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Examining the impact of strategic outlook on financial performance of South African JSE listed firms

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Thesis for the Master of Management in Finance and Investments

Topic: Examining the impact of strategic outlook on financial Performance of South African JSE listed firms

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DECLARATION

I, Mandira Soomeer, declare that the research work reported in this dissertation is my own, except where otherwise indicated and acknowledged. It is submitted to fulfil the requirements for the Masters of Management in Finance and Investment degree at the University of Witwatersrand, Johannesburg. This thesis has not, either in whole or part, been submitted for a degree or diploma to any other institution or university for similar qualification.

Signature: _____ Date: _____

Abstract

Africa is currently chasing a large financing gap in order to fund developmental goals in the nation. With a range of other more pressing social issues to address, governments are overtasked and the efforts to source funds have been trying. Domestic private investment from firms is therefore necessary to build the nation to a point of attracting FDI but also mitigating the long term negative effects of foreign investment. This is a suitable form of funding as local firms are familiar with the business environment and their support is more relevant to an African context. However the ability to provide domestic private investment is dependent on the strategic outlook of domestic firms.

Using a cross-section of JSE listed firms for the periods 2008 and 2013, respectively, differentiated by market capitalisation, the study models the relative optimistic strategic outlook of firms, where optimistic is defined as a favourable perception of future financial prospects which result in a firm taking the necessary steps to invest in itself and its country at present, to support future domestic expansions of operations. Furthermore the effect of optimism on financial performance is examined.

The results of the study have revealed that although larger firms exhibited higher levels of optimism in 2008, this subsequently changed in 2013, when their smaller counterparts began to favour a more optimistic outlook. This was attributed to a change in government policy that promoted smaller business development. Furthermore, in 2008, optimistic firms are more financially sound than their pessimistic counterparts and that the share prices of optimistic firms are positively related to domestic investment, and by extension economic development. The 2013 results could not conclude the same. Therefore there is a time dependency of optimism that is influenced by the dynamic nature of the business environment as well as governmental policy reforms.

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Chapter 1: Introduction

1.1 Background Literature

Africa's development has always been slow and less than ideal compared to many other regions of the world. The development of the New Partnership for Africa's Development (NEPAD) was created to address these developmental shortcomings of the African nations. NEPAD is a broad-based initiative aimed at stimulating Africa's sustainable development, among other social and economic concerns. This research study is aligned with some objectives of NEPAD and provides an empirical foundation from which firms can begin brain-storming their strategic and resource planning, and commence investing in the infrastructural development of Africa (Akinboade & Lalthapersad-Pillay, 2009).

Africa is at a disadvantage, especially in attracting foreign investment, and according to Dunning (1998), the process of allocating foreign direct investment (FDI) is heavily determined by the "location advantage" among other factors. Countries are differentiated on their relative advantage based on their allocation of resources, strategic environment and policy regime (Dunning, 1998). Countries have more of a competitive advantage when effective policy management and regulation are able to facilitate resource allocation such that there is minimal disparity between societal groups. This provides individuals with fairly equal opportunities. The ripple effects translate into lower dependence on the state for aid and grants thereby freeing up government funds to address developmental aims (say infrastructure provisioning) and in so doing uplifting the general state of the economy.

African economies are characterised by small domestic markets, an ineffective or fledgling financial sector, large dependency on imports due to poorly developed manufacturing sectors, and grossly underdeveloped physical infrastructure (power, transportation, telecommunications and water and sanitation). Without investment in infrastructure development, Africa is unlikely to overcome its problems, diversify its production base, and increase its export potential (Dahou, Omar & Pfister, 2009 ; Akinboade & Lalthapersad-Pillay, 2005).

These less than favourable conditions limit the amount of FDI to Africa. Coupled with its relatively ineffective financial market, Africa is unable to realise the full potential benefits that can accrue from FDI (Alfaro, Chanda, Kalemli-Ozcan, & Sayek, 2004). According to these authors, countries should weigh the cost of policies focused on attracting FDI, with those that aim to improve and develop local conditions. Similarly, this research study aims to assist, as it focuses on how firms can potentially contribute towards domestic private investment and therefore, leave government free to tackle the improvement of local conditions. It will be argued that, the collaboration of firms' and

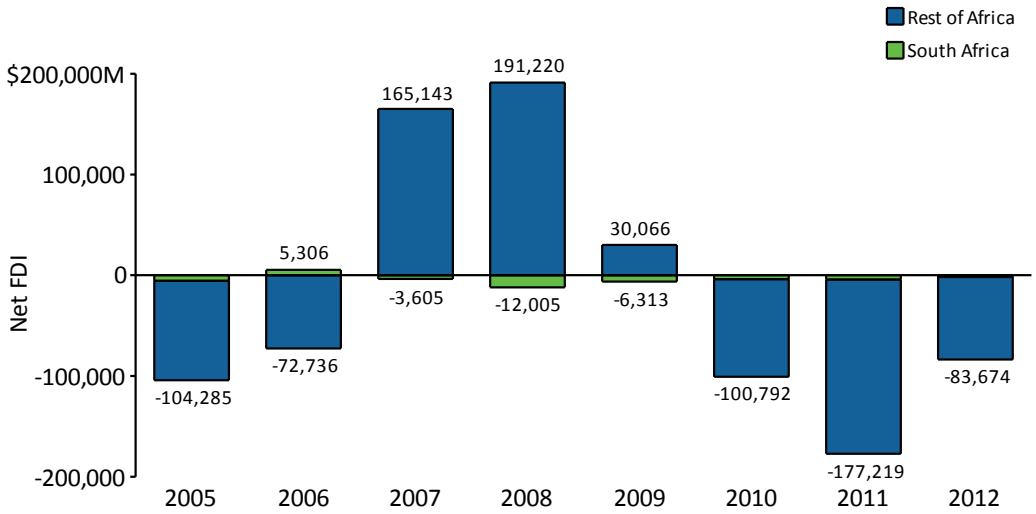
government efforts will indirectly and directly attract FDI, thereby expanding the range of FDI sources and effectively increasing the FDI inflows.

The Africa Infrastructure Country Diagnostic (AICD) estimated that approximately US$93B per year is required to develop infrastructure in Africa. Africa's spending, in 2012, was US$45B; indicating a financing gap of US$48B (African Monitor, 2012).

Africa as a whole, however, is not attracting high enough levels of investment to support the development of its necessary infrastructure. Although FDI inflows to Africa rose by 6.8% to about US$56.3B in 2013 from a previous annual increase of 5%, this was from high inflows in the southern African countries including South Africa and Mozambique (US$10B and US$7B respectively), compensating for the inflow declines in other sub-regions (United Nations UNCTAD, 2014).

Figure 1 below shows the decline of FDI in recent years within Africa and South Africa. As a proportion of net flows to Africa, a small proportion is attributable to South Africa. This was most recently 2.06% in 2012.

Figure1: Net FDI in Africa



Source: World Bank Database (11/06/2014)

*South Africa net FDI values also shown as a proportion of total African FDI flows

However a vicious cycle exists, where Africa is tasked with developing and upgrading its infrastructure in order to attract and retain FDI flows, but to do so requires a significant initial capital investment. Thus the focus of many African nations is from where to source investment funds. Furthermore, the degree of FDI capacity in stimulating growth and thereby fulfilling the

development goals of Africa is of further importance (United Nations Economic Commission for Africa, 2005).

This highlights the need for identifying suitable sources of funds to help finance Africa's development and close the financing gap that currently exists. The scenario therefore leads to the problem enunciated in the problem statement.

1.2 Problem Statement

African governments have been taking active steps to attract private investment for all sectors, including infrastructure. Zambia, for instance, established the Office for Promoting Private Power Investment (OPPPI) in 2000, which was made responsible for endorsing and enabling private investment in power related projects. African countries have generally set up agencies to promote investment by specifically focusing on image/reputation building, investment generation, information distribution and policy support (OECD, 2012).

Without the aid of private investment, developmental goals will be difficult to be realised. However foreign investment is difficult to attract (due to Africa's lack of a "location advantage") and its use is unsustainable in the long term. Its use in the long term is unsustainable because it inculcates a culture of dependency on richer, more advanced nations. In this way it stifles entrepreneurship and innovation in the host country. Domestic private investment from firms is therefore necessary to build the nation to a point of attracting FDI but also mitigating the long term negative effects of foreign investment. The ability to provide domestic private investment however, is dependent on the strategic outlook of domestic firms (OECD, 2012).

This research study aims to model the relative optimistic strategic outlook of firms, where optimistic is defined as a favourable perception of future financial prospects which result in a firm taking the necessary steps to invest in itself and its country at present, to support future domestic expansions of operations. This may be achieved through an optimistic production orientation which can be gauged by an "optimism index" based on a number of assumptions, which will provide the firm's relative level of optimism regarding its strategic outlook.

1.3 Purpose Statement

As one of the top economies in Africa, it is important for South African firms to assist with the development of Africa. In order for South African firms to invest in the development of Africa and expand its own business operations, such double-effect production design needs to align with the strategic outlook of the firm. If firms are performing poorly and anticipated growth levels are low, then they are unlikely to consider expansion in the short term and will be more concerned with ensuring that working capital requirements are being financed. However, if a firm is performing well and views its future prospects favourably, then expansion with a two-fronts production engagement is more likely. Therefore it is important for firms to have a clearly defined strategic outlook that is thought about in terms of the components of optimism. These variables (capital expenditure, debt levels, net share repurchases, dividend payout, purchase of foreign investments, return on domestic investment, number of employees and regions where domiciled) will be discussed at length in the following chapter. A clearly defined strategic outlook will allow for the firm to make optimal capital investment decisions. The impact of which, is not only on the development of the country at large, but will also feed back into the firm, with benefits accruing to the firm as a result of greater profitability from expanded operations, and an enhanced brand reputation or higher levels of investment interest from abroad (Boz, 2009).

Optimism and its effects on financial performance are observed for large and small firms separately, as large firms are generally expected to have greater resources with which to engage in investment decisions (Driver, 2006). A subsequent analysis of the "optimism index" effects on various measures of financial performance (share price, return on assets (ROA), return on capital employed (ROCE) and return on equity (ROE)) are performed to determine the effect of such a strategic outlook, either relatively optimistic or relatively pessimistic, on the performance and returns of a firm.

The proposed index and subsequent analysis may not only help a firm in determining its ability to assist in the domestic development of the country, but may also assist in inferring the strategic stance competitor firms may have adopted, and the corresponding performance of these firms. This helps firms with making decisions about their own investments. In particular, the effects on the top JSE listed firms are envisaged as the main focus of this study.

Although extensive international research has been conducted around the need for FDI to develop emerging markets, few solutions were provided around the use of investment from domestic firms to effectively "internally" finance this growth and development. Furthermore, there have been many international studies which focused on the effects of isolated factors or groups of select factors on economic growth and financial performance of countries, there was no effect analysed for

a wider combination of factors, least of all those indicative of strategic outlook, and none within the South African firm context. This research is therefore aimed at addressing these shortcomings.

More specifically, the proposed index and subsequent analyses will be used to infer results on the following hypotheses:

H1: Large firms are relatively more optimistic than small firms

H2.1: Relatively optimistic firms are more financially sound than relatively more pessimistic firms

H2.2: Share prices are influenced strongly by the level of optimism of a firm and differ between groups

H3: Performance of optimistic firms is positively related to domestic investment (and by extension economic development)

1.4 Significance of Study

This study establishes an index which indicates the relatively optimistic or pessimistic strategic stance adopted by firms. The subsequent analyses of the index results will help to determine the relative financial performance of an optimistic firm compared to that of a more pessimistic firm, over a 5 year business cycle period. Firms may use these results to determine what strategic stance their competitors are adopting over periods of time. By updating the empirical data in the analyses, over time, firms can more accurately make strategic and capital expenditure decisions.

In addition to this, the study will be able to contribute to the financial advisory and strategy consultancy space, whereby advice can be tailored to a firm depending on its level of optimism. Policy levers may also be identified which can maximise investment inflows and the gains from the investment to both the country and the firm (Ndikumana & Verick, 2008).

1.5 Data and Overview of Methodology

1.5.1 Data

The data required for the study is obtained from the annual reports, financial statements and press releases of the top JSE listed firms, with focus being given to the factors that inform an optimistic strategic outlook, and can be applied to the construction of the index. In particular, the standardised financial statements of the chosen firms were obtained from the Bloomberg database. These standardised financial statements allow for consistency to be applied across data collection. Furthermore, it aids the calculation of the accounting ratios because common line items are utilised that have been adjusted for. These documents are from corporate websites and the Bloomberg database.

Bloomberg is chosen as the preferred data source for financial information as it is a holistic data source encompassing global data. The financial data is compiled across each firm for the years 2008 and 2013, respectively. Analysis is performed on each of the years respectively. Therefore the data will take on a cross-sectional form. Both a quantitative and qualitative analysis of the annual reports is undertaken, to ensure that values are correctly used and are being appropriately informed. For instance, where particularly large values were obtained, managerial statements, press releases and other market reports were referenced in order to find reasoning for the fluctuations. Where once-off payments or events were identified, these numbers were adjusted appropriately to prevent skewing the data.

The names of the firms were obtained from the JSE website and annual reports. Listed firms are considered in this study because they have a greater availability of data from a range of sources beyond just financial reports, as well as the fact that these are the companies most likely to actively engage in domestic private investment.

Companies were distinguished by size based on their market capitalisation. Rankings for the top 100 JSE listed firms is readily available, where however for smaller and medium sized firms rankings need to obtained manually. To avoid manually ranking firms, for the purposes of this study, small firms were taken as those that form part of the JSE Small Cap Index (J202).

1.5.2 Methodology

The research analysis focuses on the relationship between relative optimism and firm performance. Principal component analysis is used in informing the construction of the "optimism index". Principal component analysis is a technique used in determining the load factors of a series of explanatory variables on the principle component. These principal components are defined as "linear combinations of optimally-weighted observed variables (original data)" (Brooks, 2008). In this way, it is used to determine relatedness of the explanatory variables and infer any unusual relationships that may be exhibited.

Subsequently regression analysis is applied in determining the weighting of each explanatory variable on the "optimism index" as well as in answering the research questions, particularly in determining the relationship between optimism and firm performance. Regression is concerned with "describing and evaluating the relationship between a given variable and one or more other variables". More especially regression explains movements in a variable (financial performance measures) by reference to movements in other variables (optimism) (Hansen, 2015).

The data collected on the JSE listed firms are examined using econometric procedures on SASJMP statistical package software. SASJMP performs the same statistical analyses as other major statistical software, but is advantageous in that it offers dynamic and interactive graphs, enabling insights to be gained that would otherwise be undetected by tables of numbers or static graphs (JMP, 2015).

1.6 Outline of Study

The research report firstly consists of a description of the research question and a detailed breakdown of all the hypothesized relationships under review. The identification of factors indicative of strategic outlook is envisaged as the main focus for this study as well as the relationship between the firms level of optimism and its performance. Secondly, a comprehensive literature review follows. Thirdly the research hypotheses are highlighted in detail. Fourthly, the construction of the index is discussed in the methodology, with focus being given to the factor selection and weighting of factors in the index. Previous studies are reviewed in order to inform the selection of factors and to provide themes under which they can be selected. This however, is at a microeconomic level. Fifthly, regression analyses provide empirical results for the hypothesized relationships. These relationships are analysed in detail and inferences are drawn to explain how the documented relationships can be used to contribute to domestic private investment. Sixthly, shortcomings of the study are highlighted, with recommendations for future studies on related topics, to achieve improved results. Finally the salient points of the study are recapped in the conclusion section.

Chapter 2: Literature Review

2.1 Introduction

Earlier studies on FDI were unable to reach consensus around the link between FDI inflows and growth. Some concluded that a positive relationship exists between the two, whilst others observed that a negative relationship obtains. This is partly due to the differences in samples used. A study conducted by Li & Liu (2005), however, was able to overcome many of the weaknesses of previous studies as it made use of a larger sample of 84 countries, as well as controlled for statistical errors. They concluded that FDI and growth are positively related. This finding is consistent with more recent studies by Abdullahi, Aliero & Yusuf (2012), conducted on a sample of African countries as well as by Adams (2009), who focused on a sample of 42 sub-Saharan African countries. It can therefore be assumed that FDI does exhibit a positive relationship with economic growth.

Large proportions of domestic savings in Africa are withdrawn from the continent in the form of capital flight, compelling governments to create a macroeconomic incentive that promotes African economies as premium investment destinations (Dahou, Omar & Pfister, 2009 ; Akinboade & Lalthapersad-Pillay, 2009). Governments alone have difficulty in implementing policy reforms to promote investment due to issues of political instability and more pressing socio-economic problems needing to be addressed. FDI can only be attracted in the absence of political unrest and in an environment of good labour relations, low labour costs, high levels of skilled labour and high levels of profitability. Therefore investment in Africa requires higher rates of profitability and returns than other regions, given its relatively riskier macroeconomic environment (Dahou, Omar & Pfister, 2009 ; Akinboade & Lalthapersad-Pillay, 2005). Africa has the highest rate of return on investment in the world, which was around 9.3% in 2011 (United Nations UNCTAD, 2013).

Firms can assist governments in contributing to the capital investment needs of Africa by expanding business operations and investing in infrastructure development (domestic private investment). An extensive literature review around FDI flows was conducted and despite many studies focusing on the determinants of FDI and its effect on growth (although not in the African context), little information was available on how FDI affected domestic factor markets. One study in the literature search however addressed the issue. Ndikumana & Verick (2008) examined the “causes and effects of FDI in African economies by focusing on the linkages between FDI and domestic factor markets”. In particular, the study investigated whether domestic investment promoted FDI inflows and was in turn affected by FDI. The study found that measures aimed at encouraging domestic private investment ultimately attracted higher FDI inflows, as the strong investment performance from the domestic investment suggested high returns on capital. This motivates the rationale that financially

sound firms, that have an optimistic strategic outlook, can eventually benefit from the economic growth that the stimulus of FDI would promote. Public investment was also found not to be as effective a driver of FDI as private investment. This result appears consistent with the work of Keshava (2008), which focused on the evaluation of China and India. Some researchers recommend that future studies in the field examine the methods government could adopt to incentivise private investment, which will in turn make Africa appear more competitive to foreign investors (Ndikumana & Verick, 2008).

Cross-border bank lending could be argued to be an alternative to domestic private investment by firms. However, as revealed by Brambila-Macias, Massa & Murinde (2011) in their study on the effects of FDI and cross-border bank lending on Africa's long term economic growth, FDI has a consistently larger impact than cross-border bank lending on economic growth. Therefore policy reforms should be aimed more intensively at facilitating the inflow of FDI in African nations.

Long term use of FDI alone can have negative implications for the host country as it propagates the dependency of the poorer nation on the advanced nations. FDI can stifle the development of entrepreneurship in the host country as the superior knowledge, skills and resources of the more advanced country outweigh those locally. Furthermore the balance of payments is weakened as profits are expatriated abroad (Todaro & Smith, 2005). It is therefore reasonable to postulate that combined use of domestic private investment is able to negate these effects and reemphasises the need for local firms to help finance the development of Africa.

As one of the top economies in Africa, with established industrial and tertiary sectors, South Africa is suitably positioned to fast-track investment and trade expansion in Africa (Akinboade & Lalthapersad-Pillay, 2005). This rationale is supported by Huggins, Demirbag and Ratcheva (2007), who refers to this action as "horizontal (non-offshore) FDI". In horizontal FDI, product concepts and technical knowledge and skills are prevalent in a base country (e.g. South Africa) and are transferred to and later simulated in other bordering countries. In this way there is a one-way knowledge transfer from a more developed country to another physically and culturally close country. South African firms will in this way be participating in "market seeking investment", which serves domestic markets, and facilitates the entry of larger multinational corporations, into less developed African nations. However Huggins, Demirbag and Ratcheva (2007) observe that in general, a less experienced firm is likely to expand based on horizontal FDI, whereas more experienced and established firms will expand activities based on efficiency alone. This study will focus on analysing large and relatively smaller JSE listed firms (according to market capitalisation), enabling it to evaluate this described postulation.

South Africa can participate in investment and trade ventures with the rest of Africa. For instance, many South African mining firms can assist other less developed African countries in leveraging their mineral and resource beneficiation (Disenyana & Sogoni, 2013). Firms like Eskom, South African Airways, Telkom, and other parastatals and firms, in the financial and telecommunications sectors, can impart their knowledge and skills after having developed much of South Africa's infrastructure to international levels. The benefit of such assistance is that South African firms are aware of the state of affairs in other African countries, making its skills and knowledge transfer more relevant to a third world country context (Disenyana & Sogoni, 2013 ; Akinboade & Lalthapersad-Pillay, 2005). Public-private partnerships (PPP) may also be formed as certain goods or services (water supply and toll roads), are difficult to distinguish in terms of who owns, operates and finances them (Calitz & Fourie, 2010). An example of such a successful PPP within South Africa includes the Gautrain Rapid Rail project. In these partnerships, public agencies can leverage off the technical, managerial and financial resources of the private sector to achieve its objectives. In return the private sector is able to benefit from the exposure and expands its business operations. In this way PPPs allow for both private and public agency objectives to be synergised (Akinboade & Lalthapersad-Pillay, 2005).

Although firms possess the ability to contribute towards domestic developmental finance, they often may not, due to the more lucrative investment opportunities abroad. A conceptualisation of the determinants of FDI is the "eclectic paradigm" espoused by Dunning (1977, 1993). This popular framework has subsequently been made reference to in a number of research studies. The framework makes use of a number of macro and micro level factors to analyse why firms invest abroad. At a high level, the framework argues that firms invest abroad in pursuit of the advantages of ownership, location (strategic environment, natural resources) and internalisation of its production advantages. Ownership advantages allow a firm to exploit resources in the other country and maintain its competitiveness regardless of being foreign. Internalisation advantages refer to those that a firm receives through its own production rather than production through a partnership or joint venture (Anyanwu, 2012). The following section will look at what firms' strategic outlook entails.

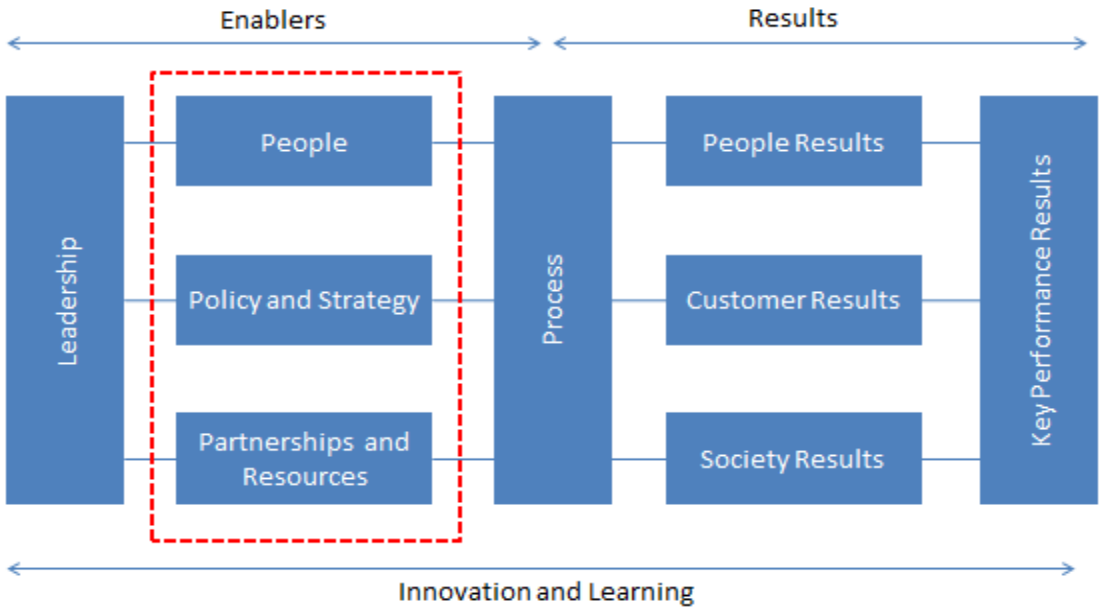
2.2 Defining Strategic Outlook

Corporate investment decisions are vitally important to the management of firms and form part of the fundamental strategy of business. Corporate investment decisions are the main mechanism through which funds are filtered into domestic private investment. In this way strategic outlook is considered from the firms' perspective of its future business prospects, that is, its earnings and growth potential (Tsinani, Sevic, & Maditinos, 2012) and how it affects corporate investment decisions and policies that are undertaken presently.

The definition of strategic outlook that is used for this study, is drawn from a study by Li (2011), where earnings quality is measured by examining capital and labour investment decisions, two key corporate investment decisions made by firms. Li's (2011) study tests the extent to which corporate investment decisions contain information about future profitability and prospects. A similar approach will be taken in this study, where factors indicative of strategic outlook (capital and labour investment-related factors), which are informed by future earnings quality, affect current financial performance.

This view of strategic outlook is consistent with that of Oliver (2011), who listed all-encompassing operational strategies as: core asset acquisitions, R&D activity, customer relationship management and increasing process speed and convenience. Many of these strategies overlap with the broader category of corporate investment strategies, reemphasising its importance to the firm's management (Oliver, 2011).

Figure 2: Business Excellence Model



Source: Wongrassamee, Gardiner and Simmons (2003)

The figure above represents the Business Excellence Model as presented by Wongrassamee, Gardiner and Simmons (2003). It provides a framework under which firms can identify the key business operational levers through which performance objectives can be met. This study aims to identify factors of strategic outlook under the themes of people, policy and strategy, and partnership and resources, which form part of corporate investment decisions. It will then expand on and help establish the relationship between the strategic outlook and firm performance. People management

refers to the firm's management and development of its human capital. Policy and strategy refers to any strategic or policy decisions made based on initiatives in place. Finally, resources refer to management and acquisitions/divestitures of key resources to enable effective business performance (Wongrassamee, Gardiner, & Simmons, 2003).

The definition of strategy being applied to this study is cognisant of Kaplan and Norton's balanced scorecard approach to viewing business. They propose four key areas for consideration that provide a comprehensive view of business, including customer perspectives, internal perspectives, innovation and learning, and financial perspectives (Binnersley, 1996). Innovation and learning is a key part of corporate investment strategy and its contribution to the index construction will be discussed later in the methodology section.

The use of firm-level data as shown by Asiedu and Freeman (2009) is advantageous as a micro analysis approach to the study will link the firms' perception of its strategic outlook to its capital investment decisions.

2.3 Defining Optimism in the Context of Strategic Outlook

According to Driver (2006), business optimism has been captured in previous survey studies as an indicator of confidence of future prospects. Heaton (2002) also stated that firms' management is optimistic when it "systematically overestimates the probability of good firm performance and underestimates the probability of bad firm performance".

In Li's (2011) study it is concluded that a positive relationship exists between corporate investment decisions and earnings quality. That is, if firms experience an increase in earnings (high earnings quality) and expect this to be sustainable, then they will usually increase investment levels. Therefore the definition of optimism is consistent with that presented by Driver (2006), and can be defined as a favourable view of future prospects.

Additionally, Tsinani, Sevic and Maditinos (2012) described optimistic firms as those that are profitable for longer or are "extremely confident regarding the future". This reiterates that firms who expect favourable future prospects and sustainable high growth and earning levels will be viewed as being optimistic.

In constructing an "optimism index" on which to regress the explanatory variables, a dummy variable was employed to determine the level of optimism in firms. The scores indicate the following:

- 0 = Pessimistic
- 1 = Neutral
- 2 = Optimistic

These scores were obtained through qualitative analysis of internal reports on firms' prospects, market reports on firms' prospects as well as broker consensus on tradability of firm shares. Where brokers recommended selling shares of a particular firm, prospects were viewed in a negative light, suggesting future pessimism. Holding share positions was viewed as neither outright optimism nor pessimism. Finally the recommendation of buying shares of a particular firm suggested positive future prospects (i.e. optimism).

The most dominant of the rankings across each of the three sources (internal, market, or broker), is the assigned ranking that is used in the regression analysis. Although a degree of subjectivity is associated with qualitative analysis and classifying firms as either optimistic, pessimistic or neutral, the use of three different views on the future prospects of firms' serves to reduce this through 'averaging'.

2.4 Defining Financial Performance

With the glaring need for domestic private investment it is important to understand which firms are performing well enough to contribute towards this financing gap. To do so requires understanding the drivers of this performance. An extensive archive of theoretical and empirical research exists, that has tried to investigate the drivers of firms' financial performance. Theoretical research is primarily based on microeconomic principles. Empirical research is aligned with one of two areas. Firstly, the investigation of the optimal measures of firms' financial performance and growth, and secondly the investigation of the effect of financial and non-financial factors on this financial performance and growth. According to Liargovas and Skandalis (2010), non-financial factors include, but are not limited to, debt leverage, liquidity, capitalization, investment, size, age, location, export performance and managerial efficiency. The factors applied by Liargovas and Skandalis (2010) were used to inform the selection of factors indicative of strategic outlook for this study. The drivers of firms' financial performance are unlimited and each study appears to investigate the influences of a different combination of factors. However it has been noted that factor selection and effect analysis has not been approached through the lens of firms' strategic outlook.

In choosing the best measures of financial performance on which to regress optimism, the choice is between accounting-based measures or market-based measures. Accounting-based measures appear to be the most commonly used in literature. This is most likely a result of the ease of finding data. Publicly traded firms have readily available financial statements and annual reports from which to source figures for the calculation of accounting performance ratios. Furthermore accounting numbers are commonly used by firms' management in making strategic decisions as they "provide insights into economic rates of return" (Rowe & Morrow Jr, 1999).

However, the shortcoming of using such numbers is that they are generally short-term biased, reflecting only short-term performance and are prone to alteration and manipulation by management. By their nature, accounting numbers are retrospective as they are based on historical information and trends (Rowe & Morrow Jr, 1999).

On the other hand, market-based measures of performance are theoretically more accurate as they reflect the present value of the firm's expected future cash flows. In this way they are indicative of future prospects that will accrue to shareholders. Furthermore under the assumption of the efficient market hypothesis, it is expected that all information is factored into market-based measures, making them less susceptible to managerial alterations and manipulations (Rowe & Morrow Jr, 1999).

Share prices will be used as a suitable market-based measure of financial performance in this study. Under the assumption of efficient markets, share prices provide the best estimate of value. Share prices are effectively the present value of future cash flows, in this way higher prices are indicative of a greater future prospects (Damodaran, 2012). Therefore share prices are of particular importance to this study as they are expected to have a strong and positive relationship with optimism.

Previous research has revealed that the measures of financial performance used, although varied, tend to remain the same with regards to certain measures. The combination of ROE, ROA and ROS was used in studies by Cochran, Wood and Jones (1985), Hart and Ahuja (1996), Liargovas and Skandalis (2010) and Özcelik, Avci Özturk, & Gursakal (2014). Konar and Cohen (1997) used ROA and ROE in their study. These measures appear to be the most popular and have displayed consistent use throughout the years. These measures are also used in a number of other studies, along with other measures.

ROE examines profitability from the perspective of equity investors. This is different to the return on capital which refers to the profitability of the overall firm. Using Porters "five forces of competition framework" it is found that firms with a higher ROE tend to display competitive advantage. Firms with a sustainable competitive advantage are more valuable and attract the attention of value investors. This mechanism of attracting investment flows makes ROE of particular interest to this study (Damodaran, 2012).

ROA measures a firms operating efficiency in generating profits from assets prior to the effects of financing. Operating efficiency is of particular importance as strategic investment decisions are frequently made that impact the resources of the firm. Should these decisions not be adding value to the business then decisions need to be revised (Damodaran, 2012).

Asset turnover is an alternative to ROA and indicates a firm's efficiency with regards to deploying its assets. Higher ratios are considered better as it is implies that a firm is generating more revenues per rand of assets. However variances between industries often make comparisons less meaningful.

Return on capital employed (ROCE) measures a firms operating efficiency with regards to employing its capital. Highers ratios imply more efficient use of capital. As with ROA, this ratio is of importance as it is affected by strategic investment decisions. Should the decisions around the use of capital not be value generating then they need to be revised.

Return on sales (ROS) measures a firms operating efficiency by showing how much profit is generated per rand of sales. Higher ratios imply growing efficiency whereas decreasing ratios may imply future financial problems. ROS is of importance as it is expected to exhibit a strong relationship with optimism (future earnings potential).

2.5 Defining Exploratory Variables

In choosing the appropriate variables that are indicative of strategic outlook there is a choice between using financial or non-financial variables. Traditional performance measurement places emphasis on use of financial measures, however due to its inability to capture important aspects, this kind of measure has come under scrutiny. From a strategy perspective, traditional financial variables are unable to address matters relating to "customers, suppliers, innovation, production flexibility, speed to market, strategic alliances or employee needs" (Manoochehri, 1999). Despite the

recent move towards use of non-financial variables, such variables could not be considered for the purposes of this study as there is difficulty in obtaining data for such factors across each company.

Disclosure of information occurs differently and within such companies, non-financial information may not even be tracked as current systems in firms may be financially inclined. Given the dominance of financial systems, financial variables are considered to be a uniform metric, consistent across all firms (Manoochehri, 1999).

There are many types of costs that imply a level of optimism. These include costs incurred in the pursuit of business opportunities (corporate social responsibility (CSR), capital expenditure, research and development (R&D)). However where financial frictions exists, firms do not pursue all positive net present value projects. Firms adopt a more prudent approach and choose to save funds for transactions or to act as a buffer in times of need. Firms therefore need to find a balance between liquidity and choosing a level of future business opportunities to undertake (Subrahmanyam, Indudeepchhachhi, & Brown, 2013). For the purposes of this study, all costs have been adjusted to stand alone items, that is capital expenditure is for plant, property and equipment expenses alone, that are not related to R&D or CSR. A positive relationship is anticipated between these factors and optimism. However due to limited data on these specific costs across firms, only capital expenditure will be included in the factor analysis.

2.5.1.1 Capital Expenditure

The size of the capital budget is a major strategic decision by firm management. Management may choose to invest less in capital expenditure when long term growth is lower than expected, free cash flow is lower and long term performance is lower due to underinvestment (Subrahmanyam, Indudeepchhachhi, & Brown, 2013).

Research has focused primarily on capital budgeting within developed countries. In the study by Subrahmanyam, Indudeepchhachhi and Brown (2013), a simple regression was performed to compare the level of capital expenditures in developed markets (US) to those in an emerging market (India). It was concluded that capital expenditure is driven by historical growth and leverage in the US and free cash flow and firm size in India. From these results it can be noted that firms that have recently experienced faster growth and better financial prospects (higher free cash flow) invest more in capital expenditure. This is supported by Beatty, Riffe, & Welch (1997) who studied the determinants of future net capital expenditures within US firms. They concluded that increases in capital expenditure are a result of strong operating performance and liquidity (positive outlook).

These results are consistent with an older study by McConnell & Muscarella (1985) who concluded that capital expenditure is driven by future investment opportunities. In addition to this Liargovas and Skandalis (2010) used a measure of net investment in their study to find the factors that affect firm performance, and concluded that net investment is positively related to firm performance as new investments expand production and cash generating abilities of the firm.

From these studies it can be infered that capital expenditure is expected to display a positive relationship with optimism.

2.5.1.2 R&D Expenditure

Innovation is a key concept related to optimism. As it is an expense outside of the everyday business operations, it is unlikely to be present in the event that a firm was not performing well. This is supported by Baum, Caglayan, & Talavera (2013), who state that R&D activities are associated with an increase in firms' cash holdings (financial prospects). Due to the lengthy and uncertain payback period of R&D expenditure, such a relationship is necessary. R&D expenditures cannot be undertaken in the presence of low liquidity. In research focusing on FDI, the ratio of R&D and advertising costs to sales is often used. In the study by Asiedu and Esfahani (2001), this ratio is applied.

For the purposes of this study the R&D variable was excluded due to lack of information on R&D spend for each of the sample firms over the years. Firms often do not disclose the cost separately and instead absorb it into operating costs. It was also found that the cost is sometimes reported at a group level but not at a company level.

2.5.1.3 CSR Expenditure

Firms that have CSR commitments aim to improve internal working conditions and to adopt best labour practices as well as to make investments towards the upliftment of society. Despite the costs attached to these practices there is much to be gained for firms that commit to CSR. Brand reputation and image is enhanced through such practices and with the ability to retain top talent and maintain good customer relations, this translates into financial benefits such as increased sales, reduced costs in the long term and increased investments and access to capital (Özcelik, Avci Özturk, & Gursakal, 2014).

Studies over the years have revealed varied results on the link between CSR actions and financial performance. McGuire and Schneeweis (1988) concluded that less profitable firms are less likely to undertake CSR commitments. In this way the link between CSR and optimism can be established. CSR spending should be higher within more optimistic firms. However a recent study by Özçelik,

Öztürk and Gürsakal (2014) was unable to find a significant relationship between CSR and financial performance. This result was consistent with the study by Nelling and Webb (2009).

For the purposes of this study the CSR variable was excluded due to limited information on CSR spend for each of the sample firms over the years. As with R&D, it was found that firms often do not disclose the cost separately and instead absorb it into operating costs. It was also found that the cost is sometimes reported at a group level but not at a company level.

2.5.2 Debt Levels

Myers (1977) suggested that when firms have a positive growth outlook, debt levels are likely to increase as a result of greater lender confidence. Debt is also seen to be a factor of age. Huyghebaert (2003) found that as firms' age, they are able to reach a state of stability where cash flows are more predictable and positive (positive outlook). As a result they are able to secure debt more easily. This links to Myers' (1977) argument, in that the lender confidence is ultimately enhanced through the reputational quality of the debtor firm. This positive relationship between age and debt is further supported by Sakai et al (2010), who concluded that with age comes a stronger relationship with lenders, thereby mitigating information asymmetries and improving credit allocation. Within the South African context Ezeoha and Botha (2012) revealed that debt levels are adjusted based on the stage of the business cycle that the firm is in. Debt levels are especially high within start-ups, drop thereafter, only to increase again during more mature stages of its life.

However a negative effect may also obtain as firms with fewer growth opportunities tend to have higher levels of long-term debt. Furthermore, Pandey and Chotigeat (2004) found that profitability, and by extension a positive growth outlook, consistently showed a negative relationship with a range of debt ratios between 1992 and 1996. This reveals that within an emerging capital market, in accordance with the pecking order theory, more profitable firms tend to rely more on internal equity financing as compared to external debt financing. Therefore the variable for debt level is postulated to have a negative effect on optimism.

2.5.3 Net Share Repurchases

Excess cash in a firm is either retained for business operations, invested into new projects or distributed to shareholders in the form of dividends or share repurchases. Therefore the primary determinant of share repurchases is excess earnings. Share repurchase decisions are usually made only after capital expenditure and dividend decisions. Due to the negative signalling effects of volatile dividend payouts, a change in the level of distributable cash flow is often met with a change in share repurchases rather than a change in dividend payout. Literature has also revealed that share

repurchases are made in the absence of other investments or projects (Brav, Graham, Harvey, & Michaely, 2005).

Share repurchases convey to shareholders that the firm is unable to find better investment opportunities for the funds. This has negative connotations and may signal that funds are not being used towards growth opportunities. Share repurchases are also made in the event that management believes the firm is undervalued and use the repurchasing mechanism to raise share prices (Brav, Graham, Harvey, & Michaely, 2005). Repurchasing is also used to prevent takeovers and dilute the effects of stock options (Khaledi, 2013).

Share repurchases are not driven by positive growth or prospective opportunities. For this reason it is expected to exhibit a negative relationship with optimism.

2.5.4 Dividend Payout

Dividend payout policies are important components of the financial management of firms. Theory suggests that management's dividend payout decisions depend on their outlook on the firm's long-term sustainable earnings. If the firm is expected to have a high earnings quality (positive prospects), then dividend payouts are expected to be higher (Skinner & Soltes, 2011). Fluctuations of dividend payouts often have negative signalling effects causing shareholders to question the value of the firm or highlight market changes (Litner, 1956).

This study postulates a positive relationship between dividend payout and optimism. This view is consistent with Litner (1956) who is a pioneer in the field of research linking earnings and dividend payouts. Substantial supporting research has been conducted subsequent to Litner's work. These studies include that by Fama and French (2001) and Skinner and Soltes (2011). In particular Fama and French (2001) looked at dividend payouts in the context of excess earnings ("the level that can be profitably reinvested in the firm").

Furthermore there are studies that suggest that dividend payouts are influenced by the phase of the business cycle in which the firm is in. An opposing relationship is suggested. For instance, high growth firms are likely to pay less dividends or none at all, as cash flow is redirected to investment opportunities. Mature firms, with limited opportunities for growth distribute excess earnings through dividends (Swanson & Krishnan, 2014).

2.5.5 Purchases of Foreign Investment

Wagner (2011) investigated the effect on performance of relocating (offshoring) a firm's operating activities to a foreign country, and found that offshoring was often associated with a pessimistic strategic outlook. Often business activities are relocated when a firm is no longer profitable in its

domestic country and it can gain a cost advantage elsewhere. Furthermore it is generally observed that more labour intensive firms are those most likely to relocate activities.

On this note, it is seen that when better investment opportunities are located in other regions, firms take advantage of these and relocate funds to these foreign investments. In this way domestic opportunities are viewed in a negative light and the funds are no longer able to support domestic private investment. Foreign investment purchases are expected to display a negative relationship with optimism.

In addition to relocating operations, foreign investment by a local firm may take two other forms. The first is through an acquisition of foreign firms and the second is through a greenfield project, where a new subsidiary is established abroad. These foreign acquisitions and expansions are also expected to affect optimism negatively (Mall, Raboch, & Tomio, 2009).

In the study by McGowan & Moeller (2009), where a model for making FDI decisions was constructed, the future risks to FDI were considered, both of which affected profitability and riskiness of FDI. Macroeconomic factors included fluctuations in the target country's inflation rate, exchange rate, tax rate and interest rate. Microeconomic factors however included the demand for the firm's products, the availability of local labour, local wage rates and the employment laws. This model, not only supports Dunning's (1998) theory of "location advantage", but informs the construction of the index by taking into consideration the firm's risk profile. If the firm is relatively risk averse then it is likely to invest more in foreign opportunities, given the difficulty in conducting business in Africa as a result of its volatile environment.

2.5.6 Return on Domestic Investment

Asiedu (2004) argued that policies enhance FDI flows to Africa. These policies involve promoting openness of countries. One of the identified variables to stimulate openness and FDI flows was the host country's investment climate. The rationale is that with an open attitude towards inward investment and with good returns and current performance, FDI inflows are forthcoming. Similar thinking was applied at a micro-level, leading to the introduction of a variable for return on domestic investment. The higher the return on domestic investment, the more attractive the firm becomes to other investors. This effect is extended to a macro-level where the country is able to improve its infrastructure and in turn attract more FDI.

Earlier work by Asiedu (2002) was also leveraged in the selection of the return on domestic investment variable. Asiedu (2002) constructed a model for determining the factors that affect FDI in

sub-Saharan Africa. The theme of country return on investment was used in Asiedu's model and is applied to the construction of the index in this study. The theme however, is used to inform factor selection at a microeconomic (firm) level. The firm's return on domestic investments is an appropriate factor in the determination of optimism as both foreign and domestic investors are attracted to firms that pay a higher return, signalling to firms that they should remain in their domestic environment and potentially expand due to favourable prospects.

2.5.7 Number of Employees

Investment in human capital is a crucial indicator of firm optimism. When operations are expanded more employees are required for effective functioning of the operations. According to the results of the study by Kamaluddin and Rahman (2009) firms in South Africa, are still predominantly reliant on physical capital despite efforts to move towards a reliance on intellectual capital (banking, electronic, information and service sectors). According to resource-based theory, firms can achieve organisational effectiveness and competiveness by manipulating tangible and intangible resources (human, other physical and intangible resources) (Kamaluddin & Rahman, 2009).

Staff compliment is therefore expected to display a positive relationship with optimism.

2.5.8 Domiciled in South Africa

The study by Asiedu and Esfahani (2001), states that FDI projects require local knowledge and connections within the host country. For transnational enterprises this can be achieved although at high transaction costs. Through joint ownerships, such transaction costs can be reduced, although at a cost of weakening incentives to suppliers. It can be inferred that for locally domiciled firms, transaction costs can be minimised. Furthermore there is the home ground advantage that comes with local firms understanding the business environment and being able to execute quicker. This is consistent with Akinboade and Lalthapersad-Pillay (2005) who mention that South African firms are aware of the state of affairs in other African countries, making their own skills and knowledge transfer more relevant to a third world country context. This is further supported by Liargovas and Skandalis (2010) who mention that enduring competitive advantage lies in local knowledge and relationships that other competitors do not possess. These advantages are location specific and immobile. In order for firms to access such advantages they need to locate business operations with the proximity of the region or country.

To capture this feature a dummy variable was adopted, that takes on the value of 1 if the firm is domiciled in South Africa and 0 if it is domiciled elsewhere. In a study by Bennett (2005), in which the determinants of FDI in sub-Saharan Africa were examined, a dummy variable was introduced to

test whether regional effects occur. Likewise, this study will determine if there is a regional difference between locally domiciled firms and those domiciled abroad.

Chapter 3: Research Questions and Hypotheses

3.1 Hypothesis 1: Large firms are relatively more optimistic than small firms

Optimism over future growth potential and prospects is closely linked to the size of the firm. In general, the larger resource base of large firms allows them to expand operations more easily and act as a buffer in economic downturn periods, and they are generally less susceptible to financial constraints. This results in larger firms being more optimistic about future prospects (Majumdar, 1997 ; Liargovas & Skandalis, 2010).

In particular large firms are able to leverage economies of scale and improve their efficiency relative to their smaller counterparts. Large firms also tend to have more bargaining power and in highly competitive markets this is advantageous as smaller firms are unable to compete. However it has been experienced that when firms become larger they might suffer from x-efficiencies, leading to poorer performance. Therefore the theoretical relationship between size and optimism could be ambiguous (Majumdar, 1997).

In general, and especially with regards to the sample firms used in the analysis of this study, larger firms tend to be older. This allows them to exploit additional advantages that a more established and reputable business is privy to, such as higher mark-ups and greater credit access. These older firms are more experienced, and should have superior skills and knowledge (Liargovas & Skandalis, 2010). These additional advantages would allow older firms to be more optimistic.

Firstly a Pearson chi-square test will be used to determine the likelihood of firm size and level of optimism being completely independent. This will be tested in the following way:

H_0 : Optimism and firm size are independent

H_1 : Optimism and firm size are dependent

To determine whether large firms are more optimistic than smaller firms, the hypothesis will be stated as follows:

$H_0 : \mu_{large} > \mu_{small}$ (average optimism score of large firms is greater than that of small firms)

$H_1 : \mu_{large} \leq \mu_{small}$ (average optimism score of large firms is less than or equal to that of small firms)

3.2 Hypothesis 2.1: Relatively optimistic firms are more financially sound than relatively more pessimistic firms

Aidis, Mickiewicz, and Sauka (2008) used a unique data set including repeat sampling, to empirically examine the effect of entrepreneurial optimism on business performance. In particular the study examined the relationship between expected and realised peformance for 133 small and medium sized firms. The results revealed that entrepreneurially optimistic firms peformed significantly better, regarding their profits, than entrepreneurially pessimistic firms.

This relationship is attributed to the ability of optimistic firms to take on riskier projects, that are rewarded accordingly. When firms plan for success and make the necessary investment in resources (optimism), this has been seen to be more financially beneficial than an alternative strategy of limiting the impact of negative shocks (pessimism) (Aidis, Mickiewicz, & Sauka, 2008).

In order to determine whether financial performance differs across each group (level of optimism of either 0, 1 or 2) the Kruskal-Wallis test is employed. This is a non-parametric test that compares three or more different groups. Under this test the hypothesis is as follows:

H_0 : All groups have identical distribution functions

H_1 : At least two of the groups differ only with respect to median

Furthermore a secondary method to test if variances are the same across groups will be used. Levene's test will be used in this instance as it is less sensitive than other tests to deviations from normality.

Lastly the Wilcoxon matched-pairs test is used in determining if the means of matched groups are significantly different. This test is selected as it is a non-parametric test. The pertinent hypothesis is stated as follows:

$H_0 : \mu_{Group\ 0} = \mu_{Group\ 2}$ (average financial performance of optimistic firms is equal to that of pessimistic firms)

$H_1 : \mu_{Group\ 0} \neq \mu_{Group\ 2}$ (average financial performance of optimistic firms is not equal to that of pessimistic firms)

3.3 Hypothesis 2.2: Share prices are strongly influenced by the level of optimism of a firm and differ between groups

When firms are optimistic about future prospects, such firm's share prices should increase above the intrinsic value, which is the expected present value of future dividends (Boz, 2009). Given the close theoretical link between optimism and the value of the firm (share price), it is anticipated that for the empirical study, consistent results will obtain.

To determine the strength of the relationship between levels of optimism and share prices the R^2 values will be examined. R^2 is an indicator of the proportion of variance in the dependent variable that is predicted by the independent variable. The higher the value, the greater the predication ability of the independent variable. The standard error provides a measure of the average amount by which the regression model over or under predicts. The lower the standard error, the greater is the prediction ability.

Using the Wilcoxon matched-pair test as per Hypothesis 2.1, the differences between means for the levels of optimism can be examined for any significance.

3.4 Hypothesis 3: Performance of optimistic firms is positively related to domestic investment (and by extension economic development)

Driver (2006) conducted a study in the UK using survey data on the business optimism in firms of varying sizes, in order to estimate the determinants of optimism. This study revealed that in the recent years preceding 2006, medium and large sized firms had invested less relative to reported optimism. Such findings were unexpected and contradictory to theory, which proposes that optimism and investment are positively related. It was concluded that the role of greater pension provision by larger firms created more uncertainty, forcing firms to revise their appetite for investment downwards. The theorised positive relationship between firm optimism and domestic investment should ordinarily hold true. This study will allow for this relationship to be examined within a South African context and allow the hypothesis to be accepted or rejected.

To determine whether firm performance and domestic investment are positively related, the hypothesis will be stated as follows:

$H_0 : \beta_{\text{domestic investment}} > 0$ (domestic investment is positively related to firm financial performance for more optimistic firms than more pessimistic firms)

$H_1 : \beta_{\text{domestic investment}} \leq 0$ (domestic investment is unrelated or negatively related to firm financial Performance for more optimistic firms than more pessimistic firms)

Chapter 4: Data and Methodology

4.1 Introduction

Research involves collecting and organising the relevant data and then using analysis techniques to examine the relationships or patterns within the data to either support or disprove hypothesised relationships or help to draw valid inferences (Rabinowitz & Fawcett, 2014 ; Dreyer, 2010).

Firstly a principal component analysis was applied to examine the importance of each explanatory variable and to see if there was potential to consolidate groups of variables into one, where they appear to have similar characteristics and move in tandem. Linear regression analysis was then employed to test the postulated relationships of each explanatory variable on the "optimism index". This part of the study was conducted in addition to the examination of the hypotheses and formed part of the validation of the explanatory variables.

Linear regression analysis and its accompanying tests were employed to directly test the hypotheses of interest, in particular the relationship between firm optimism and financial performance. These concepts will be discussed in this chapter.

4.2 Population of Analysis

A population is the "total collection of all objects or people to be studied" (Hansen, 2015). The population of application for this study is all JSE listed firms over the period 2008-2013.

4.3 Unit of Study

A unit of study is the individual units that make up the total population. Therefore, the unit of study for this research paper are the individual firms listed on the JSE for a 5 year period from 2008-2013. Exploratory variables, that are indicative of strategic outlook, are collected across each of the sample firms.

4.4 Sampling Technique

The sample may be viewed as selected items from the population that satisfy a preselected parameter. Such a sampling technique is referred to as stratified purposeful sampling. "Each case represents a prespecified combination of variables, the confluence of which is the focus of the study" (Sandelowski, 2000). To analyse the data, firms were classified as either large or small, depending on their market capitalisation. Equal numbers of both groups were analysed. The total sample size included 112 firms. 60 largest JSE listed firms as well as the 52 smallest JSE listed firms were used as the sample group.

Firms that lacked information for more than two of the variables were omitted from the sampling as well as firms that had no operational information available for the year 2008, due to either not being listed prior to this point or having not been established at that time. This omission of key firms was compensated for by allowing for the next largest or next smallest firm to take its place in the sample.

4.5 Data Collection

The primary source of data for this study is the Bloomberg database, which was chosen as a preferred data source due to its holistic and all-encompassing functions as well as its access to global data. In particular, the standardised financial statements of the chosen firms were obtained from the Bloomberg database. These standardised financial statements allow for consistency to be applied across data collection and calculation of ratios and other measures. Broker consensus reviews were also utilised to determine whether positions of firms' shares should be bought, sold or held.

Data was obtained for the years 2008 and 2013 respectively, for each variable, across each firm. Comparison analysis of the results for each of the years is conducted. This approach allows for changes in strategic outlook to be examined over a medium term business cycle, without being too long a period, such that outdated information from periods prior to the global financial crisis is included (Brooks, 2008).

The crisis has had an impact on potential output levels over the long term period due to lower growth rates during the immediate period following the crisis and the long recovery period. In addition to this, total factor production growth in the medium to long term could also be reduced as a result of lower levels of physical investment and R&D and innovation. To avoid the substantial variations that inclusion of pre-crisis information would entail, these were excluded from the analysis and focus was placed on post-crisis years (Directorate-General for Economic and Financial Affair, 2009).

Cross sectional studies are carried out at a point in time over a short period of time. This suited the nature of this study because the effects of differences in strategic outlook on financial performance, at different points of time, are examined. In this way cross sectional studies provide a "snapshot of the outcome and the characteristics associated with it, at a specific point in time" (Levin, 2006).

Cross sectional studies are used predominantly for healthcare and medical related studies. The primary advantage of employing a cross sectional analysis is that it is relatively inexpensive and takes minimum time to collect and analyse data. In addition to this, the prevalence of the variable of

interest (optimism) can be calculated (Levin, 2006). Despite the convenience of cross sectional studies, the limitation is that the snapshot nature may not provide a good enough basis for establishing causality between variables. Furthermore cross sectional studies do not account for confounding factors that may exist and could affect the relationship between the target variables without affecting the variables themselves (Andrews, 2014).

4.6 Explanatory Variable Validation

An additional exercise was performed to empirically verify the significance of the chosen explanatory variables. This also provided a means for testing the postulated relationships of the explanatory variables on the "optimism index".

4.6.1 Principal Component Analysis

Factor models are employed in situations where there are many closely related variables and the most important influences from these variables need to be accounted for. Factor models take the form of either a macroeconomic or mathematical factor model. The two are differentiated by the observable nature of the factors. Factors are observable in macroeconomic models and latent in mathematical models. Principal component analysis (PCA) is the most commonly applied mathematical factor models (Brooks, 2008). PCA is popular due to its ease of use. It is a technique that can be applied across large datasets and is easily calculated (Kristensen, 2012).

PCA is employed to inform the construction of the "optimism index" which models the relative level of optimism of the 112 firms in the study, regarding their strategic outlook. It determines the relatedness of the explanatory variables and whether variables that are highly related, and at times redundant, can be condensed into a single variable with better explanatory power. PCA coupled with the linear regression analysis performed, served to sense-check the postulated relationships of each explanatory variable on the "optimism index". Such an index will generally take the following form:

$$OPTIMISM = W_1(\Delta F_1) + W_2(\Delta F_2) + W_3(\Delta F_3) + \ldots\ldots + W_p(\Delta F_p)$$

Where:

W_i = The weight of each factor in the optimism index

ΔF_i = The change in the relevant factor from the earlier financial year

Regressing the explanatory variables on the optimism dummy variable was performed to determine the weights (W_i). From this an "optimism index" was obtained, that reflected the relationship of each explanatory variable on the "optimism index".

4.6.2 Defining the Explanatory Variables

The explanatory variables for the construction of the "optimism index" used in this study are as follows:

- **Capital Expenditure**: The rand value of capital expenditures for 2008 and 2013 respectively.
- **Debt Levels**: The rand value of total debt (short term and long term) for 2008 and 2013 respectively. Debt is only considered to be interest bearing debt.
- **Net Share Repurchases**: The rand value of net share repurchases for 2008 and 2013 respectively. Positive values represent share repurchases and negative values represent shares sold.
- **Dividend Payout**: The rand value of total dividend paid to shareholders for 2008 and 2013 respectively.
- **Purchases of Foreign Investment**: The rand value spent on purchasing foreign (offshore) investments for 2008 and 2013 respectively.
- **Return on Domestic Investment**: This is calculated as the net income on domestic investments (interest income) as a percentage of the book value of domestic investments. The returns for 2008 and 2013 respectively were obtained.
- **Number of Employees**: The absolute number of employees for 2008 and 2013 respectively.
- **Domiciled in South Africa**: For firms that are domiciled in South Africa a value of 1 is assigned. For foreign domiciled firms a value of 0 is assigned.

4.6.3 Principal Component Analysis Process

In PCA, if there are *k* explanatory variables (x_1, x_2, x_3, …, x_k) in the regression model, these will be transformed into *k* uncorrelated new variables or principle components (p_1, p_2, p_3, …, p_k). These principal components are defined as "linear combinations of optimally-weighted observed variables (original data)" (Brooks, 2008).

$$p_1 = \alpha_{11}x_1 + \alpha_{12}x_2 + \ldots + \alpha_{1k}x_k$$

$$p_2 = \alpha_{21}x_1 + \alpha_{22}x_2 + \ldots + \alpha_{2k}x_k$$

$$\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots$$

$$P_k = \alpha_{k1}x_1 + \alpha_{k2}x_2 + \ldots + \alpha_{kk}x_k$$

Where:

p_i = value of the i^{th} principal component

α_{ij} = coefficients (factor loadings or weights) to be calculated on the j^{th} explanatory variable in the i^{th} principal component

x_j = value on the observed variable j

It is also required that the sum of squares of the factor loadings for each principal component is one.

i.e. $\alpha_{11}^2 + \alpha_{12}^2 + \ldots + \alpha_{1k}^2 = 1$

. . . . . .

$\alpha_{k1}^2 + \alpha_{k2}^2 + \ldots + \alpha_{kk}^2 = 1$

The construction of the principal components is a mathematical task in constrained optimisation. Eigen equations are used to produce the factor loadings, where no other set of factor loadings could produce a set of principal components that are better able to account for the variance in the explanatory variables. The factor loadings are calculated, satisfying the principle of least squares used in multiple linear regression (Johnson & Wichern, 2007).

The statistical software SASJMP is easily able to perform the mathematical exercise and determine the required factor loadings. In performing the calculations no assumptions are made about the structure, distribution or other properties of the explanatory variables.

PCA aims to represent the variation in the k explanatory variables through a set of principal components (Kassim, Hasan, Ismon, & Asri, 2013). If there is colinearity between the original explanatory variables it is possible that some of the principal components will account for so little of the variation that they can be discarded. Therefore the number of meaningful components to be retained is expected to be less than the number of original variables (Hansen, 2015).

4.6.4 Determination of Components to be Retained

In PCA there are specific methods for determining the number of meaningful components to retain. These methods are discussed in this section.

Kaiser Criterion

The first is through the Kaiser criterion, where components with an eigenvalue greater than 1 are retained. The rationale is that eigenvalues greater than 1 show that the component is accounting for a greater amount of variability. This method usually selects the correct number of components to retain when the number of variable is small. Given the small number of variables being studied and the ease of use of this method it is favoured for this study.

Scree Test

The second approach is through the use of a scree test. In a scree test the eigenvalues for each component are plotted and examined for any “break” in the plot. This break usually separates large

and small eigenvalues. The components to this appear before the breaks are retained. The limitation of this method is that the "breaks" are sometimes not easily observable. Therefore this method will be applied in conjunction with the Kaiser criterion which will also serve as a sense check.

Proportion of Variance Accounted For

The final approach used is the measure of the proportion of variance accounted for and involves retaining a component if it accounts for a specified percentage of the variance in the dataset. The proportion is calculated as:

$$\text{Proportion} = \frac{\text{Eigenvalue for a component}}{\text{Total eigenvalues of corrlation matrix}}$$

In PCA this denominator is equal to the number of explanatory variables because each variable contributes a unit of variance to the analysis. This method is used to verify the number of components retained. Ideally the lowest number of components that explains the highest cumulative proportion of variance should be retained.

4.7 Data Analysis

Quantitative methods of data analysis are most commonly used by researchers for their ability to draw meaningful results from a large body of data (Chambliss, 2012). This study employs the following data analysis techniques to test the research hypotheses:

4.7.1 Descriptive Statistics

Descriptive statistics are used to describe the distribution of the data and the nature and strength of the relationships between variables (Chambliss, 2012). In general, descriptive statistics help to explain the data in more detail and convey information about the characteristics of the data. From this inferences may be drawn that help to ascertain the hypothesised relationships (Miles & Banyard, 2007).

The following descriptive statistics will be referred to in this study:

4.7.1.1 Measures of Central Tendency

Measures of central tendency for quantitative variables are the values around which cases tend to center. For nominal variables this is the most common value. The sample mean is the most commonly used. It is an arithmetic mean, which is the sum of all data values in the data set, divided by the number of data values. Other than the mean, the median is used. This is the exact middle ranked value in a distribution, which divides the data set in halves.

4.7.1.2 Measures of Dispersion

Dispersion measures include both the minimum and maximum values in the sample as well as the range. The range is the difference between the maximum and minimum value. The range is important as it identifies the whole range of possible values that can be encountered in the sample. The range however can be prone to alteration due to the presence of outliers. This reduces its effectiveness as a summary measure.

4.7.2 Regression Analysis

Regression analysis is a vital tool at the disposal of econometricians. According to Brooks (2008), regression employs quantitative methods in "describing and evaluating the relationship between a given variable and one or more other variables". More especially regression explains movements in a variable by reference to movements in another or other variables. As stated in the objectives of this study, it aims to establish whether there exists a positive relationship between optimism and financial performance, as this is argued to be a mechanism through which firms can contribute towards domestic private investment in the country and Africa as a whole. To effectively establish this relationship a simple linear regression analysis was adopted.

4.7.2.1 Simple Linear Regression Model

Cross sectional data analysis makes use of simple linear regressions. These are used to describe relationships that can be characterised by straight lines. In general a linear statistical model takes the following form:

$$Y_i = \alpha + \beta x_i + \varepsilon_i$$

Where:

α= Intercept of the line.

β = Slope of the line. A one unit increase in x corresponds to a β unit increase in Y.

ε_i = Statistical error for the i^{th} firm. This accounts for the fact that the statistical model is not an exact fit to the sample data and comprises of both a fixed and random component. The fixed component is a result of the true relationship being non-linear. The random component is attributed to measurement errors in Y or not having included other key variables in the model.

x_i = Independent variable. For the purposes of this study x will be the "optimism index" value for the i^{th} firm.

As described above, regression analysis is used in determining the factor weightings of each explanatory variable on the "optimism index". This technique is again employed, in turn in examining the relationship of optimism on firm financial performance.

Under the second hypothesised relationship, this model is used is used to estimate whether relatively optimistic firms are more financially sound than their relatively pessimistic counterparts, (i.e. have better financial performance). Furthermore the results from the regression between the firm's optimism and share prices are used to answer the third hypothesised relationship, which stipulates that there exists a strong relationship between these two variables. Finally the forth hypothesised relationship is answered through the use of regression analysis, which highlights that the domestic private investment and performance of optimistic firms are positively related.

The most common method of fitting a line to the sample data is through ordinary least squares (OLS). This entails taking the vertical distances from the point to the fitted line, squaring it and then minimising the sum of the areas of the squares. OLS estimators are generally superior to other estimates as they have the lowest variance among the class of linear unbiased estimators. In particular it is easy to conduct and produces results that are easily interpretable (Hansen, 2015 ; Brooks, 2008).

One of the limitations in the use of linear regression is that it may be prone to distortion by outliers. Furthermore, most systems are not linear in nature and so the assumption of linearity is a simplified assumption. This can be overcome in future studies by applying a non-parametric regression technique (ClockBackward, 2009).

Measures that are used for the determination of the strength of the linear relationship include the coefficient of determination (R^2) and the standard error. R^2 is an indicator of the proportion of variance in the dependent variable that is predicted by the independent variable. The higher the value, the greater the predication ability of the independent variable. The standard error provides a measure of the average amount by which the regression model over or under predicts. The lower the standard error, the greater is the prediction ability.

4.7.2.2 Defining Dependent Variables

The dependent variables for the regression analysis of optimism on financial performance include the following:

- **Share Price**: For the purposes of this study, daily average share prices for 2008 and 2013 respectively are obtained.
- **ROE**: Calculated as EBIT/Common equity. ROEs for 2008 and 2013 respectively are obtained.

- **ROA**: Calculated as EBIT/Total assets. ROAs for 2008 and 2013 respectively are obtained.
- **Asset Turnover**: Calculated as Revenue/Total Assets, with the ratios for 2008 and 2013 respectively computed.
- **ROCE**: Calculated as EBIT/(Total assets – Current liabilities). This return is computed for 2008 and 2013, respectively.
- **ROS**: Calculated as EBIT/Revenue. For the purposes of this study returns for 2008 and 2013 respectively are obtained.

4.7.2.3 Hypothesis Testing Process

When conducting hypothesis testing there are two approaches which can be used, both of which should ideally produce the same conclusions: test of significance approach and the confidence interval approach. The process of hypothesis testing in this study makes use of the test of significance approach.

The process followed includes the following steps:

1. Define the null hypothesis (H_0).
2. Define the alternative hypothesis (H_1).
3. Choose an appropriate significance level (α). This is the probability of rejecting a null hypothesis in a statistical test when it is true. This is most often set at 5%.
4. Define a rejection region. If a 5% significance level is used, then 5% of the total distribution will lie in the rejection region.
5. Obtain a critical value with which to compare the test statistic.
6. Perform the test. If the test statistic lies in the rejection region then reject the null hypothesis.
7. P-values will be used in the hypothesis testing. If the p-value is <0.05, then the null hypothesis is rejected. If the p-value is ≥ 0.05, the test is not statistically significant and the null hypothesis fails to be rejected.

Chapter 5: Presentation and Analysis of Results

The results and findings are detailed in this chapter, with inferences drawn from each of the relevant hypotheses of this study.

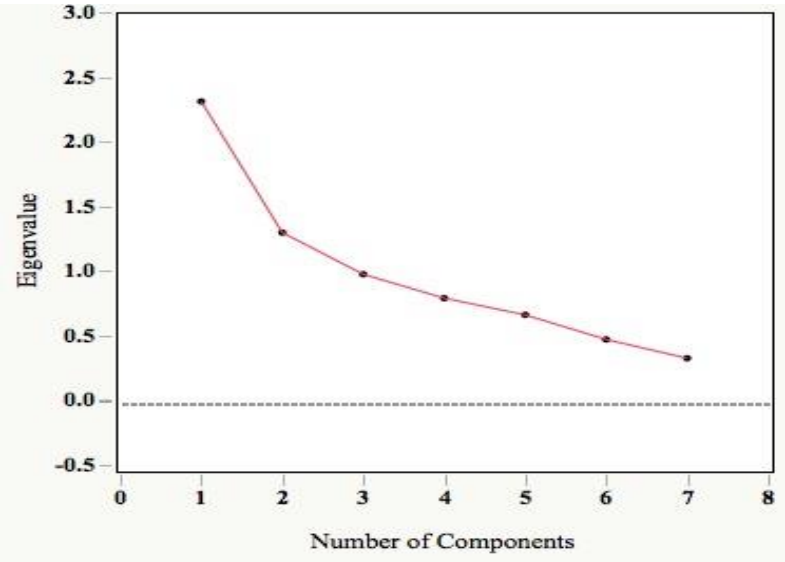
Specifically the chapter consists of the following:

- A presentation of the detail in the validation of the explanatory variables in the "optimism index"
- A presentation of the descriptive statistics of firms in the study (sample)
- Regression results for Research Hypothesis 1
- Regression results for Research Hypothesis 2.1
- Results for Research Hypothesis 2.2
- Results for Research Hypothesis 3

5.1 Validation of Explanatory Variables

5.1.1 Principal Component Analysis

Figure 3: Scree Plot



Using the scree plot alone, it is difficult to deduce the number of components to retain, as there is no clear "elbow" in the curve. However, using the eigenvalue information in Table 1 below, the Kaiser criterion approach can be adopted, allowing for two components to be retained. By retaining two components, 52.233% of the variance is accounted for. Although this is not a considerably large portion of total variance, the inclusion of this second component was able to add 18.9% to the portion of variance explained.

Table 1: Eigenvalues

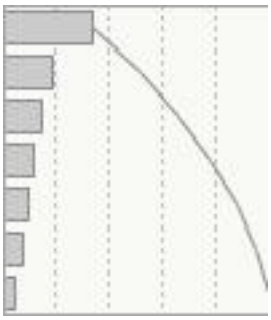
Number	Eigenvalue	Percent	Percent	Cum Percent
1	2.3348	33.354		33.354
2	1.3215	18.879		52.233
3	0.9992	14.274		66.508
4	0.8142	11.631		78.139
5	0.6852	9.788		87.927
6	0.4950	7.072		94.999
7	0.3500	5.001		100.000

Table 2: Rotated Load Factor

	Principal Component 1	Principal Component 2
Capex	0.75	0.04
Debt Levels	0.29	0.74
Employee Numbers	0.43	0.17
Foreign Investment Purchases	0.38	-0.1
Net Share Repurchases	0.04	-0.6
Dividends Paid	0.81	0.25
Return on Domestic Invested Capital	-0.0	-0.0

From Table 2, it is seen that the first principal component is strongly correlated with 2 of the original variables and moderately correlated with Employee Numbers. The first principal component increases with increasing Capex, Employee Numbers and Dividends Paid. Seeing as the first principal component is so highly correlated with Dividends Paid and Capex, it is primarily a measure of non-operating activity cashflows (financing and investing activities). It is a factor indicative of a firm in expansion.

The second principal component increases with Debt Levels and decreases with Net Share Repurchases. This is primarily a measure of financing activity cashflows. When firms have high levels of debt they are not able to repurchase as many shares.

There is no single variable that is readily available from annual financial reports which is a good enough indicator of either non-operating activity cashflows or financing activity cashflows. Therefore the potential to consolidate the highly related variables in PC1 or PC2, respectively, is limited. All original explanatory variables will be retained for the regression analysis.

5.1.2 Regression Model Results – Large and Small Firms

In 2008 (Table 3), optimism in large firms is seen to be driven by three primary variables and so an alternative model is run with just the variables of interest. Debt Levels, Employee Numbers and Net Share Repurchases are the only significant explanatory variables, as shown by their low p-values.

Table 5 shows that the coefficients of Debt Levels and Net Share Repurchases are positive with optimism increasing by 0.01% for a 1% increase in Debt Levels and 0.21% for a 1% increase in Net Share Repurchases. The result for Debt Levels is consistent with the postulated relationship mentioned in the description sections for each of the explanatory variables. Net Share Repurchases displayed a positive relationship with optimism which was counter to expectation. However this relationship was shown to be statistically insignificant. Employee Numbers however was expected to display a positive relationship with optimism. Although the decrease is negligible, Employee Numbers is significant in the new reduced model and so the effect is of importance to the analysis.

As shown by the p-value in Table 6, the new reduced model is highly statistically significant given that the value of 0.0005 is less than 0.05.

Table 3: Effect Likelihood Ratio Test – 2008 Large Firms

Source	Nparm	DF	L-R Chi Square	Prob > ChiSq
Capex	2	2	0.15911597	0.9235
Debt Levels	2	2	11.3269448	0.0035*
Employee Numbers	2	2	8.94655972	0.0114*
Foreign Investment Purchases	2	2	1.83660178	0.3992
Net Share Repurchases	2	2	11.541333	0.0031*
Dividends Paid	2	2	0.59973031	0.7409
RDIC	-2	2	4.8766359	0.0873
Domiciled in SA	2	2	0.2018174	0.9040

Table 4: Whole Model Test – Full Model

Model	-LogLikelihood	DF	ChiSquare	Prob>ChiSq
Difference	16.052102	16	32.1042	0.0097*
Full	43.442925			
Reduced	59.495028			

Table 5: Parameter Estimates – 2008 Large Firms

Source	Estimate	Standard Error	ChiSquare	Prob>ChiSq
Intercept	0.11391564	0.649926	0.03	0.8609
Debt Levels	0.00013017	7.2875e-5	3.19	0.0741
Employee Numbers	-0.0001625	8.0624e-5	4.06	0.0438*
Net Share Repurchases	0.00205359	0.0012329	2.77	0.0958

Table 6: Whole Model Test – Reduced Model

Model	-LogLikelihood	DF	ChiSquare	Prob>ChiSq
Difference	12.076640	6	24.15328	0.0005*
Full	47.418388			
Reduced	59.495028			

In 2008 (Table 7), optimism in small firms is seen to be driven primarily by Return on Domestic Invested Capital. Employee Numbers, although not significant are the closest of the remaining

variables to be significant. An alternative reduced model is run using a stepwise regression approach in order to determine a model of best fit.

Table 9 shows that the coefficients of these variables are negative and statistically insignificant, with optimism decreasing per increase in Employee Numbers and Return on Domestic Invested Capital. These results would have been consistent with the postulated relationship had they been statistically significant. As the results of Table 7 and 9 shows, only Return on Domestic Invested Capital reflected the optimism of small firms in 2008. As shown by the p-value in Table 10, the new reduced model is highly statistically significant given that the value of 0.0007 is less than 0.05. Therefore although individual variables may not be significant the combined effect is to produce a significant model.

Table 7: Effect Likelihood Ratio Test – 2008 Small Firms

Source	Nparm	DF	L-R Chi Square	Prob > ChiSq
Capex	2	2	0.02398746	0.9881
Debt Levels	2	2	1.51073618	0.4698
Employee Numbers	2	2	2.96965998	0.2265
Foreign Investment Purchases	2	2	0.73678709	0.6918
Net Share Repurchases	2	2	2.06787313	0.3556
Dividends Paid	2	2	1.73919357	0.4191
RODIC	2	2	7.9181903	0.0191*
Domiciled in SA	2	2	0.24426361	0.8850
Net Share Repurchases	0.00205359	0.0012329	2.77	0.0958

Table 8: Whole Model Test – Full Model

Model	-LogLikelihood	DF	ChiSquare	Prob>ChiSq
Difference	12.729363	16	25.45873	0.0621
Full	35.805489			
Reduced	48.534853			

Table 9: Parameter Estimates – 2008 Small Firms

Source	Estimate	Standard Error	ChiSquare	Prob>ChiSq
Intercept	1.85854826	0.6821206	7.42	0.0064*
Employee Numbers	-0.0001877	0.0001145	2.69	0.1012
RODIC	-0.0674331	0.0424931	2.52	0.1125

Table 10: Whole Model Test – Reduced Model

Model	-LogLikelihood	DF	ChiSquare	Prob>ChiSq
Difference	9.596066	4	19.19213	0.0007*
Full	38.938787			
Reduced	48.534853			

In 2013 (Table 11), optimism in large firms is seen to be driven primarily by Capex and Foreign Investment Purchases. Stepwise regression is again employed to determine a reduced model of best

fit. The coefficients of these variables suggest a relationship with optimism that is statistically insignificant. However although the individual variables are insignificant, the combination of them in the reduced model is statistically significant as shown by the p-value of 0.0113 in Table 14.

Table 11: Effect Likelihood Ratio Test – 2013 Large Firms

Source	Nparm	DF	L-R Chi Square	Prob > ChiSq
Capex	2	2	6.03539601	0.0489*
Debt Levels	2	2	0.92988768	0.6282
Employee Numbers	2	2	0.06990427	0.9657
Foreign Investment Purchases	2	2	7.26466554	0.0265*
Net Share Repurchases	2	2	2.05953236	0.3571
Dividends Paid	2	2	3.07443349	0.2150
RDIC	2	2	1.95549979	0.3762
Domiciled in SA	2	2	1.65732942	0.4366

Table 12: Whole Model Test – Full Model

Model	-LogLikelihood	DF	ChiSquare	Prob>ChiSq
Difference	9.889675	16	19.77935	0.2303
Full	48.371193			
Reduced	58.260868			

Table 13: Parameter Estimates – 2013 Large Firms

Source	Estimate	Standard Error	ChiSquare	Prob>ChiSq
Intercept	-0.1294771	0.5109245	0.06	0.7999
Capex	-0.000271	0.0001874	2.09	0.1481
Foreign Investment Purchases	0.00219439	0.0019964	1.21	0.2717

Table 14: Whole Model Test – Reduced Model

Model	-LogLikelihood	DF	ChiSquare	Prob>ChiSq
Difference	6.495089	4	12.99018	0.0113*
Full	55.620695			
Reduced	62.115784			

In 2013 (Table 15), optimism in small firms is seen to be driven primarily by four variables, however upon performing a stepwise regression in order to obtain a reduced model of best fit, it was found that the model of best fit produces a p-value of 0.4515. It therefore remains a statistically insignificant model. Both Capex and Foreign Investment Purchases are statistically insignificant in the reduced model for small firms in 2013.

Net Share Repurchases and Domicile Region did not feature in the reduced model due to multicollinearity. This means that both variables are highly correlated and could be predicted from the other variables. Furthermore with such a small sample size it becomes increasingly difficult to predict large numbers of variables.

Table 15: Effect Likelihood Ratio Test – 2013 Small Firms

Source	Nparm	DF	L-R Chi Square	Prob > ChiSq
Capex	2	2	13.2491336	0.0013*
Debt Levels	2	2	4.11033083	0.1281
Employee Numbers	2	2	5.49030221	0.0642
Foreign Investment Purchases	2	2	12.53048	0.0019*
Net Share Repurchases	2	2	6.34271901	0.0419*
Dividends Paid	2	2	4.73816495	0.0936
RDIC	2	2	4.05858897	0.1314
Domiciled in SA	2	2	6.1481194	0.0462*

Table 16: Whole Model Test – Full Model

Model	-LogLikelihood	DF	ChiSquare	Prob>ChiSq
Difference	17.269348	16	34.5387	0.0046*
Full	28.122142			
Reduced	45.391490			

Table 17: Parameter Estimates – 2013 Small Firms

Source	Estimate	Standard Error	ChiSquare	Prob>ChiSq
Intercept	-0.8521555	0.4461696	3.65	0.0561
Capex	0.00092596	0.0008369	1.22	0.2686
Foreign Investment Purchases	-0.000955	0.0018101	0.28	0.5978

Table 18: Whole Model Test – Reduced Model

Model	-LogLikelihood	DF	ChiSquare	Prob>ChiSq
Difference	1.838308	4	3.676616	0.4515
Full	53.526492			
Reduced	55.364800			

A receiver operating characteristic (ROC) chart is used for testing the accuracy of predictions, in particular the ability of the explanatory variables to correctly predict the level of optimism of a firm. ROC compares two operating characteristics (sensitivity and specificity) as the criterion changes. The accuracy of the test depends on how well the test separates data into the different levels of optimism. Accuracy is measured by area under the curve, with 1 representing a perfect test and a score of 0.5 representing a worthless test. As seen by the results in Table 19, tests across both large and small firms were good tests.

Table 19: Area Under Receiver Operating Characteristic Chart

	0	1	2
2008 Large	0.9022	0.7270	0.7568
2008 Small	0.8560	0.8168	0.7059
2013 Large	0.7174	0.7020	0.7750
2013 Small	0.8856	0.8619	0.8114

5.2 Descriptive Statistics

Within the sample, 54% of firms are large and 46% small. 85% of the sample population is domiciled in South Africa.

Tables 20 and 21 below show the measures of central tendency and dispersion that were computed to show the distribution of each dependent and explanatory variables, respectively.

The key highlights of the dependent variables include:

- Share prices for both 2008 and 2013 have means of R55.27 and R90.50, respectively. This is the greatest increase of any of the measures of the financial performance over the 5 year period. Furthermore the share prices have relatively high standard deviations of R110.84 and R120.61 respectively. This can be attributed to the significant differences in prices of established large firms relative to smaller firms with lower demand driving their share prices.
- The average asset turnovers are very high for both 2008 (88.63%) and 2013 (89.20%) and also have relatively high standard deviations of 98.86% for 2008 and 90.9% for 2013.
- Average returns for all measures, with the exception of ROE, have decreased over the 5 year period.
- ROA has relatively low standard deviations for both 2008 (11.61%) and 2013 (9.83%) as the values are not as dispersed as those of the other performance measures.

Table 20: Descriptive Statistics – Dependent Variables

	Mean	Median	Maximum	Minimum	Standard Deviation
Share Price 08	R 55.27	R 17.89	R 943.86	R 0	R 110.84
Share Price 13	R 90.50	R 41.40	R 761.16	R 2.11	R 120.61
ROE 08	21.69 %	20.62 %	150.25 %	-82.42 %	27.64 %
ROE 13	23.94 %	17.27 %	453.85 %	-59.79 %	48.12 %
ROA 08	9.04 %	8.29 %	54.23 %	-29.35 %	11.61 %
ROA 13	7.79 %	6.83 %	38.10 %	-30.16 %	9.83 %
ROS 08	20.88 %	15.06 %	125.66 %	-25.56 %	23.24 %
ROS 13	20.64 %	14.23 %	99.20 %	-91.78 %	25.72 %
ROCE 08	18.95 %	13.4 %	106.59 %	-3.95 %	18.98 %
ROCE 13	15.22 %	11.49 %	72.55 %	-39.18 %	15.16 %
AT 08	88.63 %	60.42 %	462.68 %	-1.67 %	98.86 %
AT 13	89.20 %	64.30 %	488.43 %	0 %	90.90 %

The key highlights of the explanatory variables include:

- The inclusion of both large and small firms in the study has resulted in widely dispersed values for each of the explanatory variables across all firms. Despite removing outliers from

the each stage of the analysis, the resulting standard deviations are very high for each variable, in particular for Debt Levels and Employee Numbers.

- Employee Numbers have the highest averages for both 2008 and 2013 at 15 095 and 25 507.3 respectively.

Table 21: Descriptive Statistics – Explanatory Variables

	Mean	Median	Maximum	Minimum	Standard Deviation
Capex 08	R 1 547.07 M	R 184.07 M	R 26 896 M	R 0	R 3 789.69 M
Capex 13	R 1 878.52 M	R 396.2 M	R 30 337 M	R 0	R 4 466.04 M
Debt Levels 08	R 6 880.13 M	R 840.75 M	R 232 829 M	R 0	R 26 490.16 M
Debt Levels 13	R 8 012.79 M	R 1 918.38 M	R 183 418 M	R 0	R 20 886.45 M
Employee Numbers 08	15 095	6 267.5	106 225	0	21 516.91
Employee Numbers 13	25 507.3	9 089	769 866	0	78 546.03
Foreign Investment Purchases 08	R 244.58 M	R 0	R 11 657 M	-R 244.2 M	R 1 163.47 M
Foreign Investment Purchases 13	R 538.28 M	R 0	R 9 478 M	-R 0.56 M	R 1 590.93 M
Net Share Repurchases 08	-R 94.10 M	R 0	R 6 825 M	-R 16 615 M	R 1 826.38 M
Net Share Repurchases 13	-R 274.66 M	R 0	R 742 M	-R 17 246 M	R 1 724.78M
Dividends Paid 08	R 848.30 M	R 133.96 M	R 13 816 M	R 0	R 1 928.99 M
Dividends Paid 13	R 1 306.63 M	R 216.61 M	R 16 187 M	R 0	R 2 769.78 M
RODIC 08	63.66%	11.50%	5 237.49 %	-5.76 %	493.63%
RODIC 13	19.99%	11.96%	350.23%	-13.24%	41.34%

5.3 Research Hypotheses

5.3.1 Hypothesis 1

Hypothesis 1 tested whether large firms are relatively more optimistic than small firms. The first part in this analysis is to determine if size does have an impact on level of optimism (i.e. size and optimism are dependent). Without dependence between these factors, differentiating between firms according to their size would be a pointless exercise as it has no bearing on level of optimism. Specifically, a Pearson chi-square test is used to analyse this categorical data. The results are reflected below in Table 22. With the distinction between large and small firms, the difference in level of optimism between these two categories is of interest. In 2008 the p-value of 0.0056 is less than the significance level of 0.05. The null hypothesis is rejected and it can be concluded that firm size does influence the level of optimism.

In 2013, however, the p-value of 0.1364 results is the opposite. The null hypothesis fails to be rejected and it can be concluded that firm size and the level of optimism were independent in 2013.

Table 22: Significance Tests

			Chi-square	**Prob>chi-square**
2008				
Likelihood ratio			10.559	0.0051*
Pearson chi-square test			10.378	0.0056*
	N	**DF**	**–LogLike**	**R^2 (U)**
	112	2	5.2796735	0.0435
2013				
Likelihood ratio			4.015	0.1344
Pearson chi-square test			3.985	0.1364
	N	**DF**	**–LogLike**	**R^2 (U)**
	112	2	2.007279	0.0168

Figure 4: Mosaic Plot – Contingency Analysis of Optimism

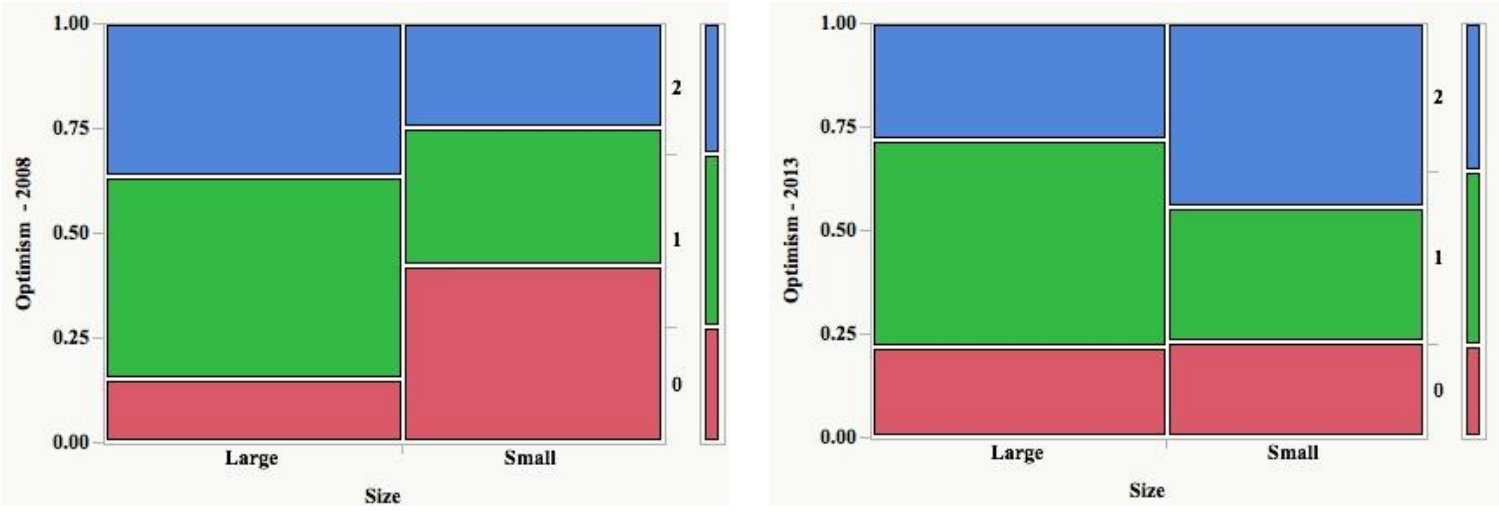


Table 23: Contingency Table

	0 (Pessimistic)	1 (Neutral)	2 (Optimistic)	Total
Large	9	29	22	60
Total %	8.04	25.89	19.64	53.57
Col %	29.03	63.04	62.86	
Row %	15.00	48.33	36.67	
Small	22	17	13	52
Total %	19.64	15.18	11.61	46.43
Col %	70.97	36.96	37.14	
Row %	42.31	32.69	25.00	
Total:	**31**	**46**	**35**	**112**
2008	**27.68**	**41.07**	**31.25**	
Large	13	30	17	60
Total %	11.61	26.79	15.18	53.57
Col %	52.00	63.83	42.50	
Row %	21.67	50.00	28.33	
Small	12	17	23	52
Total %	10.71	15.18	20.54	46.43
Col %	48.00	36.17	57.50	
Row %	23.08	32.69	44.23	
Total:	**25**	**47**	**40**	**112**
2013	**22.32**	**41.96**	**35.71**	

The results for the test of whether large firms are relatively more optimistic than their smaller counterparts, differs between 2008 and 2013 per Figure 4 and Table 23.

Relative to their larger counterparts, in 2008, smaller firms were 27.31% more pessimistic. In general 42.31% of small firms were seen to be pessimistic compared to the 25% with an optimistic outlook. Larger firms however, are generally neutral with 48.33% of firms exhibiting indifference between an optimistic or pessimistic strategic outlook. The overall optimism of larger firms is 11.67% more than that of smaller firms. These results are consistent with the hypothesised relationship.

Coupled with the fact that many small firms had not commenced operations by 2008 or had not listed on the JSE at that point, suggests that small firms were very much in a fledgling state in 2008. In addition to this, the impending market downturn resulting from the global financial crisis, would have led smaller firms to anticipate poorer prospects as customers curbed their consumption. Smaller firms would not have had the same ability to "weather the storms" as their larger counterparts, due to losing customers from their already smaller customer base as well as their lower level of financial reserves to act as a buffer in times of financial constraint.

In 2013, large and small firms were fairly equally pessimistic with only a 1.41% difference between the two. Once again large firms are generally neutral with 50% exhibiting indifference between an optimistic and pessimistic strategic outlook. Small firms have become significantly more optimistic

since 2008, as 44.23% of firms are optimistic compared to the previous 25%. Large firms are far less optimistic than they were in 2008.

These results are consistent with the fact that in recent times, increasing support has been provided to aid business development in the hopes of achieving governmental aims to alleviate unemployment. This has provided smaller firms with more of an optimistic outlook as there is more certainty associated with the continuity of their operations, due to the support given to these small and medium sized firms. Small firms are provided with access to financing as well as given advantages in terms of procurement. Furthermore, with the additional competition that these smaller firms are beginning to pose, large firms are becoming less explicitly optimistic, and tending more towards a neutral outlook (Department of Trade and Industry, 2008).

It can be concluded that the hypothesised relationship that large firms are relatively more optimistic than small firms is consistent with the 2008 results. However with a changing market and more focus on developing smaller firms, smaller firms are becoming more optimistic in recent times.

5.3.2.1 Hypothesis 2.1

Hypothesis 2.1 tested whether relatively optimistic firms are more financially sound than relatively more pessimistic firms. The first part in the analysis of this hypothesis is to determine if financial performance differs across each level of optimism, using both a Kruskal-Wallis test and Levene test. The Kruskal-Wallis test examines whether each level of optimism has an identical distribution, whereas the Levene test examines whether the variances of each level of optimism are the same. The results are reflected below in Table 24.

Table 24: Tests for significance in differences of financial performance across levels of optimism

	Kruskal-Wallis Test		Levene Test	
	Test score	P-value	Test score	P-value
Share Price 08	19.2636	<0.0001*	3.4367	0.0357*
Share Price 13	3.7518	0.1532	1.9782	0.1433
ROE 08	7.2149	0.0271*	0.3446	0.7092
ROE 13	3.3795	0.1846	1.3534	0.2627
ROA 08	9.0835	0.0107*	0.0487	0.9525
ROA 13	0.5292	0.7675	0.0123	0.9878
ROS 08	3.4570	0.1775	0.9383	0.3944
ROS 13	2.1880	0.3349	1.1111	0.3329
ROCE 08	15.2399	0.0005*	2.4076	0.0948
ROCE 13	1.7156	0.4241	1.2057	0.3034
AT 08	16.5031	0.0003*	4.0671	0.0198*
AT 13	0.7834	0.6759	0.0080	0.9920

Table 24 highlights the results from the Kruskal-Wallis tests which show that none of the 2013 measures of financial performance differs significantly across levels of optimism. ROS is not significantly different across levels of optimism for either 2008 or 2013. However the remaining measures have a p-value less than 0.05 and so it can be concluded that these measures have at least two groups whose financial performance is significantly different in 2008.

Furthermore the results of the Levene test reveal that for share price and asset turnover, the variances across each of the levels of optimism differs significantly in 2008 only.

Overall the results reveal that financial performance does differ significantly across each level of optimism for 2008.

Table 25: Wilcoxon Matched-Pair Test

Measure	Level	-Level	Score Mean Difference	Std. Error Difference	Z	P-value
Share price 08	2	0	19.10046	4.706765	4.058087	<0.0001*
Share Price 13	2	0	-4.8425	4.820529	-1.00456	0.3151
ROE 08	2	0	9.6719	4.720365	2.04897	0.0405*
ROE 13	2	0	-1.59250	4.820529	-0.33036	0.7411
ROA 08	2	0	11.1318	4.720365	2.35825	0.0184*
ROA 13	2	0	-1.20250	4.820529	-0.249454	0.8030
ROS 08	2	0	8.333641	4.720365	1.765465	0.0775
ROS 13	2	0	1.13750	4.820529	0.23597	0.8135
ROCE 08	2	0	14.9945	4.723585	3.17438	0.0015*
ROCE 13	2	0	5.23250	4.820529	1.08546	0.2777
AT 08	2	0	16.1502	4.720315	3.42143	0.0006*
At 13	2	0	3.737500	4.820529	0.7753298	0.4381

The Wilcoxon matched-pair is then used to determine which levels of optimism are significantly different by comparing their mean financial performances. It specifically highlights which pairs of means are most significantly different. As per the hypothesis only the differences between optimistic and pessimistic firms (levels 2 and 0) are of interest. The results of the Wilcoxon matched-pair test in Table 25 are consistent with those of the Kruskal-Wallis test. For 2008 all measures of financial performance, with the exception of ROS, there is significant difference between the performance of optimistic firms relative to pessimistic firms. This is shown by the p-values that are less than 0.05; thus allowing for the null hypothesis of equal means to be rejected. In particular optimistic firms perform better than their pessimistic counterparts as shown by the score mean difference. Share prices are shown to have the largest difference between means of 19.1 with asset turnover following closely with a mean difference of 16.15.

The results for 2013 shows that there are no significant differences between the financial performance of optimistic firms and their pessimistic counterparts. The score mean differences are lower than those from the 2008 results and in some instances even negative.

It can be concluded that the hypothesised relationship that relatively optimistic firms are more financially sound than more pessimistic firms is consistent with the 2008 results. The results for 2013 do not reveal any significant differences in financial performance. However with further examination into the differences between other pairs of levels of optimism, significant differences may be identified.

5.3.2.2 Hypothesis 2.2

Hypothesis 2.2 tested whether share prices were strongly influenced by the level of optimism and that the difference between levels of optimism was significant. The analysis of this hypothesis will employ the use of an R^2 value as well as the Wilcoxon matched-pair test. The results are presented in Table 26.

Table 26: Oneway Anova Summary

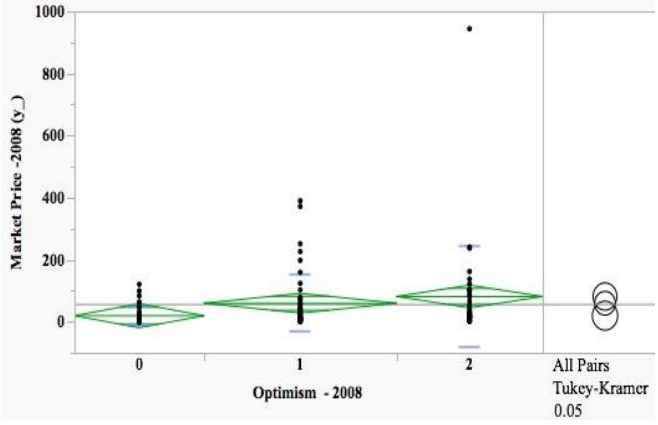
	2008	2013
R^2	0.047263	0.016413
Adjusted R^2	0.029781	-0.00163
Root Mean Square Error	109.1726	120.7112

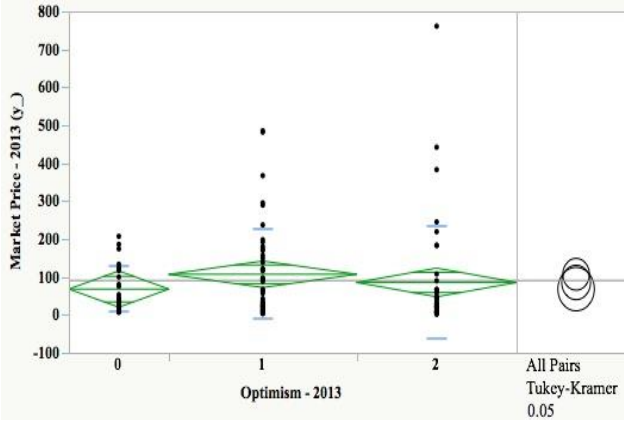
As one of the main measures by which companies and the public assess firms' financial performance, share prices are expected to rise as optimism rises, primarily due to the signalling effect. R^2 measures the percentage of share price movements that can be explained by movements in level of optimism. In general the higher the value, the greater the fit of the model. The R^2 values for both 2008 and 2013, as shown in Table 18, are very low at 4.73% and 1.64% respectively, suggesting that levels of optimism are poor in explaining the variation of share prices. The root mean square error is very high and reiterates the poor quality of the prediction ability of the model. This result is different to expectation and could suggest that share prices are driven primarily by external market forces and not firm optimism.

As revealed above in Table 26, the mean differences between financial performance of optimistic and pessimistic firms are highly significant in 2008 but not significant in 2013.

Examination of Figure 5 below shows how the clustering of data points differs within each level of optimism, thereby affecting the means of each group. Furthermore, the presence of outliers may skew the means. However this was later adjusted for.

Figure 5: Oneway Analysis of Share Price





Upon deeper inspection and per Table 27 below, it is found that there are no significant differences in share prices between any of the levels of optimism for 2013. In 2008, however there are significant differences between average share prices for optimistic and pessimistic firms as well as neutral and pessimistic firms.

Table 27: Wilcoxon Matched-Pair Test of Share Price

Measure	Level	-Level	Score Mean Difference	Std. Error Difference	Z	P-value
Share price 08	2	0	19.10046	4.706765	4.058087	<0.0001*
Share price 08	1	0	18.54804	5.175295	3.583958	0.0003*
Share price 08	2	1	5.25745	5.277016	0.996293	0.3191
Share price 13	2	0	-4.8425	4.820529	-1.00456	0.3151
Share price 13	1	0	4.3506	5.180651	0.83979	0.4010
Share price 13	2	1	-10.1114	5.433642	-1.86089	0.0628

From these results we are unable to conclude categorically that share prices are strongly influenced by the level of optimism of a firm at all times. However the hypothesised relationship that these share prices differ significantly across levels, is consistent with the 2008 results. The results for 2013 do not reveal any significant differences in share prices. Although significant outliers were removed, with such a small sample, any moderately different data points could account for skewing the results. There is the possibility that any remaining outliers could have been instrumental in skewing the means of share prices and obscuring any significant differences that may exist between the levels of optimism.

5.3.3 Hypothesis 3

Hypothesis 3 tested whether the performance of optimistic firms is positively related to domestic investment and by extension economic development. Simple linear regression analysis is applied, regressing domestic investment against the financial performance of only optimistic firms (level 2).

In running the regression models of domestic investment against financial performance, certain firms were removed from the analysis due to the presence of significant outliers. MTN and Barclays were removed from 2008 analysis and MTN, Naspers, BHP Billiton, Sasol and Investec were removed from the 2013 analysis.

As shown in Table 28 below, the coefficients of the domestic investment variable are only significant when regressed against share price as shown by the p-values which are less than 0.05 for both 2008 and 2013. ROE, ROA and ROS are positively related to capex, however the coefficients are very small, almost negligible, and are not statistically significant. Furthermore the R^2 values are very small, reiterating the poor quality of fit of the models.

It can therefore not be said conclusively that overall performance of optimistic firms is positively related to domestic investment. Rather the hypothesis can be amended and it can be concluded that firm financial performance, as reflected by share price, is positively related to domestic investment (and by extension economic development)

Table 28: Parameter Estimates

Dependent Variable	Term	Estimate (β_i)	Standard Error	t Ratio	Prob>|t|	R^2
Share Price 08	Intercept	38.056303	25.27182	1.51	0.1416	0.33
	Domestic Investment	0.0237085	0.00591	4.01	0.0003*	
Share Price 13	Intercept	31.793368	12.54853	2.53	0.0159*	0.31
	Domestic Investment	0.0227136	0.005795	3.92	0.0004*	
ROE 08	Intercept	21.506687	4.870331	4.42	0.0001*	0.00
	Domestic Investment	0.0002757	0.001139	0.24	0.8103	
ROE 13	Intercept	18.949084	5.40765	3.50	0.0013*	0.01
	Domestic Investment	-0.001575	0.002497	-0.63	0.5324	
ROA 08	Intercept	9.6732633	2.177902	4.44	<.0001*	0.00
	Domestic Investment	0.00013	0.000509	0.26	0.8002	
ROA 13	Intercept	7.7320247	1.921191	4.02	0.0003*	0.03
	Domestic Investment	-0.000949	0.000887	-1.07	0.2923	
ROS 08	Intercept	21.357871	3.72093	5.74	<.0001*	0.00
	Domestic Investment	0.0002824	0.00087	0.32	0.7476	
ROS 13	Intercept	18.41478	3.691538	4.99	<.0001*	0.00
	Domestic Investment	-0.000662	0.001705	-0.39	0.7003	
ROCE 08	Intercept	20.478767	3.04396	6.73	<.0001*	0.01
	Domestic Investment	-0.000339	0.000712	-0.48	0.6367	
ROCE 13	Intercept	15.412177	2.181236	7.07	<.0001*	0.02
	Domestic Investment	-0.000774	0.001007	-0.77	0.4473	
AT 08	Intercept	117.40829	22.44285	5.23	<.0001*	0.03
	Domestic Investment	-0.005068	0.005249	-0.97	0.3413	
AT 13	Intercept	102.38991	18.50085	5.53	<.0001*	0.00
	Domestic Investment	-0.002587	0.008544	-0.30	0.7639	

Chapter 6: Summary of Findings and Conclusion

6.1 Introduction

This chapter presents a summary of the empirical analysis highlighted in Chapter 5, the limitations of the study with recommendations for future studies and finally the inferences and conclusions drawn from the findings.

6.2 Summary of Findings

As described in Chapter 3, the study aimed to address four key hypotheses:

- Hypothesis 1 tested whether large firms are relatively more optimistic than small firms.
- Hypothesis 2.1 tested whether relatively optimistic firms are more financially sound than relatively more pessimistic firms.
- Hypothesis 2.2 tested whether share prices were strongly influenced by the level of optimism and that the difference between levels of optimism was significant.
- Hypothesis 3 tested whether the performance of optimistic firms is positively related to domestic investment (and by extension economic development).

In addition to the examination of these key hypotheses, a separate analysis of the proposed explanatory variables used to construct the "optimism index", was performed. This analysis was able to verify the postulated relationship of each explanatory variable with optimism. Several techniques were used throughout the study.

In establishing whether large firms are relatively more optimistic than small firms, a Pearson chi-squared test was used to firstly determine the dependence of firm size and the level of optimism of the firm. The results revealed that only in 2008 was a dependence between firm size and level of optimism observed. 2013 did not exhibit the same results.

Furthermore it was found that in 2008 larger firms were 11.67% more optimistic that their smaller counterparts. Smaller firms were 27.31% more pessimistic. In 2013 however, both large and small firms were fairly equally pessimistic, with a very small difference between the two. Small firms were significantly more optimistic than they previously were in 2008, after a 19.67% increase. These results, although contrary to expectation, are suggestive of the fledgling state of small firms prior to the global financial crisis. Policy reforms have been made recently in order to encourage business development in the aims of reducing unemployment. With the additional financial support provided to small firm, as well as the incentives provided for expanding operations, smaller firms are beginning to revise their outlook and become more optimistic regarding future prospects (Department of Trade and Industry, 2008).

In establishing whether relatively optimistic firms are more financially sound than pessimistic firms three tests were employed; the Kruskal-Wallis test, the Levene test and the Wilcoxon matched-pair test. The Kruskal-Wallis and Leven tests were used to determine if financial performance differs across each level of optimism. The Wilcoxon matched-pair test was then used to test for significant differences in mean financial performance between pairs of levels of optimism.

Overall it was revealed that financial performance differed significantly across levels of optimism for 2008 only, with the exception of ROS which produced statistically insignificant results for both years. The results of the Wilcoxon matched-pair test were consistent with those of the Kruskal-Wallis test. For 2008 all measures of financial performance, with the exception of ROS, there was a significant difference between the performance of optimistic firms relative to pessimistic firms. Share prices are shown to have the largest difference between means of 19.1 with asset turnover following closely with a mean difference of 16.15.

In establishing whether share prices are strongly influenced by the level of optimism and that the difference between levels of optimism was significant, the use of an R^2 value and further Wilcoxon matched-pair test is employed. The R^2 value measures the percentage of share price movements that can be explained by movements in level of optimism. The Wilcoxon matched-pair test, as mentioned before, was used to test for significant differences in share prices between pairs of levels of optimism.

The results were unable to conclude categorically that share prices are strongly influenced by the level of optimism of a firm at all times. However the hypothesised relationship that these share prices differ significantly across levels, is consistent with the 2008 results. The results for 2013 do not reveal any significant differences in share prices.

In establishing whether the performance of optimistic firms is positively related to domestic investment and by extension economic development, a simple linear regression was applied, regressing domestic investment against financial performance of optimistic firms. Although outliers were adjusted for it could not be concluded that overall performance of optimistic firms is positively related to domestic investment. Rather, financial performance, as reflected by share price, exhibited a positive relationship to domestic investment (and by extension economic development).

Examination of the explanatory variables making up the “optimism index” revealed that there was a lack of consistency in results between large and small firms, as well as between years. In 2008, large firm data showed that Debt Levels was consistent with the postulated relationship, that it is

positively related to optimism. Employee Numbers however was expected to display a positive relationship with optimism. Although the decrease was negligible, Employee Numbers is significant in the new reduced model. For small firms during the same year, Return on Domestic Invested Capital was the only variable found to reflect the optimism. All other variables were statistically insignificant.

In 2013, large firm data was unable to reveal any significant variables. However, a reduced model of best fit was generated through the stepwise regression approach, and produced an overall model that was statistically significant. For small firms during the same period, the reduced model of best fit was statistically insignificant, as well as the individual variables.

6.3 Limitations

This exploratory study, is considered part of on-going research in the area of strategy and financial performance measurement, has several limitations, some of which are expected to be improved upon in future research.

First, the study was limited to a small sample size. This was due to limiting the sample to JSE listed firms. If the study was expanded to the full range of JSE listed firms or included non-public firms, the empirical results of the study are expected to be consistent. For future studies on this topic it is recommended that a sample of only large firms is used, owing to the accuracy of its data, it's wealth of historical information, as well as the standardisation of the disclosed data across firms. Small firms are new to the market and lack the historical data needed for most research purposes. Furthermore the disclosure requirements within small firms appear to be less stringent thereby limiting the amount of information that is available for them. Lastly small firms have business operations that vary significantly as many of them are niche businesses. Including small firm data in the analysis increases the likelihood of significant variation and the presence of outliers.

Second, due to the inconsistencies between companies in terms of compiling annual reports and disclosing information, the full range of envisaged factors was unable to be explored as data could not be found for some factors across the range of firms.

Thirdly, the firms analysed are vastly different as they operate in a broad range of industries which respond differently to macroeconomic factors. This difference in industries, lead to the existence of outliers in the data. Although these were removed for the purposes of the statistical analysis, it would be preferable to group companies by industry for enhanced accuracy.

Fourthly, the use of qualitative data makes the analysis open to error as this data has the tendency to be subjective or biased.

Future studies can consider expanding to the industry level. Micro analysis has a further shortcoming in that the data for x and y variables are both derived from the same company, leading to a potential endogeneity problem.

6.4 Conclusion

With the current shortage of funds in Africa it is difficult for developmental goals to be achieved. Governments have been tasked with finding appropriate sources of funding, however, with far more pressing social issues to address, budget adjustments in favour of infrastructure related development are not always possible. Domestic private investment from firms is therefore necessary to build the nation to a point of attracting FDI but also mitigating the long term negative effects of foreign investment. This is a suitable form of funding as local firms are familiar with the business environment and their support is more relevant to an African context.

The ability to provide domestic private investment however, is dependent on the strategic outlook of domestic firms. This research study aimed to model the relative optimistic strategic outlook of firms, where optimistic is defined as a favourable perception of future financial prospects which result in a firm taking the necessary steps to invest in itself and its country at present, to support future domestic expansions of operations.

Optimism and its effects on financial performance were observed for large and small firms separately, as large firms are generally expected to have greater resources with which to engage in investment decisions (Driver, 2006). However the results have indicated that in a dynamic market, government policy has the potential to greatly influence firms' optimism. With a changing business environment that is more favourable towards smaller firms in recent times, it is seen that strategic outlook, either optimistic or pessimistic, is time dependent.

Although 2008 results revealed that optimistic firms are more financially sound than their pessimistic counterparts and that the share prices of optimistic firms are positively related to domestic investment, and by extension economic development, the 2013 results could not conclude the same. This validates the time dependence of optimism (i.e. the business climate at that time).

This study has shown that in order to plan effectively towards meeting developmental funding requirements, governmental policies should be structured in such as way so as to target key

domestic private investment contributors. This will ultimately set the tone of a more optimistic business environment. With a clearly defined optimistic strategic outlook, firms can make optimal capital investment decisions. The impact of which, is not only on the development of the country at large, but will also feed back into the firm, with benefits accruing to the firm as a result of greater profitability from expanded operations, and an enhanced brand reputation or higher levels of investment interest from abroad (Boz, 2009).

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