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Growth and Strategies of Large and Leading Firms - Top 50 firms on the Johannesburg Stock Exchange (JSE)[1]

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Abstract

The orientation and investments of large and lead firms can shape the patterns of industrial development and growth in a country. It is thus important to understand the investment decisions of large firms and how they relate to policy in terms of building productive capacity in the South African economy. This study assesses the investment decisions and strategies of the largest 50 firms listed on the Johannesburg Stock Exchange (JSE) (by market capitalisation) as they relate to industrial development in South Africa. The assessment is based on an analysis of publically available annual reports and announcements for listed firms.

A key finding is that while there has apparently been considerable changes in the composition of the top 50 the very large firms (in the top 20) have largely retained their positions ranked by market capitalisation. The assessment also shows that while firms have shown significant profitability, they have retained significant portions of profits within their organisations. The majority of the retained profits are being held as reserves as opposed to being reinvested such that total reserves held stood at R1.4 trillion by 2016. Investments that have been undertaken largely comprise expenditure on replacement capital and mergers and acquisitions, rather than expansionary expenditure. There is a high degree of internationalisation by South African firms, with the majority of merger and acquisition deals being concluded outside South Africa.

JEL classification

D21, D22, E22, G34, L25, O12, O16, O25

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1. Introduction

South Africa's low economic growth in recent years has contributed to continued high levels of unemployment and inequality and the pattern of growth has largely not been inclusive. The country's economy is still heavily reliant on primary activities such as mining, and productive sectors capable of absorbing relatively low skilled labour such as manufacturing have been declining since the late 1980s. The decline in manufacturing suggests early deindustrialisation, which will require a coherent industrial policy to reverse. Industrial policy involves the structuring of policy, incentives and support mechanisms by the state to support the development of domestic firms. Firms' strategies (i.e., including on investment and expansion, location decisions and pricing and market conduct) are central to the process of industrial development. These strategies are driven by a range of factors including existing market competition in a sector or country, product market competition, as well as cost and demand linkages (Puga and Venables, 1996).

Large businesses in South Africa are now highly internationalised, including both outward internationalisation by South African firms as well as the presence of transnational corporations (TNCs) with their roots in other countries. Several companies are either cross-listed, or have significant portions of their revenues derived abroad. Internationalisation of South African firms could signal efforts to raise capital from international capital markets in order to reinvest in home markets, or it could signal declining investment appetite in home markets relative to international markets, with local firms seeking high-return investment opportunities abroad. Inward internationalisation may be positive from the perspective of drawing in foreign capital and productive capabilities, although it may also mean foreign TNCs seeking to extract capital from South Africa in order to reinvest in their countries of origin, as discussed further below.

South African firms have expanded in the southern Africa region on the basis of various factors, including 'market-seeking' strategies in response to demand constraints in home markets, as well as 'asset or resource-seeking' strategies to benefit from access to additional raw material or productive resources (Verhoef, 2016). The expansion of firms also leverages existing firm capabilities, managerial systems and technology developed in the home market into new markets (Verhoef, 2016). While these activities relate to the growth and expansion of firms, it is relevant that a number of large investments, as profiled in this research, are not being made in South Africa which presents a domestic policy challenge in terms of a lack of domestic investment.

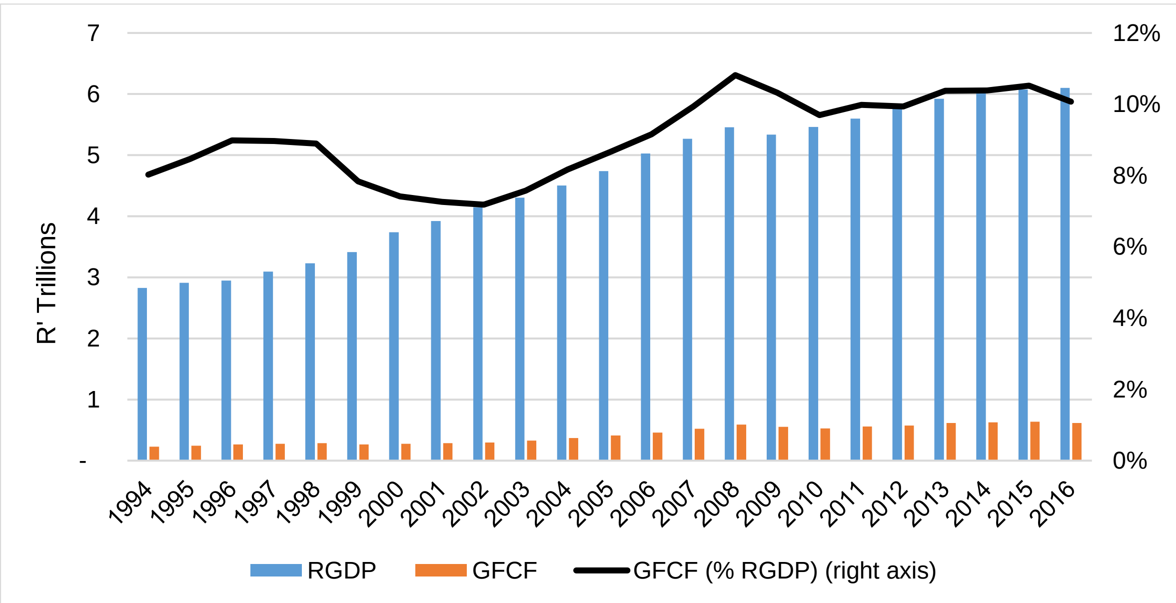
Understanding the rationale underpinning major investments, internationalisation and expansion by big businesses is thus critical to assessing the responsiveness of firms to state incentives and interventions both in home and foreign markets. The investment trends of large firms are likely to shape the country's industrial development outcomes, and subsequently its ability to embark on an inclusive and labour-absorptive growth trajectory. For industrial policy to be effective there is a critical need to understand the investment trends, strategies and decision-making of such firms, as the policy levers designed to influence the firms' decisions are unlikely to be effective in the absence of such an understanding.

The above forms an important part of the rationale for the Industrial Development Research Programme (IDRP), funded by the DTI. This particular paper forms part of the IDRP which also involved an assessment of food producing firms, Remgro Limited, listed firms in metals, machinery and equipment sectors, supermarket groups, and a study on procurement in rail in South Africa.

In the context of the broader economy, investment refers to transactions that increase the magnitude of real aggregate wealth. This mainly includes the purchase or production of new real assets such as structures and equipment by businesses for production purposes. Purchases of financial assets are not considered as part of 'investment' because financial assets reflect credit relationships within the economy, rather than representing real net worth for the economy (Parker, 2010). There are several competing models of firm investment which are not discussed in detail here. Several models have been developed to better understand and explain investment patterns (Porter, 2010). For this purpose it is important to note that many of the theories fail to account for the role of retained profits in investment, as proposed by the cash flow model. Faced with high costs of capital, firms can opt for investment expenditure financed through internal reserves. This implies that investment is not only dependent on output and cost of capital, but partly on the level of profits or expected profits as well, which in turn influence available reserves. Therefore, it could be assumed that the optimal capital stock is a function of expected profits. In this regard, it is argued that the desired capital stock should be made dependent not on the level of output but instead on variables which capture the level of profits or expected profits (du Toit and Moolman, 2004). In this assessment we consider closely the extent of growth in company reserves or accumulated profits in South Africa, viewed as a potential alternative source of capital which has seemingly not been used by firms to finance productive investments.

Levels of investment in South Africa has not grown significantly since 2010. While real aggregate investment measured in terms of gross fixed capital formation (and as a share of real GDP) had increased from the early 2000s to around 2008, it has essentially levelled out since then at around 10% of real GDP on average (Figure 1).

Figure 1: Gross fixed capital formation (% real output, 2010 constant prices) (1994-2016)



Source: StatsSA data

The structure of the South African economy is characterized by large firms with significant amounts of retained profits, and persistent high levels of concentration reinforced by high barriers to entry. Patterns of ownership in the economy are skewed in favour of the white population, large conglomerates and incumbent firms, and family groups. Given the current debates on structural transformation, understanding firms' decisions is thus important so that appropriate policy levers can then be designed to influence such decisions to yield more inclusive, competitive and innovative development outcomes.

Against this backdrop, this project is a first step in tracking the investment activities of large firms listed on Johannesburg Stock Exchange (JSE), and the rationale provided for the investments. *The key theme in this research is to understand the investments, decision-making and investment strategies of large and lead firms as they relate to industrial development in South Africa.*

The study assesses listed companies for two primary reasons; first, these are large companies which through their large investments (or lack thereof) influence investments within an economy (or have potential to do so); and second, listed companies are obliged to publish their financial statements which makes their data accessible. The available published data on listed firms is generally not 'mined' and analysed in any detail from the perspective of economic development policy and presents a rich source of information for understanding key trends and patterns developing in the behaviour of large firms that may warrant further policy consideration.

There are over 400 firms currently listed on the JSE. In this regard a sample of the 50 top companies ranked by market capitalisation has been considered in this research. The study considers market capitalisation as a means to rank the firms, rather than, say, revenue, given different business models and nature of activity of firms. A revenue measure may skew the rankings in favour of high volume commodity producers and retailers, for example. Ranking by market capitalisation is also reflective of the value attributed by investors and capital, who may be potential investors for other (black-owned) firms in the economy, to particular firms in terms of their size, assets and potential for growth or not, and the underlying value of companies.

It is of particular interest from a policy perspective how investments can be attracted to other sectors and new enterprises, relative to large firms that are listed. However, to the extent that shareholding on the JSE accounts for a significant proportion of equity investments in South Africa, it is also relevant what the firms being invested in do with this financial capacity. Are investments being made by large listed firms in new productive capacity and technologies, or are large firms making limited fixed capital investments in South Africa, earning higher rents from entrenched positions of market power in key industries, and simply passing on profits to shareholders? Policy makers will have an interest in how to shape policy such that investments are made in new capacity in South Africa in particular, and how to attract entry and investments in developing firms across the economy. Lastly, it is important to consider the firms on the JSE to the extent that there are debates about how the composition of the pool of the largest firms and its ownership by different groups has changed and also remained the same since the democratic transition. Key questions in this regard, although not considered in significant detail in this report are whether the 'face' of ownership of the largest firms has changed, whether black ownership has increased in these firms, and where there have been changes what has been the impact in terms of outcomes and firm behaviour?

The top 50 companies constitute 86% of the total market capitalisation on the JSE in 2017. This motivates for considering the top 50 companies as a representative sample of lead firms in the South African economy. Furthermore the top 50 is representative of a range of sectors and industries which allows for consideration of aspects of investment behaviour and company strategy that are perhaps specific to the arrangements and market conditions in a particular industry. The top 50 has representation in 8 out of the 10 industries represented on the JSE as informed by the JSE's ICB industry classification benchmark.

Although the top 20 firms could also be considered as a sample, given they constitute 71% of cumulative market capitalisation, the problem comes when outliers or other firms that do not meet the objectives of the study have to be removed. The fact that 20 firms constitute 71% of the market capitalisation is a significant finding on its own, pointing to significant concentration of value and control in the economy. As demonstrated below, there are dual listed companies that do not have significant operations in South Africa. These are very significant in terms of market capitalisation, and as a result their removal could easily reduce the top 20 'sample size' (71%) to less than 50% of market capitalisation. Furthermore, although the top 20 companies have a significant representation in terms of market capitalisation, the top 20 companies on the JSE do not adequately represent the exchange in terms of sectors and industries covered.

Table 1: Share of total market capitalisation March 2017

Firms	Cumulative market capitalisation %
Top 10	58%
Top 20	71%
Top 50	86%
Top 100	95%

Source: InetBFA

2. Overview of stock markets

The stock market provides a platform on which shares of publicly held companies are issued and traded. Companies issue shares in lieu of capital to finance operations while investors receive shares that give them a claim on the profits and overall growth of a company. When companies are profitable, stock market investors make money through the dividends companies pay out and by selling appreciated stocks at a profit referred to as capital gain. The downside is that investors can lose money if the companies whose stocks they hold decrease in value which results in the stocks' prices decreasing. This leads to losses for the investors if stocks are sold at low prices (Brown, 2012).

The value of shares is determined by the expected future profits of a company; if investors expect high future profits share prices increase, while low future profit expectations have the opposite effect on the price. Future profits expectations are affected by a range of factors that include: the business model of the company, quality of management; research and development, growth of historic profits, quality of projects in the pipeline and the competitive position of the firm (Ahmadi, 2017).

2.1 Structure of the stock market

A stock exchange is structured into two markets, the primary and secondary market. The primary market is where companies issue shares for the first time to the general public; this is the market where firms raise capital and the only market that firms are part of. The secondary market is where investors trade shares amongst themselves after the shares have been sold for the first time in the primary market. On the secondary market, investors require a broker to purchase the securities on their behalf and the price paid includes brokerage fees.

2.2 The role of the stock exchange

The capital market is a common feature of every modern economy and is reputed, amongst other things, to perform critical capital allocation functions which promote economic growth and stimulate orderly industrial development. In many advanced countries where capital markets correlate directly with the economy, the capital market is viewed as the primary gauge for the economy's performance (Aklahyel, Askira & Gaya, 2014). Furthermore, capital markets with adequate depth play an essential role in economic development since they are the principal platform through which low cost funds are mobilised to finance medium to long term projects on infrastructure and other productive assets. In the South African context, capital markets can foster diversification of the country's economic base which is largely mining and financial services dependent and assist economic agents to pool, price and exchange risk thereby encouraging savings and investments and ultimately creating wealth. The capital market also helps to channel capital or long-term resources to firms with relatively high and increasing productivity thus enhancing economic growth and industrial development.

Development of firms and the establishment of small, medium and large scale companies and industries are critical for the growth of economies, a process in which the capital market has a critical role to play. Industries can grow if, among other things, enough funds are available for take-off and expansion. In turn, industrialisation and industrial development is a prerequisite for the economic take-off or economic developments of any country, and central to breaking a cycle of poverty and underdevelopment (Tregenna, 2011; Kucera & Milberg, 2003; and Rowthorn & Coutts, 2004). To achieve this, adequate access to capital is a prerequisite.

However, successful industrial development is highly dependent on how the raised capital and the resultant profits are utilised. Firms often invest in non-productive assets. For example, mergers and acquisitions result in increased revenue and earnings that increase the value of the shares and benefit shareholders. However, in the context of industrialisation and economic growth, mergers and acquisitions are a consolidation of existing operations that does not necessarily increase output at a macro level or increase employment within an economy. An important downside of a pattern of investment based on a narrow focus on mergers and acquisitions is also that sectors can become increasingly concentrated often leading to poor competitive outcomes.

There are also other aspects relating to the globalisation of financial capital which may present challenges from the perspective of developing industrial capacity domestically. This relates in particular to the fact that internationalised firms may use the openness of capital markets to extract much needed capital from an economy. We discuss these issues below in relation to some of the large firms included in the Top 50 list.

2.3 Cross and dual listings

Cross listing is the listing of any security on two or more different exchanges. Cross listing accomplishes two things for an issuer. First, it tends to increase the liquidity of the security because there are more places to buy and sell, there are more participants in the market, and there is sometimes more time to trade the stock (if the exchanges are in different time zones). Second, it helps the issuer raise more capital because it makes more investors available from other markets and gives the company more exposure potentially lowering the cost of capital in the process. Depending on how the cross listing is structured it may have adverse effects on different countries. Cross listing may be used as a conduit to extract capital from a country;

in a case where the cross listed company does not have significant operations in a country where it is listed, the extracted funds will not benefit the country that has provided capital. The opportunity cost, other things equal, is that this capital could be an investment within the country where the capital is sourced that could potentially contribute to employment and economic growth.

Dual listings on the other hand are effectively mergers between two companies (in different countries) in which the companies agree to combine their operations and cash flows, but retain separate shareholder registries and identities (Bedi, Richards, & Tennant, 2003). In this respect, a dual listing is quite different to a cross listing. Whereas a dual listing involves the (quasi) merger of two separate entities, a cross listing occurs when an individual company establishes a secondary listing on a foreign exchange. One form of dual listing involves two companies transferring their assets to one or more jointly owned subsidiaries or holding companies. The holding company then passes dividends back to the main companies, which distribute them according to a predetermined ratio. Alternatively, instead of the transfer of assets, there may be contractual arrangements to share the cash flows from each other's assets. The operations of the two companies are closely coordinated, and in most cases the companies share a common board of directors (Hancock, Phillips & Gray, 1999). The main reason for adopting a dual listing structure is to minimise capital gains tax and other tax obligations that would result from a conventional merger (Smith & Cugati, 2001). There are also other considerations that include maintaining national identity or corporate status of both dual listed companies and avoiding accounting complications that come with a conventional merger deal such as goodwill accounting.

3. Overview of the Top 50 and company sectors

The top 50 firms have been ranked based on market capitalisation. Market capitalisation refers to the total market value of a company's outstanding shares. It is reflective of the size of a firm and the magnitude of its operations. As noted above, revenue may also be utilised to rank the firms, however because of the diversity amongst the firms being analysed, a revenue based ranking could be biased. For example, for the investment services firms considered a significant portion of income (share of profits from joint ventures and associates) is not classified as revenue such that a revenue based ranking will be skewed. This section begins by considering key changes (and continuity) in the composition of the JSE top 50 since 2000.

3.1 Key trends in the composition of the JSE top 50

Table 2 below shows the top 50 companies ranked from the largest to the smallest based on market capitalisation. The average company size in terms of market capitalisation is R229 billion while the largest (SAB Miller) and smallest (Pioneer Foods) companies are R2388 billion and R39 billion, respectively. The average value is significantly skewed by the larger capitalisation attributable to entities such as SAB Miller. As can be seen in the table below 8 out of the top 10 companies are cross listed[2] companies, together constituting 54% of the total

[2] SAB Miller through Anheuser-Busch InBev SA NV has other listings on the Bermuda Stock Exchange, Euronext Brussels Stock Exchange and Mexico Stock Exchange. British American tobacco has a primary listing on London stock exchange while Naspers is also listed on Nasdaq Stock Market. Glencore has listings in London Stock Exchange and Hong Kong Stock Exchange while Richemont and Steinhoff are also listed on Schweizer Borse Swiss Exchange and Frankfurt Stock Exchange, respectively. BHP Billiton has other listings on London Stock Exchange and Australian Stock Exchange.

JSE market capitalisation. To the extent that these firms are cross listed with significant operations outside of SA, they are perhaps less illustrative of firm decision making as it relates to industrial development *in South Africa*. The only companies in the top 10 with significant South African operations based on share of revenue are Standard Bank and Firstrand Ltd.

Table 2: JSE Top 50 by market capitalisation (R billion), 2000 and March 2017

	Top 50 2017	Sector	2017 Market Cap (R' billion)	% of total JSE market cap (2017)	Top 50 (ranked in 2000)
1.	SAB Miller	Consumer Goods	2388	17.8%	Anglo American Plc
2.	British American Tobacco	Consumer Goods	1654	12.3%	Richemont Securities
3.	Naspers Ltd	Consumer Services	922	6.9%	De Beers Consol Mines
4.	Glencore Plc	Mining	788	5.9%	Anglo American Plat
5.	Compagnie Fin Richemont	Consumer Goods	504	3.8%	Old Mutual Plc
6.	BHP Billiton Plc	Mining	458	3.4%	Billiton Plc
7.	Firstrand Ltd	Banking	290	2.2%	Dimension Data Hldgs
8.	Anglo American Plc	Mining	286	2.1%	Firstrand Ltd
9.	Steinhoff Int Hldgs N.V.	Consumer Goods	282	2.1%	Standard Bank Invcorp
10.	Standard Bank Group Ltd	Banking	255	1.9%	Nedcor Ltd
11.	Sasol Limited	Specialty Chemicals	242	1.8%	S A Breweries Plc
12.	MTN Group Ltd	Telecoms	234	1.7%	M-cell Ltd
13.	Vodacom Group Ltd	Telecoms	220	1.6%	Sasol Ltd
14.	Old Mutual Plc	Insurance	177	1.3%	Impala Platinum Hlgs
15.	Sanlam Limited	Insurance	148	1.1%	Sanlam Ltd
16.	South32 Limited	Mining	142	1.1%	Remgro Ltd
17.	Barclays Africa Grp Ltd	Banking	130	1.0%	Anglogold Ltd
18.	Nedbank Group Ltd	Banking	129	1.0%	Investec Group Ltd
19.	Aspen Pharmacare Hldgs	Health Care	125	0.9%	Lonmin P L C
20.	Remgro Ltd	Investment services	118	0.9%	Absa Group Limited
21.	Mondi Plc	Paper	113	0.8%	Liberty Group Ltd
22.	Shoprite Holdings Ltd	Consumer Services	111	0.8%	Liberty International Plc
23.	RMB Holdings Ltd	Investment services	93	0.7%	Johnnic Holdings Ltd
24.	Bid Corporation Ltd	Consumer Services	91	0.7%	Johnnic Communications
25.	Mediclinic Int Plc	Health Care	87	0.7%	Bidvest Ltd Ord
26.	Capitec Bank Hldgs Ltd	Banking	85	0.6%	Sappi Ltd
27.	Discovery Ltd	Insurance	81	0.6%	Imperial Holdings Ltd
28.	Anglo American Plat Ltd	Mining	81	0.6%	Gold Fields Ltd
29.	Tiger Brands Ltd	Consumer Goods	81	0.6%	Gencor Ltd
30.	Growthpoint Prop Ltd	Property	76	0.6%	Tiger Brands Ltd Ord
31.	Woolworths Holdings Ltd	Consumer Services	75	0.6%	RMB Holdings Ltd
32.	Hammerson Plc	Property	75	0.6%	BOE Ltd Ord
33.	Kumba Iron Ore Ltd	Mining	66	0.5%	Barloworld Ltd
34.	Rand Merchant Inv Hldgs	Investment services	62	0.5%	Venfin Ltd
35.	Investec Plc	Investment services	62	0.5%	Investec Holdings Ltd
36.	Intu Properties Plc	Property	61	0.5%	Liberty Holdings Ltd Ord

37.	Redefine Properties Ltd	Property	61	0.5%	Tigon Ltd
38.	PSG Group Ltd	Investment services	59	0.4%	Pick n Pay Stores Ltd
39.	Anglogold Ashanti Ltd	Mining	56	0.4%	Metropolitan Life Ltd
40.	Reinet Investments S.C.A	Investment services	55	0.4%	Coronation Hldgs Ltd
41.	Bidvest Ltd	Industrials	53	0.4%	Amalgamated Beverage Industries
42.	New Europe Prop Inv Plc	Property	48	0.4%	Nampak Ltd
43.	Resilient Reit Limited	Property	48	0.4%	Alexander Forbes Ltd
44.	Sappi Ltd	Paper	46	0.3%	Fedsure Holdings Ltd
45.	Netcare Limited	Health Care	45	0.3%	Steinhoff Interntl Hldgs
46.	Mr Price Group Ltd	Consumer Services	43	0.3%	MIH Holdings Ltd
47.	MMI Holdings Limited	Insurance	40	0.3%	Datatec Ltd
48.	Capital&Counties Prop Pl	Property	40	0.3%	New Africa Investment
49.	Truworths Int Ltd	Consumer Services	39	0.3%	Naspers Ltd
50.	Pioneer Foods Group Ltd	Consumer Goods	39	0.3%	Discovery Holdings Ltd

Source: InetBFA

The table also indicates the top 50 firms ranked by market capitalisation in 2000 to assess the extent to which there has been continuity, but also change in the composition of the largest firms in South Africa. *The South African lead firms by sector haven't changed significantly since 2000, especially within the top 50 firms, although the order of firms may have changed in some cases. That is, within the top 50 firms, several sectors including banking, mining, consumer goods, consumer services, insurance and investment services have remained essentially the same in terms of firms represented over the period* (Table A in the appendix), perhaps indicating entrenched positions of these firms in the sectors in which they operate. For example, there are high barriers to entry in retail banking (Makhaya & Nhundu, 2015), such that the four large retail banks (Firstrand, Standard Bank, Nedbank and Absa) have remained in the top 20 since 2000. These banks have roughly maintained their actual positions in the top 50 with the exception of Nedbank which has fallen seven places ut remains in the top 20.

In fact there is indication of consolidation and increased concentration in insurance and investment services evidenced by decline in the number of firms represented in the top 50. Major decline in investment services firms happened between 2000 and 2005 due to various factors including restructuring, and mergers and acquisitions. i.e., the acquisition of BOE Ltd by Nedbank in 2002, the consolidation of Investec Group Ltd and Investec Holdings Ltd to form Investec Plc, the fact that Tigon Ltd went out of business in 2005, the unbundling and delisting of Coronation Holdings Ltd to form Coronation Fund Managers in 2003, and the unbundling of Johnnic Holdings Limited in 2005. However, companies such as Remgro Ltd, Investec and RMB Holdings Ltd have maintained relatively stable positions across these years.

Certain firms have experienced rapid growth in value since 2000, which is perhaps reflective of broader shifts in the economy such as the decline in mining or rapid growth and/or consolidation of certain service-related businesses and investment groups. Discovery, primarily involved in insurance, is now ranked 27th from 50th in 2000. A major change in terms of insurance companies happened between 2000 and 2005 due to the removal of Metropolitan Life Ltd following the merger with Momentum to form MMI Holdings; and the delisting of Alexander Forbes in 2007. Liberty Group fell away between 2005 and 2010. Interestingly, companies such as Old Mutual Plc and Sanlam Ltd with long-standing interests in the South Africa economy have maintained their presence in the JSE Top 50 and their rankings.

Other firms, such as PSG Group, emerged in the top rankings after 2005. Similarly, Steinhoff International Holdings was ranked 7th in 2015 from around 30th in 2010. This rapid increase in value is largely due to the acquisition of Europe's second largest retailer of home furnishings (Conforama) in 2011. The acquisition led to an 87% increase in revenue between 2011 and 2012.[3]

There was still a substantial role for mining companies despite more challenging economic conditions on the past five years. Firms in the mining sector had climbed in terms of rankings and number in the JSE Top 50 between 2000 and 2010. This was partly due to the global commodity price boom, particularly the boom in the prices of precious and other industrial metals on the back of rising demand from emerging markets such as China. This period saw the emergence of Exxaro Resources Ltd, African Rainbow Min Ltd, Assore Ltd and Uranium One Inc. There was also substantial restructuring of companies such as the unbundling of Kumba Resources to form Exxaro Resources Ltd and Kumba Iron Ore in 2006. *However, firms in the sector declined from 2010 onwards partly due to heavy strikes that erupted since 2012, and unfavourable commodity prices.* BHP Billiton declined from the 1st position in 2010 to 5th in 2015, Anglo Platinum Ltd declined from the 8th position to 40th, and Anglogold Ashanti Ltd declined from 13th position to 44th in the same period. Other companies including Impala Platinum Holdings, Lonmin Plc and Gold Fields fell away completely from the JSE Top 50 between 2010 and 2015. Restructuring processes partly contributed to the decline of the sector, for instance; Gold Fields Ltd unbundled in 2013, leading to the formation of Sibanye Gold; and the share prices of mining companies with operations in Zimbabwe declined following news regarding the Zimbabwean government's implementation of laws which required local ownership of mining companies. In summary, the noticeable shifts in the mining sector appear to be underpinned by changes in market conditions rather than a structural shift in the nature of activities in the economy, which is an important area for further research.

Of particular significance since 2000 is the high levels of internationalisation of large businesses in South Africa; the emergence of property and health care firms; and the decline of certain technology and media companies. A significant number of large firms in South Africa are cross listed and/or have considerable operations outside South Africa. The entire Top 50 consists of 23 cross listed companies, accounting for 65% of the total JSE market capitalisation. This indicates high levels of internationalisation of firms on the JSE although considering the extent of cross listing alone has its limitations and is a somewhat conservative indicator given it does not include firms that are not cross listed but that have significant international operations.

Notably some companies do not have operations at all in South Africa, which is an especially concerning feature of the property sector wherein firms have grown significantly in terms of market capitalisation. Specifically, Hammerson Plc, Intu Properties Plc, New Europe Property Investments Plc and Capital & Counties Properties Plc, all in the property sector, do not have significant operations in the country. These firms' strategies do not articulate any future investment plans in South Africa, suggesting that foreign companies use South Africa as a source of capital to be invested abroad, effectively the same rationale provided by South

[3] Steinhoff International 2012 annual report p.27

African firms for seeking dual listing in international markets in the late 1990s (Chabane et al, 2006).

When the 23 multi-listed companies are excluded from analysis, only 27 companies of the top 50 are left accounting for about 20% of total JSE market capitalisation. This assessment illustrates an important point. When accounting for internationalisation, cross listing, and the extent of operations actually in South Africa, the number and value of remaining firms on the JSE is significantly reduced.

Moreover, all the remaining firms on the JSE account for only 35% of the total JSE market capitalisation. These firms basically represent ‘the real South African JSE’. In this context, estimates of black ownership may actually be unhelpful if they do not account for levels of internationalisation and whether companies owned by an increasing number of black South Africans actually have operations in South Africa. That is, firms within the “real JSE” are the ones for which black ownership should really matter, and increasing black ownership and industrial development support for companies with significant operations in South Africa should matter most given they can contribute to investment, employment and productive growth domestically.

There has been significant entry of property management and health care companies. Property management firms emerged between 2005 and 2010 through Capital Shopping Centres Group Plc (now Intu Properties plc) and Growthpoint Prop Ltd to seven[4] companies in 2017. As highlighted above, the majority (4 out of 7) of these companies are extensively internationalised, with no operations in South Africa. Furthermore, even the remaining ‘localised’ property management firms are not necessarily involved in building new property investments in South Africa. As such, the sector cannot be considered a driver of economic development, particularly due to its low labour absorption ratios (Tregenna, 2012). The same can be said of the significant growth of firms in the health care sector and health insurance, which has significant cross-ownership ties to the Remgro family and conglomerate group in particular.[5]

The decline in technology and media firms is also worth noting given the links these firms have to modern technology platforms in particular. Dimension Data Holdings annual reports indicate a decline in market capitalisation from 2000 onwards. Johnnic Communications unbundled in 2005, and Datatec Ltd in 2001. Mih Holdings Ltd, a subsidiary of Naspers, was delisted in 2002 following a restructuring process by Naspers. Thereafter Naspers became the only company featured in the JSE Top 50 in the technology and media sector. In fact Naspers improved significantly from 49th position in 2000 to the 3rd position in 2017, largely due to an acquisition of a 35% stake in a Chinese gaming and technology company (Tencent) in 2001. Tencent has grown by over 200 times since then.[6]

3.2 JSE Top 50 by sector

Analysis of the top 50 companies will be carried out at sectorial level[7] based on the main business activities of the firms. Some firms may have subsidiaries involved in different lines of business from the holding firm however in these classifications the dominant line of business

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[4] Hammerson Plc, Capital Shopping Centres Group Plc, Growthpoint Prop Ltd, Intu Properties Plc, New Europe Property Investments Plc and Capital & Counties Properties Plc

[5] See Warning on Remgro and Afrocentric surprises healthcare market inquiry

[6] See Why the sky is the limit for Naspers’ share price

of the holding company is considered. Extensively diversified firms such as Bidvest Ltd that have activities across multiple product sectors as part of the main operation of the business are grouped together under the 'Industrials' sector. A breakdown of the sectors represented by the top 50 is provided below (Table 3).

Table 3: JSE Top 50 firms in 2017, by sector

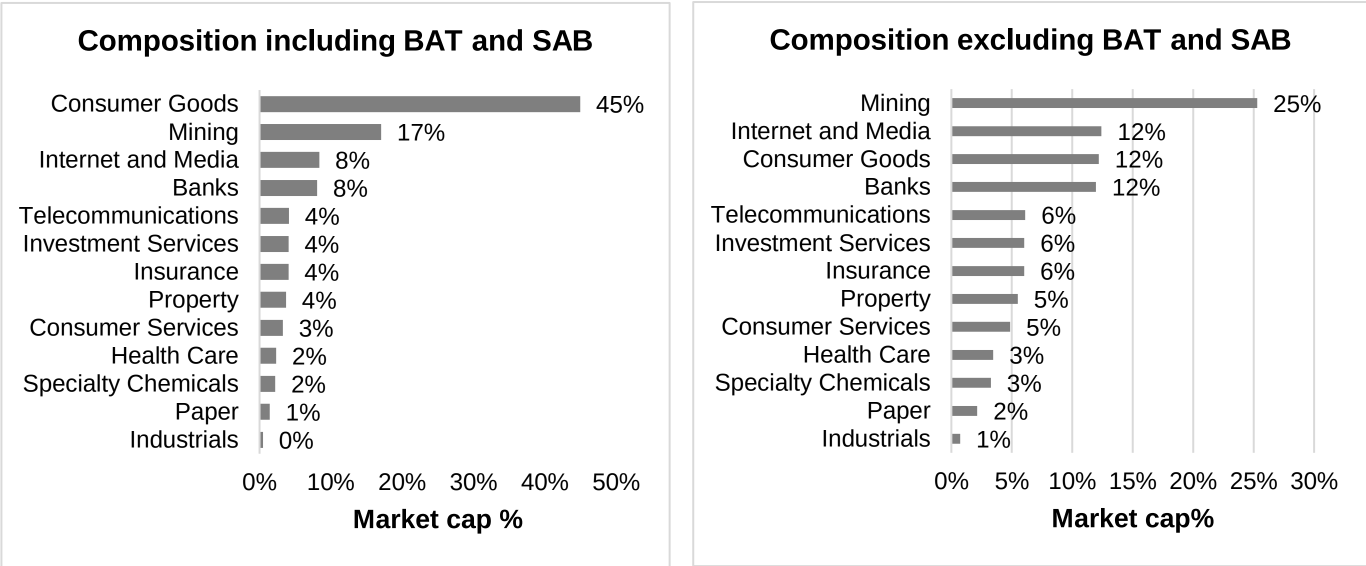
Banking	**Consumer goods**	**Consumer services**	**Health care**
Barclays Africa Ltd Capitec Bank Ltd Firstrand Ltd Nedbank Group Ltd Standard Bank Ltd	SAB Miller British American Tobacco Compagnie Fin Richemont Steinhoff Int Hldgs N.V. Tiger Brands Ltd Pioneer Foods Group Ltd	Shoprite Holdings Ltd Bid Corporation Ltd Woolworths Holdings Ltd Mr Price Group Ltd Truworths Int Ltd	Aspen Pharmacare Hldgs Mediclinic Int Plc Netcare Limited
Investment services	**Mining**	**Paper**	**Property**
Investec Plc PSG Group Ltd Rand Merchant Inv Hldgs Reinet Investments S.C.A Remgro Ltd RMB Holdings Ltd	Anglo American Plat Ltd Anglo American Plc Anglogold Ashanti Ltd BHP Billiton Plc Glencore Plc Kumba Iron Ore Ltd South32 Limited	Mondi Plc Sappi Ltd	Capital&Counties Prop Pl Growthpoint Prop Ltd Hammerson Plc Intu Properties Plc New Europe Prop Inv Plc Redefine Properties Ltd Resilient Reit Limited
Industrials	**Insurance**	**Specialty chemicals**	**Telecommunications**
Bidvest Ltd	Discovery Ltd MMI Holdings Limited Old Mutual Plc Sanlam Limited	Sasol Limited	MTN Group Ltd Vodacom Group Ltd
Internet and media			
Naspers Ltd			

Source: INET BFA data

The banking sector comprises organisations that have banking as a dominant primary activity while the consumer goods sector is made up of firms that produce final goods for consumers rather than manufacturers of inputs for producing other goods. The consumer services sector comprises companies that largely distribute consumer goods to the final users, for example supermarkets and clothing outlets while the health care sector is made up of hospitals and a pharmaceutical company. Investment services companies are generally holding companies and firms that primarily invest in both listed and unlisted financial instruments and firms. The insurance sector consists of life and health insurance firms.

The lead sectors in terms of market capitalization of the JSE Top 50 are consumer goods (45%), mining (17%), internet and media (8%), and banking (8%). The major contributors falling within the consumer goods sector are the cross listed entities SAB Miller and British American Tobacco Plc. These companies constitute 35% of the entire JSE Top 50 market capitalization which is more than two times larger than the contribution of the whole mining sector. Because of the scale of these entities they tend to skew the analysis, so much so that it is difficult to analyse the dynamics amongst relatively smaller entities (Figure 2). In the second panel of figure 2 SAB Miller and BAT are excluded for illustrative purposes.

Figure 2: Composition of the JSE Top 50 with and without BAT and SAB Miller (March 2017)



Source: INET BFA

Note: Market capitalisation percentage is based on the total market capitalisation of the top 50 firms.

When SAB and BAT are removed from the top 50, the composition in terms of market capitalisation changes with mining becoming the largest sector. This illustrates the significant impact that a few cross listed companies can have on the analysis of the top 50. There are other cross listed companies (other than BAT and SAB) that have the potential to skew results in the same way. We assess this and the treatment of these firms within the analysis below.

3.3 Effect of cross listings

As mentioned cross listed companies are entities who list their shares on one or more foreign stock exchanges in addition to their domestic exchange. This is largely meant to increase the liquidity of shares and reach out to global investors to improve an entity's capacity to raise funds. As noted in the previous section two of the largest multinational companies listed on JSE (SAB and BAT) currently constitute 35% of JSE's total market capitalisation. However, in most cases, a significant number of cross listed companies' shares are not owned significantly or traded on JSE. *This also puts into perspective recent debates around the composition of ownership on the JSE in terms of black ownership. These particular firms are largely owned by shareholders outside of South Africa, which skews the proportion of foreign and domestic ownership (and that by black South Africans) which is actually attributable to firms that have a significant proportion of their operations in South Africa.* Said differently, the extent of ownership by black South Africans of firms that operate and invest in South Africa is likely to be much lower than aggregate figures stated in recent debates.

BAT only has 15%[8] (290 million shares out of a total of 1.9 billion shares) of its shares that are on the South African branch register. Similarly, a large share of these entities' operations are based outside South Africa when considered in terms of the distribution of revenue. The share of revenue attributable to South African operations (based on companies that reported the breakdown) is as follows: Naspers 5.5%, Richemont 8%, BAT 18%, South32 10% and Anglo

[8] See British American Tobacco 2015 Annual Report p.114

American Plc 7%. As a result given the focus of the study, these firms are perhaps less relevant when considering firm investment decisions as they relate to industrial development in South Africa.

There is also a concern when one considers some of the industries in which these entities operate in terms of consumer goods, being beer production in the case of SAB and tobacco for BAT. These tend to be sectors that do not (in terms of the nature of operations and value chain) have strong linkages with high value adding downstream economic activity unlike sectors where firms are involved in the production or manufacturing of key inputs to downstream production (Tregenna 2012; and Felipe, Kumar & Abdon 2012).

In this context, our approach has been to consider more closely the significant effect that large cross listed companies of this nature can have on the interpretation of the available data on investments made. As a result, some parts of the analysis will exclude cross listed companies.[9] There will be a section under investments and acquisitions that will separately analyse the investment activities of these cross listed companies in South Africa.

4. Key performance metrics

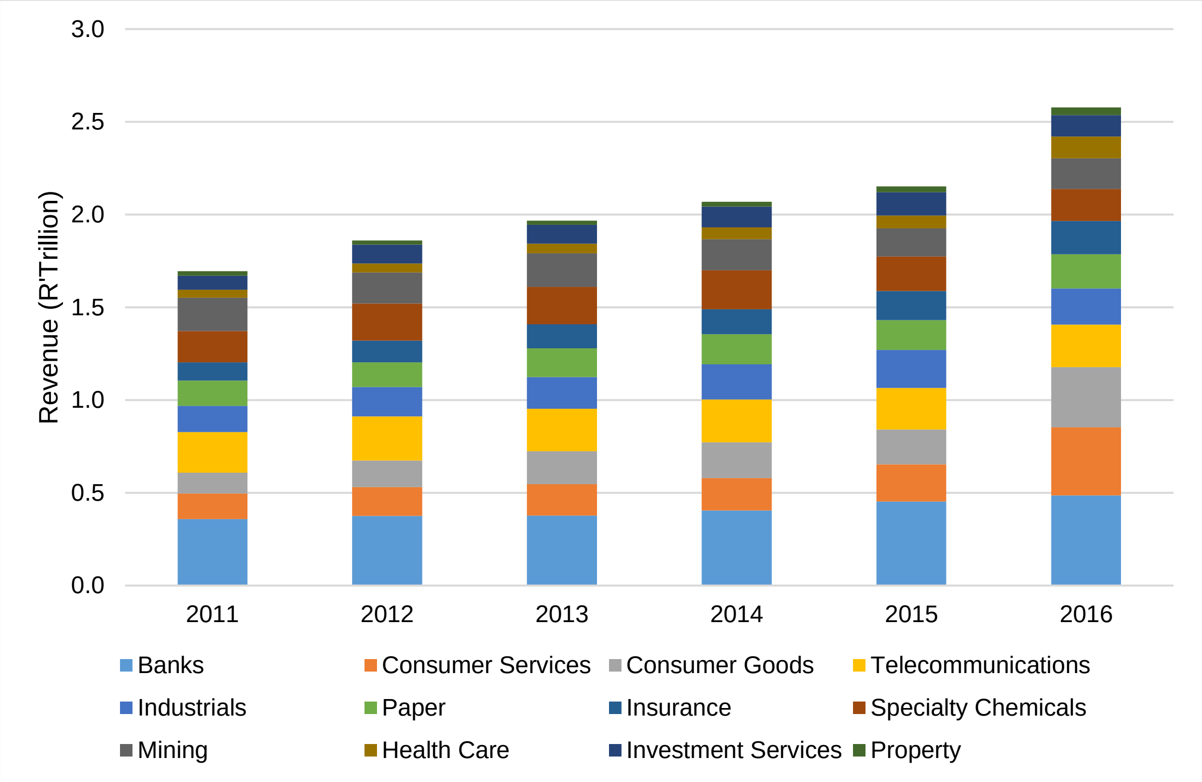
This section considers key performance metrics for the top 50 firms, focusing on profitability and investments. As discussed in the previous section, much of the analysis will exclude the large cross listed companies largely because of their insignificant operations in South Africa. In this regard, eight cross listed companies[10] have been omitted from the analysis that follows. Investment activities of these entities will be analysed separately under section 4.3.

4.1 Profitability

Revenue and profitability are strong determinants of investments; firms are driven largely by returns and as a result they are inclined to spend more on investments (capital expenditure or acquisitions) when their operations are profitable and prospects for further growth are high. In this section we analyse profitability and retention rates; and the extent to which they have impacted investment behaviour. Figure 3 below shows total revenue by sector between 2011 and 2015 at 2015 constant prices.

[9] BAT, SAB Miller, Anglo American plc, Glencore plc, BHP Billiton, Richemont. Naspers and South32.
[10] See previous note.

Figure 3: Total revenue by sector (2015 constant prices), 2011-2016



Source: InetBFA

Over the period under review, total revenue increased by 52% from R1.7 trillion in 2011 to R2.6 trillion in 2015. Revenues are largely attributable to the banking, consumer services and consumer goods sector that constitute 19%, 14% and 13%, respectively based on 2016 figures. In terms of revenue growth, consumer goods exhibited the highest growth rate of 24% (Table 4).

In this sector growth is largely driven by Steinhoff International whose revenue has grown by 100% (CAGR 19%) over the period under review. Steinhoff's growth was driven mostly by strategic acquisitions and investments over the period under review.[11] Between 2011 and 2012 Steinhoff International's revenue increased by 87% after the acquisition of Conforama – a European household goods retailer.[12] Similarly, between 2014 and 2015 there was also a significant increase in revenue after the acquisition of Pepkor (their largest corporate transaction to date) a South African based investment and holding company with business interests in Africa, Australia, United Kingdom, Poland, Slovakia and New Zealand. In the 2016 financial year, Steinhoff also acquired Mattress-Firm, a multi-brand mattress retail chain in the United States, Groupe Cofel (Cofel) – the leading mattress manufacturer in France, Poundland in the United Kingdom, Tekkie Town in South Africa and Fantastic Holdings in Australia.

Notably, revenue growth in consumer services companies in 2016 (22%) is largely because of the inclusion of Bid Corporation that reported for the first time in 2016 (11% growth if Bid Corporation is excluded).

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[11] See also Acquisitions bolster revenue at Steinhoff
[12] Steinhoff International 2012 Annual Report p.27

Health sector growth of 22% per year on average is essentially as a result of Aspen Holdings' significant acquisitions (mostly out of South Africa) over the period.[13]

Table 4: Total revenue and revenue growth by sector 2011 and 2016 (2015 constant prices)

	2011 (R'000)	2016 (R'000)	CAGR
Banks	358 454 969	486 115 757	6%
Consumer Services	138 376 168	367 146 531	22%
Consumer Goods	112 445 948	324 977 262	24%
Telecommunications	217 832 886	227 997 000	1%
Industrials	141 050 876	196 098 395	7%
Paper	136 478 583	184 456 193	6%
Insurance	98 304 787	178 668 979	13%
Specialty Chemicals	169 285 771	172 942 000	0%
Mining	178 642 857	164 220 443	-2%
Health Care	43 195 547	117 764 030	22%
Investment Services	77 280 310	116 137 923	8%
Property	22 926 177	40 845 539	12%

Source: InetBFA

Note: Consumer goods grew by 22% largely because of Bid Corporation that reported for the first time in 2016 - if Bid Corporation is omitted growth is only 11%.

In contrast growth in revenue in mining (-2%), banking (6%), specialty chemicals (Sasol) (0%) and telecommunications (1%) has been low. The mining sector was largely affected by the strikes of 2012/2013 while the decrease in commodity prices from 2014 onwards also had a significant negative effect on revenue. The slow growth in revenue in the banking sector could partly be a result of Capitec's entry into the retail banking sector that sparked a competitive reaction from incumbents, as a result of which bank charges decreased persistently between 2011 and 2014 (Makhaya & Nhundu, 2015). Sasol's 0% CAGR (as the only firm in the specialty chemicals grouping) is a result of low oil prices that prevailed 2014/2015[14], depreciation of the rand between 2013 and 2015; and poor investments that resulted in R11.5 billion being written off.[15] The telecommunications sector was largely affected by MTN's R9.3 billion fine in Nigeria,[16] change in structure of the industry as consumers shift from voice to data which is relatively cheaper[17] and increased market competition.[18]

In Figure 4 below we compare the profitability of sectors under review. Although profitability is considered by sector here, we note the importance of assessing changes within a particular 'sector' at the company level. Profitability is assessed by two metrics, return on assets (ROA) and return on equity (ROE). Return on assets is an indicator of how profitable a company is relative to its total assets and gives an idea as to how efficient management is at using its assets to generate earnings. Return on equity on the other hand measures a corporation's profitability by revealing how much profit a company generates with the money shareholders

[13] Aspen Holdings' significant acquisitions over the period include Arixtra and Fraxiparine brands from GSK, API manufacturing and infant nutritional assets from Nestle.
[14] Sasol 2015 Annual Report p.17
[15] See more Sasol's share price drops most in 17 years as North American adventure sours
[16] MTN 2014 and 2015 Annual Report
[17] Vodacom 2014 Annual Report
[18] See note 16

have invested. It is measured by comparing a firm's profits to the total equity. The percentage difference between these two ratios signifies the extent to which an entity utilises debt to finance its assets (financial leverage). A low percentage difference between the ratios signifies low debt in the capital structure; while a high percentage difference indicates a high financial leverage, a feature that is typical of banks and other financial service companies.

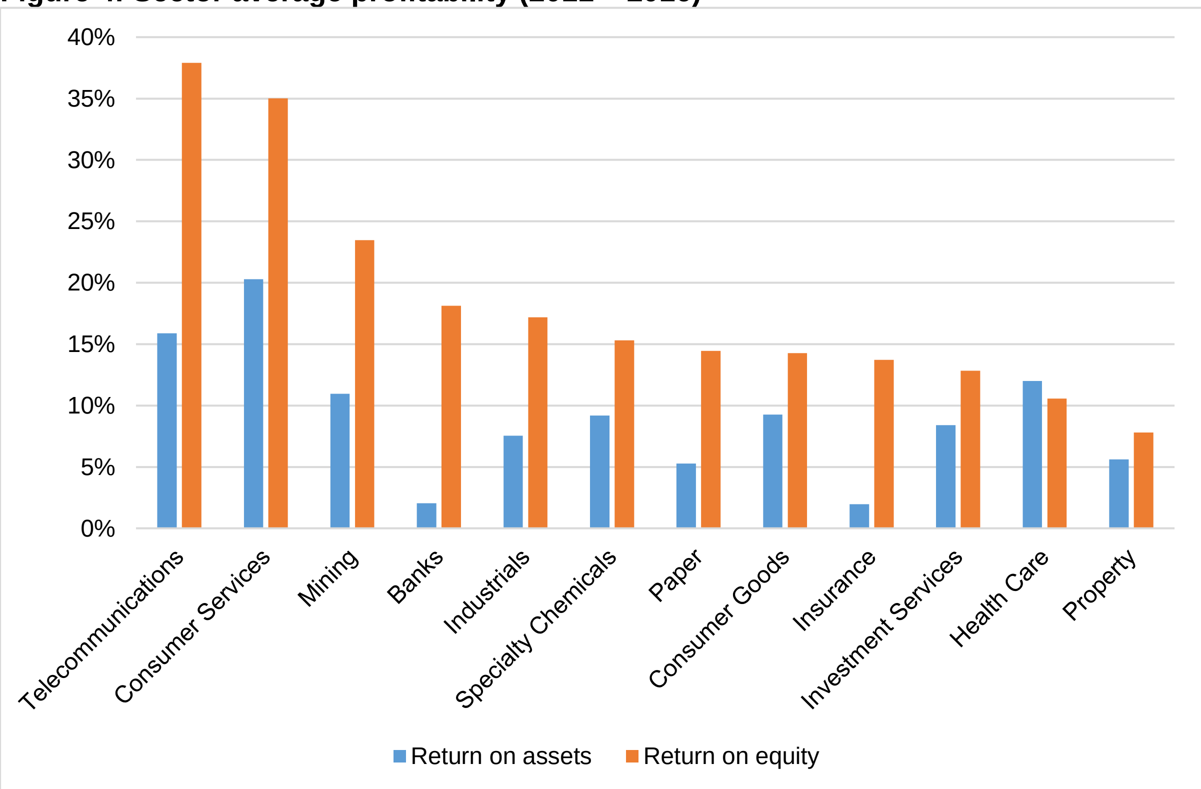
In terms of profitability, consumer services exhibited the highest return on assets averaging 20% per year. This could be a result of low assets that are required in the supermarkets and clothing retailer industry. Consumer services also exhibited the second highest return on equity suggesting a high level of profitability in this sector.

Firms in the telecommunications industry also reported high profitability (ROA 17% & ROE 38%) over the period under review. There was a significant decrease in profitability in 2015 which was a result of MTN Nigeria's regulatory fine provision (R9.3 billion). Interesting to note is the high difference between ROA and ROE which suggest a high leveraged asset base.

Banks and the insurance sector posted the lowest ROA of around 2%, which is a result of the capital structure of the financial services sector. Banks and insurance companies are highly leveraged and own a significant amount of assets that are financed by debt (loan book balances financed by deposits, asset portfolios financed by pension fund contributions etc.). Analysis of ROE shows that banks are the 4th most profitable sector with a ROE of 18% on average.

In the mining sector profitability decreased over the years from a ROA of 20% to -3% between 2011 and 2015, which decrease significantly brings down the average ROA to 11%. Profitability in the mining sector was largely affected by decrease in commodity prices from around 2014 onwards as well as the mining strikes of 2012/ 2013 financial years.

Figure 4: Sector average profitability (2011 – 2016)

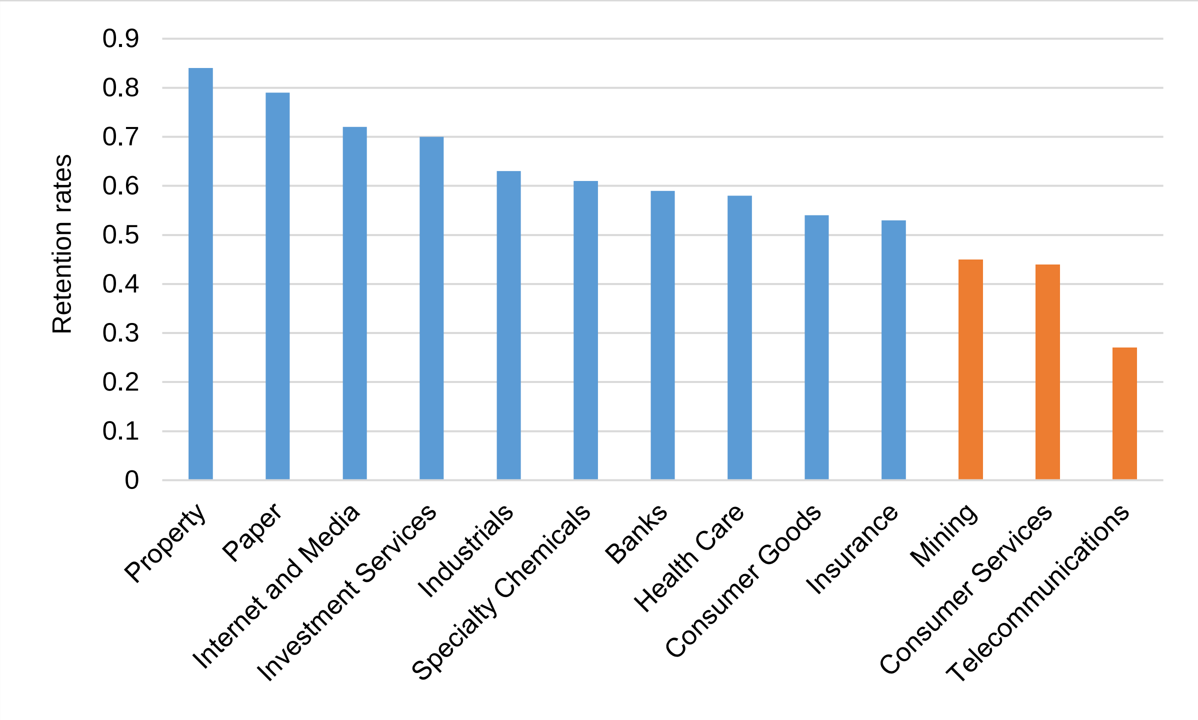


Source: InetBFA

4.2 Retention rates and reserves[19]

In general, certain firms and indeed groupings of firms in terms of sectors have exhibited fairly high profitability and it may thus be expected that firms face incentives to invest in expanding capacity, other things being equal. However, firms also have to comply with company policies in terms of paying dividends before funds can be diverted to investment projects or reserves. Important to note is the fact that dividends are not mandatory, firms only offer dividends when they feel they can afford to forgo investment as part of company policies and internal strategies. As a result companies that have high retention rates[20] are viewed as high potential growth companies that invest substantially in new productive assets. Firms with low retention rates are usually companies that no longer have expansion capacity or do not plan to invest in new projects such that funds will not be retained within the organisation earning low returns and will instead be distributed to shareholders as dividends (Lally, 2013; Johnson and Soenen, 2003). Figure 5 below illustrates average retention rates per sector and Figure 6 shows overall average retention rates of the top 50 firms over time.

Figure 5: Average sector retention rates



Source: InetBFA

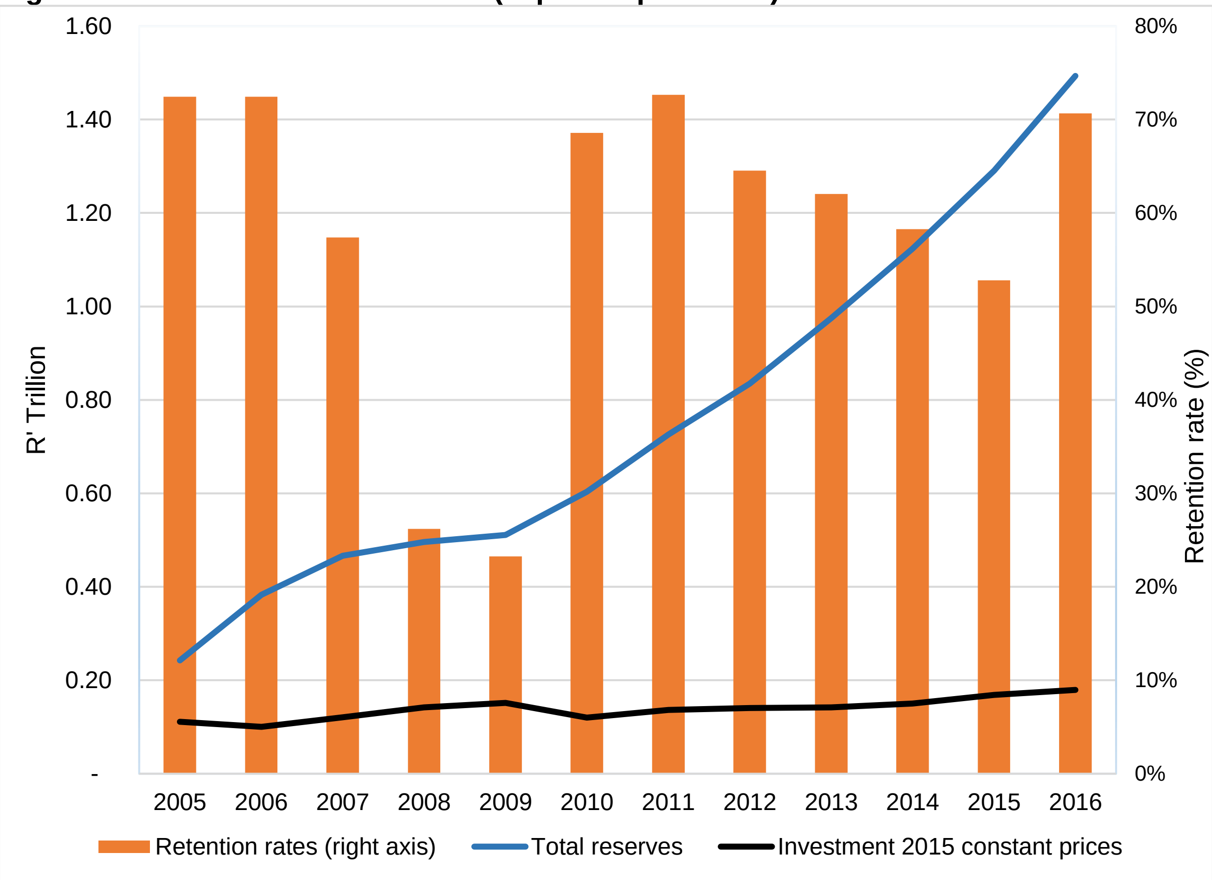
In general there are high retention rates amongst the companies examined averaging 62% between 2011 and 2015 (Figure 5). In terms of sectoral dynamics, property, paper, internet and media; investment services and industrials sectors ranked highest in terms of high retention rates. In contrast the mining, consumer services and telecommunications sectors exhibited retention rates of less than 50%. The mining sector was largely affected by low profitability over the period while low retention rates in the consumer services sector could be as a result of the structure of the industry that does not require significant investment in large assets. The telecommunications sector's retention rates are affected largely by Vodacom Group's dividend policy of paying out on average 90 percent of profits as dividends. Vodacom

[19] Reserves are balances on distributable reserves which are driven by retained profits.
[20] Retention rate is the proportion of profits that is kept within the organisation after paying dividends.

Group's dividend policy is largely as a result of the fact that the organisation does not have much debt and currently has limited projects to invest in; consequently in its view, paying out a higher dividend is the most efficient use of cash.[21]

Company reserves have grown from R242 billion to R1.4 trillion (Figure 6) between 2005 and 2016. This demonstrates the *potential* for firms to invest more as firms hold significant reserves that can be invested at zero interest costs. Indeed this may augment investments across firms which stood at R179 billion in 2016 and averaged R113 billion per year between 2005 and 2016. The accumulation of reserves contradicts the view that a lack of saving has undermined a lack of investment in South Africa. Indeed, household savings have remained problematically low in the past two decades. However, the assessment above demonstrates that firms, at least in recent periods, have had access to sources of retained or accumulated earnings which could have been used for additional productive investments.

Figure 6: Reserves and investment (capital expenditure)



Source: InetBFA

Note: Closing balances on distributable reserves have been utilised as a proxy for reserves. Reserves exclude cross listed companies (see section 3.2)

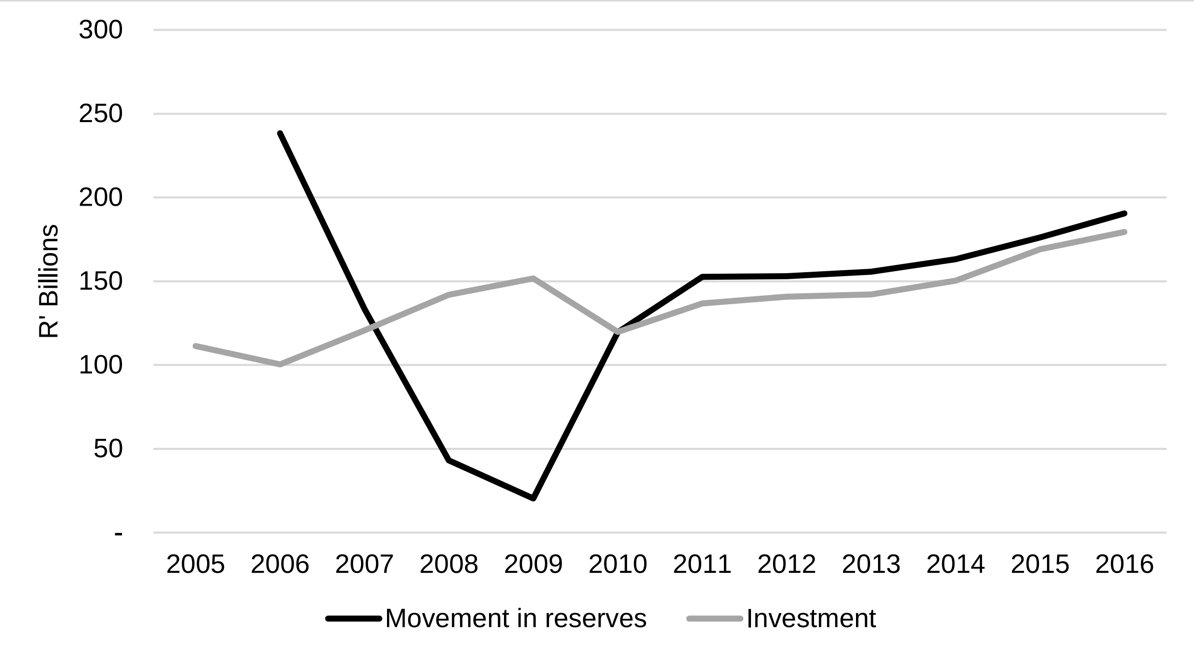
Investment and movement (change) in reserves between 2005 and 2016 (Figure 7) shows that the amount contributed to reserves on an annual basis decreased significantly between 2005 and 2009 (R110 billion) and during the same period real investment increased by a substantial amount (R51 billion). This is the only period where the amount invested was more than funds placed in reserves. The increase in investment during this period may be explained by firms' high demand and expenditure relating to the world cup, amongst other factors

[21] See Vodacom pays out R3.8bn dividend

including favourable commodity prices in the early 2000s. Reserves during the same period may have been used to fund this investment, which may explain the decrease. Around 2008 and 2009 there is likely to have been an impact on reserve accumulation relating to pressure on companies and demand arising from the global economic slowdown.

From 2010 onwards both investment and funds contributed to reserves (total per year) increased steadily however there is a clear, albeit relatively narrow, gap (Figure 7) which indicates that firms were contributing more money to reserves than investments. This may also have been significantly affected by greater caution exercised by firms in the years following the economic crisis, although this does not explain continued accumulation in later years.

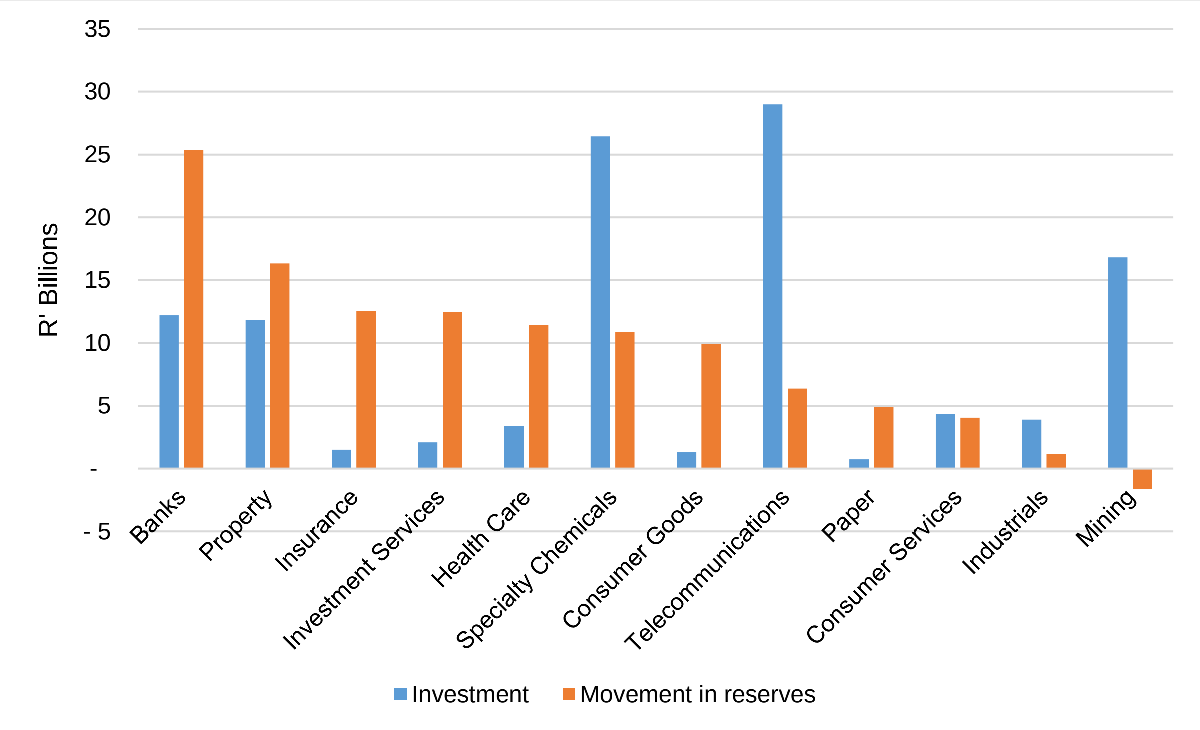
Figure 7: Analysis of reserves and investments (2015 constant prices)



Source: InetBFA

A breakdown of average yearly contributions to reserves and investments (Figure 8) shows that it is not all the sectors that have been accumulating reserves. *Interestingly, telecommunications, specialty chemicals and mining companies have been investing more than they contribute to reserves. In contrast all other sectors on average contribute more money to reserves than they invest.*

Figure 8: Average movement in reserves and investment per sector (2005-2016)



Source: InetBFA

Financial service, property, healthcare and consumer goods sectors are the main drivers of reserves accumulation. In this regard banks on average contribute more to reserves (25 billion) than any other sector. It may be argued that this is explained by the need for banks to meet the liquidity coverage ratios as required by the regulator. However the liquidity coverage ratios can only explain the stock of reserves and not the growth thereof as is the case with the banks. Furthermore there is evidence that banks have been exceeding their liquidity coverage ratio as required by the regulator, between 2013 and 2015 Capitec Bank exceeded the liquidity coverage ratio requirements by over 1000% (Makhaya & Nhundu, 2015:28).

5. Investment

In this section, we consider various measures for considering investment across the firms assessed. The asset base of companies is firm considered over time to assess major changes, before published data on capital expenditure and then mergers and acquisitions is considered, each of which shows the patterns of expenditure by firms.

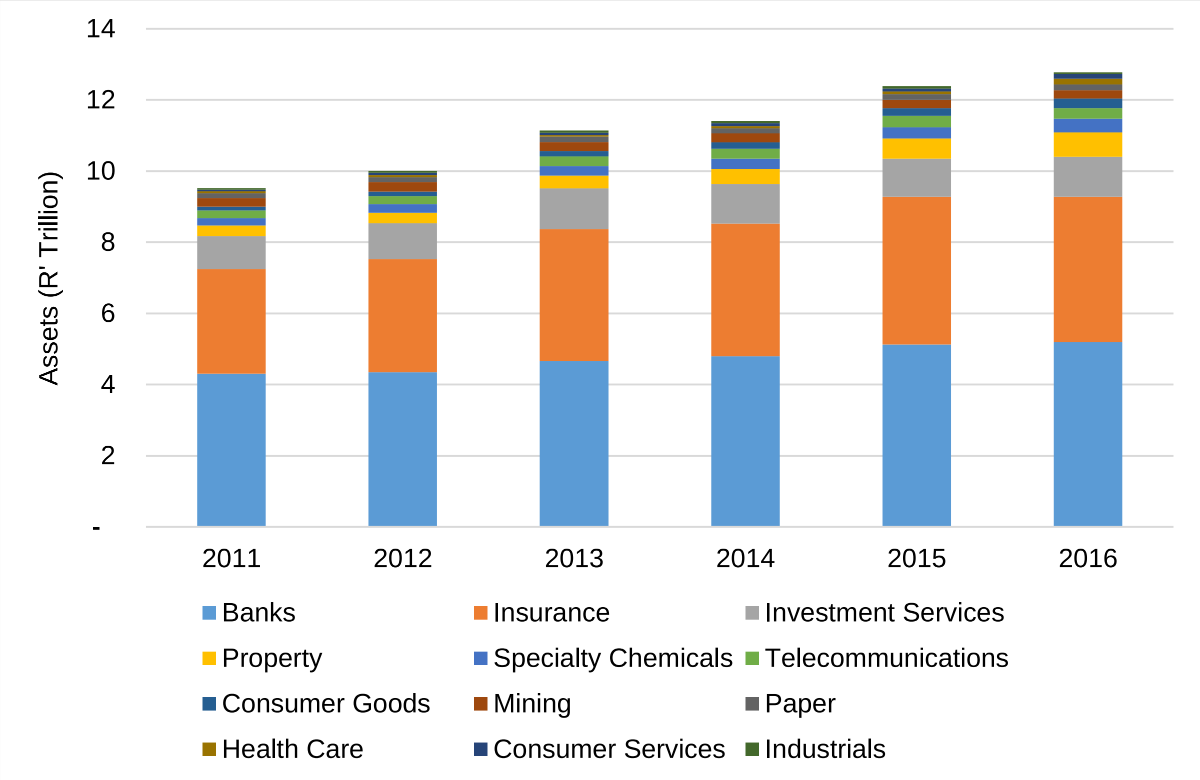
5.1 Assets

The three largest sectors across the years in terms of assets held are banking, insurance and investment services (Figure 9). The large asset base of the retail banking sector is attributed to the wide spread of physical assets (branches, ATMs, etc.) that banks have, together with the non-physical (loans) assets. Standard Bank Group leads the banking sector in terms of assets (37% of total banking assets valued at over R5.2 billion in 2016), followed by Firstrand (22%) and Barclays Africa Group (21%).

Old Mutual leads the insurance sector (70% of total insurance assets valued at over R4.1 billion in 2016), followed by Sanlam Limited (16%) and MMI Holdings Limited (11%); and Investec Plc leads the investment services (71% of total assets valued at over R1bn in 2016), followed by Remgro Ltd (9%) and Reinet Investments S.C.A (7%) although these firms are less comparable in terms of types of investments held.

The three largest sectors grew moderately between 2011 and 2016. In particular insurance grew with a CAGR of 7% from over from R2.9 billion in 2011 to over R4 billion 2016, followed by investment services (4.1% CAGR to over R1 billion in 2016) and banks (3.8% CAGR from R4.3 billion in 2011 to over R5.1 billion in 2016). On the other hand, the asset base in consumer services and healthcare grew rapidly with a CAGR of 24.9% and 24.5%, respectively.

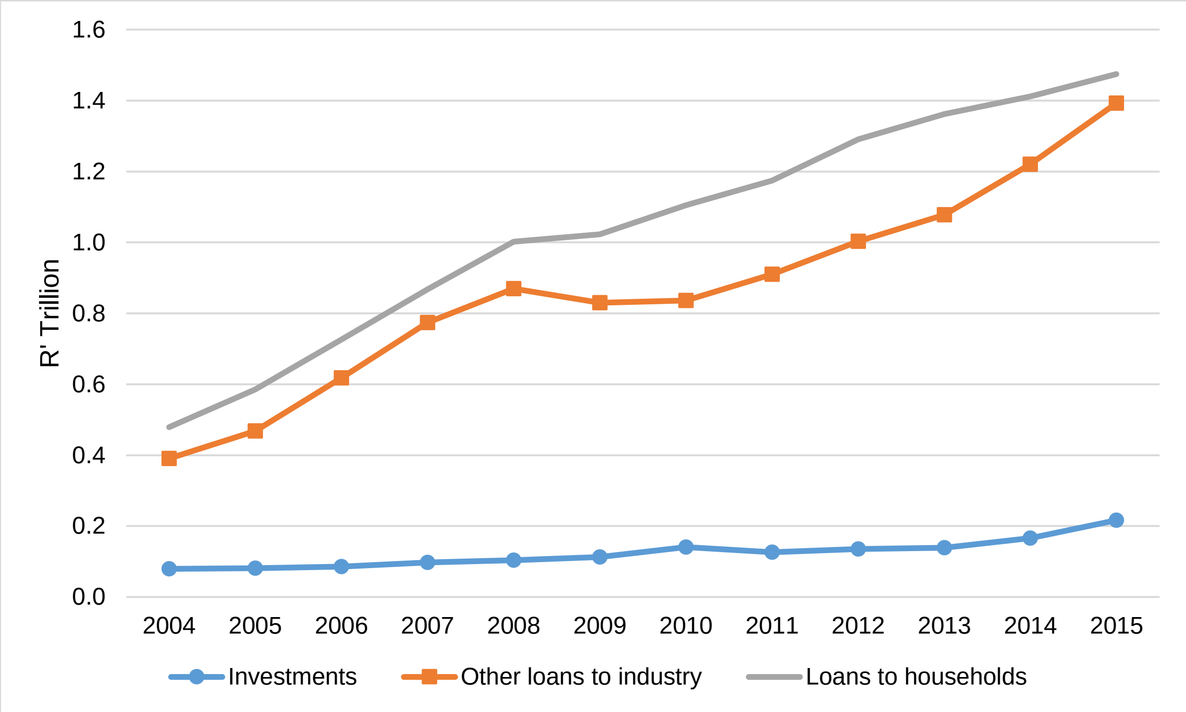
Figure 9: JSE Top 50 total assets per sector 2011-2016 (2015 constant prices)



Source: InetBFA

Banks' assets are largely made up of loans. An analysis of the lending behaviour of South African banks shows that a significant portion of these loans are to households while only a small portion fund investment activities in productive economic sectors (Figure 10). Although loans and advances to industries have grown significantly, almost as much as household loans, further analysis shows that the majority of these funds are utilised in the finance and insurance sector largely for sales credit while another significant portion funds the community, social and personal services (SARB, 2016). Important to note also is the fact that loans for investment purposes have remained stagnant relative to household loans and advances to different industries. In the section below we analyse total assets after excluding the financial services sector.

Figure 10: Extension of credit by South African financial institutions (2004-2015)



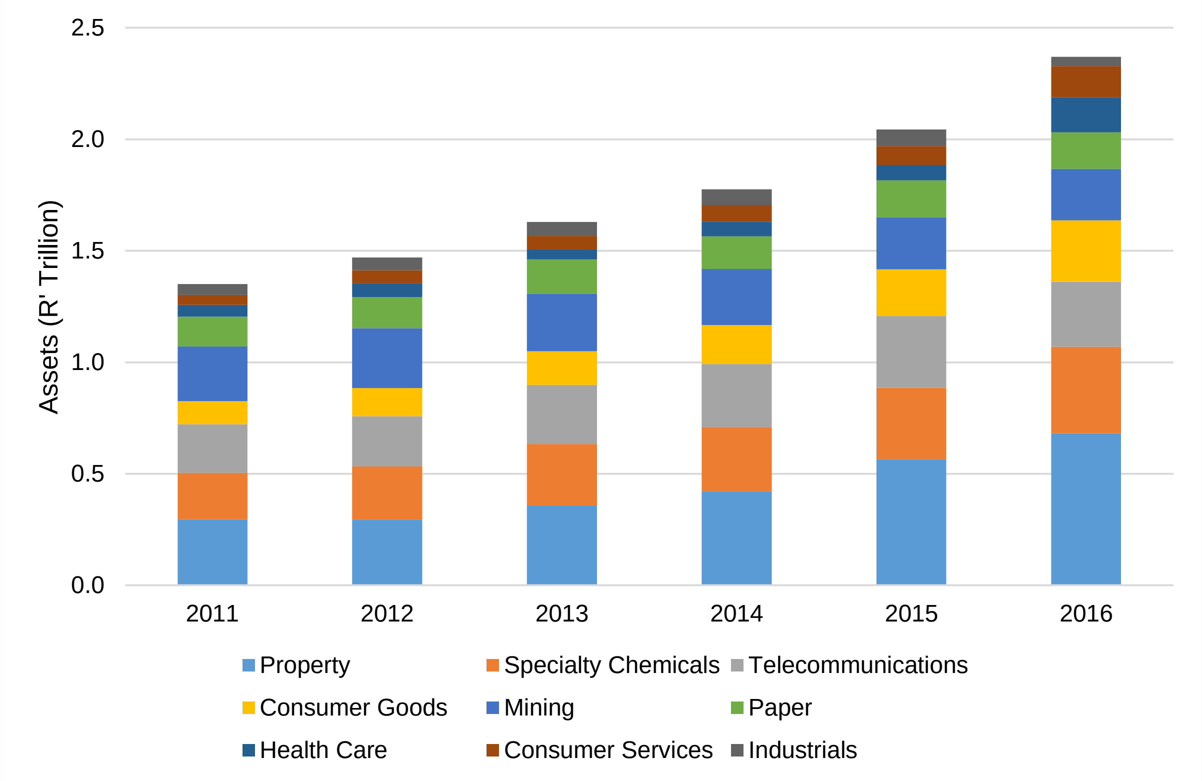
Source: SARB quarterly bulletin
Note: Other loans to industry include instalment sale credit, leasing finance, mortgage finance and other advances.

Financial services firms (banks, insurance and investments) lead the JSE Top 50 in terms of assets, however if we control for these sectors, a clearer picture of changes in the asset base of other firms in other sectors emerges (Figure 11). The property sector leads in terms of assets, followed by mining, telecoms and speciality chemicals (which is only Sasol).

However, it is worth noting that the property sector is dominated by companies that do not have operations at all in South Africa (i.e., Hammerson Plc, Intu Properties Plc, New Europe Property Investments Plc and Capital & Counties Properties Plc). Moreover the two major contributors to the asset base of this sector in 2016 are Intu Properties Plc and Hammerson Plc.

The mining sector is led by Anglogold Ashanti Ltd and Anglo American Plat Ltd in terms of assets held. In telecoms, MTN Group Ltd leads Vodacom, while Sasol is the only contributor under speciality chemicals. Although it is convenient to refer to changes by sector, the latter case of speciality chemicals points to an important constraint of this approach – that in some cases a ‘sector’ as per JSE classification is in fact only constituted of one or two lead companies and it thus makes more sense to assess the companies involved.

Figure 11: JSE Top 50 assets (excluding financial services) (constant 2015 prices) 2011-2016



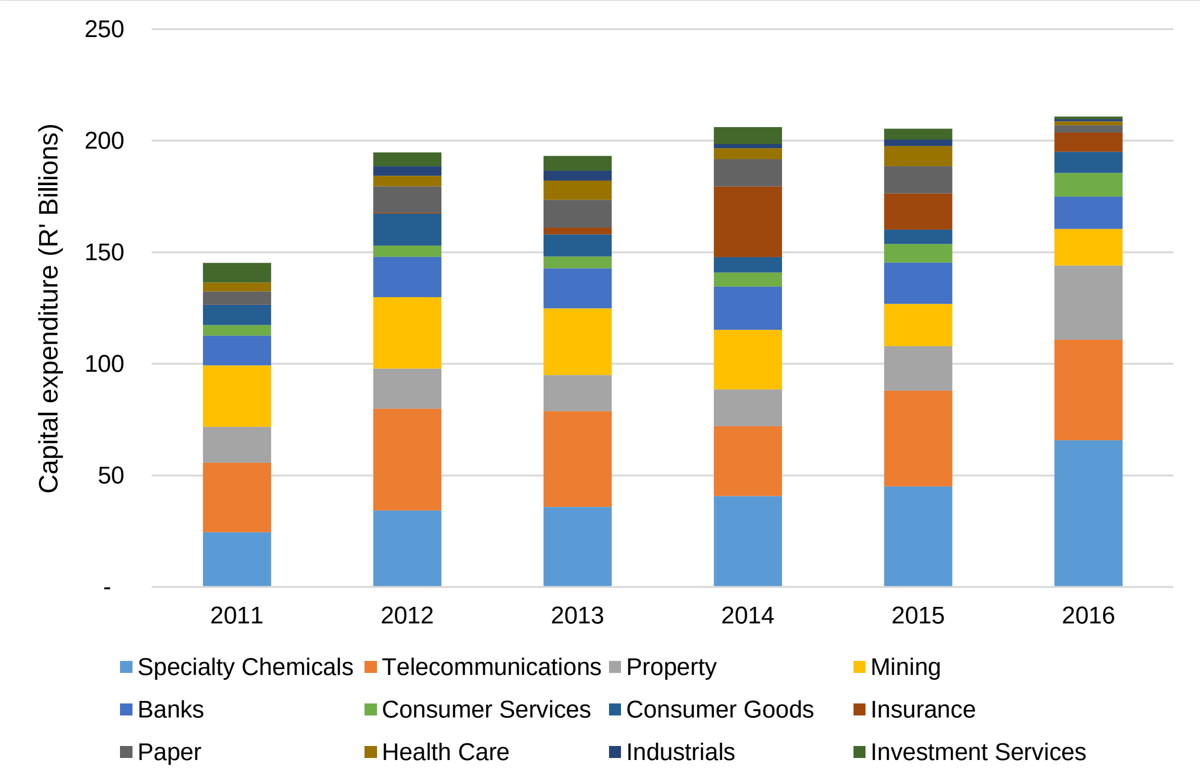
Source: InetBFA

5.2 Capital expenditure on non-current assets

The speciality chemicals sector (i.e., Sasol Ltd) expended the most on non-current assets (property, plant and machinery), followed by telecommunications and mining between 2011 and 2016 (Figure 12). It is interesting to note that Sasol alone expended more than all the sectors in 2014, 2015 and 2016 although this comprised significant international investments. However, the telecommunications sector (consisting of MTN and Vodacom) invested more than the other sectors between 2011 and 2013 which may have to do with the importance in that sector of investments in physical masts and network capacity, particularly given constraints in terms of available radio spectrum.

Capital expenditure on physical capital grew to varying degrees across the entire period when considered by sector. Sasol, telecommunications and mining grew at a CAGR of 22%, 13% and 1.9%, respectively. However, the telecoms sector experienced noticeable increases in expenditure in 2012 and 2013. MTN increased its capex expenditure by 55% in 2012 due to capital investments across the group but mainly in Nigeria, as well as the weakening rand. However, its capex decreased by 33% in 2014 due to capex decline in Nigeria and movements in foreign currency. The property sector experienced a significant increase in capital expenditure in 2016 due to the inclusion of Hammerson Plc.

Figure 12: Top 50 capital expenditure by sector 2011 - 2016

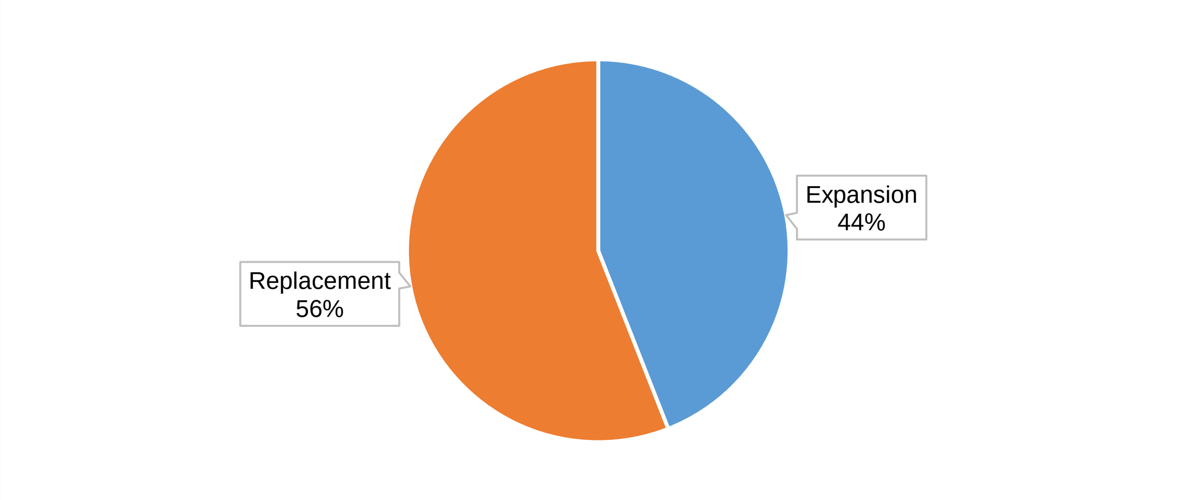


Source: InetBFA

Expansion vs replacement capital expenditure

Capital expenditure can be classified into two types, expansion and replacement capital expenditure. Replacement capital expenditure is meant to replace old or obsolete plants and equipment while expansion capital expenditure is outlay to add to existing plants and equipment to increase production capacity. Data on the type of capital expenditure is limited and out of the companies under review only 18 companies provided a breakdown on the nature of capital expenditure. Entities in the financial services industry (banks, insurance and investment services) and the majority of companies in the top 20 did not report on this breakdown. However, based on the companies that reported the breakdown, it appears the majority of the capital expenditure is being utilised to maintain operations rather than expansion although we are cautious in the interpretation of this data (Figure 13). The difference in the proportions is relatively narrow, and as noted data limitations mean that we do not look to disaggregate or interpret this data further.

Figure 13: Expansion vs replacement capital expenditure (only 18 companies)



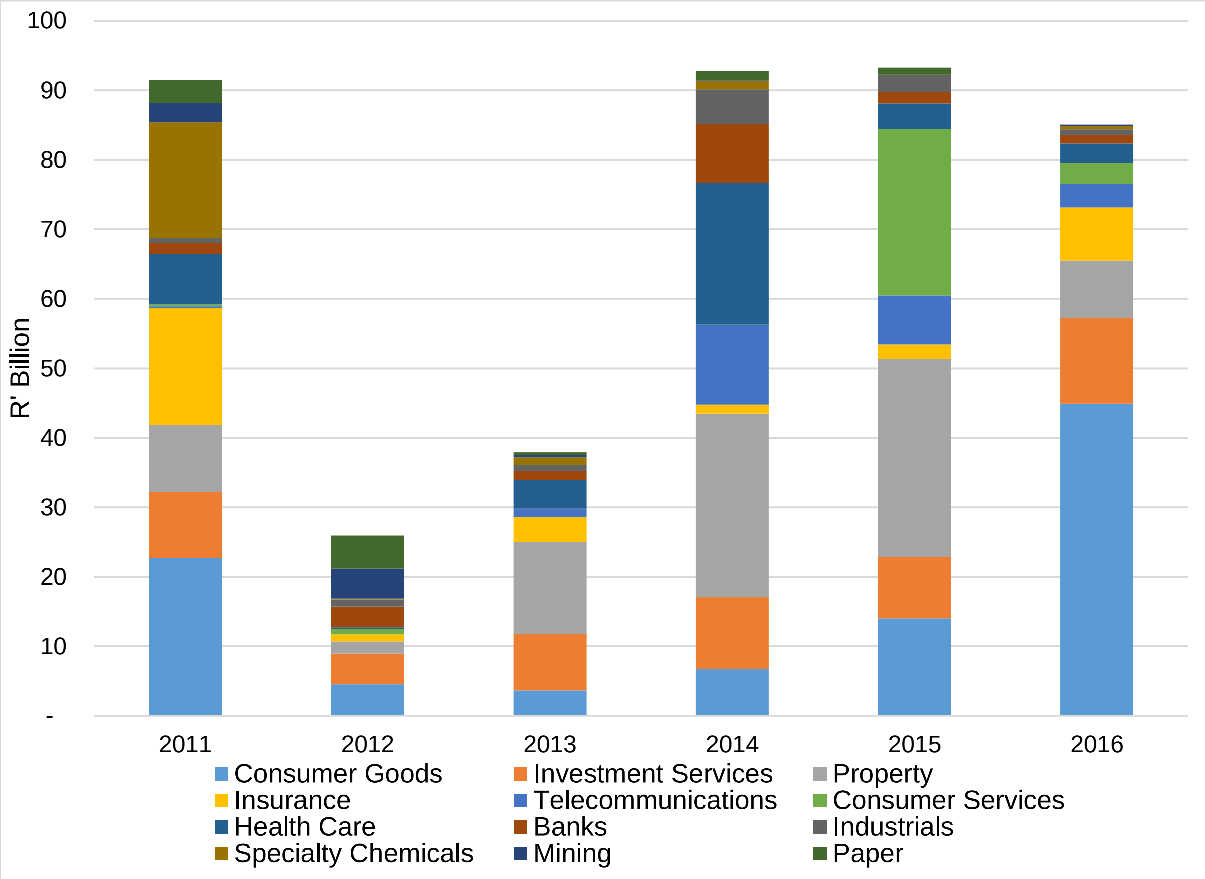
Source: InetBFA

5.3 Mergers and acquisitions

Overall, mergers and acquisitions were lowest in 2012 and 2013 due to only a limited number of transactions in consumer goods, insurance, investment services, property and speciality chemicals between 2011 and 2012 (Figure 14). By the very nature of merger activity, we would expect some volatility between years in the value spent on transactions, also influenced by sector or industry specific dynamics. However, mergers and acquisitions increased in 2014 and 2015 to levels slightly higher than in 2011. Major developments in 2011 included Steinhoff acquiring JD Group and KAP, and Tiger Brands acquiring Davita Holdings, in consumer goods; the merger between Momentum and Metropolitan to form MMI Holdings in insurance; acquisition of OUTsurance and Rensburg Sheppards Plc by RMB Investment Holdings and Investec Plc respectively, in the investment services sector; the acquisition of V&A Waterfront by Growthpoint in the property sector; and Sasol's acquisition of Canada's Talisman Energy Inc in speciality chemicals.

There is also a noticeable increase in mergers and acquisitions in the property sector beyond 2012 due to Intu Properties Plc's acquisition of Midsummer Place and Parque Principado in 2013, and several entities in 2014. The health care sector also spent substantially in 2014 due to Aspen Pharmacare Holdings acquiring 100% of the Sigma pharmaceutical business. In 2015, the significance increase was in the consumer services as result of Woolworths' substantial acquisition of David Jones Limited. Companies in consumer goods spent high values on mergers and acquisitions in 2016, driven by Steinhoff's acquisition of a UK discount retail chain (Poundland) and a US-based Mattress Firm, and Pioneer Foods' acquisition of Weet-Bix East Africa and UK-based Streamfoods. Remgro's acquisition of Al Noor Hospitals Group plc, and Rand Merchant Investment Holdings' acquisition of UK-based short-term insurer Hastings Group, largely drove the mergers and acquisitions in investment services; while Sanlam's acquisition of Morocco-based SAHAM Finances contributed significantly to the increase in mergers and acquisitions spend in insurance.

Figure 14: JSE Top 50 mergers and acquisitions (constant 2015 prices) 2011-2016

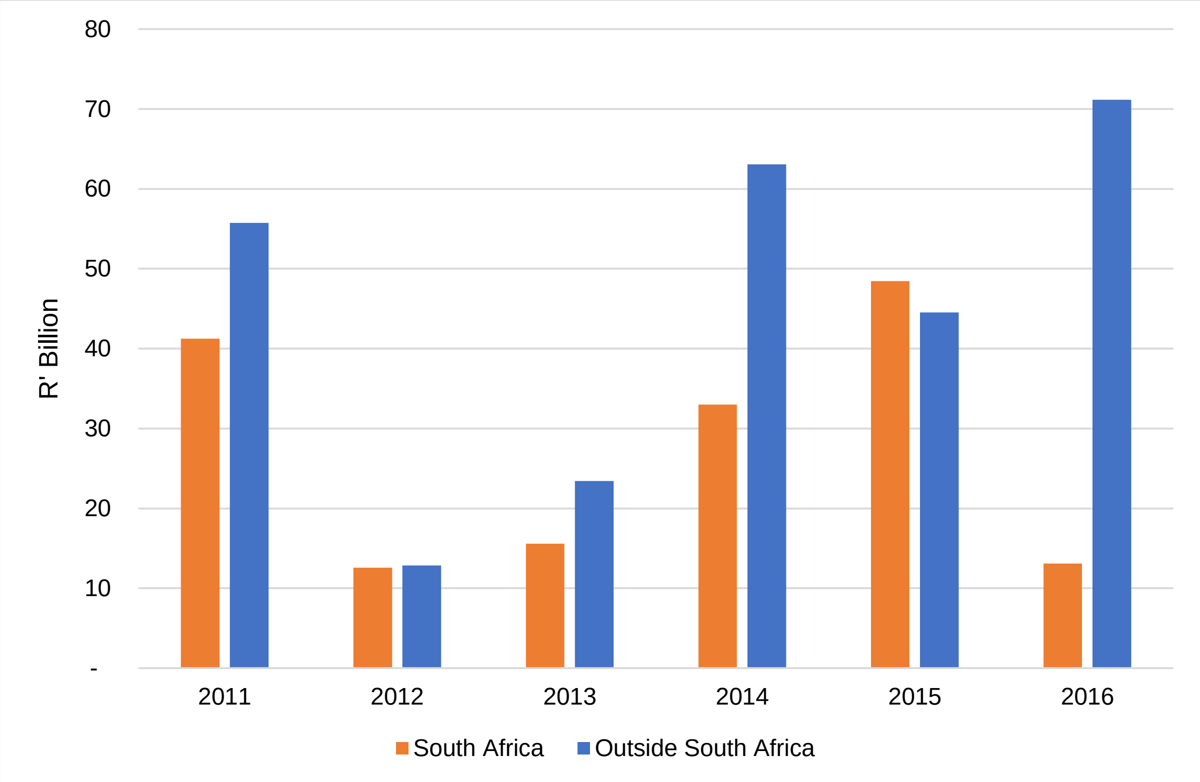


Source: InetBFA

Mergers and acquisitions by geography

Controlling for dual-listed companies, most of the mergers and acquisitions in terms of value by firms in the JSE Top 50 are taking place outside South Africa (Figure 15), albeit with marginal differences in terms of the total value of transactions that were local and international in most years. *On average only 39% of mergers and acquisitions took place locally over the period 2011 to 2016*. Notably, mergers and acquisitions declined between 2011 and 2012 irrespective of geography, and then picked up steadily thereafter. However, local mergers and acquisitions declined significantly in 2016.

Figure 15: Top 50 M&A by geography (2011–2016)



Source: InetBFA

Firms in the JSE Top 50 invest more in mergers in South Africa than in the rest of Africa. *In general, more than 81% of investments made in Africa (including South Africa) from 2011 to 2016 were in South Africa* (Table 7). *Of the M&A activity outside of South Africa, the vast majority involved transactions outside Africa.*

Table 7: Top 50 M&A value by geography (2011 – 2016) [22]

	2011	2012	2013	2014	2015	2016
South Africa	43%	49%	40%	34%	52%	16%
M&A outside SA, *of which:*	57%	51%	60%	66%	48%	84%
SADC	7%	5%	4%	2%	3%	1%
Rest of Africa	1%	0%	5%	2%	4%	2%
Outside Africa	50%	45%	51%	62%	41%	81%
SA proportion in Africa	85%	91%	81%	91%	88%	81%

Source: InetBFA

Note: Figures may not add up 100% due to rounding.

Capital expenditure on non-current assets vs mergers and acquisitions

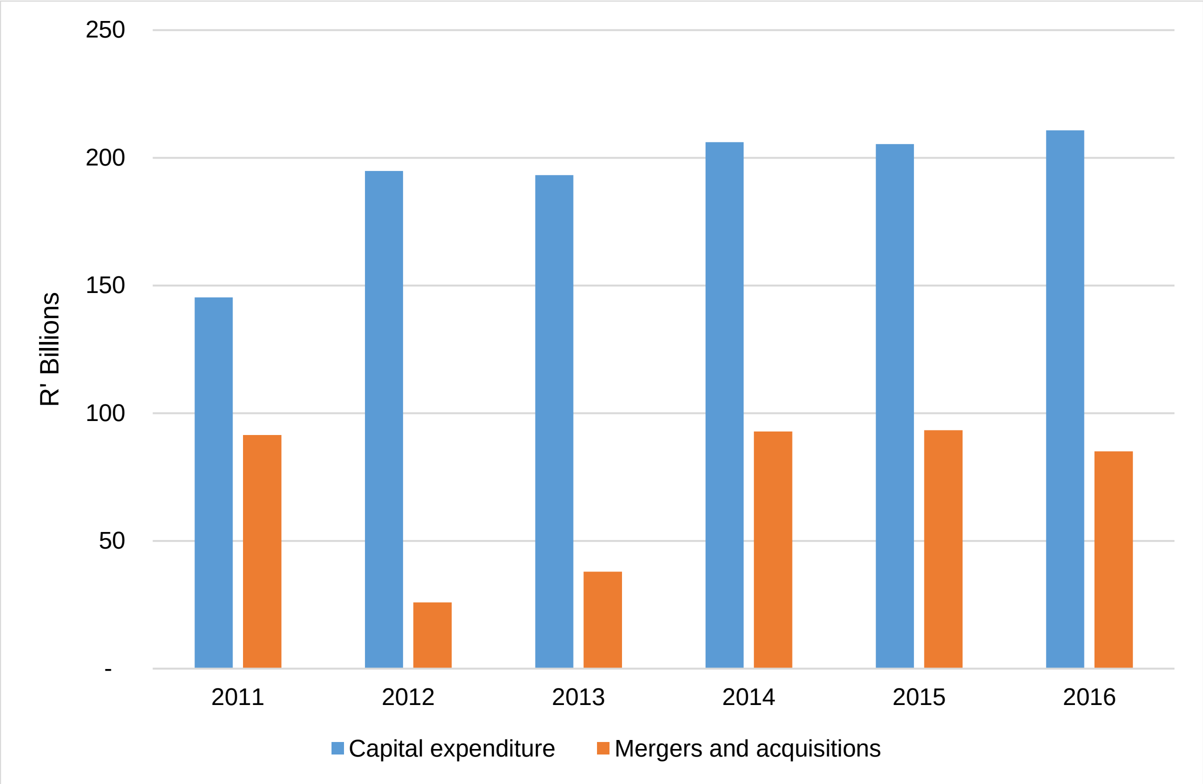
The JSE Top 50 invests more on non-current assets (property, plant and equipment) than on mergers and acquisitions (Figure 16). Investment in non-current assets (physical assets) is normally for expansion and/or upgrading purposes, while investment in mergers and

[22] SADC excludes South Africa, and the rest of Africa excludes both SADC and South Africa.

acquisitions is normally for consolidation of business operations to secure or expand access to existing or new markets.

Expenditure on physical assets grew at a CAGR of 8% from R145 billion in 2011 to R210 billion in 2016. Mergers and acquisitions decreased significantly (by 72%) from R91 billion in 2011 to R26 billion in 2012, then recovered rapidly with a CAGR of 35% to R85 billion in 2016.

Figure 16: Top 50 capex on non-current assets vs M&A (2011-2016)



Source: InetBFA

5.4 Investment activities of dual listed companies

Investment activities of dual listed companies in South Africa are very limited. This could be as a result of the fact that these entities do not have significant operations in South Africa. Out of the 69 mergers and acquisitions transactions that were carried out by these companies over the period under review only five were in South Africa. This makes up less than 1 percent (0.5%) of the value spent by dual listed companies on mergers and acquisitions over the period under review. It also appears that a significant amount of the value of capital expenditure by these companies is being spent beyond the borders of South Africa. Of the dual listed companies under review, three gave brief insight into their major capital expenditure projects in some of the years that were reviewed and all of these expansion projects were outside of South Africa.

6. Discussion

The emphasis in this report has been to highlight important changes and trends in the investment behaviour of some of the largest firms in the South African economy. This is considered in relation to broader questions regarding the lack of structural change in the economy, and continued tight control of key economic sectors by entrenched incumbent firms, reinforced by high barriers to entry. The issues around investment are considered specifically in terms of understanding investments of companies as they relate to industrial development in South Africa. It is therefore relevant to consider differently firms that do not (or no longer) have significant operations in South Africa. These companies, most of which are cross listed internationally, tend to be the very largest South African companies at least when ranked in terms of market capitalisation. However, it is clear that if policy is concerned with growing local productive investment and activity and increasing black ownership of these firms, it is perhaps less relevant what share black South Africans hold of companies that are largely no longer 'South African' but highly international. Growth in the market value of large internationalised companies is important, but the assessment points out that if these firms are not investing in South Africa or involved in sectors which are important for productive labour-absorptive growth, then a pattern of stagnant growth in fixed capital formation and de-industrialisation of the economy will continue. The underlying principle being that that the investments and strategic decisions of large firms are critical in shaping the industrial development path of countries, not least because of their capacity invest in new technologies, large scale high value projects, new organisational systems, and human capital development.

The composition of South African lead firms hasn't changed significantly especially within the top half of the top 50 firms. The top 20 firms have remained essentially the same over the period (although relative rankings may have changed) led largely by the mining and the financial services firms. However, there have also been new entrants and exits into the top 50 as a whole that suggests some change in the relative growth of non-traditional sectors in the economy. Several firms have exhibited very significant growth in rankings, such as in the case of Steinhoff and Discovery, when compared to rankings in 2000. In addition, there has been significant entry and growth of property management and health care companies. However, hospitals and property companies do not (in terms of the nature of operations and value chain) have strong direct linkages with high value adding downstream economic activity that contributes to economic growth.

Of particular concern is the evidence that the majority of the large property groups that have emerged do not in fact have any significant operations in South Africa, and are effectively using the JSE platform as a source of capital for operations elsewhere. While this is a common feature of international capital markets, it is problematic in South Africa in the context of low domestic savings to fund investment, failures in financial markets and banking in particular in financing emerging industries and businesses, and a perceived and factual lack of finance and investment in general.

This raises an important point considered in the analysis about high retention of accumulated profits by companies, which reserves could serve as a potential source of affordable capital for companies. Generally firms and groupings of firms in terms of sectors exhibited fairly high profitability and as a result it may be expected that firms face incentives to invest in expanding capacity, other things being equal. In this regard, the assessment shows that firms have retained substantial portions of profits, however a significant amount of these funds are being reserved as opposed to invested. It is important to note here that there may be some legitimate rationale for increased retention, even after dividends have been paid out, which may relate to uncertainty in demand, low growth and the poor investment climate in South Africa in the past few years. Notably, and this is often not considered in the current debates around an 'investment strike' in South Africa, firms are also less inclined to invest when they are in a position of entrenched market power, where barriers to entry are high, and where their position is not likely to be challenged by new emerging companies. High levels of concentration and barriers to entry are a well-established feature of South African economic sectors.[23] The challenge for policy makers is to determine the appropriate set of incentives to stimulate further investment in new capacity in particular, rather than simple replacement or 'buying market' share through M&A which has the effect of further concentrating industries.

On average replacement capital expenditure constitutes the majority of total capital expenditure which means firms are focusing more on maintaining current operations as opposed to expanding. We note however that the data available in this regard was limited and as such could not be used reliably to draw further findings.

A focus on 'investment' in mergers and acquisitions is somewhat misleading, in that these transactions do not represent an increase in real net wealth for the economy as a whole, although in some cases they may raise significant efficiencies. The detailed data on M&A reviewed shows that firms in the Top 50 have spent the largest proportion of the value of M&A outside of South Africa. In terms of overall expenditure, investments in non-current assets are significantly larger than the value of M&A expenditure.

There are important limitations in terms of the disaggregated company data to assess further the types of investment made in particular, as noted throughout the report. However, it has been possible to reliably discern the broad patterns that have emerged in terms of (low) investment, change and continuity in the composition of the lead firms on the JSE, and high company profit retention not matched by investments in additional capacity in South Africa. The effects of largely internationalised companies has also been considered extensively, and while certain generalised observations can be drawn using the reported company data, we note the importance of considering dynamics at the sector and company level as well.

Further work in this area, and iterations of this working paper, bringing together the findings of the corresponding studies, will also consider in more detail some of the key challenges arising from a policy perspective in terms of enhancing structural transformation in South Africa including through policy options to change the tightly concentrated nature of economic sectors and patterns of ownership and control.

[23] See CCRED Barriers to Entry research project

7. References

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Appendix

Table A: Movements of the JSE Top 50 (2000 – 2017)

Sector	Rank in 2000	Company	Rank in 2010	Company	Rank in 2015	Company	Rank in 2017	Company
Banking	8	Firstrand Ltd	9	Standard Bank Group Ltd	10	Firstrand Ltd	7	Firstrand Ltd
	9	Standard Bank Invcorp	15	Firstrand Ltd	13	Standard Bank Group Ltd	10	Standard Bank Group Ltd
	10	Nedcor Ltd	16	ABSA Group Ltd	16	Barclays Africa Grp Ltd	17	Barclays Africa Grp Ltd
	20	Absa Group Limited	19	Nedbank Group Ltd	24	Nedbank Group Ltd	18	Nedbank Group Ltd
			35	African Bank Inv Ltd	34	Capitec Bank Hldgs Ltd	26	Capitec Bank Hldgs Ltd
Mining	1	Anglo American Plc	1	BHP Billiton plc	5	BHP Billiton plc	4	Glencore Plc
	3	De Beers Consol Mines	3	Anglo American plc	6	Glencore plc	6	Bhp Billiton Plc
	4	Anglo Amer. Platinum	8	Anglo Platinum Ltd	23	Anglo American plc	8	Anglo American Plc
	6	Billiton Plc	11	Impala Platinum Hlgs	31	South32 Limited	16	South32 Limited
	14	Impala Platinum Hlgs Ld	12	Kumba Iron Ore Ltd	40	Anglo American Plat Ltd	28	Anglo American Plat Ltd
	17	Anglogold Ltd	13	Anglogold Ashanti Ltd	44	Anglogold Ashanti Ltd	33	Kumba Iron Ore Ltd
	19	Lonmin P L C	17	Gold Fields Ltd			39	Anglogold Ashanti Ltd
	28	Gold Fields Ltd	24	Exxaro Resources Ltd				
	29	Gencor Ltd	26	African Rainbow Min				
			27	Lonmin plc				
			32	Harmony GM Co Ltd				
			42	Assore Ltd				
			44	Uranium One Inc				
Consumer Goods	2	Richemont Securities Dr	2	British American Tob plc	1	British American Tob plc	1	SAB Millers
	11	S A Breweries Plc	4	SABMiller plc	2	SABMiller plc	2	British American Tob Plc
	30	Tiger Brands Ltd Ord	7	Compagnie Fin Richemont	4	Compagnie Fin Richemont	5	Compagnie Fin Richemont
	41	Amalgamated Beverage	30	Steinhoff Int Hldgs Ltd	7	Steinhoff Int Hldgs N.V.	9	Steinhoff Int Hldgs N.V.
	45	Steinhoff Interntl Hldgs	31	Tiger Brands Ltd	35	Tiger Brands Ltd	29	Tiger Brands Ltd
					46	Pioneer Foods Group Ltd	50	Pioneer Foods Group Ltd
					48	Distell Group Ltd		
Consumer Services	38	Pick N Pay Stores Ltd	22	Shoprite Holdings Ltd	21	Woolworths Holdings Ltd	22	Shoprite Holdings Ltd
			34	Truworths Int Ltd	28	Shoprite Holdings Ltd	24	Bid Corporation Ltd
			36	Massmart Holdings Ltd	39	Mr Price Group Ltd	31	Woolworths Holdings Ltd
			46	Pick n Pay Stores Ltd	45	Truworths Int Ltd	46	Mr Price Group Ltd
			48	Woolworths Holdings Ltd			49	Truworths Int Ltd
Insurance	5	Old Mutual Plc	18	Old Mutual Plc	12	Old Mutual plc	14	Old Mutual Plc
	15	Sanlam Ltd	20	Sanlam Limited	15	Sanlam Limited	15	Sanlam Limited
	21	Liberty Group Ltd	43	MMI Holdings Limited	27	Discovery Ltd	27	Discovery Ltd
	22	Liberty International Plc	45	Discovery Holdings Ltd			47	MMI Holdings Limited
	36	Liberty Holdings Ltd						
	39	Metropolitan Life Ltd						
	43	Alexander Forbes Ltd						
	44	Fedsure Holdings Ltd						
	50	Discovery Holdings Ltd						
Investment Services	16	Remgro Ltd	21	Remgro Ltd	17	Remgro Ltd	20	Remgro Ltd
	18	Investec Group Ltd	25	RMB Holdings Ltd	25	Brait SE	23	RMB Holdings Ltd
	23	Johnnic Holdings Ltd	37	Investec plc	29	RMB Holdings Ltd	34	RMBI Hldgs
	31	RMB Holdings Ltd	49	Reinet Investments	30	Investec plc	35	Investec Plc
	32	BOE Ltd Ord			33	Reinet Investments S.C.A	38	PSG Group Ltd
	34	Venfin Ltd			36	Rand Merchant Ins Hldgs	40	Reinet Investments
	35	Investec Holdings Ltd			38	PSG Group Ltd		
	37	Tigon Ltd						
	40	Coronation Hldgs Ltd						
	48	New Africa Investment						
Property			38	Capital Shop Cent Grp	22	Intu Properties plc	30	Growthpoint Prop Ltd
			40	Growthpoint Prop Ltd	26	Capital & Counties Prop	32	Hammerson Plc
					32	Growthpoint Prop Ltd	36	Intu Properties Plc
					37	New Europe Prop Inv plc	37	Redefine Properties
					42	Redefine Properties Ltd	42	New Europe Prop Inv
					43	Resilient REIT Limited	43	Resilient Reit Limited
							48	Capital & Counties Prop
			29	Aspen Pharmacare	14	Aspen Pharmacare Hldgs	19	Aspen Pharmacare

Health Care			50	Netcare Limited	18	Mediclinic Internat Ltd	25	Mediclinic Int Plc
					41	Netcare Limited	45	Netcare Limited
					47	Life Healthcare Group		
Paper	26	Sappi Ltd			19	Mondi plc	21	Mondi Plc
					49	Mondi Ltd	44	Sappi Ltd
					50	Sappi Ltd		
Internet & Media	7	Dimension Data Hldgs	10	Naspers Ltd	3	Naspers Ltd	3	Naspers Ltd
	24	Johnnic Communications						
	46	Mih Holdings Ltd						
	47	Datatec Ltd						
	49	Naspers Ltd -n-						
Telecoms	12	M-cell Ltd	5	MTN Group Ltd	9	MTN Group Ltd	12	MTN Group Ltd
			14	Vodacom Group Ltd	11	Vodacom Group Ltd	13	Vodacom Group Ltd
Industrials	25	Bidvest Ltd Ord	23	Bidvest Ltd	20	Bidvest Ltd	41	Bidvest Ltd
	33	Barloworld Ltd						
Specialty Chemicals	13	Sasol Ltd	6	Sasol Ltd				Sasol Ltd
Basic Metals			33	Mittal Steel Sa Ltd				
Packaging	42	Nampak Ltd Ord						
Logistics	27	Imperial Holdings Ltd	39	Imperial Holdings Ltd				