



THE MYTH OF CORPORATE CASH HOARDING

A study of the cash holdings of South African companies



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About this report

The Myth of Corporate Cash Hoarding is a report by Intellidex, funded by Business Leadership South Africa (BLSA). Intellidex is solely responsible for the research and content of the report. BLSA's funding was not contingent on any of the findings contained in this report.

The report is based on an interrogation of data held by Iress using its Financial Analysis Software service. Intellidex analysts downloaded and interrogated this data in order to assess the levels of cash held by JSE-listed industrial and resources companies. This analysis was supported by academic literature on the economics of corporate cash holdings.

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Executive Summary

Are South African companies hoarding cash? This report is an answer to that question, and it is, briefly, "no". That finding is drawn from a study of the 85 mining and industrial companies among the top 100 companies on the JSE over the last 10 years.

Total cash held by non-financial companies has grown by 17.4% a year with much of the growth coming through in the past five years. In the latest year, the sample group held R765bn worth of cash, up from R154bn 10 years ago. While this appears to be a significant growth in cash balances it can mostly be explained by the following factors:

- 1. After adjusting for inflation, cash holdings grew by 11% a year.
- 2. Multinationals form a significant portion of the sample group, many of which have little activity in South Africa, including the single largest cash holding company, BHP Billiton. Much of the cash held by these companies is in hard currency. Over the period, the rand depreciated from R7.29/\$ in 2007 to R16/\$ during 2016. This means that every \$100 of hard currency holding would have increased from R729 to R1,600 over the period, an annual growth rate of 8.18%.
- 3. Company balance sheets as a whole have grown dramatically during the period, in part due to inflation and rand depreciation. When examined as a percentage of total assets, cash levels have fluctuated from 6.4% to 10.2%, and were at 7.8% at the end of the period. This indicates that almost all of the growth in cash holdings is a function of the growth of companies as a whole.
- 4. A great deal of the cash held by companies is held to replace plant and equipment as it reaches the end of its useful life. Depreciation and amortisation of equipment was equivalent to 55% of cash holdings in the most recent year. The rate of growth in depreciation and amortisation has been slightly higher than the rate of growth of cash.
- 5. SA companies have been investing throughout the period. Roughly three quarters of capital expenditure is on new investments and expansion of existing production lines, with the balance spent on maintaining existing infrastructure. Capital expenditure has been particularly strong in certain years, particularly 2012 and 2015.

To the extent that there is some residual motive for companies to hold cash rather than invest, we have identified the following factors as critical:

- 1. Companies' cash holdings have an inverse relationship to GDP growth rates. When the economy is doing poorly, companies hold more cash relative to assets. This indicates that companies are motivated primarily by caution in the face of difficult conditions, increasing cash holdings in order to absorb any negative earnings shocks. The declining GDP growth rate of the past four years has been exactly matched by a growth in companies' cash levels as a percentage of total assets. This is often described as a "cash conservation" strategy and is pursued by companies facing highly uncertain economic conditions.
- 2. For mining companies, return on equity in the past four years has been lower than interest that can be earned on cash. This indicates that it is more profitable for them to hold cash than to invest.

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- 3. Mining companies also exhibit a negative relationship between company value and the cost of investment. Every rand they invest adds less than one rand to the value of the firms. It is therefore better from a shareholder perspective for these firms to hold cash or distribute it to shareholders rather than invest it themselves.
- 4. South African firms have become more indebted over the period, with the ratio of debt to total assets increasing from 75% to 100%. This means that company balance sheets have become riskier overall. Increasing the amount of cash held has a countervailing impact, helping to reduce the risk imposed by higher leverage.
- 5. Cash hoarding is not the same as an investment strike. Companies with surplus cash who do not want to invest it can distribute their cash as dividends. If shareholders have more productive uses for the cash, we would expect them to pressure companies to distribute their cash.

The growth in companies' cash holdings is mostly explainable by the depreciation of the rand, inflation and the overall growth of companies' balance sheets. The balance of the growth in cash levels can be explained by companies conserving cash in the face of poor economic conditions, increased debt on company balance sheets, and the low return on investment faced by mining companies in particular.

Company investment rates will increase if economic conditions improve and the valuation of companies by shareholders improves. Pro-growth policy delivered in a reliably sustainable way is the best possible government intervention to boost company investment rates and reduce any need for companies to hold excess cash.

BOX 1

Some views on SA companies' cash holdings

South African businesses are flush with money. Too bad they aren't willing to spend it at home.

They're hoarding cash or expanding abroad, put off by a stagnating economy, power shortages, low commodity prices and slower growth in export markets China and Europe. Delays in passing business regulations and a dispute between President Jacob Zuma and Finance Minister Pravin Gordhan are compounding their unease.

- Mike Cohen, Liezel Hill and Kevin Crowley, Bloomberg. 23 May 2016

The private sector remains reluctant to invest the cash lounging on company balance sheets. Poor confidence in the economic environment has played a notable role in this, but the picture may be more complicated than it first appears.

- Lynley Donnelly, Mail & Guardian. 3 July 2015

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Methodology

This report focuses specifically on the top 100 non-financial companies listed on the JSE. These are the largest companies in the country accounting for more than three quarters of the JSE's total capital market capitalisation. We have excluded banks and insurance companies because cash holdings are affected by other factors including regulations and deposits from non-corporate entities. With financials excluded, 85 industrial and resources companies were left in the study group.

The research is quantitative and relies on financial data taken from Iress's FAS system and economic data from Statistics South Africa and South African Reserve Bank's databases.

The first part of the report examines the trends in the amount of liquid assets held by the sample companies over the past 10 years. Critics who argue that South African companies are hoarding cash make their conclusions based on analysis of absolute nominal cash figures. However, this measure has been found to be insufficient in most previous studies. Looking at growth in absolute cash values alone fails to account for the fact that cash holdings should grow in line with the growth of a company's balance sheet. A more defensible measure is to compare cash holdings against total assets to see whether its growth is proportional. To do that, we examine a measure that has not been looked at in the discussions on South African corporate cash holdings: the cash-to-total assets ratio. This ratio has been used in similar empirical studies. Nyamgero (2015), Flipse (2012) and Opler et al (1999) emphasise the use of this ratio in their studies of trends in cash holdings. The ratio recognises that cash should grow in line with all the other assets of the company.

Examining nominal figures over time also fails to recognise the effect of inflation on the cash holdings of companies. As the prices of goods and services increase, companies' cash requirements will increase. To overcome this weakness, we analyse trends in real cash holdings (cash holdings adjusted for inflation).

Absolute cash holdings may also be misleading because they fail to adjust for depreciation on fixed investments. Companies must set aside a certain amount of cash to replace existing assets and infrastructure before it wears out and affects production. It's therefore imperative also to look at the cash holdings after depreciation has been accounted for.

After the analysis of the trends in cash holdings, this report considers some economics literature regarding cash holding by companies. We also consider the effect of cash on the risk profile of company balance sheets and the impact on economic growth. This considers the impact on overall savings rates in the economy and the role this plays in economic growth.

We also investigate whether holding excess cash is in the best interest of companies. Effectively the report would provide answers on what cash companies hold, some analysis of why that holding pattern varies, and analysis of the economics of such cash holding.

A: How much cash are SA companies holding?

1. Nominal cash holdings

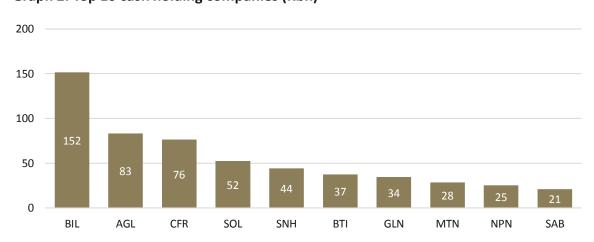
We start with the total nominal cash balances by sector. We calculated these figures by adding the cash and equivalents balances on companies' balance sheets at the end of each financial year to the end of the 2016 financial year. The results are in Graph 1, broken down into mining and industrial companies.

1000 800 600 336 273 232 400 203 200 169 167 139 93 200 269 178 178 0 FY07 FY08 FY09 FY10 FY11 FY12 FY13 FY14 FY15 FY16 ■ Industrials
■ Mining

Graph 1: Nominal cash holdings by sector (Rbn)

Total cash held by non-financial companies has grown by 17.4%/year with much of the growth coming through in the past five years. Mining companies recorded growth of 20%/year ahead of the 16% recorded by industrials.

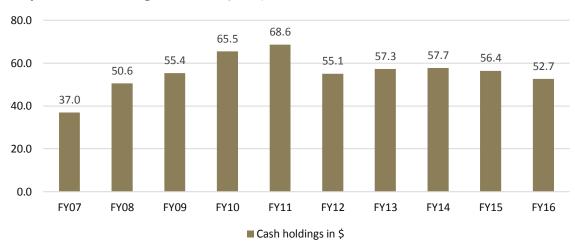
2. Currency impact on rand cash holdings



Graph 2: Top 10 cash holding companies (Rbn)

Graph 2 provides insights as to who is holding most of the cash in SA. These 10 companies held 72% of the cash in the sample group in the 2016 financial year. BHP Billiton has the highest cash holding, accounting for 20% of cash balances for the entire 85-company sample. All the top 10 cash holders are multinationals, generating the bulk of their cash outside of SA. SABMiller (subsequently delisted), British American Tobacco, Richemont, Naspers and BHP generate less than 10% of their revenue from SA. It is likely that most of the cash held by these companies will not be in SA.

This brings another important factor into consideration: the exchange rate. The rand weakened from R7.29/\$ in 2007 to R16/\$ during 2016. This means in constant dollar terms, cash balances would have grown far less than they have in rand terms.

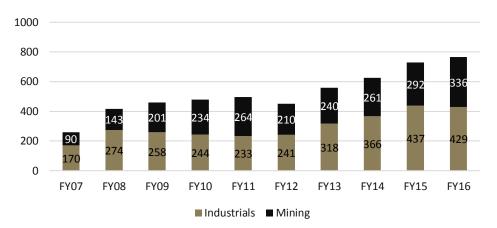


Graph 3: Cash holdings in dollars (\$'bn)

Graph 3 shows the cash holdings in dollar terms. We arrived at the figures by dividing cash holdings at current prices by the 12-month moving average of the rand dollar exchange rate for that year. If we take out the effects of the exchange rate we see that overall cash levels have not changed that much over the past 10 years. Cash held in dollar terms grew by an average of 3.6% a year and has been stable between \$50bn and \$58bn over the past six years.

3. Cash holdings at current prices

One major weakness with nominal cash figures is that they don't account for inflation. This is less of a factor when looked at in hard currency terms, but is clearly a factor in rand terms. In Graph 4 below we show the cash holdings adjusted for inflation. We arrived at the figures by multiplying the absolute cash holdings of each company by an adjustment factor based on the consumer price index (CPI). The CPI increased from 59.3 points in 2007 to 100 points at the end of 2016, implying inflation of 68.6% over the 10-year period.



Graph 4: Cash holdings at current prices by sector (Rbn)

Cash holdings adjusted for inflation grew by 11% a year which is lower than the 17.4% growth we found using the absolute cash holdings figures.

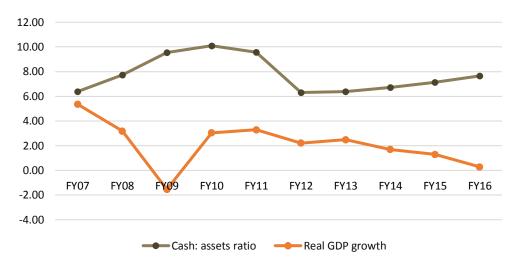
These absolute levels of cash do not provide much insight, however. We need to understand cash holdings in the context of corporate activity and the development of companies themselves. We do that in the next section.

B: Cash holdings in perspective

How much cash should companies hold? We provide some answers by looking at the cash holdings of companies in the context of the rest of their activities, and the rest of the economy.

1. Cash: total assets ratio

The cash:assets ratio is the most widely used and recommended measure when studying trends in cash holdings by companies. It allows us to gauge if cash holdings by companies have outpaced growth in the company's balance sheet.



Graph 5: Cash to assets ratio vs real GDP growth (%)

Graph 5 provides some clear insights. The cash:assets ratio has largely been in the single-digit region except in 2010 when it peaked at 10.2%. The current cash to assets ratio is just 1.4 percentage points higher than the ratio in 2007, reflecting negligible growth in cash as a percentage of total assets held by companies. This shows that much of the growth in company cash holdings has been due to the general growth of company balance sheets. The relative level of cash as a proportion of companies' assets has not varied much over the decade.

Graph 5 also reveals another important property of cash holdings: they vary inversely with economic growth. Cash holdings as a proportion of assets reached their peak soon after the recession that followed the global financial crisis of 2008/2009. They have been steadily growing again as economic growth has declined since 2013. This indicates that companies are increasing cash holdings in order to prepare for bad economic conditions. Higher cash holdings enable them to withstand a fall in demand and lower sales. We discuss this further in section D in the context of falling business confidence.

It is also important to note that the ratio for South African companies is still well below those of companies across the world. A study of European companies by Flipse (2012) found the average cash:assets ratio for companies in the eurozone to be in the upper teens. A study of the US by TW Bates et al (2007) found the ratio for most US companies to be 20%.

2. Cash:GDP ratio

The graph below shows the cash:GDP ratio. We arrived at the ratio by dividing total cash holdings at current prices with GDP at current prices.

20.0%

15.0%

10.0%

FY07 FY08 FY09 FY10 FY11 FY12 FY13 FY14 FY15 FY16

Graph 6: Cash to GDP ratio (%)

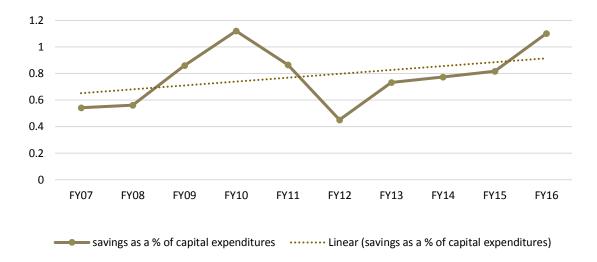
The cash: GDP ratio shows a similar trend to that of cash:total assets. The ratio has ranged between 12.3% and 18%. This again shows that companies' cash levels have not varied much when seen in the context of the size of the overall economy.

3. Cash in proportion to capital expenditure

Investment undertaken by companies is known as capital expenditure. If companies were hoarding cash we should expect that their cash levels would be increasing relative to the amount they were spending on capital. We can test for this by looking at cash as a ratio of capital expenditure. A ratio of above one means that cash savings were higher than capital expenditures while a ratio of less than one occurs when capital expenditure exceeds cash savings. If capital expenditure equals cash savings, the ratio will be one.

On average the ratio for SA companies has been largely below one, implying that companies have been spending more than then they were saving. This is clear in Graph 7.

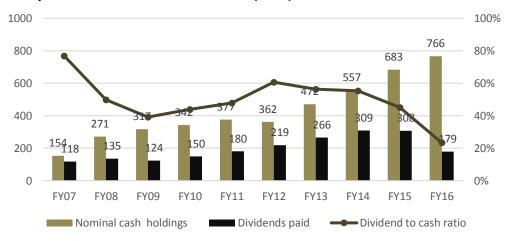
Graph 7: Cash:capital expenditure



This graph shows that companies slowed capital expenditure relative to cash levels after the 2008/2009 recession, and have slowed again along with the decline in economic growth over the past four years. However, only in two years, 2010 and 2016, was the ratio greater than one, indicating that in eight of the last 10 years, companies spent more on investment than they held in savings.

4. Cash vs dividends paid

Cash holdings should also be looked at in the context of dividends. A dividend is a payment made by the company to its shareholders, usually as a distribution of profits. Companies are likely to come under pressure from shareholders to distribute cash that companies are holding if there is no investment, precautionary or other rational reason for the company to hold cash. Public companies usually pay dividends on a fixed schedule, usually at the midpoint and end of the financial year. While the final dividend is declared at the end of the financial year, shareholders will only be paid during the following financial year. This may require companies to hold more cash at the end of the financial year.

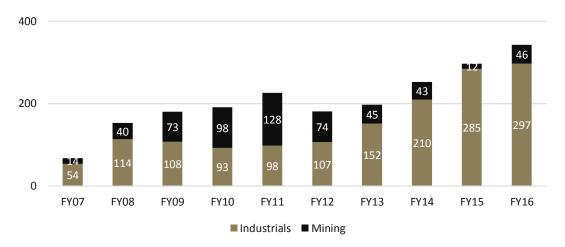


Graph 8. Nominal cash vs dividends (R'bn)

Graph 8 compares the dividends declared with the cash holdings. Dividends declared by companies as a percentage of cash have ranged between 20% and 80%. This ratio has been declining since 2012, indicating that companies have been reducing dividend payments at the same time that they have bene increasing cash holdings. This is mostly due to a drastic reduction in dividend payments by mining companies as they try to conserve cash in the face of low commodity prices.

5. Replacement expenditure

Companies need to use to cash to replace equipment that has reached the end of its life. New plant that companies invest in depreciates in the process of being used. At some point such equipment needs to be replaced. For companies to avoid a cash shortage when replacement investment has to be made, they set aside a portion of their cash flow to replace existing assets and infrastructure before it wears out. Most companies conserve cash to cover the following year's replacement capex. So, in order to obtain a "clean" reading of companies' absolute level of cash holdings, it is important to remove cash earmarked for capital replacement. One way to do that is to examine the depreciation and amortisation of assets. Assets such as machines are depreciated over their useful lives. Once they have reached the end of their useful lives they have to be replaced. This is not a precise measure because assets can continue to be useful after being fully depreciated and there are some tax allowances for accelerated depreciation. Nevertheless, it provides some insight on whether firms are holding cash in order to replace worn out plant and machinery. Graph 9 shows cash net of depreciation and amortisation for our sample of 85 companies. Depreciation and amortisation have been deducted from cash holdings as if some cash is earmarked for the purchase of worn out equipment.



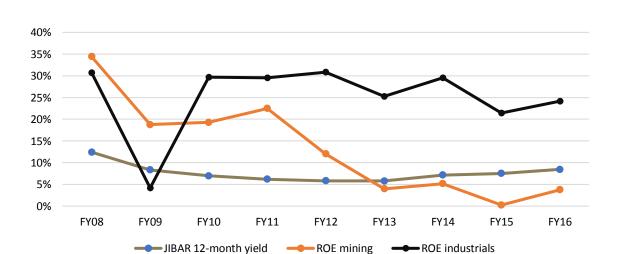
Graph 9: Cash holdings after depreciation costs (R'bn)

As can be seen from Graph 9, deducting cash savings for capital replacement requirements results in a significant drop in the amount of cash held by companies. For the financial year 2016, removing depreciation and amortisation from cash holdings reduced cash holdings by 55% from R343m to R765m. This is particularly clear for mining companies, whose cash holdings are almost eliminated once depreciation of equipment is taken into consideration.

C: Why companies hold cash in theory

In this section we consider some of the theory about why companies hold cash and use it to explain some of the aspects of South African cash holdings.

1. Cash is expensive



Graph 10: Returns on cash compared to equity

In general, holding cash is costly for firms. If a firm chooses to hold cash and near-cash securities rather than invest, it generates opportunity costs. It effectively is earning less than it could from investments. Even if it does not have any investment opportunities, cash could be used to increase dividends or acquire another firm, thereby transferring cash from a company's balance sheet to shareholders. The cost to the company of holding cash will be the difference between after-tax interest received from holding cash and the investment return from investing the cash in expanding the business.

Since companies always have an option to reinvest in existing operations, a rough measure of the cost of cash is the difference between a company's return on equity and the return available for cash invested on the money market. In Graph 10 we show the average return on equity (ROE) per sector against the Johannesburg Interbank Agreed Rate (Jibar). The Jibar is the money market rate used in SA. It is calculated as the average interest rate at which banks buy and sell money. In this case we show the 12-month moving average of the 12-month Jibar yields.

Graph 10 shows that the ROE for industrial companies has been largely above the money market yields with an average spread of 20% post the 2008/2009 economic crisis. Income tax on interest will reduce the Jibar yield, depending on a company's tax rate, but it is likely that for most mining companies, interest paid on cash has been better for the last two years than the returns they can earn from investing it. For industrial companies, however, for every rand kept as cash the company will be theoretically losing out on as much as 20% of potential returns.

BOX 2

Keynes's explanation for why companies hold cash

The 20th century economist John Maynard Keynes identified three motives for holding cash: transaction, precautionary and speculative motives.

Transaction motive: Companies hold cash to satisfy normal transactional requirements for activities with a firm's ongoing operations. Since companies are frequently involved in the purchase and sale of goods or services they also need to have cash on hand to make those transactions. As companies get larger, cash required to meet operational requirements will also increase. This is quite evident from the data in Graph 4 where the growth in cash has been in line with the growth in size of most companies.

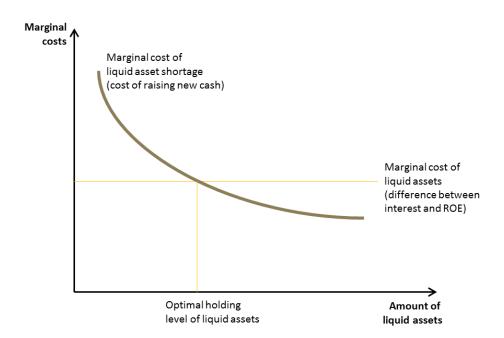
Precautionary motive: Firms also hold cash to meet contingencies or unforeseen circumstances. Firms hold cash in anticipation of difficult times both in the business and in the capital markets in which they source financing. This motive may explain the spike in cash holdings by South African companies following the 2008/2009 economic recession. Since the future is uncertain, a firm may have to face contingencies such as an increase in the price of raw materials, labour disputes, demand fluctuations, etc. Firms hold cash to ensure uninterrupted business operations.

Asset or speculative motive: Firms may also hold cash for speculative purposes in order to take advantage of opportunities that may arise. If a firm feels prices of raw materials will fall in the future, it will hold cash in order to accumulate inventory when they do. Thus, a firm holds cash to exploit possible opportunities that are out of the normal course of business.

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Holding cash has benefits and costs. The key benefit of holding cash is that it creates a safety buffer so that the company can meet its obligations and invest in any opportunities without needing to raise external funding or liquidate assets. If it has too little cash, it risks not being able to meet its obligations, which could be very costly to shareholders. When a company runs out of cash, it is forced to borrow or raise capital from shareholders, both of which are costly in terms of advisory fees and origination fees, as well as the higher cost of the funds compared with cash generated from operations.

As companies operate in conditions of uncertainty, their cash holdings will be a function of their beliefs about the future. Either decision has costs and benefits, which shift depending on the specific circumstances. Opler et al (1999) argue that the optimal level of cash and near cash holdings occurs where the marginal cost of holding liquid assets curve intersects the marginal costs of liquid assets shortage. In the graph below Opler et al (1999) shows the equilibrium optimal holdings of cash.



Graph 11: Theoretical optimal level of cash holdings

The marginal cost of a liquid asset shortage increases as the amount of cash shrinks, while the marginal cost of holding cash stays steady with interest rates and ROE. Firms should hold cash at the level where these two factors balance.

2. Cheaper forms of cash will be used first

Myers and Majluf (1984), who popularised the pecking order theory, had a different view. They argued that cash holdings are at the discretion of companies and there is no optimal cash level for a company. According to this theory, issuing new equity is very costly for firms because of information asymmetries. Outside investors demand a higher implied premium in new equity because they have

less information about the firm's prospects than insiders. Thus, firms finance their investments primarily with internal funds, then with debt and finally with new equity.

According to the pecking order theory, when operational cash flow is high, firms will use it for the following priorities:

- 1. finance new profitable projects,
- 2. repay debts,
- 3. pay dividends and, finally,
- 4. accumulate cash.

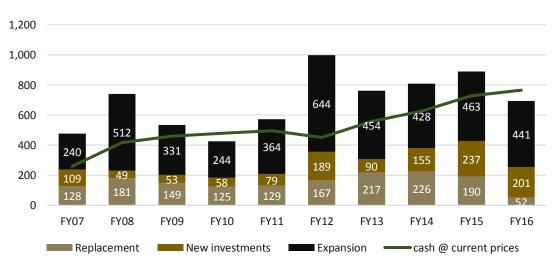
When retained earnings are insufficient to finance new investments, firms use their cash holdings, then issue new debt and finally raise new equity. This suggests that the accumulation of cash is the last objective that firms should have.

D: Why South African companies would want to hold cash

This section will look at some factors that have influenced companies' cash holdings decisions.

1. Availability of investment opportunities

One major factor which has been found to influence managers' decisions on how much cash to hold is the availability of investment opportunities. It's not rational for companies to sit on excess liquid assets when there are profitable projects available. The graph below shows total capital expenditure by South African companies broken down by type, compared with the cash holdings of companies.



Graph 12: Capital expenditures at current prices (R'bn)

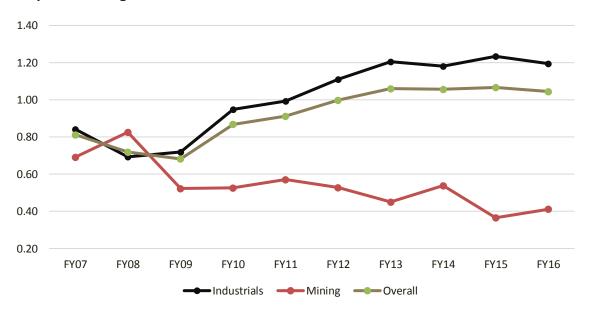
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We have broken capex into three groups: replacement, new investments and expansion expenditure. Replacement expenditure refers to cash spent on the replacement of an old machine by a new one. Expansion involves capital expenditure to increase the production capacity in the same line of production. These investments are made in existing activities. New investments are expenditures on lines of production to diversify the business or due to new strategies.

The graph shows that companies have been investing most of their available reserves with the bulk of the capex being spent on expansion projects and new projects. Roughly three quarters of the capex is on new investments and expansion of existing production lines. This suggests that SA companies have in fact been investing considerably throughout the period.

Companies will invest only when there are profitable opportunities to do so, with a net present value higher than low-risk returns on cash. Studies by Nyamgero (2015), Flipse (2012) and Opler et al (1999) use the Tobin Q ratio to assess the availability of investment opportunities.

Tobin Q is calculated by dividing the market value of assets (the market value of the company's shares plus the book value of debt) by the book value of assets (usually the replacement value of assets). In theory, if Q is greater than one, ie, when the market value of assets is higher than the book value of assets, additional investment in the firm would make sense because the profits generated would exceed the cost of the firm's assets. If Q is less than one, the firm would be better off selling its assets instead of trying to put them to use. The ideal state is where Q is approximately equal to one, denoting that the firm is in equilibrium. Graph 13 shows the development of the Q ratio of South African companies over the past 10 years.



Graph 13: Average Tobin Q ratios

The Tobin Q ratio for mining companies has largely been below one and deteriorating over the 10-year period. This is quite consistent with the deteriorating conditions in the South African mining industry. Rising unit costs, increasing policy uncertainty and depressed commodity prices have

resulted in a situation in which the increase in value of a mining company will be smaller than any investment in assets.

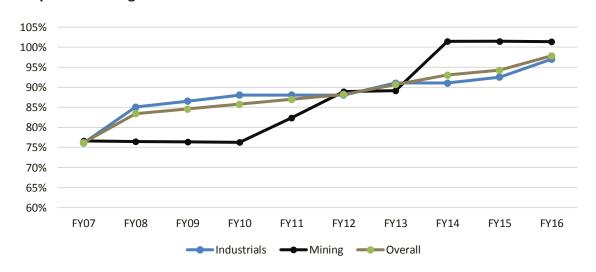
The ratio for industrials has improved over the period and has been above one since 2012. Since then it has made sense for industrial companies to invest as the impact on the value of their firms would be greater than the cost of the investment.

2. Companies are getting bigger

One thing that is clear from the analysis of South African companies is that most have grown significantly over the past decade. As they get bigger, they require higher cash holdings. The growth in the absolute cash holdings by South African companies over the past 10 years has been quite consistent with the growth in the balance sheets, as was clear in Graph 4, above. The market capitalisation of the top 40 index has spiked from about R3-trillion in January 2007 to R5.57trn (46%), while the total assets held by the top 100 companies have also ballooned to R22.25trn from R8.87trn (60%) in the same period. As firms grow, cash levels should also be expected to grow.

3. A need to de-risk balance sheets

Leverage is another factor which plays a major part in the decision on how much cash to hold. Leverage reflects the amount of debt relative to assets. Companies with high leverage may want to hold more cash for them to be able to make loan repayments and to de-risk their balance sheets to assure lenders.

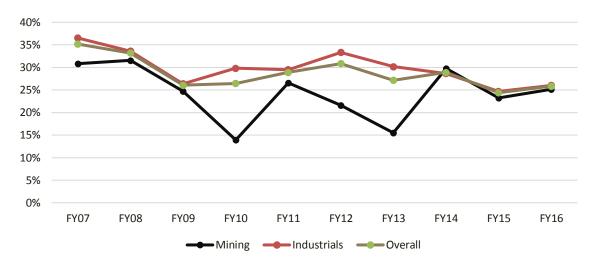


Graph 14: Leverage

We have examined whether this is a factor in South African companies' cash holdings. We measure leverage as the total debt divided by total assets. The leverage ratios have increased for all companies from around 75% in 2007 to close to 100% currently (Graph 14). This means a higher proportion of companies' assets are now financed by debt. This increases the risk profile of

companies as it makes them less able to withstand a poor trading period. Companies will partly offset this increased risk by increasing their liquid assets, which helps to ensure they always have sufficient liquidity to meet debt repayments.

A related factor is the structure of companies' debt. The more short-term debt they hold, the higher the risk will be. Short-term debt is usually in the form of callable overdrafts and other debt of less than a year's duration, with long-term debt being held for longer than a year. Firms with more short-term debt in their capital structure have higher risk because short-term credit lines are less certain and may not be renewed. In order to compensate for the risk of financial distress that may be caused by fluctuations in available short-term debt, companies hold larger amounts of cash.

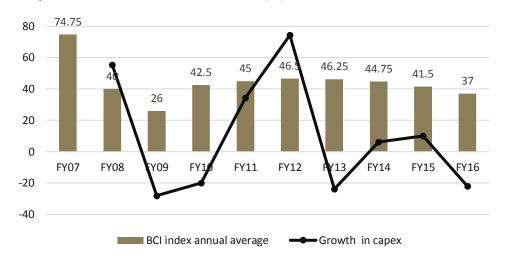


Graph 15: Short-term debt to total debt

The overall average short-term debt as a percentage of total debt has declined over the years and at the end of FY16 was at 25%. This decline suggests that the incentive to de-risk by holding more cash has declined. In the latest year, 25% of companies' debt is due within the next 12 months.

4. Waning business confidence

Weak economic conditions lead to low business confidence. Companies' perceptions on the future of the economy plays a major role in investment decisions. When management is confident of the economic outlook for the country they are likely to invest more in order to prepare for increased demand. On the other hand, if they anticipate difficult conditions they are likely to conserve cash.



Graph 16: Business confidence index (%)

Corporate perceptions of the future can be read from the Bureau for Economic Research's business confidence index. The BER takes the percentage of respondents that rates prevailing conditions as satisfactory as an indicator or proxy of business confidence. The composite RMB/BER Business Confidence Index (BCI) is the unweighted mean of five sectoral indices: manufacturing, building contractors, retailers, wholesalers and new vehicle dealers. It's a widely accepted measure of business confidence in SA.

The index is compiled on a quarterly basis so we average the quarterly readings to get an annual reading shown on the graph. The index plummeted from around 75 in 2007 to a lowest average reading of 26 in 2009. While business confidence improved post 2009, it has failed to breach the 50-point level. Capex also declined in line with the business index reading. While the economy recovered from the 2008 recession, confidence has stayed below 50 since 2012, reflecting a substantial lack of confidence by businesses. This explains the decline in capital spending since 2013.

The business confidence figures broadly track GDP growth depicted in Graph 4.

E: Conclusion

This report has made it clear that the growth in the cash holdings of South African companies can largely be explained by inflation, the depreciation of the rand and the overall growth of companies' balance sheets. The residual growth can be explained by companies applying the precautionary principle and accumulating cash to ride out difficult economic conditions. Companies also aim to reduce risk on their balance sheets, which have seen the proportion of debt grow by 25% in the past 10 years. This explains the fluctuation in cash levels relative to assets of between 6.4% and 10.2% over the past 10 years.

Capex has in fact remained robust, with companies on average spending more than their cash savings every year. This investment, however, tracks economic conditions and business confidence, declining during periods of economic underperformance and weak confidence. Some companies, particularly in the mining sector, face a situation in which spending cash on investment destroys value – every R1 spent on investing in assets leads to an increase in the value of the firm of less than R1.

When the returns on an investment are below the after-tax interest on cash, firms will naturally choose to hold cash rather than invest. On average, however, return on investment remains above the return on cash in SA. If firms cannot identify suitable investment opportunities themselves, they can be expected to return cash to shareholders to be reallocated to companies that are able to identify positive return investments. Currently, we should expect companies in the mining sector to return cash to shareholders for reinvestment in higher return sectors of the economy.

Cash holdings are directly responsive to economic policy. A policy environment that promotes economic growth and provides certainty is likely to reduce firms' caution about economic conditions. That will free up cash for investment, while improved policy is likely to improve prospective returns on investments. Ultimately, company investment decisions are driven by the prospect of good returns, and the current trajectory of declining economic growth is dimming those prospects.

References

- 1. Bates, T.W., Kahle, K.M. and Stulz, R.M., 2009. Why do US firms hold so much more cash than they used to?. The journal of finance, 64(5), pp.1985-2021.
- 2. Flipse, A.P, 2012. The determinants of corporate cash holdings: Evidence from European companies, Tilburg University
- 3. Nyamgero, F, 2015. Are South African firms holding more cash than before?. University of Pretoria.
- 4. Opler, T., Pinkowitz, L., Stulz, R. and Williamson, R., 1999. The determinants and implications of corporate cash holdings. *Journal of financial economics*, *52*(1), pp.3-46.
- 5. Saddour, K., 2006. The determinants and the value of cash holdings: Evidence from French firms (No. halshs-00151916).

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