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Linking IDC finance to structural transformation and inclusivity in post-apartheid South Africa

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ABSTRACT

The need for structural transformation and inclusivity in South Africa is urgent, given poor economic growth, employment and equality outcomes. This article examines the role of South Africa's main industrial finance institution – the Industrial Development Corporation (IDC) – in providing finance for structural transformation and inclusive economic growth post-apartheid. We find that the IDC's funding has been concentrated in capital-intensive upstream sectors of the economy, with limited concessional finance to facilitate meaningful entry of SMEs into high-value and labour-absorptive downstream sectors. The IDC's funding model (in being a self-sustainable institution) is a significant constraining factor in this regard. Furthermore, the lack of a purposeful integrated industrial policy strategy which directs investments clearly means that IDC's funding priorities are not clearly defined.

KEYWORDS

Development finance; structural transformation; inequality

JEL Classification G23: L16: D63

1. Introduction

The need for sustained economic development in South Africa could not be more urgent. For many years, economic growth has been dismal while unemployment levels have been alarmingly high (StatsSA, 2018). At the same time, there has been limited meaningful structural transformation¹ (i.e. the resource-based sectors still dominate the export basket).

The poor performance of the economy has been matched with astoundingly high levels of inequality. In terms of income, South Africa remains amongst the most unequal countries – if not *the* most unequal country – in the world, and inequality has worsened over time (Keeton, 2014; Sulla & Zikhali, 2018). The dismal outcomes make it clear that the current economic model is not working to transform the structure of the economy and foster greater inclusivity.

Economic growth requires structural transformation of the economy, with the literature documenting the beneficial effects of growing the manufacturing sector in particular (Tregenna, 2008; McMillan & Rodrik, 2011; Felipe et al., 2012; Hoekman, 2017). For

¹Structural transformation is the movement from low to higher productivity activities within and between sectors (McMillan & Rodrik, 2017).

structural transformation to occur, investments in productive capacity and technological sophistication are key (Team, 2005; Gylfason & Zoega, 2006). In South Africa, these investments are hampered by high levels of concentration and barriers to entry. Business rivals are important, since they bring new products and business models and spur incumbents to invest in order to improve their own offerings. In South Africa, where incumbents are powerful, they can and have blocked rivals through various strategies, and furthermore, impacted on downstream industries by exercising their market power. The untransformed industrial structure in South Africa thus goes along with low levels of competition and poor productivity. Fostering structural transformation through a developmental state requires concerted and integrated policies, which facilitate investment in manufacturing and related sectors within a broad industrial policy strategy.

This article focuses on the role of development finance in South Africa, and specifically the Industrial Development Corporation (IDC) (South Africa's main development finance institution), in promoting structural transformation and reducing inequality through enhancement of greater participation in key industrial sectors. In Section 2, we first link finance to structural transformation, inclusivity and inequality, and then explore the role that development finance (in particular) can play to improve these. Thereafter, we briefly outline (in Section 3) the method and data used in order to analyse the IDC's investment patterns. Section 4 reflects on the role of the IDC in facilitating structural transformation and meaningful participation, while Section 5 discusses the developmental potential of the IDC, in the context of its funding model and broader industrial policy. Section 6 concludes.

2. Review of literature

2.1. Linking finance to structural transformation, inclusivity and inequality

Several studies on barriers to entry in South Africa show that the economy remains highly concentrated in terms of the control by large companies over markets (for a reflection on this, see Roberts, 2017). While large firms are important to realise economies of scale and scope and to make necessary investments for upgrading, they need rivals to spur them to do so. Market power within concentrated industries raises barriers to entry, impacting entry of potentially innovative firms that could improve the competitiveness of the industry. Moreover, concentration reduces the incentives for large firms to invest in upgrading, thereby undermining capability development.

In addition, concentration in upstream industries results in poor outcomes in downstream industries, since powerful upstream firms may charge downstream firms higher prices. These downstream firms are often diverse and more labour-absorbing businesses looking to use the materials from upstream firms as inputs into their own production lines (Mondliwa & das Nair, 2017; Mondliwa & Roberts, 2018; Rustomjee et al., 2018). The dominance of resource-based sectors and concentration within these sectors thus serves to hinder structural transformation in the South African economy. In order to foster entry of firms, reduce concentration and promote structural transformation in South Africa, adequate finance, among a raft of other industrial policy measures is required.

Transforming the economy through better participation of small and medium-sized firms is necessary for reduction of inequality too, through employment and wage effects. Diversifying investments away from upstream capital-intensive industries to value-added and labour-absorptive downstream industries has the potential to improve employment and reduce inequality (Tregenna, 2008; Hartman et al., 2017; Baymul & Sen, 2018). Furthermore, reducing concentration is necessary to reduce inequality too, since concentration increases the dividends and capital gains to the wealthy (Khan & Vaheesan, 2017), and more generally increases inequality in countries where ownership is more skewed than consumption (Gans et al., 2018). In South Africa, concentrated markets mean that despite low growth and investments levels, profits have been sustained (OECD, 2013; Bosiu et al., 2017; UNECA, 2018) and appropriated to a small (and already wealthy) section of the population. In dealing with inequality in South Africa, policies must take into account the impact of concentration on a country's productive structure, and on the returns to the holders of wealth.

2.2. Industrial policy and development finance

While the need for structural transformation of the economy for development is broadly accepted, how this occurs has been subject to debate. While orthodoxy emphasises the role of the market in industrialisation and economic development, the experiences of the East Asian tigers between the 1960s and 1980s as well as that of China since the 1980s has placed increased emphasis on the developmental role of the state in driving economic development. It is increasingly recognised that industrialisation does not occur automatically, and that a path to industrialisation must be created, by pursuing a broad industrial policy strategy that encompass other policies such as development finance and appropriate levels of competition (Amsden & Singh, 1994; Lee, 2019).

Given the difficulties with access to adequate finance from private financial institutions to foster structural transformation and inclusive growth in South Africa (Bosiu et al., 2019), the role of the state becomes crucial. In Korea, for instance, the state played a key role within the financial system in capabilities development, particularly in the context of market failures. This included state-owned banks serving the real sector of the economy through provision of finance to manufacturing sectors while restricting competition, so that firms were able to generate profits for investment; the creation of an import-export bank to assist in export promotion; and provision of loans to SMEs in technology-intensive sectors and without requiring much collateral. The Korean experience highlights the role of finance as a policy tool that works together with other policies for productive investments (Lee, 2019).

The alternative liberalisation policies of the late 1980s and 1990s have, in some countries like South Africa, led to premature deindustrialisation and financialisation, as well as a reliance on capital flows and commodity prices (Palma, 2008; Ashman et al., 2011). Furthermore, liberalisation of capital controls has led to capital flight which has undermined domestic productive investment (Ashman et al., 2011).

Given the failure of markets to provide adequate finance in many countries, development finance institutions (DFIs) or national development banks have stepped in to provide much-needed industrial finance at discounted rates. The thinking on the importance of DFIs has changed over time from a clear case for the need for development banks in the 1950s to a view that they create inefficiencies. However from the 1990s, particularly after the global financial crisis, development banks have once again become popular (Moslener et al., 2017). They have become important for promotion of strategic trade, prioritisation of investments in key sectors, provision of coherence to economic policies, and shaping and creation of markets by targeting financial resources and supply-side measures to particular technologies, firms and sectors (Mazzacuto et al., 2016).

In South Africa, the private banking sector has been oriented towards funding for consumption rather than investment, and credit for investments has remained relatively stagnant over the period from 1994 to 2017. Moreover, the South African economy has become increasingly financialised (Karwowski, 2017; Newman, 2017). Literature has linked increasing financialisation to profit-hunting by firms rather than investment in productive assets, thus working against industrialisation.

Development finance has an integral role to play in South Africa in promoting smaller and more dynamic businesses in downstream diversified sectors, including black-owned businesses. In particular, DFIs should provide patient capital and concessionary finance in order to allow businesses time to build up capabilities and scale required, particularly in markets where there are powerful incumbents (Amsden, 1989; Roberts, 2016).

3. Methodology

In order to analyse how the IDC is positioned to facilitate structural transformation and inclusive growth of the South African economy, the paper assesses both the IDC's investments in the economy (Section 4), as well as the broader context and policy environment within which the IDC functions (Section 5). In Section 4, we use data from both the annual reports of the IDC as well as data on investments sourced from the IDC. This is supplemented by interviews and correspondence with key people within the IDC (see Appendix 1). While the study considers the overall post-apartheid period, emphasis is placed on the period post-2007 because this is when a more targeted industrial policy was adopted—the National Industrial Policy Framework (NIPF). For the period prior 2007, we largely rely on previous studies (see the introductory part of Section 4) that have provided similar analysis.

The data analysis considers IDC's investments in the economy from several perspectives: (i) whether IDC funding has been focused on diversification of the economy's productive structure; (ii) whether IDC has been providing concessional funding (especially patient capital); and (iii) how the IDC has been funding black industrialists given the need for transformation and greater inclusivity in the South African economy.

4. The role of the IDC in structural transformation and inclusion

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; National Treasury, 2008; Mondi & Bardien, 2013). South Africa's industrialisation path before 1994 has been characterised as being based on a minerals-energy complex (MEC), due to the influence of mining-linked activities on the economy (Fine & Rustomjee, 1996). This was a result of support provided through government, including favourable electricity

prices, rail and port infrastructure, and, critically, finance through the IDC (Roberts & Rustomjee, 2009; Zalk, 2017).

In the transition period, the IDC played an important role in tariff liberalisation (Mondi & Roberts, 2005). Together with this, government adopted a suite of economic policies which favoured getting the prices right and reducing state intervention. While the high levels of concentration in the economy were identified as a potential constraint for diversification early on, the expectation was that import competition and competition law would constrain market power (Joffe & Kaplan, 1995). The neoliberal policies adopted have not had the desired effect, either in terms of diversification of the economy and investments in productive capacity or better inclusion. South Africa continues to exhibit high levels of concentration in many key productive sectors. Furthermore, many of these sectors also have high barriers to entry which reduces the ability of potential entrants to effectively compete within their respective value chains and markets in general.

4.1. Financing sectors for diversification

In the 1994-2007 period, studies have shown that IDC funding reinforced the existing industrial structure by continuing to provide funding to upstream, resource-based sectors in the metals and chemicals sectors, reinforcing the industrial path with funding for diversification or inclusion not featuring as prominently (Mondi & Roberts, 2005; Black & Roberts, 2009; Fumbata, 2016).

From 2007 onwards, through a more targeted industrial policy (the National Industrial Policy Framework (NIPF) and its implementation plans the Industrial Policy Action Plans (IPAPs)), the IDC sought to support stronger labour-intensive and value-added manufacturing sectors. However, between 2008 and 2017, Figure 1 shows that, despite the introduction of the NIPF and IPAPs, finance provided by the IDC continued to support more established upstream industries relative to more diversified and labour-intensive downstream industries, although there was some level of diversification albeit to a limited extent. Nevertheless, between 2008 and 2017, sectors that received the most funding were mining and quarrying; machinery and metals products; electricity, gas and water supply; and chemicals and other mineral products. Within these, the following sub-sectors received the highest share of funding: gold and uranium ore mining; electricity, gas and steam; basic iron and steel, and other chemicals and man-made fibres (Appendix 2).

The data presented in Figure 1 emphasises the fact that since 2008, the IDC has focused on providing finance to sectors strongly supported in the past. Within the metals, machinery and equipment (MME) value chain, for example, the basic metals sectors received considerable support during apartheid, including through IDC investments aimed at promoting competitiveness. This sector has continued to receive various types of support post-apartheid, including through the IDC (Rustomjee et al., 2018).

The role of the IDC (among other measures) in the continued support of upstream industries poses a significant challenge for industrialisation of the South African economy in two ways. Firstly, due to limited funding in general, it reduces the amount of funding available for downstream sectors. The provision of funding to less labour-absorptive, capital-intensive, and highly concentrated sectors such as basic metals as well as mining and quarrying was at the expense of funding towards

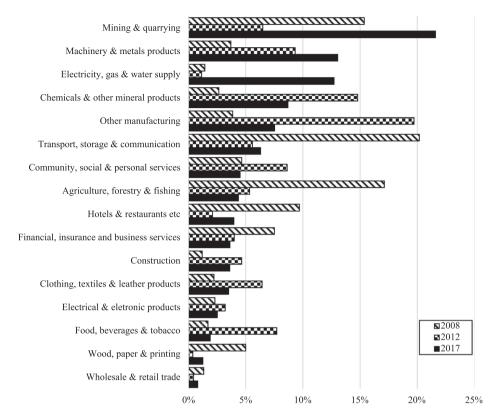


Figure 1. Sector share of IDC aggregate funding (2008–17).

Source: IDC Data, authors' calculations.

manufacturing and related service sectors that tend to be more labour-absorptive. Focusing on these value chains can contribute to greater structural transformation and inclusivity in the economy.

Secondly, the strategies employed by powerful and large upstream firms undermines the development and competitiveness of downstream industries in value chains. Understanding the value chains within which industries are located is important, since the impact of support (including finance) at one point in a value chain has implications for growth and linkages in other parts of the value chain. The creation of mutually beneficial linkages, with positive externalities, between upstream and downstream players is key for structural transformation and development of small and medium enterprises. As such, the IDC's funding of upstream and largely capital-intensive sectors may not necessarily undermine the structural transformation and inclusivity agenda if there exist strong linkages with downstream producers.

In South Africa's case though, studies have shown that support for upstream (including funding support) has not resulted in better outcomes in downstream industries, as powerful entrenched firms in upstream industries have used their power to extract rents. For instance, the support provided to upstream metals firms in the MME value chain has not assisted in the development of downstream firms. In fact, there has been a hollowing out of capabilities in downstream industries (Zalk, 2017; Rustomjee et al., 2018).

One of the areas in which the IDC has managed to diversify funding is its support of the Renewable Energy Independent Power Producers Procurement (REIPPP) programme.² Through the investments in renewables since 2011, the IDC has played a role in derisking the green economy, which has resulted in increased appetite for risk on the part of the private investors and hence an increase in investment in this sector. The success of the IDC's funding and support for the REIPPP programme highlights that the IDC may in-fact be well-placed to fund well-designed programmes. The implication here is that the shortage of IDC funding in sectors important for inclusive industrialisation, and with strong labour absorption, may partly be as a result of a lack of coherency in industrial policy and programmes (we return to a discussion on industrial policy in Section 5). Thus, the identification and prioritisation of industries and sectors with high value-add and labour-absorption is key to successfully industrialising while allowing greater participation.

4.2. Patient capital, concessional funding and funding small businesses

For structural transformation and inclusive economic growth to occur, necessary measures need to be put in place to facilitate the entry and participation in the economy, particularly of SMEs and black-owned businesses. Moreover, greater participation of small and medium businesses in more diversified industrial sectors can help create a more dynamic and innovative economy.

The IDC has been providing funding mainly to bigger businesses, particularly more recently, as evidenced by the approvals data (Figure 2).³ The data shows that the number of approvals has been decreasing from 2002 to 2017: 516 projects were approved in 2002 compared to only 177 in 2017, even though the value of approvals was increasing in real terms. We do note though that the existence of institutions like the National Empowerment Fund (incorporated into the IDC in 2017) and Small Enterprise Finance Agency suggests a reduced role for the IDC in terms of small businesses. Better data would help us to ascertain whether IDC funding is oriented towards businesses that are much larger than those defined as 'small' and 'medium' using official definitions.

South Africa's financial institutions typically provide only short- to medium-term finance, with SMEs and black-owned businesses still experiencing significant challenges with access to finance (Chandrasekhar, 2016; Ncube et al., 2016; FinFind, 2018). In the context of a concentrated economy, access to longer-term finance is critical to ensure that businesses can sustainably compete by building capabilities, particularly in sectors where scale is important. Development finance institutions should provide patient capital⁴ (Luna-Martinez & Vincente, 2012; Chandrasekhar, 2016) to help overcome the challenge of start-ups incurring losses in the first few years of operation, before they have built up capabilities and become profitable (Herrington et al., 2015; Ncube et al., 2016).

²The 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).

³Using the IDC's definition, it is difficult to get a good picture of the size of businesses being funded by the IDC as a result of its changing definition of what constitutes a small business.

⁴Patient capital can be defined as long-term equity or debt whose providers do not aim to capture benefits in the shortterm and who maintain their investment even in the face of adverse short-term conditions for the firm (Deeg & Hardie, 2016).

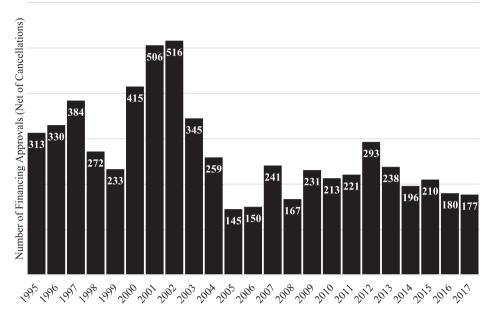


Figure 2. Number of financing approvals (net of cancellations), (1995–2017). Source: IDC Annual Reports.

Whether the IDC provides patient capital can be considered from two angles: firstly, loan repayment periods; and secondly, equity investments. As far as loans are concerned, patient capital is typically equated with long-term (multi-year) loans on the assumption that they will not be traded or securitised (Deeg & Hardie, 2016). Analysis of IDC's loan book since 1994 indicates that the majority of loans mature between one and five years, especially since 2001 (Figure 3).⁵ This categorisation is quite broad, and it is unclear what the duration of most loans are within this category. Notwithstanding this, when compared with international standards, the IDC's loan periods are inadequate as most DFIs offer loans with maturity of more than six years (Luna-Martinez & Vincente, 2012).

Furthermore, studies on barriers to entry show that it can take several years before an entrant can realise profits (Chavis et al., 2011; Ncube et al., 2016). Consider for example the case of Grain Fields Chicken (GFC) in the poultry industry, which only became profitable four years after entry (Ncube et al., 2016). A loan of 5-year maturity with an immediate repayment schedule would have been inadequate in this case, in the absence of access to other capital. Though the IDC does provide grace periods of up to 2 years⁶ for some loans it is unclear what proportion of loans receive these.

Secondly, equity can be thought of as patient capital because long-term is typically understood to mean that the investor intends to hold the investment for a multiyear or an indefinite time period, and maturity of equity is effectively unlimited (Deeg & Hardie, 2016). The IDC's funding mix includes both debt and equity. Data from the

⁵There was a decrease in the share of longer-term (>5 years) loans since 2001, though there was some reversal of this from 2013 onwards, which may be related to funding for renewable energy projects.

⁶Interview with IDC, 28 June 2018.

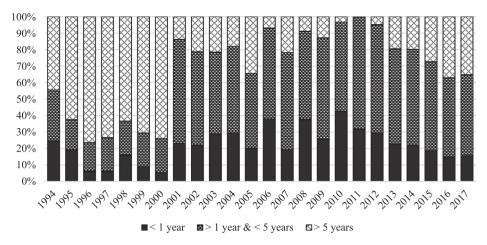


Figure 3. Maturity of IDC's loan book (1994–2017). Source: Authors' construction based on annual reports.

IDC's annual reports show that more than 50% of the IDC's funding has been in the form of equity since 1994.

While the IDC's equity investments can be thought of as sources of patient capital, it is important to consider what kind of businesses the IDC is taking equity stakes in. The IDC could, for instance, be taking equity stakes mainly in large and well-established companies rather than start-ups, either for strategic or other reasons. The IDC's stock of investment securities in 2015 reflect its continued orientation towards more upstream sectors, with established sectors like 'other mining' (23.1%) and 'basic non-ferrous metals' (15.7%) being prominent, together with 'other chemicals and man-made fibres' (38.5%) (Zalk, 2017).

Moreover, the IDC's equity investments are in fact crucial to the institution maintaining a good balance sheet, in order to borrow money. Therefore, the level and mix of equity funding is very important for the IDC. We return to a discussion of the IDC's funding model in Section 5 below.

In addition to patient capital, DFIs also generally provide concessional funding in the form of lower interest rates and grants, as well as other non-financial support initiatives linked to finance provided. Lower interest rates are particularly important given that one of the challenges for SMEs is the relatively high cost of finance associated with the private banking sector. Counterintuitively, the IDC does not generally provide lower interest rates on its loans. In fact, the IDC's pricing of loans is not more competitive than commercial banks, with businesses often approaching the IDC as a lender of last resort. It is partly the IDC's funding model which appears to be a challenge for providing concessional funding, as discussed in Section 5 below.

The IDC does however have a number of specialised schemes under which it provides concessional finance (on-balance sheet schemes). This is possible through a cross-subsidisation of the investment portfolio, with the IDC using proceeds from large equity

⁷This classification includes a host of industries including cosmetics, but we do not have the breakdown of firms in this category to ascertain what kinds of firms are mainly represented.

⁸Interview with IDC, 28 June 2018.

investments to cross-subsidise its loan book in order to provide concessional finance. Concessions under these schemes include longer repayment periods and interest rates that are lower than prime rates. Nonetheless, the development impact of these schemes is minimal given their relatively small share in IDC's total funding (total approvals under on-balance schemes accounted for about 6% of total IDC approvals in the 2011–2017 period).

Finally, businesses that are starting out also tend to face working capital challenges. This component of overall capital requirements is critical for small and medium companies since, unlike large companies, they cannot afford to fund operations without consistent cash flow. The key issue raised by businesses is that of payment delays, which is partly related to buyer power. Large corporates tend to take as long as 120 days to pay suppliers, while there are challenges of non-payment and cancellation of contracts by SOEs. 10 To some extent, the IDC is able to bridge the working capital gap through its Working Capital Fund and revolving credit facilities. However, access to these facilities (and IDC funding in general) is limited because application processes are typically complex and time-consuming. Although there is a general acknowledgement that proper due diligence is important for sustainable provision of finance, there is also a need for timely decisionmaking. Moreover, innovative ways of conducting due diligence and assessing risk need to be developed, as opposed to the traditional methods typically used.

4.3. BEE, black industrialists and the IDC

The legacy of the apartheid regime has left the economy largely in the control of the minority white population. Hence inclusive economic growth does not only mean participation of small and medium enterprises in general, but black-owned businesses in particular, in order for the economic profile to reflect the demographics of the country. In order to address these legacy issues, the dominant policy post-apartheid has been black economic empowerment (BEE) (BEE Com, 2001; Hirsch & Hines, 2005). The outcomes have however been limited (Chabane et al., 2006; Ponte et al., 2007). Despite nearly R600 billion in BEE transactions completed in the period between 2003 and 2013 alone (DTI, 2013), ownership and control of businesses remain skewed disproportionately to the minority (Bosiu et al., 2017).

In line with overall policies, the IDC's initial approach to black economic empowerment funding was to fund acquisitions of shares in existing companies by black shareholders (IDC, 2015). Data between 1995 and 2005 shows that most BEE deals in this period were for acquisitions. The IDC's BEE policy evolved from a purely acquisition-based focus to expansionary investments since the early 2000s (IDC, 2003, 2015), with it seeking to provide concessional loans and equity funding to assist black businesses (IDC, 2003).

In 2013, the IDC also intensified its focus on funding for black industrialists (IDC, 2015). IDC's funding of black industrialists occurs through its own funding channels as well as co-funding of black industrialists identified through the DTI's Black Industrialist Scheme (BIS) that was launched in 2016. The BIS aims to promote the participation of black industrialists as manufacturers in key sectors identified in the IPAP.

⁹Calculations based on data provided by the IDC.

¹⁰Reflections by black industrialists at an Inaugural Ministerial Black Industrialist Dialogue hosted at the Department of Trade and Industry (DTI) on 3 October 2018.

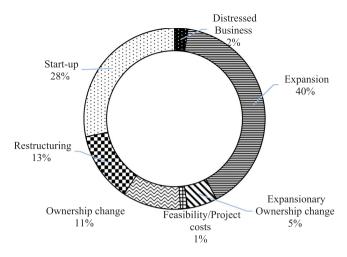


Figure 4. Black industrialists funding by Type (2014–17).

Source: IDC Data, authors' calculations.

Approvals for black industrialists increased from R323.7 million in 2013/2014 to R3.2 billion in 2017/2018 in real terms, largely at favourable or concessional lending rates. Most funding in the short period between 2014 and 2017 (when data is available) has been for expansions (40%), followed by start-ups (28%) (Figure 4). Expansion helps smaller businesses become more effective rivals, given that several of South Africa's industries are characterised by large minimum efficient scales of production. Moreover, expansionary investments have potential to generate more employment than acquisitions.

The IDC's minimum funding value of R1 million means that potential black industrialists may not qualify because they are either too small or not well-established. The smaller share of start-ups may point to the lack of a more general framework for the promotion of black industrialists in the economy, with finance standing as one cog in a bigger wheel. Moreover, black industrialists are still subjected to stringent application processes in line with the normal IDC funding.

5. Discussion – is the IDC well-placed to facilitate structural transformation and inclusive growth?

The outcomes outlined in the above sections – namely the general lack of concessional funding; the focus on bigger and more established businesses; and the continued focus of funding on more upstream sectors – paint the IDC as an institution that is not well-placed to help transform the structure of the South African economy or to facilitate the creation of new businesses. But what are the underlying reasons which have led to these outcomes?

5.1. The impact of the IDC's funding model on its operations

We argue, firstly, that the IDC being a self-sustainable development finance institution affects how it functions. The IDC last received funds from the government in 1954

(Mondi & Bardien, 2013), and this kind of self-sustainability is outside of the norm for development finance institutions internationally. The outcomes outlined in Section 4 above, must be viewed in light of the impact of the funding model on the functioning of the institution.

The IDC relies on borrowings, internal profitability, capital growth and sales of mature investments to maintain and expand its funding. Data from the annual reports of the IDC shows that in the period between 2000 and 2017, the IDC funded its activities from three main sources: internally generated funds, borrowings and investment disposals. Internally generated funds (repayment of loans, dividends and advances received) played the biggest role, though borrowings have taken on increased importance, increasing significantly from 2009 onwards (IDC, 2017).

The IDC's performance as far as concessional loans and patient capital must be viewed in light of its own borrowings, since the IDC generally uses loans received in order to onlend to businesses. 11 The IDC's own borrowings 12 therefore impact on how it can fund businesses in the economy in two ways: Firstly, the payback period for loans given to businesses is dependent on the payback period associated with IDC's own borrowings. Secondly, 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. In effect then, the interest rate that the IDC is able to lend money out at is determined by the various interest rates that it is subjected to.

Moreover, the substantial need to borrow money in the domestic and international market impacts on the IDC's equity investments. The ability of the IDC to borrow increasingly larger amounts from international agencies and to raise funds at attractive rates relies heavily on the strength of its balance sheet (IDC, 2011). 13 Furthermore, the dividend flows from these investments are an important source of funds, allowing the IDC to cross-subsidise financing activities and to offset impairments (IDC, 2011). They allow the IDC to create funding schemes that address specific development outcomes, often at concessionary rates.

While the IDC's model thus far has ensured that the institution remains financially viable, it is clear that the model has implications for how the institution functions. The quantum of funding provided by the IDC is substantially smaller than other development finance institutions (Naqvi, 2018), 14 and the rate at which the IDC lends money is not more favourable than the banking sector, while the duration of loans is relatively short. 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. There is thus tension between the IDC's development mandate and its financial sustainability. Moreover, the financial model within which the IDC operates appear to be a significant driver of its activities.

¹¹Interview with IDC, 28 June 2018.

¹²Currently, in the total loan pool, domestic borrowings are particularly important, with 66% of total borrowings emanating domestically in 2017/2018 (bank loans and private placement bonds accounted for the majority of domestic borrowings). 34% of total borrowings in 2017/2018 emanated from foreign borrowings, with DFIs – from which the IDC could obtain concessional loans - accounting for only 5% of total borrowings in 2017/2018 (IDC, 2018 - Corporate Plan presentation). ¹³https://pmg.org.za/tabled-committee-report/1632/

¹⁴The combined assets of the IDC and DBSA amount to just over 5% of GDP, while the assets of the Chinese CDB and Brazilian BNDES amount to 14 and 16% of GDP respectively. The German KfW has assets of about 17% of GDP.

5.2. The IDC and the industrial policy space in South Africa

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 work together to block greater participation in the economy, highlighting the need for purposeful action in different areas (Roberts, 2016). This requires coordination across different government departments. Successive post-apartheid governments have however failed to realise a coherent industrial policy with a lack of 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. It also means that there is 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.

For this to be successful though, more reflection and analysis is required on the role of interests in shaping policy and support. Powerful upstream industries in South Africa have been able to lobby government to skew policies, regulation and support in their favour, thereby undermining other industries along their value chains. The impact has been to both maintain the status quo in terms of the structure of the economy, as well as to undermine capability development, investment and entry of new firms into the economy. Thus, a broader discussion around government support, including through development finance, needs to be had. Without this, it is unlikely that there will be significant inroads in changing the structure of the economy, and ultimately, in dealing with inequalities related to access to the economy and accumulation of wealth.

6. Conclusion

The apartheid legacies have left an economy that is still characterised by the minerals energy complex (MEC) industries, with majority of the population (largely black) excluded from participating in the mainstream economy. Structural transformation in the South African context means diversifying away from upstream, MEC-linked industries, to downstream sectors that exhibit higher value addition and labour-absorption. It also means better inclusion through the establishment and development of small and medium-sized enterprises, particularly those owned and controlled by black entrepreneurs to compete effectively in the economy.

The IDC (through provision of industrial finance) has sought to foster structural transformation and inclusive economic growth, mainly through the use of concessional finance to SMEs (especially black-owned enterprises). However, the developmental impact of IDC's efforts has largely been limited. This is because the IDC's funding remains largely oriented towards large and established enterprises in less diversified and upstream industries. Nevertheless, there have been notable changes here and there, such as significant funding for the renewable energy projects, which played an important role in de-risking the green economy. Another notable change is the abandonment of funding towards low-productive and services sector in favour of sectors and industries outlined in the IPAP.

In terms of the provision of funding focused on inclusion, the above discussions show that increased efforts have been made to fund SMEs and black-owned businesses. However, due to the qualifying criteria that seem to favour already established enterprises, and limited concessional finance in general, the impact has been miniscule. Although the IDC tries to provide concessional funding through its special schemes, the impact of these has not been effective given the relatively small size of funding that is channelled through schemes as a result of the high possibility of failure of new ventures in the context of the IDC needing to pay back its debt. Thus, the overall inability of IDC to extend sufficient concessional support to businesses has meant that SMEs and black-owned businesses have suffered the most since they face the most barriers to entry.

The limited developmental impact of IDC funding can be attributed to its own funding model. Given that the IDC borrows from private financial markets (largely commercial banks) to on-lend to industries, constraints associated with these markets have a direct bearing on its ability to provide long-term finance at favourable interest rates. This largely affects SMEs due to their relatively risky nature.

In addition to the constraining financial environment in which the IDC operates, the lack of a coherent industrial policy has hampered the IDC in terms of its impact. The experience of late industrialisers like Korea has highlighted that finance needs to work together with other industrial policy measures in order to help build capabilities. In South Africa, there are various factors which individually or collectively block greater participation in the economy, highlighting the need for concerted action from different stakeholders. Successive post-apartheid governments have failed to adopt a coherent industrial policy, as evidenced by a lack of coordination within and across government departments. This has meant that DFIs have not been subjected to a clear and consistent set of objectives over time.

The implication is that there is no single silver bullet solution to improve the developmental impact of IDC and industrial funding. Instead, efforts should be made to deliver an intergovernmental package of measures, focused on tackling barriers to entry and changing regulations to open up markets, together with effective support in the form of concessional finance, and non-financial assistance such as skills to support the development of capabilities.

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Appendices

Appendix 1. Key interviews/discussions.

Organisation	Position	Date	
Private	Former IDC board member	28 May 2018	
IDC	Person1: Research & Information	28 June 2018	
IDC	Person1: Corporate Strategy	4 July 2018	
IDC	Person2: Corporate Strategy	4 July 2018	
IDC	Person3: Corporate Strategy	6 July 2018	

Appendix 2. Sub-sector breakdown of selected disbursements, 2008–2017.

	Chamilant and missional	Aggregate sectors	Other	Minimo and	Florand de la companya de companya
	Chemical and mineral products	Machinery and metal products	Other manufacturing	Mining and quarrying	Electricity, gas and wate supply
Total Share of IDC Aggregate Sectoral Funding	·	·	•	, , ,	
(2008-2017)	9% Chemical and mineral products	13% Disaggregated Sub-sectors al Machinery and metal products	8% Other manufacturing	22% Mining and quarrying	13% Electricity, gas and water supply
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%
Water supply					1.3%
Total	100%	100%	100%	100%	100%

Source: IDC Data, authors' calculations.