather & leather products			0,1%		
Footwear			1,2%		
Wood & wood products			5,7%		
Paper & paper products			4,2%		
Printing, publishing & recorded media			0,6%		
Rubber products			0,1%		
Plastic products			4,8%		
Glass & glass products			0,8%		
Non-metallic minerals			8,0%		
Electrical machinery			10,4%		
Television, radio & communication equipment			1,2%		
Professional & scientific equipment			2,6%		
Motor vehicles, parts & accessories			26,2%		
Other transport equipment			11,4%		
Furniture			2,1%		
Other industries			3,6%		
Coal mining				4,0%	
Gold & uranium ore mining				64,8%	
Other mining				31,2%	
Electricity, gas & steam					98,7%

Source: IDC Data, authors' calculations

Appendix 7: Share of financing by sector and type of financing, 2008-2017



Source: IDC Data, authors' calculations

Appendix 8: IDC Interest Rates

Average interest rate on IDC loans (only Prime-linked, Rand denominated) - not weighted (estimative), March 2008 – March 2018

Year	Prime Overdraft Rate	IDC Interest Rate	IDC Rate Premium or Discount
March 2008	14,5	13,44	-1,06
March 2009	13	12,42	0,58
March 2010	10	10,26	0,26
March 2011	9	9,09	0,09
March 2012	9	8,68	-0,32
March 2013	8,5	7,98	-0,52
March 2014	9	8,37	-0,63
March 2015	9,25	8,31	-0,94
March 2016	10,5	9,19	-1,31
March 2017	10,5	9,16	-1,34
March 2018	10	9,69	-0,31

Source: IDC and SARB; own calculations
Notes: These are average interest rates on prime-linked rand-dominated loans (not weighted, estimative), and includes all loans

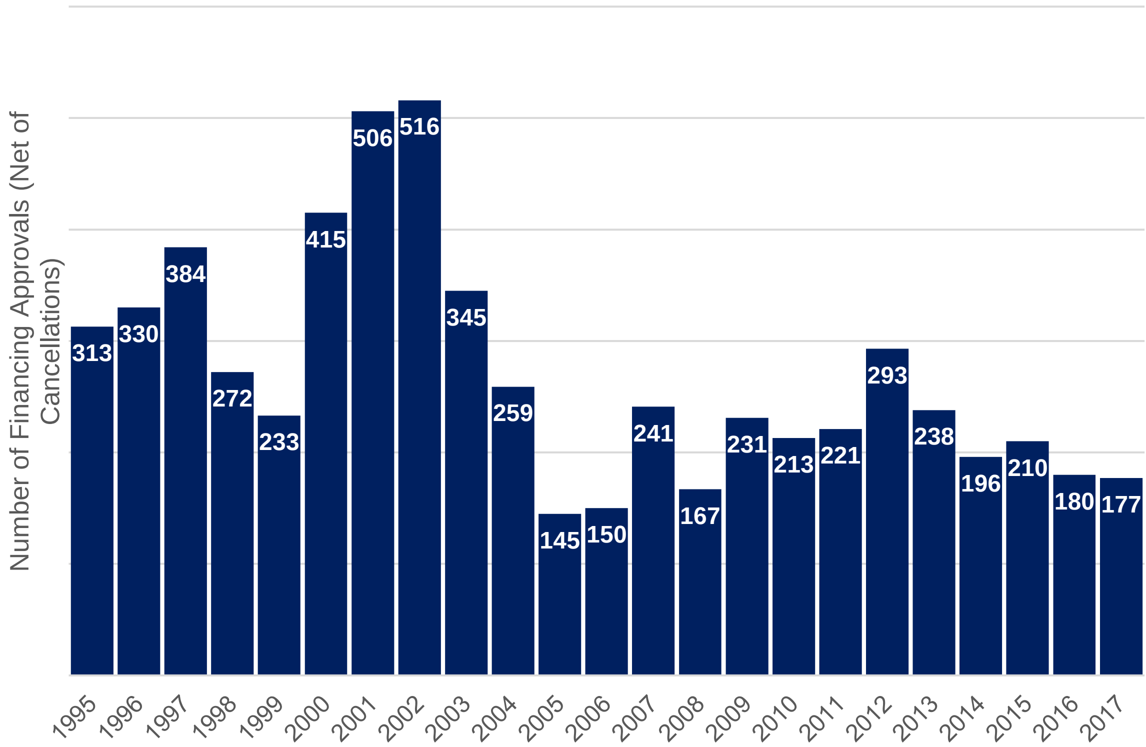
Data from the IDC shows a sectoral breakdown of the premiums or discounts to given sectors based on the prevailing prime interest rate at March of each year reported. The table presents a mixed bag in terms of the IDC's quoted interest rates. Interestingly, the IDC gives significant discounts on its loans to firms involved in gold and uranium ore mining. Similar discounts are found in the footwear, glass and glass products, television, radio and communication equipment, and water supply sectors. On the other hand, the IDC places premiums (that is prime plus some additional rate) when loaning to other sectors. Coals mining is the most notable here due to its capital-intensive nature with business services experiencing the largest premiums out of all the sectors.

IDC Loans interest rate (average excluding special schemes and "interest-free" loans), March 2014 – March 2017

	Prime +/-			
	Mar-14	**Mar-15**	**Mar-16**	**Mar-17**
Agriculture, forestry & fishing	0,3	0,2	0,2	0,3
Coal mining	1,0	1,3	0,3	0,4
Gold & uranium ore mining	- 3,2	- 1,4	- 3,7	- 3,7
Other mining	- 0,2	0,6	0,1	- 0,0
Food	0,4	0,5	- 0,1	- 0,1
Beverages	- 1,5	- 1,6	- 0,9	- 1,3
Textiles	1,2	1,0	0,4	0,5
Wearing apparel	- 0,0	0,4	- 0,1	- 0,0
Leather & leather products	0,3	- 0,5	0,3	0,3
Footwear	- 2,2	- 2,8	- 3,7	- 3,7
Wood & wood products	0,5	0,7	- 0,1	- 0,0
Paper & paper products	0,1	0,0	0,2	0,2
Printing, publishing & recorded media	1,3	2,5		
Coke & refined petroleum products	- 0,1	- 0,4	1,4	1,4
Basic chemicals	1,0	0,5	- 2,6	- 2,9
Other chemicals & man-made fibers	- 0,3	- 0,5	- 0,6	- 0,3
Rubber products				
Plastic products	- 0,8	- 1,7	- 1,9	- 2,1
Glass & glass products	- 0,5	- 5,3	- 6,5	- 6,5
Non-metallic minerals	- 0,7	0,2	0,2	0,2
Basic iron & steel	0,6	- 0,6	1,6	1,6
Basic non-ferrous metals	- 0,7	- 0,1	2,0	2,0
Metal products excluding machinery	- 0,7	- 1,4	- 2,6	- 2,6
Machinery & equipment	0,9	0,4	0,1	0,1
Electrical machinery	- 0,2	0,7	- 0,7	- 0,6
Television, radio & communication equipment	- 1,9	- 2,6	- 4,7	- 4,7
Professional & scientific equipment	1,2	1,7	1,4	1,4
Motor vehicles, parts & accessories	- 0,1	- 0,8	- 1,1	- 1,0
Other transport equipment	1,6	- 1,5	- 0,9	- 1,0
Furniture	- 1,5	- 1,6	- 1,9	- 1,8
Other industries	0,1	0,0	- 0,2	- 0,1
Electricity, gas & steam	2,0	1,3	0,8	0,5
Water supply	1,5	- 2,5	- 3,5	- 3,5
Building construction	- 0,6	- 0,7	- 0,8	- 0,9
Wholesale & retail trade	1,6	1,4	1,1	1,1
Catering & accommodation services	1,3	0,7	0,3	0,3
Transport & storage	- 0,5	- 1,4	- 1,2	- 1,2
Communication	0,1	- 1,2	0,4	0,2
Finance & insurance	- 0,4	- 0,2	- 0,7	- 0,7
Business services	2,6	2,4	2,3	2,3
Medical, dental & other health & veterinary services	0,4	0,6	0,7	0,7
Other community, social & personal services	1,3	1,7	2,0	1,9
Government	0,6	0,3	0,3	0,3

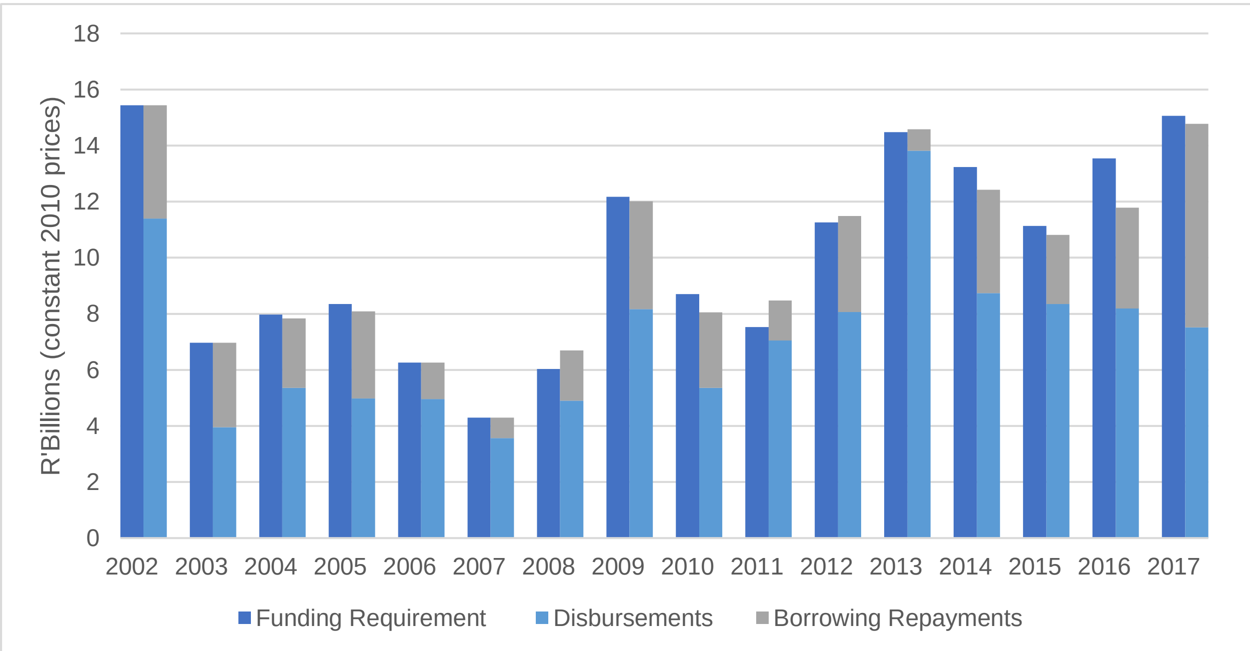
Source: IDC and SARB; own calculations
Notes: These are average interest rates on prime-linked rand-dominated loans (not weighted, estimative), and excludes loans under schemes and interest free loans

Appendix 9: Number of IDC Approvals (Net of Cancellations)



Source: IDC Annual Reports

Appendix 10: Funding Requirements, disbursements and borrowing repayments, 2002-2017



Source: IDC Annual Reports

Appendix 11: DBSA's mandate and strategies

1983-1994

In part, DBSA's mandate of performing a broad range of economic development functions within the homeland political dispensation was born out of intense political pressure exerted on the apartheid government to move towards democratic rule. In 1984, the Bank took over the administration of 79 loan agreements to the value of R352 million which the homeland states had concluded with the government (DBSA, 2012). During the first year of operation, DBSA had 132 projects and three divisions.

In 1990, for the first time since its establishment, the Bank prepared to raise loans actively on the local and international markets (DBSA, 2012). Further, it was during this year that bank decided to support SMMEs instead of merely creating industrial jobs. By 1993 it was clear that the country was headed for a democratic dispensation, and the DBSA's focus began to shift towards doing more to meet development challenges (DBSA, 2012).

1994-2007

The reincorporation of the TBVC states (homelands) into the Republic invalidated the initial agreement establishing the Bank (DBSA, 1995), and the Minister of Finance appointed the Transformation Team to make recommendations on the future role of DBSA (DBSA, 1995). Among others, the team proposed the bank focus on wholesale development finance, particularly infrastructure. This period of transition came with challenges. The bank could not fully apply its resources due to uncertainty, and projects initiated before the introduction of the new constitution could not be finalized in 1994 (DBSA, 1995). There was also limited lending to regional governments due to legal constraints on the borrowing powers of the newly demarcated provinces (DBSA, 1995). Nonetheless, openness to international markets post-sanctions meant that the bank could access more funding opportunities. DBSA got its first concessionary financing from the Japanese Exim bank in 1995 (DBSA, 1995).

In April 1997, the Development Bank of Southern Africa Act was passed. The Act officially redefined the bank's mandate and mission. The DBSA's new mandate was to facilitate the provision of infrastructure finance in order to improve the quality of life of people in South and Southern Africa (DBSA, 1997). The main focus areas were water and sanitation, energy, roads and transport, and telecommunications. However, the mandate in SADC extended beyond the core business of infrastructure finance; most of the entrepreneurial support in 1997 went to SADC countries (DBSA, 1998). In 1998, the bank established a Development Fund, a section 21 company, to maximise the impact of development finance at municipal level (DBSA, 2001).

In the early years after the democratic transition, DBSA was primarily preoccupied with clearing infrastructural backlogs. By 2001 significant progress had been made, however about 18% and 59% of the population still did not have access to clean water in South Africa and SADC, respectively (DBSA, 2001). The appointment of the new board, led by Jay Naidoo emphasized radical transformation (DBSA, 2001). The Bank's new vision was to invest in infrastructural assets that serve the poor, beyond the traditional hard infrastructural assets, thus including softer assets, such as human and institutional capital (DBSA, 2005). In addition, the bank established the Targeted Infrastructure Programme (TIP) in 2004 to provide concessional funding to poorer municipalities through tailor-made combinations of technical assistance and investment support.

The later part of the 1994 – 2006 period put more emphasis on proactive response to initiatives and programmes set out in various policies and initiatives of government including the Accelerated and Shared Growth Initiative for South Africa (ASGISA), the SADC's Regional Indicative Strategic Development Plan (RISDP), NEPAD, the gearing up for the 2010 Soccer

World Cup, and other initiatives such as the Expanded Public Works Programme and Project Consolidate (DBSA, 2005). In the private sector, the strategy entailed funding mainly greenfield or expansion projects with substantial empowerment credentials, within the guidelines of the various industry charters (DBSA, 2005). Thus, special attention was given to promotion of black economic empowerment (BEE).

2007-2017

The period saw heightened shareholder activism and emphasis on maximisation of development objectives over financial returns. The Bank also increased emphasis on knowledge development and management, refocusing its research on the development and implementation of policy frameworks in a number of infrastructure sectors. Thus, the Bank generated flagship publications (the Development Report and the Infrastructure Barometer), related to delivery of infrastructure and services (DBSA, 2008). The 2008-2009 period coincided with the global financial crisis. The DBSA made efforts to help protect the infrastructure development programmes underway (DBSA, 2009), thus providing countercyclical funding and expanding finance. The financial crisis restricted the interest of commercial banks in municipal funding for the first nine months of the year (DBSA, 2010).

In view of the expanded objectives the Bank undertook a comprehensive review and planning exercise. The first intervention entailed negotiations with the government to recapitalise the Bank by increasing its callable capital to R20 billion, with the expectation of providing over R100 billion in additional loans in the medium term (three to five years) (DBSA, 2009).

In 2012, the DBSA embarked on an extensive organizational review process, which resulted in a more sharpened mandate to concentrate the DBSA on core business of providing finance for infrastructure development. Over the years, overlapping mandates and broad focus meant that activities did not always achieved the requisite outcomes (DBSA, 2013), resulting in unfunded initiatives which contributed to the decline in the surplus available for reinvestment and eroded the capital base of the DBSA, leading to an estimated R2.4 billion growth gap in shareholders' equity since 2007 (DBSA, 2013). The new strategy sought to be in alignment with the National Development Plan and the Presidential Infrastructure Coordinating Commission (PICC) (DBSA, 2013).

As part of the organisational review, the relationship between the DBSA and the DBSA Development Fund was also assessed, resulting in a decision to discontinue financial assistance to the Development Fund (DBSA, 2013). Consequently, some of the functions of the Fund were absorbed into government departments, while others were incorporated into the DBSA. In addition, various non-financing activities undertaken by the Bank were also comprehensively reviewed leading to transfer or cessation of all activities that did not serve either the financing or the project implementation elements of the core strategy with effect from 1 April 2013 (DBSA, 2013).[69] To support the DBSA's refocused mandate and enable it to bridge the infrastructure gap and scale up development impact, the National Treasury approved a R7.9 billion capital injection for the Bank over a period of three years, starting from April 2013 until March 2016 (DBSA, 2013). The facility came at the right time when the Bank's mandate was just expanded to encompass the entire African continent. In addition, during the 2015/16 financial year, the DBSA got accredited to the Global Climate Fund, thus enabling access to US$10 billion committed to the fund to support low emission and climate resilient projects (DBSA, 2016).

[69] These included activities related to administrative support for certain external agencies, management services, non-municipal technical assistance grants, as well as any research or policy work unrelated to the core focus areas of the Bank (DBSA, 2013).