

THE FINANCING OF CORPORATE REAL ESTATE ACQUISITION,  
A SOUTH AFRICAN STUDY

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Management)

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## DECLARATION

I, Rami Avivi, declare that this research report is my own unaided work. This report is being submitted to the University of the Witwatersrand, Faculty of the Built Environment, Degree of Masters in Property Development and Management. Johannesburg, South Africa.

A handwritten signature in black ink, appearing to read 'Rami Avivi', is written above a horizontal line.

21 day of May, 2017

## **ABSTRACT**

The purpose of this study is to fill specific gaps in the existing body of knowledge of South African corporate real estate management by investigating the determinants influencing the lease versus buy decision; the methods and financing sources of corporate real estate acquisition; and the criteria used in deciding on the financing technique for corporate real estate acquisition.

The research followed a similar methodology to that of Redman and Tanner (1991) in their study “The Financing of Corporate Real Estate: A Survey”. However, it specifically focused on the South African corporate real estate environment. The data collection instrument was an online survey and the survey produced quantitative descriptions of certain aspects of the population. The population for the research was corporate real estate decision makers of leading South African companies. The data captured was presented through the aid of tables, charts and graphs. The data was further analysed through cross tabulations and hypothesis testing using the Chi Squared test of independence to determine significance of results.

South African firms use some form of leasing (mainly long term leasing) in acquiring their corporate real estate. However, ownership is also a common form of real estate acquisition through the use of mortgages secured by the acquired property, mortgage backed securities and sale of unsecured bonds. The decision criteria for acquisition includes both financial and non-financial determinants. Financial analysis is also an important factor in analysing the lease versus buy decision. This is mainly done by comparing the undiscounted cash flow of leasing versus buying. Where a discounting approach of evaluation is used, the most favoured discount rates include the weighted average cost of capital and rate of return on new investments. Mostly outsourced professional services are used when making the lease versus buy decision.

The benefit of this study was to understand the factors influencing the corporate real estate decision making process and to provide a corporate real estate decision makers with a decisional framework when determining the form of real estate tenure. Future studies should attempt to secure better response rate to allow for robustness of results and other methodologies of analysis.

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## CHAPTER 1

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### 1. Introduction

#### 1.1. Context

In their seminal paper, Zeckhauser & Silverman (1983) define corporate real estate ("CRE") as "land and buildings owned by companies". Brown, Arnold and Rabianski (1993) further defines CRE as real estate that is leased or owned by a company to achieve its corporate objectives. Oluwoy, Karantonis and Fakorede (2001) expand on this to include real property or the physical facilities that are held by public or private companies. Manning and Roulac (1999) in a more elaborate definition include "industrial, office and/or retail space in use by businesses, where not only site selection, but also facility design and space utilisation decisions, inevitably impact the company's business operations and future cash flow in numerous ways beyond any investment return received from ownership of the real property". As noted by Louko (2005), corporate real estate refers to land and buildings included within a company's financial statements as a fixed asset which are not held for investment purposes.

In contrast, investment real estate includes real assets specifically held for the purpose of achieving a return from ownership (Manning & Roulac, 1999). It is real estate that generates returns from operations and value appreciation. The associated value from holding corporate, rather than investment, real estate is not from the investment return achieved but rather its strategic contribution to business operations (Oluwoye et al, 2001). The above definition of corporate real estate is assumed throughout this paper.

The importance of corporate real estate, as noted by literature, is summarised to include: its contribution as a significant portion of a firm's asset base; its large negative impact on a firm's operating costs; and its strategic value to a firm in both an operational and investment context (Zeckhauser and Silverman, 1983; Brounen & Eichholtz, 2004; Veale, 1989; Johnson and Keasler, 1993; and Bon and Luck,

1998). Noting this importance, effective management of corporate real estate assets should be a focus by corporations. Corporate real estate management sets out to ensure “the optimum use of real estate assets utilized by a corporation in pursuit of its primary business mission” (Brown, et al., 1993). Mole and Taylor (1992) define the main functions of corporate real estate management to include: real estate acquisitions and disposals, capital and operational budgeting, space management, maintenance and operations, and architectural and engineering services. Oluwoye et al (2001) support this definition by including: operational issues, organisation considerations, acquisition, leasing, disposal, outsourcing and finance.

Acquisition (or tenure) can be seen as the first stage of the corporate real estate management process. Depending on the company’s strategy, three main transactional options are available, including: buying, leasing or sale and leaseback (Manning, 1991). This decision is one of the most critical investment decisions a company must make (Schendler, 1997 cited in Gyhoot 2003), as the consideration of either form lead to various advantages and disadvantages.

Financial consideration influencing the lease versus buy decision may include: tax consequences; asset appreciation; effect on company value and share performance, working capital requirements, asset liquidity, access to capital markets, management costs and rent escalations (Sharp & Nguyen, 1995; Rodriguez et al, 1996; Lasfer & Levi, 1998; Benjamin et al, 1998; Ghyyoot, 2003; Brounen & Eichholtz, 2004; Lasfer, 2005; and Petison, 2007).

Theory suggests a variety of financing techniques may be employed in assessing the alternatives of these options. These techniques may include: calculating the net present value of leasing versus buying; comparing the undiscounted cash flows from leasing and buying; comparing the present value of the after tax cost of leasing and the present value of the after tax cost and benefits of owning; comparing the discounted cash flows of buying and leasing corporate real estate using the company’s appropriate discount rate (weighted cost of capital); calculating the IRR of the differential cash flow for leasing and owning and comparing that to the company’s

discount rate, (Redman and Tanner, 1991; Etter and Caldwell, 1995; Lasfer and Levis, 1998; and Barkham and Park, 2011).

However, the qualitative aspects of real estate make the decision more complex and intern making it difficult to reduce the decision to only financial considerations (Ghyoot, 2003). Intangible and strategic considerations influencing the lease versus buy decision may include: site characteristics, characteristics of the company, characteristics of the required real estate, industry characteristics and dynamics of the local market (Gale & Case, 1989; Benjamin et al., 1998; O'Mara, 1999; Ghyoot, 2003; Lasfer, 2005; Petison, 2007; and Barkham & Park, 2011).

Given the above, theory is mixed as to which is the optimal form of corporate real estate acquisition. However, what is clear, is that the decision criteria for the acquisition of corporate real estate includes both financial and non-financial considerations and therefore the decision can not only be based on financial analysis.

## **1.2. Problem Statement**

Literature presents mixed views on the advantages and disadvantages of leasing versus owning corporate real estate. Empirical studies show a shortfall in consensus on the most suitable financing technique in assessing corporate real estate acquisition strategy. Additionally, when following a discounting approach of valuation there is disagreement in literature on the appropriate discount rate to be used. Finally, limited research exists in investigating the sources of financing corporate real estate acquisition. To the best of the author's knowledge, Redman and Tanner (1991) is the only international study that has investigated the financing methods of corporate real estate acquisition.

Extrapolating the findings by Redman and Tanner (1991) to present day corporate real estate decision making may be ineffective given that their study was compiled over 24 years ago. The reason for this inefficiency may be due to global real estate and financial markets having matured in the last 24 years. Furthermore, successive

financial crises may have induced responses that could have implications for the types of financing options that would be available to corporations.

Within a South African context, the same gaps in research have been identified. Limited literature exists in investigating: the advantages and disadvantages of leasing versus owning corporate real estate; the financing techniques available in evaluating this tenure choice; and the financing methods of corporate real estate acquisition. A case study compiled by Gyhoot (2003) was the only body of literature identified that investigated the financial determinants influencing the lease versus buy decision of South African corporations.

Like Redman and Tanner (1991), the findings as reported by Gyhoot (2003) may not be supportive of the current local real estate environment. This may be due to the South African property market having matured over the past decade to the point where the size of the office market rivals that of Paris, Brussels and Moscow. Furthermore, Redman and Tanner's 1991 study focused on the international market and therefore inferring their results to South African corporate real estate decision making may be inaccurate

### **1.3. Importance of the Problem**

An effective business strategy must include a real estate strategy to guide decision makers in support of the overall objectives of the business. Adopting an effective real estate strategy is critical as literature suggests that corporate real estate is one of the largest concealed asset classes in the world contributing 25% - 40% of a firm's total asset base as well as being one of the largest investments of an organisation second to that of human capital (Zeckhauser and Silverman, 1983; Veale, 1989; Johnson and Keasler, 1993; Bon and Luck, 1998; and Brounen & Eichholtz, 2004).

Internationally, extensive research has been done investigating the corporate real estate management process. The purpose of such was to understand the factors influencing the corporate real estate decision making process. Addressing the problem statement, as noted above, was and still is critical for corporate real estate decision

making both locally and internationally. The benefit of which may provide a decisional framework when determining the form or real estate tenure to follow. This was achieved by identifying: the advantages and disadvantages of the leasing versus buying; suitable financial methods to evaluate this choice; and understating the sources of financing available for corporate real estate acquisition.

#### **1.4. Goals and Objectives**

The aim of this study was to fill the gaps in the existing body of knowledge of South African corporate real estate management. This was achieved by investigating the determinants influencing the lease versus buy decision, the methods and financing sources of corporate real estate acquisition, and the criteria used in deciding on the financing technique for corporate real estate. Furthermore, the study attempted to identify trends and relationship between company characteristics and corporate real estate acquisition strategy. However, due to insignificance of results such findings were not reportable.

The benefits noted may have included an enhanced understanding on the factors influencing the South African corporate real estate management process with regards to tenure. Furthermore, it may have assisted South African CRE decision makers with a decisional framework when investigating tenure choices available for corporate real estate acquisition.

### **1.5. Research Questions**

1. What are the acquisition methods and financing sources for corporate real estate?
2. What are the decision variables in leasing versus owning corporate real estate?
3. What is the criterion used in deciding on the financing technique for corporate real estate?
4. Are sale and leasebacks a widely used strategy and if so what are the decision variables used in evaluating this decision?
5. Which industry professionals are used in the lease and own decision of corporate real estate acquisition and are these professionals in-house or outsourced?
6. Do any relationships exist between financing methods, leasing characteristics, ownership characteristics, evaluation methodology for leasing versus buying and company characteristics?

### **1.6. Scope and Limitations**

The research has followed a similar methodology to that of (Redman and Tanner, 1991). However, it specifically focused on the South African corporate real estate environment. An anonymous survey was be distributed to over 500 South African companies within multiple business sectors while specifically excluding Real Estate Investment Trusts (REITS) and property investment companies. This was done to ensure that respondents where corporate real estate decision makers rather than exclusively real estate investment decision makers. The survey used was based on the survey compiled Redman and Tanner (1991); however amendments were made given developments in literature since publication of their findings.

Limitations associated with the methodology and population of respondents:

*Sample size bias:*

A major limitation of this study was the limited number of respondents. The questionnaire was distributed to over 500 South African corporate real estate decision makers. However, 23 questionnaires were returned fully completed (a response rate of 4.6%) and 4 were returned uncompleted. The consequence of such was lack of robustness in results which has limited the validity of the research. Furthermore, the small number of respondents has prevented the use of inferential statistics in reporting the findings. Finally, it is highly likely that the data is biased given the small population of respondents.

*Single-method approach:*

A single-method methodology was adopted within this investigation. Following such an approach, rather than a multi method, may have limited the possibility of gaining a greater understanding and additional perspectives from which the phenomena are studied (Pinsonneault & Kraemer, 1992).

*Representativeness bias:*

The intention was for South African corporate real estate decision makers to answer the survey. However, given the authors inability to control who actually responded the survey may not exclusively represent the views of corporate real estate decision makers. The effect of such results in representativeness bias which may limit the validity of the findings as representatives may not reflect the required professional discipline (Pinsonneault & Kraemer, 1992).

Furthermore, respondent's answers may include an element of personal opinion and therefore may not entirely reflect the views of the organisation for which they represent. Additionally, responses may be influenced by the strategic intent of the company for which they represent and therefore may not be a true reflection of all South African corporations. Finally, there is a possibility that some respondents may have intentionally misrepresented their answers.



## **1.7. Assumptions**

### *Importance of topic:*

The form of corporate real estate tenure, the determinants of the lease versus buy decision and the sources of financing corporate real estate acquisition is an integral aspect of a firm's real estate strategy. Furthermore, the decision to lease or own corporate real estate has strategic significance and is based on pre-defined motives.

### *Sample of the population:*

Given the low response rate, the sample of respondents may not be used to represent all South African corporate real estate decision makers.

## **1.8. Definition of Key Concepts**

### *Corporate Real Estate*

Corporate real estate is defined as "land and buildings owned by companies" Zeckhauser & Silverman (1983). Brown et al (1993) support this definition and include real estate that is leased or owned by a company to achieve its corporate objectives. Furthermore, corporate real estate is said to include real property or the physical facilities held by public or private companies (Oluwoye et al, 2001). Manning and Roulac (1999) elaborate on this by including "industrial, office and/or retail space in use by businesses, where not only site selection, but also facility design and space utilisation decisions, inevitably impact the company's business operations and future cash flow in numerous ways beyond any investment return received from ownership of the real property" (Manning & Roulac, 1999). As noted by Louko (2005) corporate real estate is land and buildings included within a company's financial statements as a fixed asset, not held for investment purposes. Adendorff and Nkado (1996), cited in Hwa (2003) noted that corporate real estate can be classified into two major types of real estate. Strategic property, which is real estate owned and controlled for operational purposes and long term business strategy. Core property is real estate that companies need to control for its existing/future operations and for their medium term business strategy.

### *Corporate Real Estate Management*

Corporate real estate management refers to the “optimum use of real estate assets utilized by a corporation in pursuit of its primary business mission” (Brown, et al., 1993). Bon and Luck (1998) further support this as they define it to include the “management of real estate by an organisation that incidentally holds, owns or leases real estate to support its corporate mission”.

### **1.9. Structure of the Rest of the Report**

Following chapter one above, this report comprises of: is a review of prior literature on the topics being investigated (chapter 2), the research design of this paper (chapter 3), results and discussion of the investigation (chapter 4), a conclusion, summary of findings and recommendations (chapter 5) and finally a bibliography and annexure

## CHAPTER 2

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### 2. Literature Review

#### 2.1. Introduction

The purpose of this literature review was to evaluate previous research on the topic, namely: the acquisition methods and financing sources for corporate real estate; the decision variables in leasing versus owning corporate real estate; the criterion used in deciding on the financing technique for corporate real estate acquisition; trends on the form of tenure adopted by corporations; and the relationships between financing methods, leasing characteristics, ownership characteristics, evaluation methodology for leasing versus buying and company characteristics. Furthermore, it set out to review the most prominent methodologies used in previous studies, weakness of these studies and possible areas for improvement.

#### 2.2. The importance of Corporate Real Estate

The importance of corporate real estate, as suggested by literature, includes *inter alia*: its contribution as a significant portion of a firm's asset base, its large negative impact on a firm's operating costs, and its strategic value to a firm in both an operational and investment context. In their seminal paper, Zeckhauser and Silverman (1983) noted that during the 1980's, 25% - 40% of a corporation's asset base was made of real estate holdings. Twenty years later, Brounen & Eichholtz (2004) supported this observation as they identified corporate real estate to be one of the largest concealed asset classes in the world. In further support, research on the level of corporate real estate ownership has ranged between 25% - 40% of total assets, as identified by Veale (1989); Johnson and Keasler (1993); and Bon and Luck (1998).

In regards to operating costs, Veale (1989) noted that 10% - 20% of firms operating costs was attributable to occupying corporate space. Weatherhead (1997) supports this by noting that the cost of corporate real estate may be the second or third largest operating cost for a company. Brounen & Eichholtz (2004) further observed that CRE

constituted as one of the largest investments of an organisation second to that of human capital.

The strategic value that corporate real estate provides a business is derived from its contribution to the company's competitive advantage (Roulac, 2001). In this regard, corporate real estate supports business in "creating and retaining customers, attracting and retaining outstanding people, contributing to effective business processes to optimize productivity, promoting enterprise values and culture, stimulating innovation and learning, enabling core competency and increasing shareholder wealth" (Roulac, 2001). Lindholm and Levainen (2006) further noted that the physical workspace is important in retaining and attracting workers, and improving employee performance and satisfaction. They further noted that the success of manufacturers and retailers is a direct driver of site (CRE) selection (Lindholm & Levainen, 2006).

In their seminal paper, Modigliani and Miller (1958) suggest that the goal of a firm is to maximize profit and market value. Maximizing market value (or firm value) is achieved through maximizing the value of equity (shareholder value) and all other financial claims on the company (Jensen, 2001). This value maximization theory has been embedded in conventional economic and financial theory for over 200 years (Jensen, 2001). In order to achieve this goal of wealth maximization, a company must first define the objectives of its business activities and then develop strategies to accomplish these objectives. As part and parcel of this "business strategy" so to must there be a real estate strategy to guide real estate decisions in support of the overall objectives of the business - see Figure 2.1 below (Lindholm and Levainen, 2001).

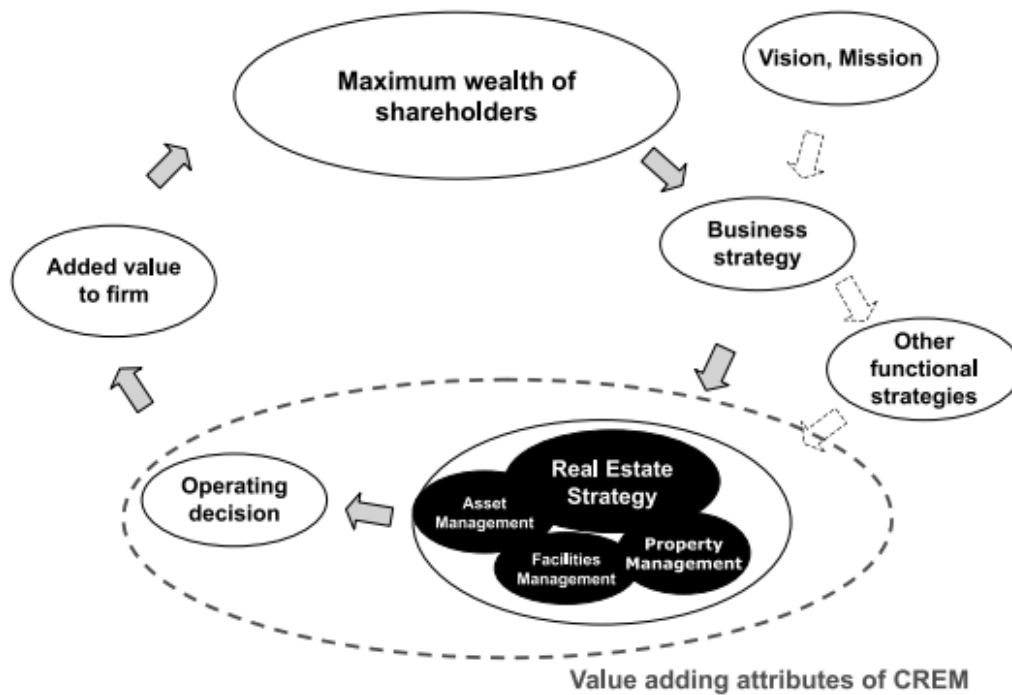


Figure 2.1 Linking Real Estate Strategies to Corporate Strategy (Lindholm, et al., 2006)

Real estate is an important asset supporting business by advancing the overall business performance and creating added value. Rodriguez and Sirmans (1996) noted that shareholders wealth maximization requires efficient management of corporate real estate assets. Hwa (2003) supports this through his empirical research which shows that companies can reduce systematic risk and increase corporate value by changing their absolute real estate holdings through real estate disposals, acquisitions, spin-offs or joint ventures. These activities and decisions form part of the corporate real estate management function.

### **2.3. Corporate Real Estate Acquisition**

As noted above, acquisition has been noted as the first stage of the corporate real estate management process with three main transactional decisions available for decision makers including: leasing, buying or a combination of both, Manning, (1991). This decision is one of the most critical investment decisions a company must make as the decision to lease or buy forms an integral part of a firm's financing choice (Schendler, 1997 cited in Gyhoo 2003).

Where a company buys their corporate real estate, they hold all risks and rewards of ownership of the asset and it forms part of the company's statement of financial position (Association of Chartered Certified Accountants, 2015). Prior research suggests that the sources of financing corporate real estate acquisition includes: mortgages secured by the asset, retained earnings, cash flow from operations, mortgage bonds, common stock, preferred stock, unsecured bonds, and commercial paper (Redman & Tanner, 1991). However, literature suggests that the primary sources of corporate real estate funding is through internally generated cash rather than external sources.

Leasing has also been noted as a favourable strategy for corporate real estate acquisition. Lease structures available to a company include some form of long term leasing including financial (capital) leases and operating leases, as well as sale and leaseback. Financial and operating leases differ in their accounting, legal and tax treatments, and therefore the type of lease a company will choose depends on their strategic and governance objectives (Lasfer & Levis, 1998). However, literature suggests that real estate leases are traditionally operating leases given the added benefit of providing off-balance sheet financing from the tenant's perspective (Ghyoot 2003 cited in Nourse, 1990).

A sale and leaseback strategy includes two simultaneous transactions, namely sale of a property and a simultaneous contract to lease it back (Louko, 2005). Traditionally, the strategy is used for large and high value assets such as real estate. The

consequence of this transaction is that the seller loses the title of ownership over the asset and is subject to periodic lease payments for its use.

The consequence of above options for corporate real estate acquisition results in both financial and non-financial considerations. The effect of these considerations are reviewed under the lease versus buy decision.

#### **2.4. The Lease versus Buy Decision**

Redman and Tanner (1991) suggest that 80% of their surveyed companies base the lease versus buy decision on financial analysis, and the majority of decision makers calculate the net effect of leasing, followed by comparing the undiscounted cash flows for leasing and buying. Barkham and Park (2011) arrive at the same conclusion as they note the decision generally begins with comparing the discounted cash flows of buying and leasing corporate real estate using the company's discount rate (cost of capital). However, as noted by Gyhoo (2003), the lease versus buy decision extends beyond the balance sheet as there are multiple intangible and strategic attributes of the real estate asset which influence such a decision.

### 2.4.1. Financial Considerations

Table 2.1 below summarised the financial (or economic) considerations influencing the decision to lease or buy corporate real estate.

*Table 2.1 Financial (Economic) Reasons to Lease or Own Corporate Real Estate (Ali, et al., 2008)*

| ECONOMIC REASONS TO OWN                                   | ECONOMIC REASONS TO LEASE                                      |
|-----------------------------------------------------------|----------------------------------------------------------------|
| 1. Avoidance of rent rises                                | Demands less capital investment                                |
| 2. Avoidance of long term commitments to lease conditions | Greater liquidity                                              |
| 3. Control over management costs                          | Greater flexibility in terms of expensive or cheaper locations |
| 4. Protection of expensive investment in plant            |                                                                |
| 5. Potential of capital gain                              |                                                                |
| 6. Potential for long term development opportunities      |                                                                |
| 7. Contribution to joint venture programs                 |                                                                |
| 8. Capital allowances                                     |                                                                |

#### *Effect on company value / share performance*

Rodriguez and Sirmans (1996) suggested that corporate real estate decisions have a significant effect on firm's value. However, a study conducted by Seiler et al (2001) noted that there were no diversification benefits from holding real assets and no



significant relationship was found between the percentage of total real estate holdings and excess returns. Brounen and Eichholtz (2004) identified a negative relationship between real estate ownership and risk which is significant for a wide range of industries. Further, they noted a negative relationship between real estate ownership and return which is significant for only high yielding industries (business services and communications. Lasfer (2005) noted that shareholder returns are maximised at an optimal level of leasing of 65%. He suggested that the market valued the benefits of leasing real estate as companies with higher leasing propensities reported higher returns to shareholders. However, the market also values the cost of leasing (i.e. loss of collateral) (Lasfer, 2005).

### *Taxes*

The opportunity to avoid or reduce tax has historically been emphasised as one of the main reasons for the existence of the leasing market (Benjamine, et al., 1998). Acquiring capital assets entitles a company to claim a tax benefit through a depreciation allowance (Lasfer, 2005). However, if the company is not in a tax paying position (i.e. making a loss) then the associated depreciation tax allowances is lost resulting in leasing being more advantageous.

However, opinions on the tax advantages of leasing is mixed. Sharp and Nguyen (1995) observed that firms with lower tax rates enjoyed a lower tax allowance and this increased their tendency to lease assets. Additionally, as noted by Lasfer (2005), there was a greater tendency amongst US firms to lease assets the greater the tax loss experienced. Graham et al (1998), identified a negative relationship between tax rates and operating leases and a positive relationship between tax rates and debt levels. These findings suggested that firms with lower tax rates have lower debt levels and higher leasing tendencies as compared to firms with high tax rates. However, Meharn et al (1999) through a regression analysis on the impact of leasing on taxes of 134 U.S. companies, identified the coefficient of the before financing marginal tax variable to be significant only with capitalised leases and insignificant for operating leases. Lasfer and Levies (1998) suggested that the decision to lease is driven by growth and not due to tax benefits.

### *Access to credit markets*

Access to credit, whether it be debt or equity, has been cited as a main attributing factor influencing the lease versus buy decision of corporate real estate acquisition. As highlighted by Sharp and Nguyen (1995), leasing is preferred amongst firms where capital costs are high. Ghyoot (2003) argued that firms generally have access to cheaper sources of credit financing (e.g. compared to developers) and therefore ownership may result in a lower opportunity cost, as “by renting the same property, they are subject to the costs of the owner, who may have higher interest charges”. However, where a company has taken on debt to purchase real estate the ability to take on additional debt may be problematic (LeaseAfrica, 2013).

### *Capital injection into core business*

A firm’s choice to lease corporate real estate or follow a sale and leaseback transaction has the benefit of freeing up capital to support a company’s core business activities, enhance growth prospects or provide greater liquidity in times of distress (Ghyoot, 2003)

### *Efficiency*

Research suggested that where a firm owns corporate real estate an opportunity for sub-optimal space use exists. The reason for this may be due to owner occupiers not considering corporate real estate space use to be as costly compared to a firm burdened with lease payments. Bootle (2002), as cited by Lasfer (2005) emphasised this point as he identified a 12% saving on space per employee when a company leased their corporate real estate.

### *Accounting and financial implications*

Leasing corporate real estate requires the lessee to make periodic lease payments which has a negative effect on the company’s profit and loss account. Ownership does not require lease payments and generally the only expenses arising are for repairs and maintenance (Lasfer, 2005). However, corporate real estate ownership requires large capital commitments and given that real estate is less liquid a company may have less cash flexibility (Ghyoot, 2003).

Ownership also allows for asset appreciation. However market risk affects the residual value of property. Additionally, appreciating assets carried at book values may attract corporate raiders over time.

Where debt funding has been used to acquire the real estate asset the companies leverage ratios will consequently increase. With an increase in leverage ratios the company's ability to raise further debt may be adversely affected (LeaseAfrica, 2013). Compared to ownership, leases have no impact on the company's debt raising ability.

#### **2.4.2. Non-Financial (Strategic) Considerations**

As noted earlier, real estate has intangible aspects and attributes of importance and therefore makes the exclusive use of financial considerations in the lease versus buy decision too narrow a basis for decision making. In the light of this, Gale and Case (1989) identified a number of non-financial variables influencing this decision such as: industry classification; company size and stage of growth; and industry growth (Gale & Case, 1989). In addition, Barkham and Park (2011) found that the dynamics of the local market, characteristics of the company, and characteristics of the required real estate influence the decision.

Table 2.2 below summarises the non-financial/strategic considerations to lease or own corporate real estate.

*Table 2.2 Non-financial (strategic) Reasons to Lease or Own Corporate Real Estate (Ali, et al., 2008)*

| STRATEGIC REASONS TO OWN                                      | STRATEGIC REASONS TO LEASE                                   |
|---------------------------------------------------------------|--------------------------------------------------------------|
| 1. Security                                                   | Freedom to move if expansion or contraction is required      |
| 2. Unique location                                            | Less risk of being tied to an obsolete building              |
| 3. Transport links                                            | Ability to test site locality without a long term commitment |
| 4. Unique building design                                     | Flexibility of size of space when letting                    |
| 5. Safeguarding location for plant that is unable to be moved | Availability of additional services                          |
| 6. Space for expansion                                        |                                                              |
| 7. Freedom of choice over property management                 |                                                              |
| 8. Ability to establish community links in aid of business    |                                                              |
| 9. Limited suitable real estate to be rented                  |                                                              |

### *Site Characteristics*

In terms of location, Barkham and Park (2011) noted that the probability of ownership is greater where the site is in closer proximity to the company's customer base, skilled labour/strategic human resources and where superior visibility and security is required. However, proximity to raw materials, general labour, and public transport has no effect on the probability of ownership (Barkham & Park, 2011)

### *Characteristics of the Company*

Lasfer (2005) suggested that company size and growth prospects influences the firm's lease versus own decision. He noted that companies choosing to lease their real estate are more likely to be large and have high growth prospects. However, Barkham and Park (2011) noted that the size of a company (measured by number of employees) has no effect on the probability of ownership, but the larger the required operational site the greater the tendency for ownership. This is further supported by Gyhoot (2003) as he suggested that leasing may be optimal where the operational space required is small.

Where a company is well-established, operates in a predictable market space, offers products/services that are non-cyclical in nature, and has stable demand generally has a greater tendency to own their corporate real estate (Ghyoot, 2003). Conversely, where a company has unpredictable demand and operates in a highly volatile environment the decision to lease may be favoured (Ghyoot, 2003). In the event of a company needing continuous maintenance and inspections, firms may favour corporate real estate ownership. Such a decision may be attributable to the lack of trust or uncertainty in the capacity of the landlord when leasing (Ghyoot, 2003).

### *Characteristics of the required real estate*

According to O'Mara (1999), ownership of CRE should take preference where the design/structure of the property is specialised or customised. Conversely, where the real estate is supported by generic design preference emphasis should be placed on leasing.

The expected length of use of the asset will influence the lease versus buy decision. Where corporate real estate decision makers are expected to use the space on a long term basis ownership is the preferred acquisition option. This is may be due to requirement of companies significantly investing in infrastructure and capital items (Barkham & Park, 2011). O'Mara (1999) also suggested that the use period of the required property may also influence the lease versus buy decision. He suggests that if the space is needed immediately then leasing may be the only available option.

### *Industry characteristics*

In terms of sector of business operation, Lasfer (2005) suggested that a trend in favour of leasing is strongest amongst Information Technology companies (hardware, software and services) and weakest amongst the textile, consumer goods, and automobile and parts sectors. Benjamin et al (1998) noted that in the United States of America leased retail space exceeds that of owner occupied retail space. This is further supported by Gyhoot (2003) who suggested that small manufacturing companies, retailers and services providers may lease due to: conservation of cash flow requirements; mobility requirements and budget or creditworthiness restrictions. Brounen and Eichholtz (2004), through their international review of corporate real estate ownership, noted that real estate ownership is greatest in heavy industry and lowest amongst the financial services sector. Redman and Tanner (1991) suggested that manufacturing, retail, financial services and telecommunications companies are most likely to lease compared to the development companies. However, as noted by Barkham and Park (2011) sector specific effects on ownership are insignificant.

Furthermore, as noted above, research suggested a growing trend of sale and leasebacks. Louko (2005) identified that Finish companies benefiting the most from sale and leaseback are those with significant retail and office holdings. Redman and Tanner (1991) noted that the use of sale and leasebacks is primarily amongst companies within the retail industry.

### *Dynamics of the local market*

Petison (2007) noted that with ownership the legal owner assumes all property related risk with the asset but not these risks are not assumed when leasing. Similarly, during periods of market boom, all upside from owning the asset will be for the benefit of the owner.

### *Outsourcing of property management responsibilities*

Where a company owns their corporate real estate, they assume the management responsibilities of this space. The benefit of following a sale and leaseback strategy therefore arises from the effective outsourcing of these management responsibilities whilst getting a cash injection from the sale (Petison, 2007). As explained by Benjamin et al (1998), firms in the business of commercial real estate have superior competencies in managing such property. They argue that such competencies may arise from economies of scale, better access to credit markets, possible tax savings, and their enhanced knowledge of the real estate market. However, the consequence of this may be inflated rental payments due to the specialised knowledge of real estate asset management (Benjamin, et al., 1998).

## **2.5. The Methods Used to Evaluate the Lease or Buy Decision**

The principal focus of financial analysis in the lease versus buy decision is to choose the option that provides the needed space at the least cost (Etter & Caldwell, 1995). Redman and Tanner (1991) note that 80% of their surveyed companies base the lease versus buy decision on financial analysis. However, Gyhoot (2003) warns that cash flow analyses are based on estimates and future projections and therefore should be used to aid the decision making process and not be used as an exclusive tool.

Lasfer and Levis (1998) suggest that the economic benefits of leasing can be derived from a firm's choice of leasing relative to borrowing and acquiring the asset. Redman and Tanner (1991) note that the majority of decision makers calculate the net present value of leasing versus buying, followed by comparing the undiscounted cash flows from leasing and buying. Etter and Caldwell (1995) suggest that financial analysis should be done by computing and comparing the present value of the after tax cost of

leasing and the present value of the after tax cost and benefits of owning. Similarly, Barkham and Park (2011) note that the decision to lease or buy begins by comparing the discounted cash flows of buying and leasing corporate real estate using the company's appropriate discount rate (weighted cost of capital).

Another method of analysis is by using the internal rate of return (IRR) method which calculates the IRR of the differential cash flow for leasing and owning and comparing that to the company's discount rate (Price, 2003). Research further suggest that other methods of financial analysis used include accounting criteria such as return on asset (ROA) and return on investment (ROI), standard capital budgeting criteria and various numerical benchmarks (Redman & Tanner, 1991).

The present value is calculated by using the company's required rate of return or cost of capital. The most common discount rates used in calculation is the weighted average cost of capital, followed by the after tax cost of debt (Redman & Tanner, 1991). However, within corporate finance examples, the discount rate used is the after tax cost of debt but such examples are based on the leasing of equipment rather than real estate.

## **2.6. Financing Strategies and Sources of Funding**

Noted above, corporate real estate ownership falls within the range of 25 – 40% of total assets. This is achieved by adopting outright buy strategy such that the asset forms part of the company's balance sheet. In contrast to ownership, firms have the choice to rent their commercial space which is in the form of off balance sheet financing (Nourse 1990 cited in Ghyoot, 2003). Alternatively, firms finance the use of corporate real estate through joint ventures or mergers (Rodriguez & Sirmans, 1996).

Where a company owns their corporate real estate, they hold all risks and rewards of ownership of the asset. Ownership also results in the real estate asset forming part of the company's statement of financial position (Association of Chartered Certified Accountants, 2015). Prior research suggests that some of the available sources of financing an outright buy of corporate real estate includes: mortgages secured by the



asset, retained earnings, cash flow from operations, mortgage bonds, common stock, preferred stock, unsecured bonds, and commercial paper. However, the findings of Redman and Tanner (1991) suggested that the primary sources of corporate real estate funding is through internally generated cash rather than external sources. However, they do argue that 42% of firms reviewed within their study used mortgages secured by the asset to fund their corporate real estate acquisition. From an industry perspective, the use of mortgages as a financing source is prevalent within the development industry whilst companies within the manufacturing sector were more likely to use retained earnings to fund real estate acquisitions (Redman & Tanner, 1991).

Lease structures available to a company include financial (capital) leases, operating leases, and sale and leaseback structure. Each lease form differs in its accounting, legal and tax treatments and therefore the type of lease a company will choose depends on their strategic and governance objectives (Lasfer & Levis, 1998). Simplistically, an agreement of lease is a contract between two parties. The lessor is the legal owner of the asset, and in return for rental payments the lessee has the right to use the asset (Association of Chartered Certified Accountants, 2015). The three lease structure as mentioned as discussed in more detail below.

Real estate leases are traditionally operating leases, meaning that they provide off-balance sheet financing from the tenant's perspective (Nourse 1990, cited in Ghyoot 2003). The lessor holds all risks and rewards of ownership of the asset and the asset does not form part of the leasing company's statement of financial position (Association of Chartered Certified Accountants, 2015).

Where an operating lease is in place, the lessee pays a rental which is treated as an operating expense financed through the statement of profit or loss over the term of the lease (Association of Chartered Certified Accountants, 2015). Nourse and Roulac (1993) note that lease arrangements may include a variety of structures including: periodic monthly payments, inflation indexed payments, escalating payments, back end loaded payments and front end loaded payments.

In contrast, a capital lease may be defined as a lease agreement between the lessor and the lessee, where the lessor finances the lease but all other all the benefits and risks of ownership are transferred to the lessee (Lee, 2003). Capital leases are considered similar to a sale of the item by the lessor and purchase by the lessee (Business Dictionary , 2015). The item being leased will be recorded on the lessee's balance sheet as an asset and corresponding liability (Investopedia , 2015). The lessee may only record the interest portion of the lease payment as an expense as compared to the entire lease payment being recorded as an expense in the case of a normal lease. For a lease to be deemed capital in nature the lease must allow for one or more of the following criteria: ownership of the asset must be transferred to the lessee by the end of the lease term, a purchase option must exist at a significantly lower price than the market value, the lease term must more than or equal to 75% of the estimated economic life of the asset and the present value of the minimum lease payments must be greater than or equal to 90% of the asset's fair market value at inception of the lease agreement (Accounting Explained , 2013).

Sale and leaseback strategy includes two simultaneous transactions, namely sale of a property and a simultaneous contract to lease it back (Louko, 2005). Traditionally, the strategy is used for large, high value assets such as real estate. The consequence of this transaction is that the seller loses the title of ownership over the asset and will be subject to periodic lease payments for its use. However the seller will receive the current market value from its disposal and the associated benefit of freeing up capital for alternative investment. The new owner (the lessor) will receives ownership over the asset, the associated depreciation allowances and tax benefits, property management responsibilities and related residual risk. (InvestorWords, 2012)

## **2.7. Transactional Trends in Financing Corporate Real Estate Acquisition**

Research reviewed below suggests that internationally, there is a strong and growing trend in favour of corporate real estate leasing as compared to owning. This may be attributable to the fact that leasing is an alternative to buying a property when the purchasing the real estate asset is impossible (Redman & Tanner, 1991). Brounen and Eichholtz (2004), through their international review of corporate real estate

ownership based on 9 countries within 20 industries, showed that there has been a steady decrease in corporate real estate ownership over the period 1992 – 2000. Through a survey conducted amongst UK corporate real estate decision makers, Gibson (2000) identified a desire to move towards short term leasing structures and reduce freehold and long term leased office space. Additionally, over the period 1989 - 2002, a third of the UK companies observed by Lasfer (2005) reported only leased property. Whilst, on average, 4.5% of total observed companies exclusively owned freehold property up until 2000 and no company exclusively held freehold property during 2000 - 2002 (Lasfer, 2005).

Furthermore, Seiler et al. (2001) in their research covering 80 US companies over the periods 1985-1994, noted a decrease in the average property plant and equipment (PPE) to total corporate assets ratio from 31% to 27%, respectively. Similarly, Bon and Luck (2002) identified within their sample of companies that the share of corporate real estate to total assets had decreased from 34% in 1998 to 22% in 2002. Over the period 2002 – 2005 Louko (2005) showed a decrease in real estate assets to total assets from his sample of 30 companies listed on the HEX. The reduction in these ratios indicates a decrease in corporate real estate ownership and that firms have adopted to redirect capital away from non-core business functions, such as real estate, and rather utilise the capital in alternative more efficient uses.

Research suggests a growing trend of corporate real estate sale and leaseback in Europe, the US, and other developed property markets. In support of this, Louko (2005) noted that Finland has experienced an increase in sale and leaseback strategies over the period 2002 – 2003 which is likely to continue into the future. Additionally, Gyhoot (2003) noted that this trend of sale and leaseback is being experienced in South Africa with the likes of Telkom and MGX Holdings planning on following a sale and leaseback (Ghyoot, 2003). This trend of outsourcing has been adopted by corporations resulting from a number of associated financial and qualitative advantages. The main advantage cited for following a sale and leaseback strategy was the availability of funds for working capital requirements (Redman & Tanner, 1991). Golan (1998) supports this as he noted that investing large amount of funds into assets that are not a core function of a company's business is sub optimal

given a company's desire to maximise value, such as Return on Assets and Economic Value added. Petison (2007) identifies that the primary driver of such a trend is due to the fact that corporations who are not in the business of real estate holdings chose to divest from those operations that are not core to their business functions. Research suggests other benefits which include, inter alia: unlocking of finance for operational expansion, unlocking of funds for working capital, lower debt financing requirements and the associated takes advantages from leasing.

## **2.8. Conclusion**

The financial issue of corporate real estate has several dimensions, including inter alia; ownership methods, relationship to capital and competition with other organisational asset types (Oluwoye, et al., 2001). Acquisition can be seen as the first stage of the corporate real estate management process and depending on the company's strategy corporate real estate decision makers have the choice to buy, lease or follow a sale and leaseback strategy.

Redman and Tanner (1991) noted that the primary funding sources of corporate real estate is through internally generated cash rather than external sources such as sale of securities. However, 42% of firms reviewed did use mortgagees secured by the real property to fund its acquisition. Additionally, real estate may be acquired through merger activities and joint ventures (Rodriguez & Sirmans, 1996). Alternatively, firms can finance the use of corporate real estate using leases or a sales and leaseback strategy.

The decision criteria for the acquisition of corporate real estate include both financial and non-financial determinants as a number of numbers of financial and non-financial advantages and disadvantages for leasing or owning corporate real estate have been noted. However, research suggests that financial analysis is dominant in influencing the lease versus buy decision The view as to which is the optimal form of corporate real estate space use is not straight forward given the conflicting advantages and disadvantages in the decision.

In a South African context, Gyhoo (2003) is the only source of research addressing corporate real estate management issues in South Africa. One issue that is not yet understood is the acquisition functions and the financing considerations for South African corporate real estate.

Given the above gaps, this paper will focus on identifying the factors that determine the leasing versus buying of corporate real estate within South Africa, the acquisition methods and financing sources used by South African companies to acquire their corporate real estate and the criteria used by South African corporate real estate decision makers to determine the choice of financing technique. Furthermore, it will assist in identifying any South African trends or relationship between company characteristics and corporate real estate acquisition strategy.

In so doing the above, academics and professionals within this subject field will have an enhanced understanding on the basis that leading South African companies make their corporate real estate acquisition decisions. South African companies will therefore have a decisional framework when making their own corporate real estate decisions.

### 3. Research Design

#### 3.1. Introduction

This chapter sets out to discuss methodologies employed in previous studies, and the research design, approach, methodology, data collection procedure, data analysis, sample size requirements and ethical considerations of this report.

The research followed a similar methodology to that of Redman and Tanner (1991) in their study “The Financing of Corporate Real Estate: A Survey”. However, the research specifically focused on the South African corporate real estate environment.

#### 3.2. Methodologies in Previous Studies

##### 3.2.1. Interviews

Gale and Case (1989), in their seminal paper “*A study of Corporate Real Estate Resource Management*”, examined the state of corporate real estate resource management practices in the 80’s. The authors collected their data through personal interviews with real estate decision makers of 30 U.S. companies which represented 15 industries. The authors analysed their data through statistical analyses. Their method of data collection and analyses had various strengths and weaknesses. Personal interview allowed the authors to collect first hand data into the corporate real estate management process. Specifically, it allowed the authors to gather a significant amount of information and explore specialised circumstances of the each organisation (Gale & Case, 1989). However, as only 30 companies were investigated which represented only 15 industries and therefore using statistical inference to generalize their results on the entire population may be inaccurate. Following a similar methodology to Gale and Case (1989) may not be appropriate given the limitation in sample size and therefore poor inferencing abilities. Further, their study focuses on

U.S. corporations whereas the topic to be investigated will focus on the South African corporate real estate environment.

Similar to Gale and Case (1989), Petison (2007) adopted a methodology of open ended interviews for his investigation on the lease versus own decision of corporate real estate in Ghana. Interviews were conducted with three Ghanaian leasing company executives, leading financial institutions officials, some real estate managers and private real estate practitioners (Petison, 2007). The author further collected and analysed data through the review of existing literature on the lease versus own decision of corporate real estate (Petison, 2007). One major limitation of the methodology employed by Petison (2007) was the limited sample size. However, this was due to the unwillingness of individuals to engage in interviews as some feared victimisation and therefore were hesitant to answer questions of relevance Petison (2007). In consequence the author's findings may be lacking in reliability and validity. This is due to the limited sample size of investigation and due to leasing companies rather than CRE decision makers forming part of the population or respondents. Furthermore, inferring the findings to the population as a whole may be inaccurate due to sample size bias. However, it does provide some insight into the lease versus owning decision amongst Ghanaian corporates despite leasing not being a widespread acquisition strategy employed within Ghana. The methodology employed by Petison (2007) will not be suitable to the topic at hand primarily due to the poor sample used within his investigation and its focus on Ghanaian and international factors influencing corporate real estate acquisition. Furthermore, the study at hand will not report its findings based on the review of literature on the topic.

### **3.2.2. Surveys**

Redman and Tanner (1991) investigated the financing of corporate real estate by evaluating the sources of funding used to acquire corporate real estate, the use and evaluation of leases, the use and evaluation of sale and leasebacks and the use of tax deferred exchanges of real property. The authors collected their data through a questionnaire based on 23 questions and the data was analysed through statistical inference. Their questionnaire was distributed to a sample of 1,200 firms who were

members of the International Association of Corporate Real Estate Executives (NACORE) and the International Development Research Council (IDRC). The sample of respondents selected represented multiple industries within various geographies. NACOR includes companies representing the telecommunications, financial services, banking, retail, development and wholesale industries. IDRC represents companies from the manufacturing industries. Of the 1,200 distributed questioners the authors had 218 responses representing a response rate of 18.2% (Redman & Tanner, 1991).

Some of the advantages of their methodology was the ability to distribute the survey to a large sample of corporate real estate decision makers representing a variety of industries. The robust sample of respondents ensured greater validity and reliability when making statistical inference on the population. One major disadvantage of their methodology was that the authors did not control their respondents by geography and therefore the audience is unsure to which country/region their findings apply. Furthermore, questioners included a predefined list of answers to choose from and therefore limit respondent's options/answers as compared to interviews.

Similar to Redman and Tanner (1991), Barkham and Park (2011) in their study "*Lease versus buy decision for corporate real estate in the UK*" collected their data through a survey. Specifically, the dataset used was based on a 1998 survey of 2,248 property occupiers in the United Kingdom (Barkham & Park, 2011). Included in the survey were questions relating to company specific characteristics including sector, size and ownership preferences, and site specific characteristics including size, location and physical site attributes. The authors analysed their data via regression analyses. Regression analyses is a statistical method of data analyses with the goal of predicting the outcome of a dependent variable using various independent variables. Variables can be entered into the model in the order specified by the researcher or logistic regression can test the fit of the model after each coefficient is added or deleted (Barkham & Park, 2011). Their regression model was based on the theory that the likelihood of owner-occupation in the British industrial estates is a function of various determinants of the lease versus buy decision (Barkham & Park, 2011). The strengths of the study was the large sample of respondents and the authors ability to identify casual relationships between owner occupation and those factors influencing the lease



versus buy decision. However, one major weakness of the study was due the data being based on a survey conducted in 1998 and therefore factors influencing the decision to own or lease may have changed or advanced from the date of the survey to date of publication. Furthermore, the purpose of the survey used was not to gather information on corporate real estate ownership but rather various aspects of property management (Barkham & Park, 2011). In addition, the sample used within the investigation were companies occupying industrial estate. In the UK industrial estates have no restriction in terms of business activity that may take place on the property. However, the issue at hand is that there is no guarantee that the results represent all industries, especially office, and therefore the issue of validity arises when making inferences onto the population.

The survey methodology employed by Redman and Tanner (1991) and Brakham and Park (2011) are suitable for the topic at hand. However, the sample to be selected within this study must ensure that it represents the South African corporate real estate population and that the number of respondents are sufficient to ensure reliability of finding when making statistical inferences on the population. Furthermore, caution must be made when distributing the questionnaire to ensure that respondents are in fact corporate real estate decision makers rather than investment real estate decision makers.

### **3.2.3. Case Studies and Financial Modelling**

Gyhoot (2003), in his conference report "*The Lease V Buy Decision in Real Estate: Theory and Practice*" followed a literature review, case study and financial modelling methodology to investigate the lease versus buy decision of corporate real estate within a South African context. The literature review investigated the financial and non-financial determinants influencing the lease versus buy decision from an international perspective. The case study was conducted on a South African state subsidised university hostel which was analysed by running financial models to evaluate the benefit of purchasing versus leasing the hostel. The advantages of the methodology employed was that the case study provided insight into the analytical process followed in investigating the advantage of leasing versus owning from financial perspective.

Further, the authors study was the first study to investigate the lease versus buy decision of real estate within South African. Finally, a case study provides piratical insight into the factors influencing the decision to leaser versus buy. However, the disadvantages of the methodology employed is that the case study only analysed the financial considerations in the lease versus buy decisions amongst South African corporates. It lacked robustness as only one company was investigated and it did not investigate the non-financial determinants influencing the lease versus buy decision of South African corporates. These determinants were assumed from international studies. The data and methodology employed would not be suitable as the sole methodology for the topic to be investigated given the limited sample size used ability to generalise ones findings on the population. A case study approach may provide a supportive element in the research to be conducted.

### **3.2.4. Financial Data Analyses**

Lasfer (2005) set out to investigation the costs and benefits of leasing as opposed to owning of corporate real estate and the effect of leasing corporate real estate space on shareholder returns. Data was collected through he analyses of companies share price performance and financial statements. 2,343 companies listed on the London Stock Exchange over the period 1989-2002 and 17,862 pooled time series and cross-sectional observations were recorded and used within his investigation.

His investigation centred around the following five hypotheses which were tested using univariate and multivariate analysis: tax savings is a driver of leasing, leasing is a substitute for debt financing, the agency conflict can be resolved through leasing, leasing is a means of achieving company efficiency, and the market value of companies is greater where companies lease as opposed to own their CRE (Lasfer, 2005). Through univariate analysis the author compares the financial characteristics of companies that fully lease their space compared to those who only have freehold property. He the runs regression analyses examining the relationship between leasing propensity and a variety of control variables, including financial characteristics, size and industry factors.

### **3.3. Research Methodology**

The topic investigated assumed descriptive and explanatory research in nature. It is research in description because it ascertained attitudes and opinions occurring in the population and the questions asked did not necessarily test theory but rather ascertained fact (Pinsonneault & Kraemer, 1992). However, it is also explanatory research as it identified casual relationships between variables.

The methodology employed by previous studies within this field has mostly been quantitative through the use of surveys and case studies. However, some research has been done qualitatively through the use of interviews and review of literature. A major advantage of quantitative research is that it ensure objectivity by the researcher as the researcher is capable of studying the topic without influencing it (Sale, et al., 2002). Data collection methods are generally convenient and quick as compared qualitative methods (Johnson & Onwuegbuzie, 2004). It further allows for the use of explanatory models which can account for phenomena occurring in similar settings (Libarkin, 2002). However, it does not offer any explanation as to why these relationships exist and the modelling of results can be misleading as it may not provide a true reflection of the real world (Libarkin, 2002). Qualitative research on the other hand is rich in details, and interpretations through this methodology are tied directly to the data source (Johnson & Onwuegbuzie, 2004). However, qualitative research is strongly dependent upon the researcher conducting the study and its validity and reliability is based on the researcher's interpretations of the study (Libarkin, 2002). Furthermore, qualitative findings may not provide any correlation between cause and effect on a broad scale (Johnson & Onwuegbuzie, 2004). The pros and cons for each methodology is apparent and a strong argument exists for using both methodologies within a single study, a mixed method approach. Mixed method approach may allow for both the quantitative and qualitative research strengths. However such approach is difficult, time consuming, expensive and the researcher must understand how to mix them appropriately (Johnson & Onwuegbuzie, 2004)

Despite the above arguments, this study is modelled on the investigation done by Redman and Tanner and therefore a quantitative methodology has been employed.

The data collection instrument was an online survey and the survey produced quantitative descriptions of certain aspects of the population allowing us to examine relationships between variables. Furthermore, the data was collected at one point in time and therefore was cross sectional in design rather than longitudinal. The consequence of this is that we are able to generalize the findings from the sample to the population but are not be able to determine causal inferences over time.

### **3.4. Survey Research and Data Collection Instrument**

Survey research is a data collection technique that involves the collection of information from a sample of respondents through responses to questions (Bickman & Rog, 2009). Surveys are generally used for explanatory and descriptive research. It allows collection of quantitative data which can be analysed using inferential or descriptive statistics and it allows for identification of relationships between variables (Saunders, et al., 2012). Pinsonnault and Kraemer (1992) noted that this method of analysis is suitable when questions to be answered are “what and how”.

The major advantages of surveys is its versatility as it may be used to investigate multiple topics, its efficiency as multiple variables can be measured with minimal effect on time and cost and its generalizability as it lends itself to probability sampling from large populations (Bickman & Rog, 2009). However, the primary limitation of survey research is its inability to provide detailed information on the underlying meaning of the data (Guy, 1994). Inflexibility of surveys is another weakness as once a survey has been distributed discoveries made post distribution cannot be added to the questionnaire (Guy, 1994). Other weaknesses associated with survey research is the risks of a low response rate, respondents not answering selected items and lengthy data analyses process.

### **3.5. Data Collection Procedure**

The data collection instrument was a questionnaire consisting of 32 questions concerning the financing, leasing and owning of corporate real estate. As noted above, the questionnaire used within this study was based on the questionnaire drafted by Redman and Tanner (1991). However, since drafting of their survey (24 years ago)

financial and real estate markets have matured and successive financial crises have induced responses that could have implications for the types of financing options available. In addition, the South African real estate market remains a relatively less mature market, which would cause it to function differently from more mature real estate markets in which their study was conducted. Due to the modernisation of theory and changes as stated above some of their questions were modernised and additional questions were included. This ensured that the survey used within this study reflected any and all subsequent contributions to the topic being researched.

Similar to Redman and Tanner (1991), the survey covered 5 main topics: general characteristics of the companies, variables/factors used to determine leasing versus buying of corporate real estate, the methods of acquisition and sources of financing corporate real, the criteria used in determining the appropriate financing technique, and the use of sale-leaseback arrangements and the methods used to decide whether to sell and lease back corporate real estate.

Given that the study of Redman and Tanner (1991) was published within the Journal of Real Estate Research, we have assumed that their questionnaire went through a process of validity checks and is therefore valid.

### **3.6. Pilot Study**

A pilot study was conducted with two leading South African corporate real estate decision makers. The purpose of these pilot studies were to test the validity and applicability of the questionnaire within a South African context. Prior to the pilot study being conducted a few questions were added and some questions were removed from the Redman and Tanners (19691) questionnaire. Additionally changes to wording and units of measure were made. Table 3.1 below summarises the changes made:

*Table 3.1 Changes and Reason for Changes to the Questionnaire Compiled by Redman and Tanner (1991)*

| <b>Questionnaire by Redman and Tanner (1991)</b> |                                                              | <b>Revised Questionnaire</b>                                      |                                                                                                                                        |
|--------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Question No.</b>                              | <b>Relevance</b>                                             | <b>New Question included / Change</b>                             | <b>Reason for Change</b>                                                                                                               |
| NA                                               | Question not included                                        | Is your company a listed entity                                   | Allows for better clarity when trying to determine causal relationships                                                                |
| 1                                                | Sector classification of an organizations area of operations | Options of classification changed                                 | Adjusted for a South African context as per the JSE sector classification                                                              |
| 2                                                | Size of firm in book value of assets measured in Dollars     | Changed to turnover and Rand value as unit of measure             | Turnover is a better unit of measure as prevents for distortion of figures and unit of measure is adjusted for a South African context |
| NA                                               | Question not included                                        | What is the approximate size of your firm in terms of staff count | Allows for better clarity when trying to determine causal relationships                                                                |
| 3                                                | Dollar value of new real estate investment                   | Rand value as unit of measure                                     | Unit of measure is adjusted for a South African context                                                                                |
| 4                                                | Method of financing real estate acquired                     | Additional methods included                                       | Advancements in topic through literature                                                                                               |
| NA                                               | Question not included                                        | Important factors in decision to own real estate                  | Allows for better clarity in understanding the topic                                                                                   |

Table 3.1 Continued

| Questionnaire by Redman and Tanner (1991) |                                 | Revised Questionnaire                                                                   |                                            |
|-------------------------------------------|---------------------------------|-----------------------------------------------------------------------------------------|--------------------------------------------|
| Question No.                              | Relevance                       | New Question included / Change                                                          | Reason for Change                          |
| NA                                        | Question not included           | Ranking benefits of leasing and owning                                                  | Allows for better clarity of understanding |
| NA                                        | Question not included           | Other considerations in leasing and owning                                              | Allows for better clarity of understanding |
| NA                                        | Question not included           | Are professionals/ consultants used in your leasing or owning decision and who are they | Allows for better clarity of understanding |
| 7                                         | Benefits of leasing real estate | Additional methods included                                                             | Advancements in topic through literature   |
| 9 - 10                                    | Mortgaging of leases            | Omitted                                                                                 | Not relevant to study                      |
| 22 - 23                                   | Tax deferred exchanges          | Omitted                                                                                 | Not relevant to study                      |

### 3.7. Distribution of the Questionnaire

Qualtrics, an internet survey software portal, was used to host the final survey online which was accessed via a link sent to respondents (the survey can be found in Annexure A). An introductory email, which included the online link to the survey, was emailed to the sample population. The purpose of the introductory letter was to inform and encourage responses by emphasising the purpose of the survey, the reason why the respondent should complete the survey, all ethical considerations and a measure of gratitude for participation. The population surveyed was required to answer the questions anonymously and subsequent to completion the questionnaire was returned in a similar fashion. Anonymity was emphasized throughout the introductory letter in order to encourage responses.

### **3.8. Population and Sample of Respondents**

The population for the research is the corporate real estate decision makers of leading South African companies. The criteria used to identify the sample of respondents was based on the following parameters: companies must either lease or own their corporate real estate; corporate real estate must not be held exclusively for investment purposes; Real Estate Investment Trusts (REITS), property investment companies, property developers and financial institutions will be excluded from the population surveyed given that there for real estate holdings may be motivated for investment purposes rather than for the sake of doing business; companies must operate in various economic sectors as defined by the JSE classification codes, including: Basic Resources, Information Technology, Industrials, Consumer Goods and Consumer Services; and respondents must be corporate real estate decision makers.

A major challenge of the study was trying to source the contact details of said population. Given this, the researcher attempted to partner with leading South African corporate real estate consulting firms and utilise their contact data base. The questionnaire was emailed to over 500 South African corporate real estate decision makers sourced from multiple platforms and contacts. Only 22 questionnaires were returned, resulting in a response rate of only 4.4%.

This sample was chosen as these companies would most likely meet the above mentioned parameters. Furthermore, leading South African companies most likely have specialised employees advising on their corporate real estate strategy given the magnitude of the company and its corporate real estate holding. A sample size of 500 plus companies was chosen in the attempt to ensure robustness of the results. It was the intention of the author to have a greater sample size however, access to additional contact details of corporate real estate decision makers is limited.

Probability sampling was not used in the research under consideration because the population was a defined finite number of companies and to ensure an appropriate response rate and hence robustness of respondents would be achieved. Since no



systematic analysis was completed, due to the limited number of respondents, some non-response bias in the results is highly possible.

### **3.9. Data Analysis and Interpretation**

The raw data captured through the questionnaire was categorical data as values were not measured numerically but rather classified into sets according to characteristics that describe the variable. Furthermore, some of the data was descriptive in nature as it was used to count the number of occurrences in each category of a variable. The data also constituted ranked data in situations where rating was required by respondents.

Data collected was then analysed through cross tabulations which sets out to identify relationships between variables. To determine the significance of these results hypothesis testing was used through the chi squared test of independence. Hypothesis testing is used to determine the validity of a claim about a population and the chi squared method is used to determine if there is significant relationship between two or more categorical variables (Rumsey, 2010). The claim that is being tested is referred to as the null hypothesis and the attentive hypothesis is believed true if the null hypothesis is rejected. Hypothesis testing usually makes use of p-values. The p-value is defined as “the level of marginal significance within a statistical hypothesis test representing the probability of the occurrence of a given event” (Investopedia, 2016). It provides the smallest level of significance at which the null hypothesis would be rejected. In summary, small p-value (typically  $\leq 0.05$ ) indicates strong evidence against the null hypothesis, and therefore one would reject the null hypothesis. A large p-value ( $> 0.05$ ) indicates weak evidence against the null hypothesis, so one would fail to reject the null hypothesis. P-values very close to cut-off (0.05) are considered to be marginal and therefore the result could go either way

The data has been presented through the aid of various tools including; frequency distribution tables as these tables summarise the number of observed cases in each category; bar charts as they show the frequency of occurrences of categories for one

variable whilst illustrating the lowest and heights occurrence; and cross tabulation tables.

### **3.10. Issues of Validity and Reliability**

“A good questionnaire is one that produces answers that are reliable and valid measures of something we want to describe” (Bickman & Rog, 2009). Central to the theme of reliability is consistency. Within a questionnaire setting the objective is to ensure a robust questionnaire so that it can produce consistent findings under different conditions. In order to ensure reliability has been achieved, the following assessment approaches was used (Saunders, 2012 in referencing Mitchell, 1996); test re-test - completion of the questionnaire by the respondent twice and then testing to ensure consistency in answers; and through the use of alternative form by having two similar questions within the questionnaire but of different form to check consistency of response.

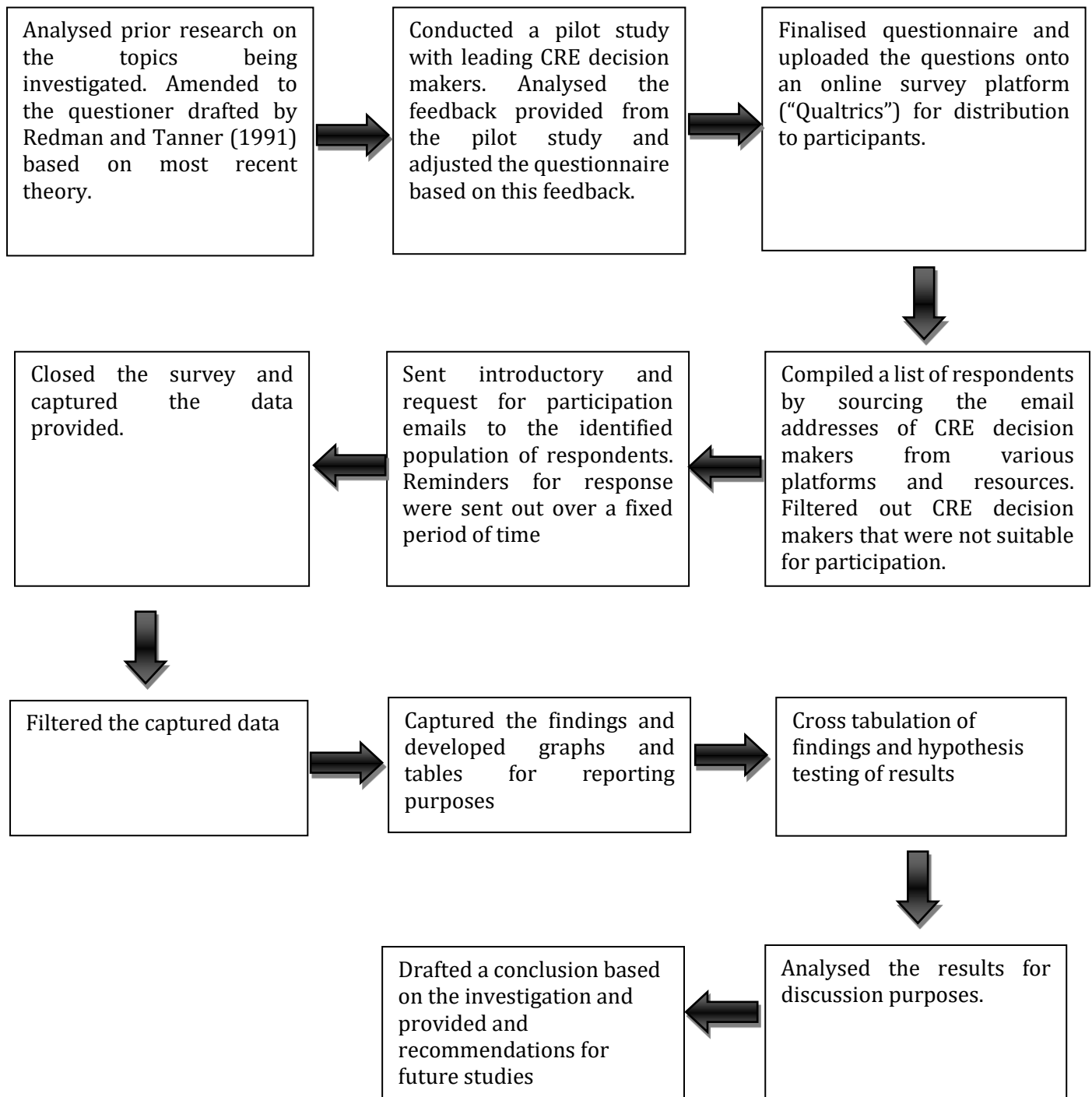
Validity is also a key characteristic of research quality which can be achieved by ensuring content validity and criterion validity. To achieve content validity the author of the questionnaire should review literature on the topic being researched. This will provide a theoretical framework of the discussion points and relevant findings relating to the topic. As an additional precaution to ensure content the questionnaire was assessed by a panel of individuals who are authorities in corporate real estate management (Saunders, et al., 2012).

However, as noted above, the questionnaire followed that of Redman and Tanner (1991). In this event, it was assumed that their survey questionnaire was valid and reliable. However, were suspension of non-reliability did arise the correct process was undertaken to develop a valid and reliable questionnaire.

### **3.11. Flow Diagram of Methodological Choice**

Figure 3.1 below discusses the methodological steps followed in conducting this investigation. The process to be followed included: analysing prior research and

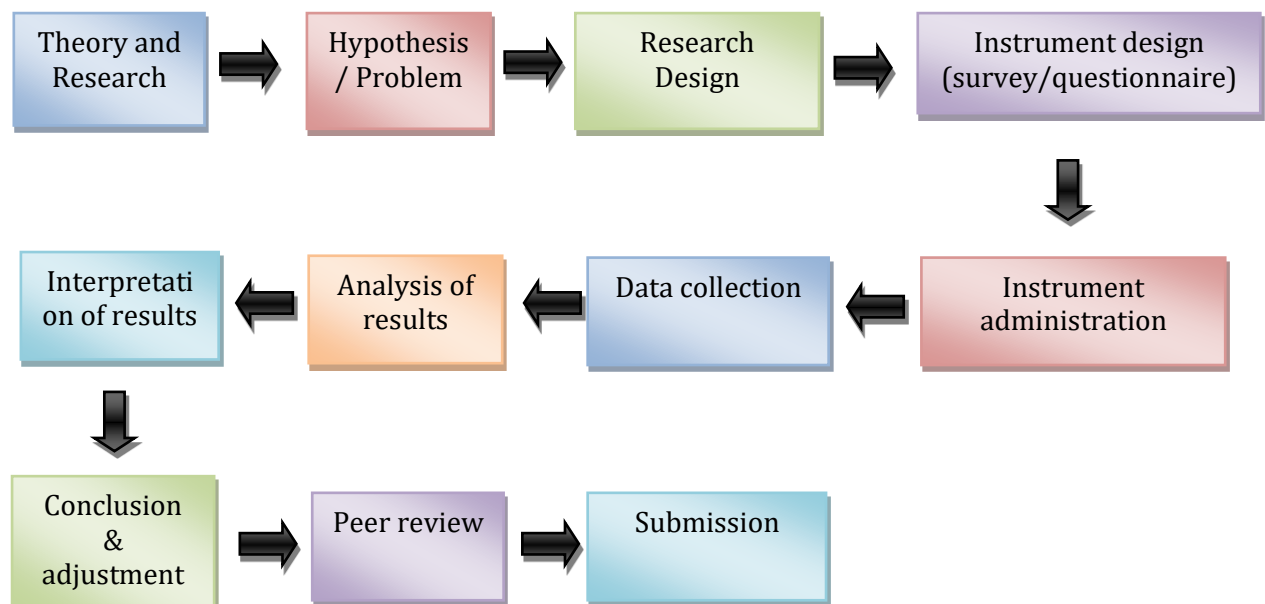
advancing the questionnaire to be used within the survey; conducting a pilot study and amending the questionnaire based on the outcome of the pilot study; uploading the questionnaire to the online platform for distribution to respondents; identifying and securing the contact details of respondents; liaising with the respondents through an introductory email and a request for participation; capturing and filtering of the results; analysis and discussion of the results and finally providing concluding comments and recommendations.



*Figure 3.1 Flow Diagram of Methodology Followed*

### 3.12. Research Approach

Figure 3.2 below summarizes the research approach adopted within this study. The steps included highlight process undertaken which included: researching the theory on the financing of corporate real estate acquisition within an international and local context; developing the problem statement through identifying the gaps within this topic; developing the methodological choice and the data capturing instrument; analyzing and interpretation of the results; concluding and commenting recommendations for future studies; submitting the report for peer review; and final submission.



*Figure 1.2 Research Approach*

### **3.13. Ethical Consideration**

Throughout this report a number of ethical considerations were complied with to ensure reliability and validity of results and other. Confidentiality was achieved by ensuring anonymity of all respondents (individuals and the company they represent). The author did not disclose any of the respondent's personal details in reporting and interpretation of the results.

Informed consent of respondents was ensured by sending an introductory and request for participation letter to the identified population so that they can make an informed decision on their participation in the survey. The letter detailed the topic being investigated, various ethical considerations (with specific emphasis on confidentiality) and the academic and economic benefit of the research. Furthermore, no participant was coerced into their participation.

Plagiarism was not conducted within this research. Where the author made use of prior academic insights this was followed by the appropriate referencing, including citations and a bibliography. All available resources were used to ensure that the population of respondents identified were professionals within the corporate real estate decision making process. However as noted, this may be one of the weakness within this study.

By virtue of respondents submitting a completed survey, they provided the author with the necessary permissions for publication of the results. However, as mentioned above, anonymity was maintained throughout this process;

The author's personal biases did not get in the way of the research as an objective standing was maintained during the interpretation of the results. The results presented were accurate and truthful reflecting that of South African corporate real estate decision makers. Furthermore, the results have been stated in the appropriate context.

## CHAPTER 4

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### **4. Results and Discussion**

#### **4.1. Introduction**

The following chapter analyses and discusses the data captured from the distributed survey through the aid of graphs, tables and figures. Furthermore, the chapter includes a discussion of the results and how it fits with the existing body of literature on the topic.

#### **4.2. Response rate**

The questionnaire was emailed to over 500 South African corporate real estate decision makers sourced from multiple platforms and contacts. However, as noted above, a significant limitation of this study was the number of survey responses. Out of the 500 emails sent, 23 questionnaires were returned fully completed (a response rate of 4.6%) and 4 were returned uncompleted.

The low response rate may be due to corporate real estate decision makers not valuing the benefit of this research and how such research may help in creating a decisional framework when making CRE acquisition decisions. Furthermore, it may be attributable to the author not having sent the survey to a large enough sample of respondents or the correct respondents who are in fact corporate real estate decision makers. Given the low response rate and purposive nature of the sample results in us not being able to do inferential analysis.

#### **4.3. Respondent characteristics**

Section 4.2 contains the general characteristics of the companies in the sample. This section therefore describes the firms for which corporate real estate decisions makers were employed. 72.73% of respondents were non-listed entities on the Johannesburg

Stock Exchange (JSE), with the balance (27.27%) being listed. Table 4.1 below summarizes the number of companies represented per industry sector classification.

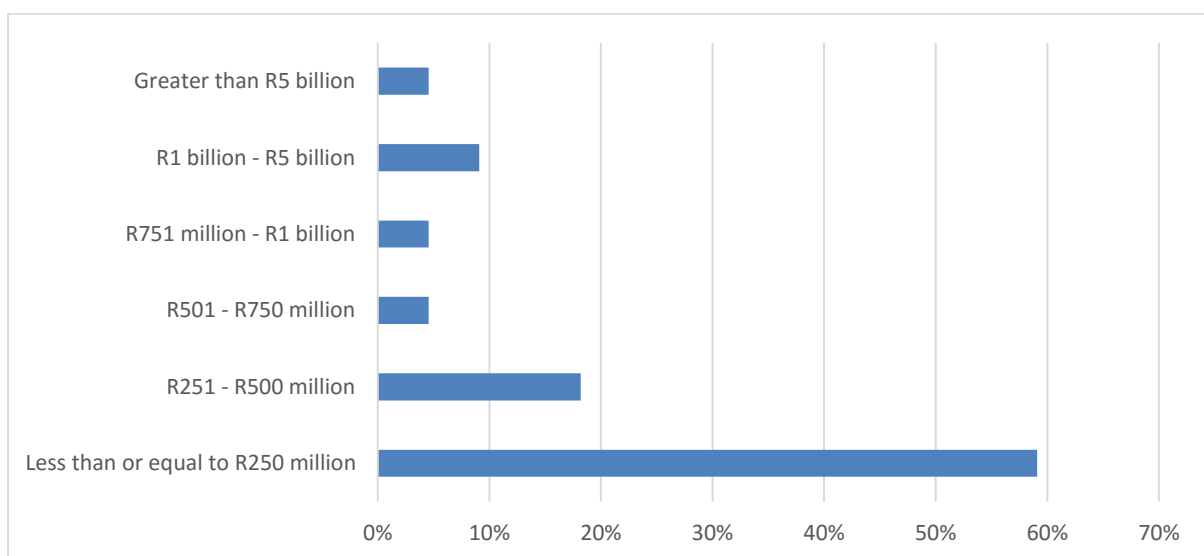
The majority of respondents represented the Consumer Goods sector, totaling 21.74% of responses. This was followed by Consumer Services and Telecommunications sectors both at 17.39%, Professional Services and Financial Services sectors (excluding real estate investment trusts and companies) both at 13.04%, Basic Materials, Industrials, Utilities and Technology sectors all at 4.35%. No responses were reported from the oil and gas as well as healthcare sectors.

Table 4.1 Respondents Sector Classification

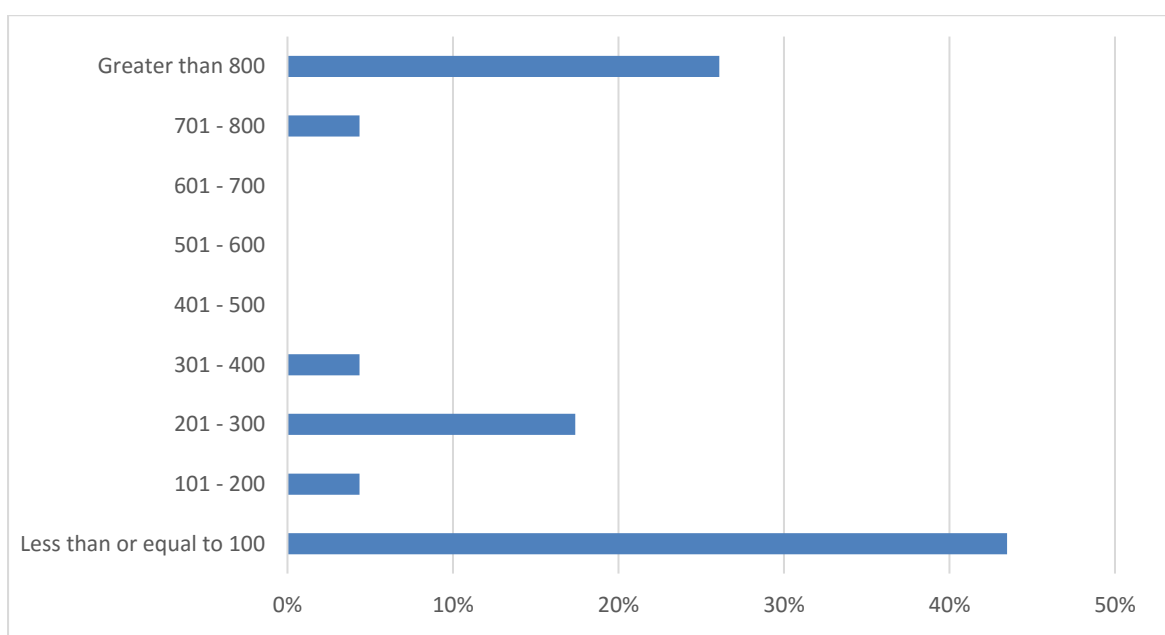
| Sector Classification                                                  | Percentage<br>(N=24) |
|------------------------------------------------------------------------|----------------------|
| Consumer Goods                                                         | 21.74%               |
| Consumer Services                                                      | 17.39%               |
| Telecommunications                                                     | 17.39%               |
| Professional Services                                                  | 13.04%               |
| Financial Services (excluding REITS and Property Investment Companies) | 13.04%               |
| Basic Materials                                                        | 4.35%                |
| Industrials                                                            | 4.35%                |
| Utilities                                                              | 4.35%                |
| Technology                                                             | 4.35%                |
| Oil and Gas                                                            | 0.00%                |
| Health Care                                                            | 0.00%                |
| Total                                                                  | 100%                 |



In determining company size two indicators were used, namely: company value in terms of turnover and staff head count. Figure 4.1 and 4.2 below illustrates approximate size firm in terms of turnover and in terms of staff count respectively. As seen above, the majority of respondents had a turnover of 250 million Rand or less (59.09% or thirteen respondents), followed by 18.18% (four respondents) having a turnover of between R251 - R500 million. 9.09% (two respondents) reported a turnover of over 5 billion Rand. In terms of staff count ten companies had a staff count of less than or equal to 100 people, followed by six companies with a staff count greater than 800 and four companies with a staff count between 201-300.



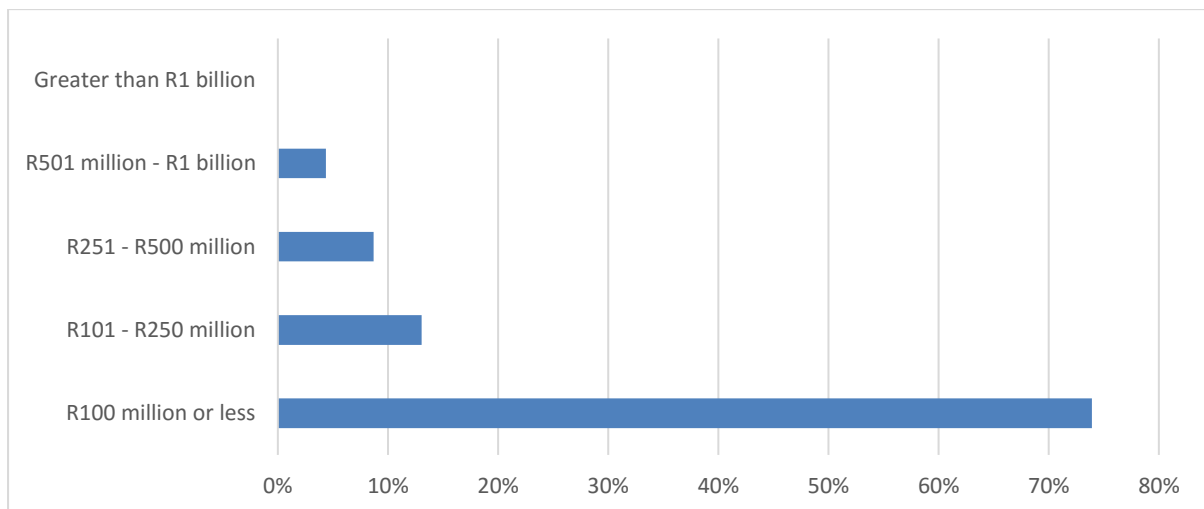
*Figure 4.1 Approximate Firm Size in Terms of Turnover*



*Figure 4.2 Approximate Size of Firm in Terms of Staff Count*

#### 4.4. Acquisition Methods and Financing Sources for Corporate Real Estate?

The survey first set out to identify the value of new corporate real estate investment by companies within the past financial year. As reported in figure 4.3, the majority of respondents (73.91%) reported a value of new real estate investment in the past financial year of under R100 million. This was followed by: 13.04% between R101 – R250 million; 8.70% between R251 – R500 million; and 4.35% between R501 – R1 billion. No companies reported a value of new real estate investment greater than R1 billion in their past financial year.



*Figure 4.3 Value of New Real Estate Investment in the Past Financial Year*

More importantly however, the methods used by the companies to finance their corporate real estate acquisition are shown in table 4.2 below. The largest source of financing corporate real estate acquisition was through long term leasing, an option chosen by eleven respondents (or 50%). The second largest source of financing was mortgages secured by the acquired property chosen by five respondents (22.73%). Surprisingly four respondents (18.18%) reported barter deals as a method of financing corporate real estate. Several other financing methods were reported including: cash flow from operation, sale and leaseback arrangements, and other (three respondents each or 13.64%), retained earnings (two respondents or 9.09%), mortgage backed securities (one respondent or 4.55%), sale of unsecured bonds (4.55%) and joint ventures (4.55%). Three corporate real estate decision makers representing 13.64% of the sample cited 'other' as their financing methods of corporate real estate

acquisitions. Financing methods not used included sale of common stock, sale of preferred stock and sale of commercial paper.

*Table 4.2 Financing Methods of Corporate Real Estate Acquisition*

| Sources of Finance                         | Percentage*<br>(N=34) |
|--------------------------------------------|-----------------------|
| Long term leasing                          | 50.00%                |
| Mortgages secured by the acquired property | 22.73%                |
| Barter deals                               | 18.18%                |
| Cash flow from operations                  | 13.64%                |
| Sale and leaseback arrangement             | 13.64%                |
| Other                                      | 13.64%                |
| Retained Earnings                          | 9.09%                 |
| Mortgage backed securities                 | 4.55%                 |
| Sale of unsecured bonds                    | 4.55%                 |
| Joint ventures                             | 4.55%                 |
| Sale of common stock                       | 0.00%                 |
| Sale of preferred stock                    | 0.00%                 |
| Sale of commercial paper                   | 0.00%                 |

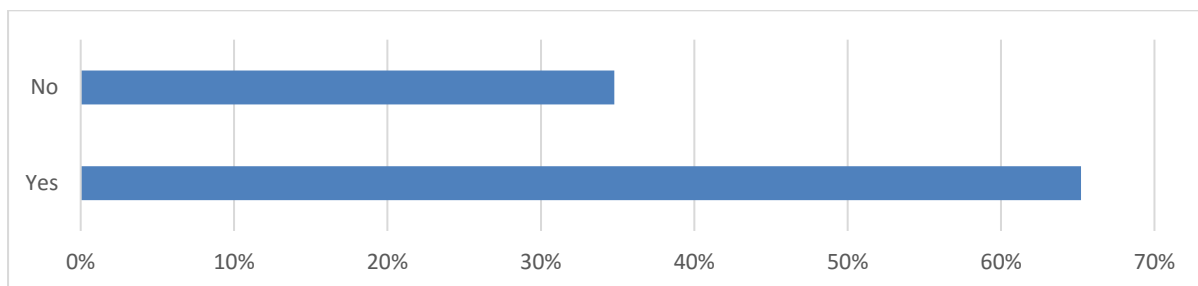
\* Responses do not add to 100% as companies were able to provide more than one response

## **4.5. The Decision Variables in Leasing Vs Owning Corporate Real Estate?**

### **4.5.1. Corporate Real Estate Ownership**

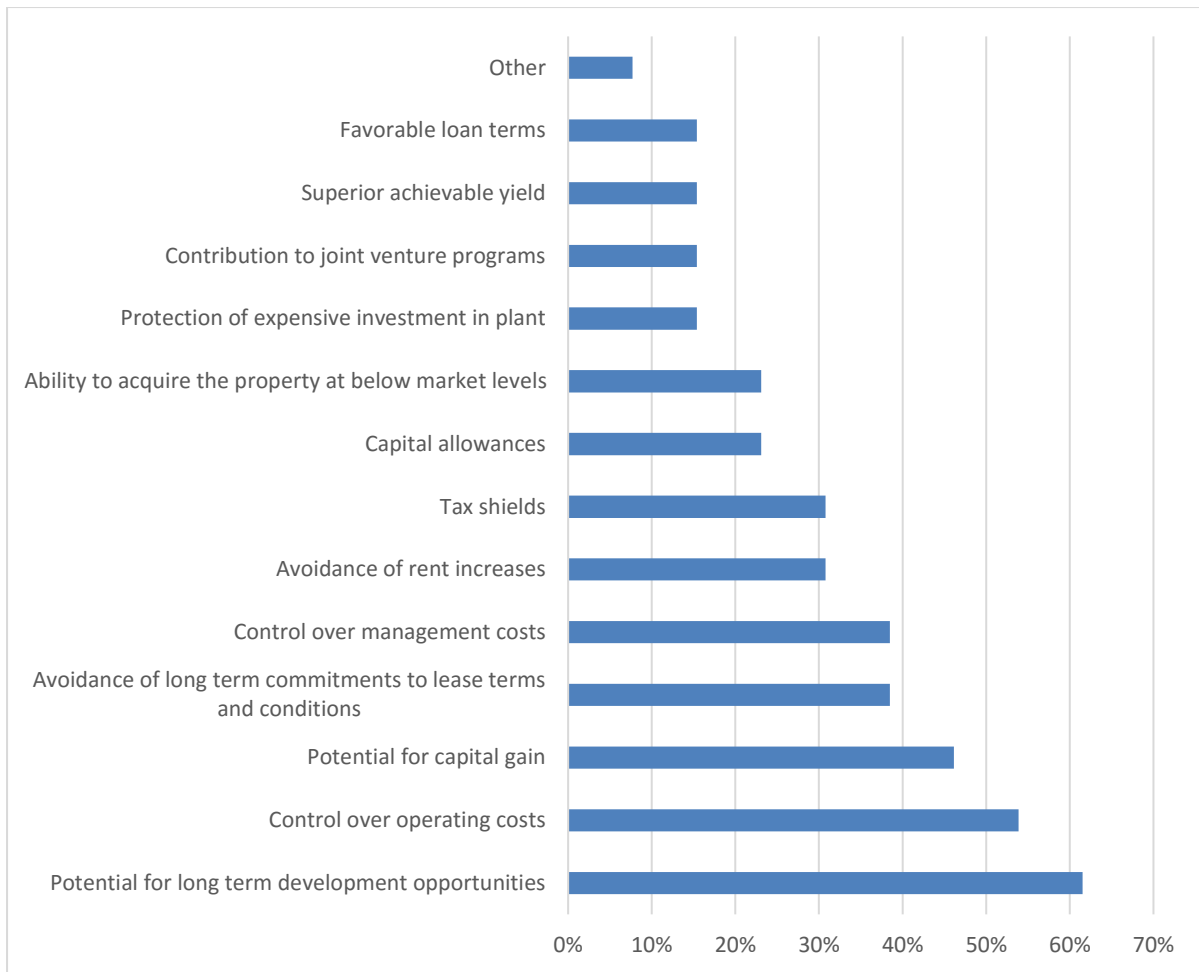
Respondents were asked to indicate if they owned any form of corporate real estate as part of their real estate holdings. Figure 4.4 contains the frequency of owning by

the respondents. 65.22% of respondents reported some form of corporate real estate ownership, whilst 34.78% of respondents do not own any corporate real estate.



*Figure 4.4 Corporate Real Estate Ownership*

Decision makers were then asked to identify financial considerations influencing their decisions to own corporate real estate as shown below in figure 4.5. A total of fifty-four responses were documented, with the most common benefit cited for ownership being the prospect for long term development opportunities at 61.54% of the respondents (or a count of eight). Control over operating costs was noted as the second most important factor at 53.85% (count of seven). Thirdly, potential for capital gain, at 46.15%, was noted as an important factor benefiting ownership (count of six). Other benefits of ownership included avoidance of long term commitments to lease terms and conditions, and control over management costs (38.46% or a count of five), avoidance of rent increases (30.77% or a count of four), tax shields (30.77%), capital allowances (23.08% or a count of three), ability to acquire the property at below market levels (23.08%), protection of expensive investment in plant (15.38% or a count of two), contributions to joint ventures programs (15.38%), superior achievable yield (15.38%) and favorable loan terms (15.38%). One respondent reported that other factors not included within the list of options is important factors in their decision to own corporate real estate.



\* Responses do not add to 100% as companies were able to provide more than one response

*Figure 4.5 Financial Determinants Influencing the Corporate Real Estate Ownership Decision\**

Respondents were then asked to rank the importance of the financial factors influencing their decision to own corporate real estate. The factors for assessment included: avoidance of rent increases, avoidance of long term commitments to lease terms and conditions, control over management costs, protection of expensive investment in plant, potential for capital gain, potential for long term development opportunities, contribution to joint venture programs, capital allowances, tax shields, control over operating costs, ability to acquire the property at below market levels, superior achievable yield.

Ranking was done using a scale from 1 to 5 (1 being most important and 5 being least important). Table 4.3 and 4.4 below illustrates the mean ranked importance of the financial factors influencing the decision to own real estate and the ranked order of

these factors respectively. Comparing the mean of the rankings provides the opportunity to compare these factors and determine the most and least important influencing this decision.

Ability to acquire the property at below market levels was noted as the most important factor at a mean of 2.22, followed by avoidance of long term commitments to lease terms and conditions with a mean of 2.45, avoidance of rent increase at 2.64, superior achievable yield at 2.88, and control over management cost at 2.89. The least important factors included potential for long term development opportunities and contribution to joint venture programs each with a mean of 4 and 4.11 respectively.

*Table 4.3 Mean of Ranked Importance of Factors Influencing the Decision to Own Corporate Real Estate? (1 being most important to 5 being least important)*

|                                                                  | Mean |
|------------------------------------------------------------------|------|
| Contribution to joint venture programs                           | 4.11 |
| Potential for long term development opportunities                | 4    |
| Protection of expensive investment in plant                      | 3.89 |
| Tax shields                                                      | 3.78 |
| Control over operating costs                                     | 3.6  |
| Capital allowances                                               | 3.56 |
| Other                                                            | 3.4  |
| Favorable loan terms                                             | 3.11 |
| Potential for capital gain                                       | 3    |
| Control over management costs                                    | 2.89 |
| Superior achievable yield                                        | 2.88 |
| Avoidance of rent increases                                      | 2.64 |
| Avoidance of long term commitments to lease terms and conditions | 2.45 |
| Ability to acquire the property at below market levels           | 2.22 |

\*Questions were ranked 1 to 5, with 1 being most important and 5 being least important.

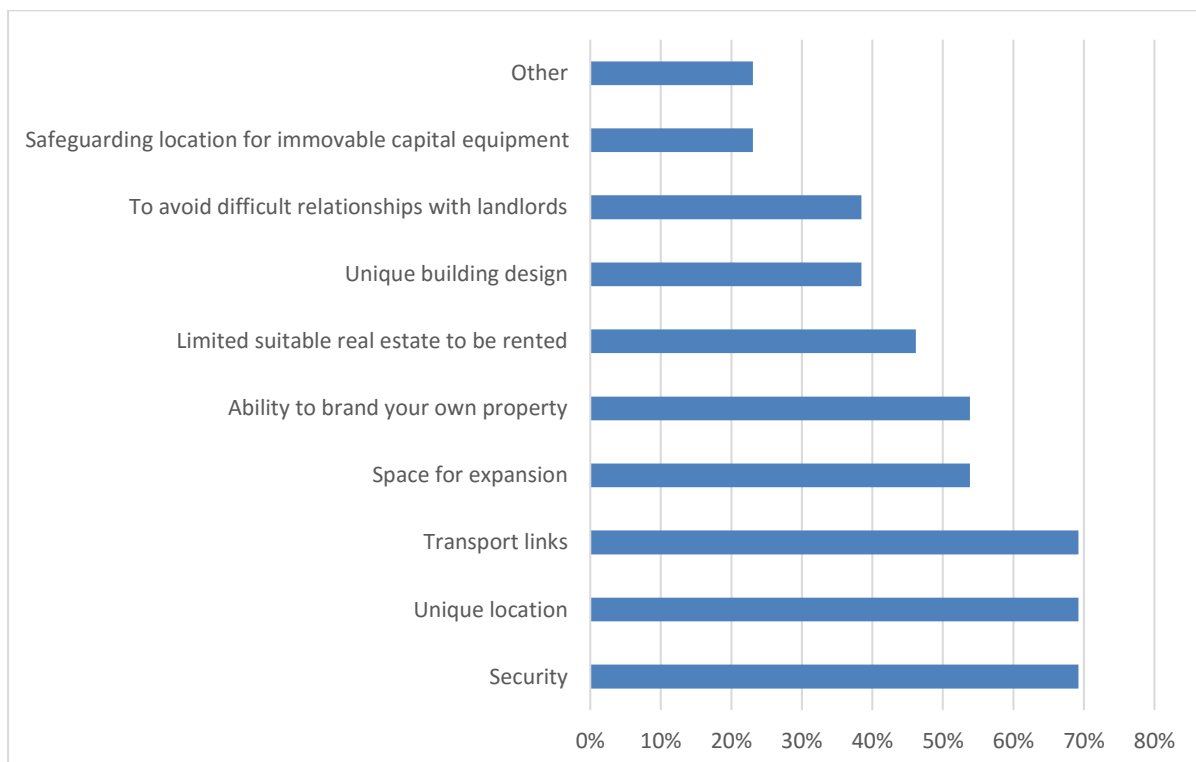
The findings of figure 4.5 and tables 4.3, and 4.4 should theoretically produce the same results however, there appears to be a discrepancy when comparing the results. Potential for long term development opportunities was the most common cited benefit in favor of ownership, however when respondents were asked to rank its importance it was one of the least important. Similarly, control over operating costs was the second most common cited benefit of ownership however, its ranked order of importance did not reflect same. The above factors should therefore be investigated further and tested amongst CRE decision makers.

*Table 4.4 Ranked Order of the Factors Influencing the Decision to Own Corporate Real Estate*

| Ranking*                                                         | 1       |    | 2       |    | 3       |    | 4       |    | 5       |    |
|------------------------------------------------------------------|---------|----|---------|----|---------|----|---------|----|---------|----|
| Avoidance of rent increases                                      | 54.55%  | 6  | 0.00%   | 0  | 0.00%   | 0  | 18.18%  | 2  | 27.27%  | 3  |
| Avoidance of long term commitments to lease terms and conditions | 45.45%  | 5  | 9.09%   | 1  | 9.09%   | 1  | 27.27%  | 3  | 9.09%   | 1  |
| Control over management costs                                    | 33.33%  | 3  | 0.00%   | 0  | 22.22%  | 2  | 33.33%  | 3  | 11.11%  | 1  |
| Protection of expensive investment in plant                      | 0.00%   | 0  | 0.00%   | 0  | 55.56%  | 5  | 0.00%   | 0  | 44.44%  | 4  |
| Potential for capital gain                                       | 36.36%  | 4  | 9.09%   | 1  | 9.09%   | 1  | 9.09%   | 1  | 36.36%  | 4  |
| Potential for long term development opportunities                | 10.00%  | 1  | 20.00%  | 2  | 0.00%   | 0  | 0.00%   | 0  | 70.00%  | 7  |
| Contribution to joint venture programs                           | 0.00%   | 0  | 22.22%  | 2  | 11.11%  | 1  | 0.00%   | 0  | 66.67%  | 6  |
| Capital allowances                                               | 0.00%   | 0  | 33.33%  | 3  | 22.22%  | 2  | 0.00%   | 0  | 44.44%  | 4  |
| Tax shields                                                      | 11.11%  | 1  | 22.22%  | 2  | 0.00%   | 0  | 11.11%  | 1  | 55.56%  | 5  |
| Control over operating costs                                     | 0.00%   | 0  | 30.00%  | 3  | 20.00%  | 2  | 10.00%  | 1  | 40.00%  | 4  |
| Ability to acquire the property at below market levels           | 44.44%  | 4  | 11.11%  | 1  | 33.33%  | 3  | 0.00%   | 0  | 11.11%  | 1  |
| Superior achievable yield                                        | 25.00%  | 2  | 37.50%  | 3  | 0.00%   | 0  | 0.00%   | 0  | 37.50%  | 3  |
| Favorable loan terms                                             | 22.22%  | 2  | 22.22%  | 2  | 11.11%  | 1  | 11.11%  | 1  | 33.33%  | 3  |
| Other                                                            | 0.00%   | 0  | 40.00%  | 2  | 20.00%  | 1  | 0.00%   | 0  | 40.00%  | 2  |
| Total                                                            | 282.46% | 28 | 256.78% | 22 | 213.73% | 19 | 120.09% | 12 | 526.88% | 48 |

\*Questions were ranked 1 to 5, with 1 being most important and 5 being least important.

Corporate real estate decision makers were also asked to determine the important of non-financial factors influencing their decision to own corporate real estate as shown in figure 4.6 below. A total of sixty-three responses were captured with the most important factors being security, unique location and transport links each at 69.23% of responses. Such findings were similar to Barkham and Park (2011) who noted that the probability of ownership is greater where the site is in closer proximity to customer base, skilled labour / strategic human resources and where superior visibility and security is required. Space for expansion and ability to brand one's own property was noted as the second greatest non-financial benefit each at 53.85% of responses. The availability of suitable supply of real estate to be rented was noted as the third most prominent factor influencing the decision to buy at 46.15% of responses. Other factors noted as important factors influencing the decision to own included: unique building design and avoidance of difficult relationships with landlords both at 38.46% and safeguarding location for immovable capital equipment and other both at 23.08%.



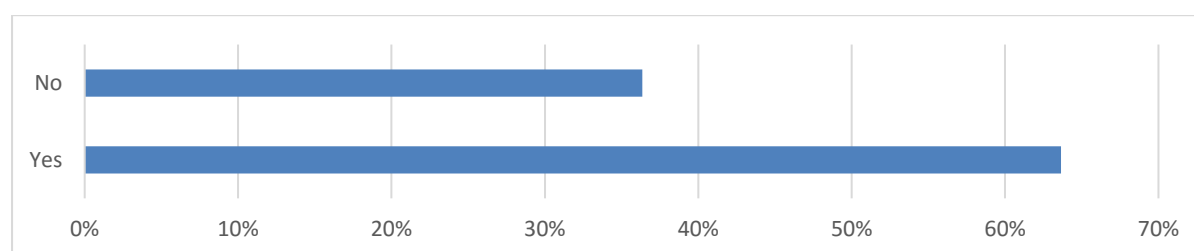
\* Responses do not add to 100% as companies were able to provide more than one response

*Figure 4.6 Other Factors Influencing the Ownership Decision of Corporate Real Estate\**



#### 4.5.2. Corporate Real Estate Leasing

Respondents were asked to indicate if they leased corporate real estate as part of their real estate holdings. Figure 4.7 below contains the frequency of leasing by the respondents. 63.64% (or a count of fourteen) of respondents reported some form of corporate real estate leasing, whilst 36.36% (or a count of eight) of respondents do not lease any corporate real estate.



*Figure 4.7 Leased Corporate Real Estate*

Table 4.5 below shows the percentage of real property that has been leased. Of the 63.64% respondents that reported leased real estate, the largest proportion seven of the responding companies (58.33%) leased between 75% - 100% of their real estate. It can be seen from this table that the frequency of leasing is not evenly distributed. However, leasing is shown to be a common method to acquire corporate real estate, which is not surprising given the emphasis on efficient management of corporate real estate use and acquisition.

*Table 4.5 Percentage of Leased Real Estate*

|               | Percentage<br>(N=12) |
|---------------|----------------------|
| Less than 25% | 16.67%               |
| 26% - 50%     | 8.33%                |
| 51% - 75%     | 16.67%               |
| 75%- 100%     | 58.33%               |
| Total         | 100%                 |

Respondents were required to provide further information on the type of leases entered into and other characteristics thereof. Table 4.6 below describes the characteristics of these leases. As seen in panel 1 of table 4.6, majority of respondents (58.33%) have both operating and financial leases. 33.33% of respondent's leases were only operating leases and 8.33% of leases were only financial leases.

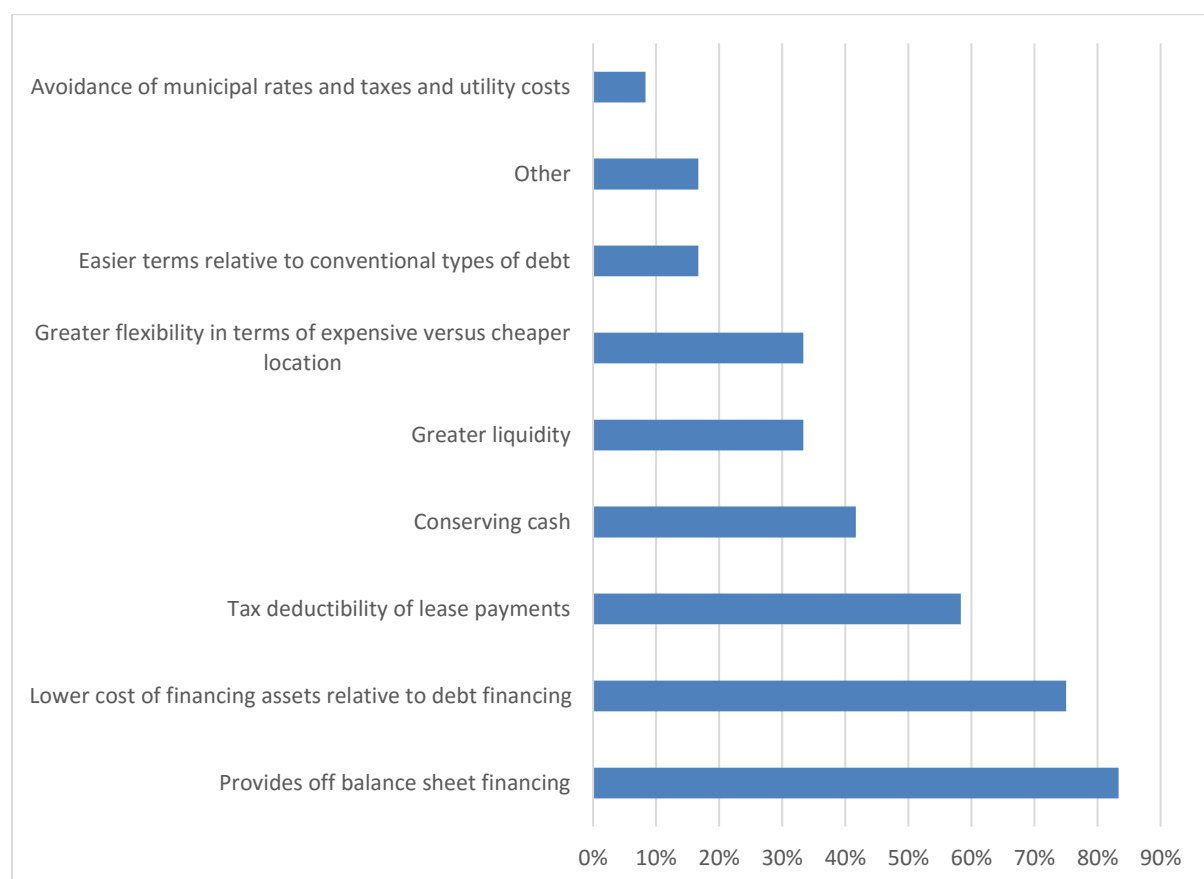
*Table 4.6 Characteristics Leases*

|                                                 | Percentage |
|-------------------------------------------------|------------|
| 1 Structure of Lease (N=12)                     |            |
| Operating leases                                | 33.33%     |
| Financial leases                                | 8.33%      |
| Both operating and financial leases             | 58.33%     |
| Total                                           | 100%       |
| 2 Did the Lease Contain an Option to Buy (N=12) |            |
| Yes                                             | 58.33%     |
| No                                              | 41.67%     |
| Total                                           | 100%       |
| 3 Were the Lease Options Exercised (N=6)        |            |
| Yes                                             | 83.33%     |
| No                                              | 16.67%     |
| Total                                           | 100%       |
| 4 Percentage of Lease Options Exercised (N=5)   |            |
| Less than 25%                                   | 40.00%     |
| 25% - 50%                                       | 40.00%     |
| 50% - 75%                                       | 0.00%      |
| 75% - 100%                                      | 20.00%     |
| Total                                           | 100%       |

Respondents were also asked if their leases contained an option to buy the real property they leased and if those options were exercised. Panel 2 of table 4.6 shows that seven of the respondents who leased (58.33%) had a buy option within their leases and that five of the seven exercised this option to buy. Two (40%) corporate real estate decision makers specified that less than 25% of the options were exercised,

a further two noted that between 25% – 50% of their options to purchase was exercised and 1 respondent noted that over 75% of their purchase options were exercised. From these results, we note that the majority of leases had an option to buy and were exercised. However, despite the presence of the buy option within the leases, most of these options have only been taken advantage on half of their properties. An advantage of having an option to buy within the leases is that it provides tenants with greater flexibility as they can chose to purchase the property when conditions warrant such a decision.

A further focus within this section was for corporate real estate decision makers that followed a leasing acquisition strategy were required to indicate the benefits of the financial and non-financial determinants influencing their decision.



\* Responses do not add to 100% as companies were able to provide more than one response

*Figure 4.8 Financial Determinants Influencing the Corporate Real Estate Lease Decision*

Figure 4.8 above, illustrates the financial determinants influencing the corporate real estate decision to lease. A total of 44 responses were recorded in investigating these factors, with the most common benefit cited for leasing was the advantage of off balance sheet financing (ten responses or 83.33%). This benefit is in line with the findings of the lease structures above which shows that the majority of respondents lease were operating leases or a combination of operating and financial leases. As per accounting standards, operating leases are not capitalized and therefore not shown on a company's balance sheet whereas financial leases are capitalized.

The second most common benefit was the lower cost of financing assets relative to debt financing (nine responses or 75%). Tax deductibility of lease payments was cited as the third most common benefit of leasing (seven responses or 58.33%). Other important benefits noted included: conservation of cash (five responses or 41.67%); greater liquidity (four responses or 33.33%); and greater flexibility in terms of expensive versus cheaper location (four responses or 33.33%).

Table 4.7 and 4.8 below illustrates the mean ranked importance of the financial factors influencing the decision to lease corporate real estate and the ranked order of these factors respectively.

*Table 4.7 Mean of Ranked Importance of Factors Influencing the Decision to Own Corporate Real estate? (1 being most important to 5 being least important)*

|                                                                   | Mean |
|-------------------------------------------------------------------|------|
| Greater flexibility in terms of expensive versus cheaper location | 4.25 |
| Easier terms relative to conventional types of debt               | 3.7  |
| Other                                                             | 3.5  |
| Avoidance of municipal rates and taxes and utility costs          | 3.4  |
| Greater liquidity                                                 | 3    |
| Conserving cash                                                   | 3    |
| Tax deductibility of lease payments                               | 2.9  |
| Lower cost of financing assets relative to debt financing         | 2.58 |
| Provides off balance sheet financing                              | 2.3  |

\*Questions were ranked 1 to 5, with 1 being most important and 5 being least important.

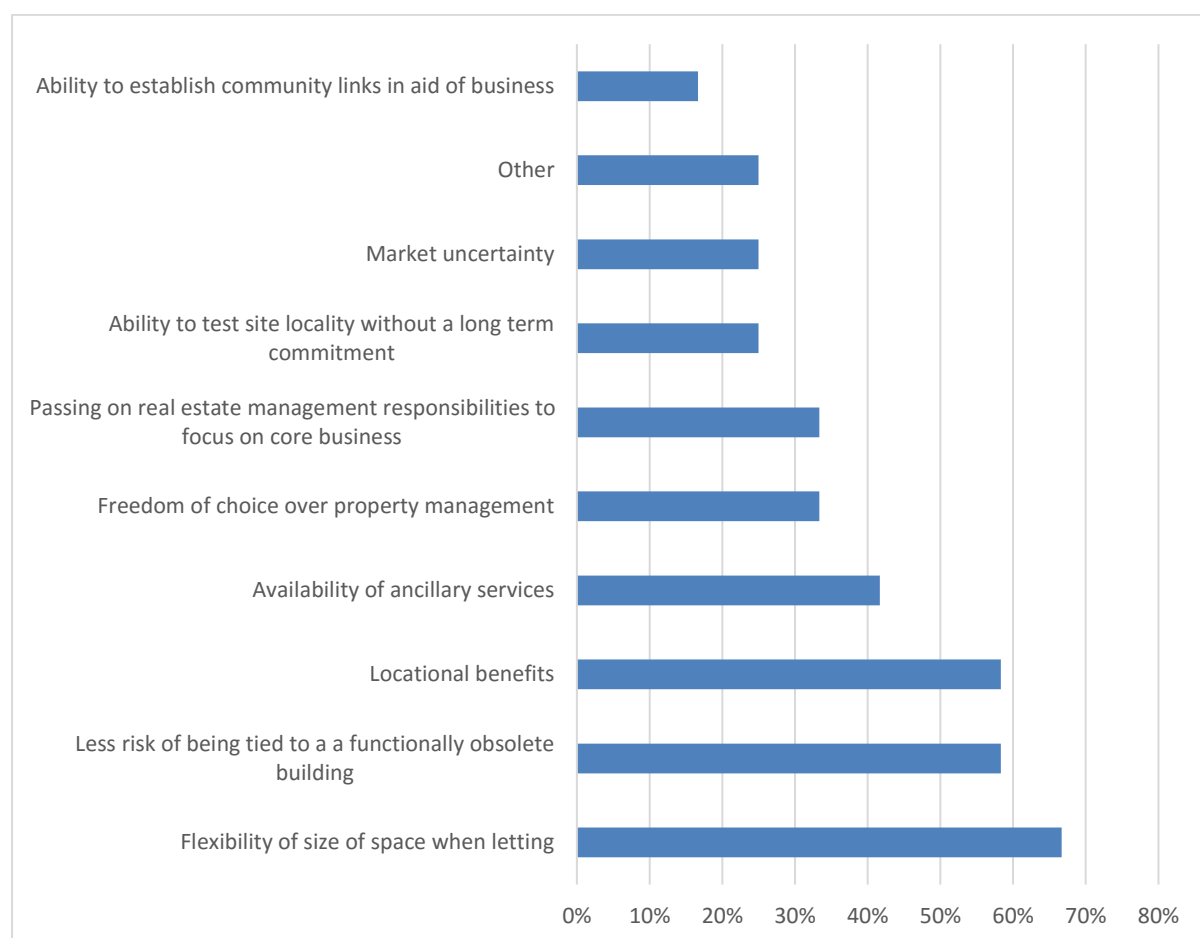
Similarly to figure 4.8, the most common benefit cited for leasing was that it provides off balance sheet financing (2.3). The second most common benefit was lower cost of financing assets relative to debt financing (2.58). Tax deductibility of lease payments was cited as the third most common benefit of leasing (2.9). The least important factors of leasing was greater flexibility in terms of expensive versus cheaper location (4.25)

*Table 4.8 Ranked Importance of Financial Determinants Influencing the Decision to Lease? (1 being most important to 5 being least important)*

| Ranking                                                           | 1       |    | 2       |    | 3       |    | 4       |    | 5       |    |
|-------------------------------------------------------------------|---------|----|---------|----|---------|----|---------|----|---------|----|
| Tax deductibility of lease payments                               | 40.00%  | 4  | 0.00%   | 0  | 10.00%  | 1  | 30.00%  | 3  | 20.00%  | 2  |
| Conserving cash                                                   | 22.22%  | 2  | 33.33%  | 3  | 0.00%   | 0  | 11.11%  | 1  | 33.33%  | 3  |
| Provides off balance sheet financing                              | 50.00%  | 5  | 20.00%  | 2  | 0.00%   | 0  | 10.00%  | 1  | 20.00%  | 2  |
| Lower cost of financing assets relative to debt financing         | 25.00%  | 3  | 25.00%  | 3  | 33.33%  | 4  | 0.00%   | 0  | 16.67%  | 2  |
| Easier terms relative to conventional types of debt               | 20.00%  | 2  | 0.00%   | 0  | 20.00%  | 2  | 10.00%  | 1  | 50.00%  | 5  |
| Greater liquidity                                                 | 0.00%   | 0  | 42.86%  | 3  | 28.57%  | 2  | 14.29%  | 1  | 14.29%  | 1  |
| Greater flexibility in terms of expensive versus cheaper location | 0.00%   | 0  | 0.00%   | 0  | 25.00%  | 2  | 25.00%  | 2  | 50.00%  | 4  |
| Avoidance of municipal rates and taxes and utility costs          | 30.00%  | 3  | 10.00%  | 1  | 0.00%   | 0  | 10.00%  | 1  | 50.00%  | 5  |
| Other                                                             | 25.00%  | 1  | 0.00%   | 0  | 25.00%  | 1  | 0.00%   | 0  | 50.00%  | 2  |
| Total                                                             | 312.22% | 24 | 331.19% | 12 | 441.90% | 12 | 510.40% | 10 | 804.29% | 26 |

\*Questions were ranked 1 to 5, with 1 being most important and 5 being least important.

The non-financial benefits of leasing have been illustrated in figure 4.9 below. A total of 46 responses were captured with the greatest non-financial benefit of leasing reported to be flexibility of size of space (eight responses or 66.67%). The second greatest benefit of leasing was less risk of being tied to a functionally obsolete building (seven responses or 58.33%), the third most important factor was locational benefits (seven responses or 58.33%). Other benefits included availability of ancillary services (five responses or 41.67%), freedom of choice over property management (three responses or 33.33%), and passing on real estate management responsibilities to focus on core business (three responses or 33.33%).



\* Responses do not add to 100% as companies were able to provide more than one response

*Figure 4.9 Non-Financial Factors Influencing the Decision to Lease Corporate Real Estate\**

#### 4.6. Criterion used in on the Financing Technique for Corporate Real Estate Acquisition

The third area investigated was the criterion used by corporate real estate decision makers in their financing decision for corporate real estate acquisition. Respondents were asked to indicate the method used to evaluate the alternative to leasing versus buying corporate real estate. Conventional theory suggests that this decision should be determined by calculating the net advantage of leasing - the difference between the present value cost of leasing and the present value cost of owning Etter and Caldwell (1995). Where this difference is positive, an acquisition strategy of leasing should be adopted Redman and Tanner (1991).

Table 4.9 below reflects analytical methods used by corporate real estate decision makers to evaluate the option to lease versus buy. A total of 27 responses were recorded, with eight responses (47.06%) comparing the undiscounted cash flows of leasing to that from buying. Following this strategy is contrary to conventional theory as noted above. Secondly, six respondents (35.29%) compared the net income of the property under each alternative. Conventional theory suggests that the use of the net income approach is not a preferred method in evaluating the decision to lease vs own as this may lead to distorted results. Only five of the twenty-seven (29.41%) respondents used the conventional discounting approach in their decision to own versus lease. Surprisingly, four respondents (23.53%) do not use any analytical method to evaluate this decision.

*Table 4.9 Analytical Methods Used to Evaluate the Lease versus Buy Decisions*

|                                                                          | Percentage* |
|--------------------------------------------------------------------------|-------------|
| Comparison of cash flows of leasing to the cash flows from buying        | 47.06%      |
| Comparison of net income from leasing to net income from buying          | 35.29%      |
| Net present value of leasing versus buying                               | 29.41%      |
| We do not evaluate the alternatives of leasing versus buying real estate | 23.53%      |
| Other                                                                    | 23.53%      |

\* Reponses do not add to 100% as companies were able to provide more than one response

Where the discounting approach was used, decision makers were asked to indicate the discount rate employed within their analysis. Table 4.10 reflects the method used by decision makers in estimating the discount rate used. The most common discount rates assumed were the weighted average cost of capital and rate of return on new investment, both at 50% (or seven respondents each). Other methods used included, other not referenced as an option (35.71% or five respondents), after tax cost of debt (28.57% or four respondents), before tax cost of debt (21.43% or three respondents) and rate of return on previous investments (14.29% or 2 respondents).

*Table 4.10 Method Used to Estimate Discount Rate in the Decision to lease vs. Own*

|                                        | Percentage* |
|----------------------------------------|-------------|
| Weighted average cost of capital       | 50.00%      |
| Rate of return on new investments      | 50.00%      |
| Other                                  | 35.71%      |
| After tax cost of debt                 | 28.57%      |
| Before tax cost of debt                | 21.43%      |
| Rate of return on previous investments | 14.29%      |

\* Responses do not add to 100% as companies were able to provide more than one response

The decision between leasing versus owning can be seen as a choice between financing alternatives. For this reason, corporate real estate decision makers were asked to indicate the process of evaluating their decision. Conventional theory suggests that decision makers should determine if the real estate asset is worth acquiring and if so then determine the method of financing. This process forms the capital budgeting decision (Redman & Tanner, 1991).



*Table 4.11 Decision to Acquire the Property First and Then Evaluate the Alternatives of Leasing versus Buying*

|                                                                                                                                      | Percentage<br>(N=16) |
|--------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| Do you evaluate the decision to acquire the property first and then evaluate the alternatives of leasing versus buying the property? |                      |
| Yes                                                                                                                                  | 56.25%               |
| No                                                                                                                                   | 43.75%               |
| Total                                                                                                                                | 100%                 |

Table 4.11 above indicates that nine decision makers (or 56.25%) evaluate the decision to acquire the property first and then evaluate the alternatives of leasing versus buying the property. However, just under half of all respondents (43.75%) indicated that they did not evaluate this decision. As noted by Redman and Tanner (1991), this may suggest that managers are combining the acquisition and financing decision rather than separating the financing and capital budgeting decision. The consequence of such may lead to incorrect selection of the alternative.

#### **4.7. Sale and Leaseback Arrangements**

The fourth area of concern that was attempted to be investigated by the survey was the use of sale and leaseback strategies by South African corporate real estate decision makers. A sale and leaseback strategy includes two simultaneous transactions, namely sale of a property and a simultaneous contract to lease it back (Louko, 2005).

Table 4.12 below illustrates the use and structure of sale and leaseback arrangements amongst CRE decision makers. Given these results, we note that a minority (35.29%) of respondents have historically used sale and leaseback arrangement. However, as noted by Gyhoot (2003) this trend of sale and leaseback is growing in South Africa. Of those respondents who have used such a strategy, panel 2 of table 4.12 indicates that 50% have used a sale and leaseback on less than 50% of their properties, while the

other 50% have used the arrangement on 75% or more of their properties. In structuring the lease of this arrangement, a large majority (83.33%) of respondents created a combination of operating and financial leases, 16.67% created a financial lease only and no operating leases were created. A reason for such a finding is supported by the off balance sheet financing benefit derived from operational leases.

*Table 4.12 Use and Structure of Sale and Leaseback Arrangements*

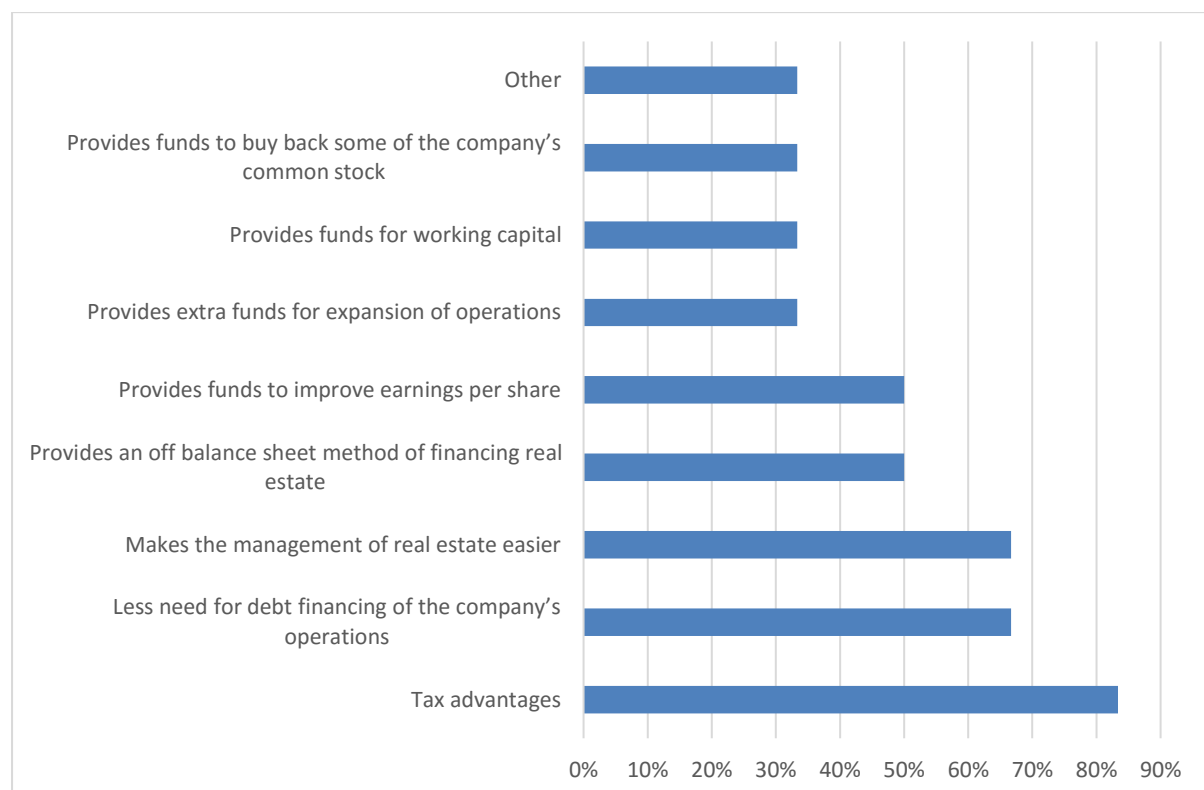
|                                                                  | Percentage |
|------------------------------------------------------------------|------------|
| 1 Use of sale-leaseback arrangements (N=17)                      |            |
| Yes                                                              | 35.29%     |
| No                                                               | 64.71%     |
| Total                                                            | 100%       |
| 2 Percentage of real estate financed by sale and leaseback (N=6) |            |
| Less than 25%                                                    | 16.67%     |
| 25% - 50%                                                        | 33.33%     |
| 50% - 75%                                                        | 0.00%      |
| 75% - 100%                                                       | 50.00%     |
| Total                                                            | 100%       |
| 3 Structure of Sale and Leaseback (N=6)                          |            |
| Operating leases                                                 | 0.00%      |
| Financial leases                                                 | 16.67%     |
| Both operating financial leases                                  | 83.33%     |
| Total                                                            | 100%       |

Of those respondents who historically followed a sale and leaseback arrangement, respondents were then asked to indicate the perceived benefits of adopting this strategy. As seen in figure 4.10, of the twenty-seven responses, the most common financial benefit cited (five responses or 83.33%) was the associated tax advantages from leasing. This was followed by: a reduction in the need for debt financing of the company's operations and easier management of real estate (each having four responses or 66.67%); off balance sheet financing (three responses or 50%); and

provides funds to improve earnings per share (three responses or 50%). The finding of improvement of earning per share is an interesting finding which supports market sentiment that management is concerned on the trend of earning per share as a means to avoid a listed entities share price.

Surprisingly, only 33.33% of respondents (2 responses) noted the benefit of providing funds for working capital and additional sources of funding for expansion of operations. This is contrary to conventional theory which suggests that the main advantages for following a sale and leaseback strategy was the availability of funds for working capital requirements and to unlock funds in assets that do not form part of the business core function.

Furthermore, 33.33% of respondents also noted the benefit of follow such an arrangement is to unlock funds to buy back some of the company's common stock, which suggests a defensive move against corporate raiders and takeovers.



\* Responses do not add to 100% as companies were able to provide more than one response

*Figure 4.10 Advantages of Using Sale-Leaseback Arrangements\**

Table 4.13 below indicates the analytical methods used by respondents to evaluate the decision of a sale and leaseback arrangement. Of the nine responses, four respondents (80%) use the net income from the sale to make their decision. This is followed by cash inflows from the sale-leaseback and the comparison of the present value of the proceeds from the sale with the present value of the costs of the sale-leaseback (each with two respondents or 40%). One respondents (20%) used other analytical methods not included within the options provided.

*Table 4.13 Analytical Method to Evaluate Sale and Leasebacks*

|                                                                                                                         | Percentage* |
|-------------------------------------------------------------------------------------------------------------------------|-------------|
| Estimation of the net income from the sale                                                                              | 80.00%      |
| Cash flow from the sale-leaseback                                                                                       | 40.00%      |
| Comparison of the present value of the proceeds from the sale with the present value of the costs of the sale-leaseback | 40.00%      |
| Other                                                                                                                   | 20.00%      |

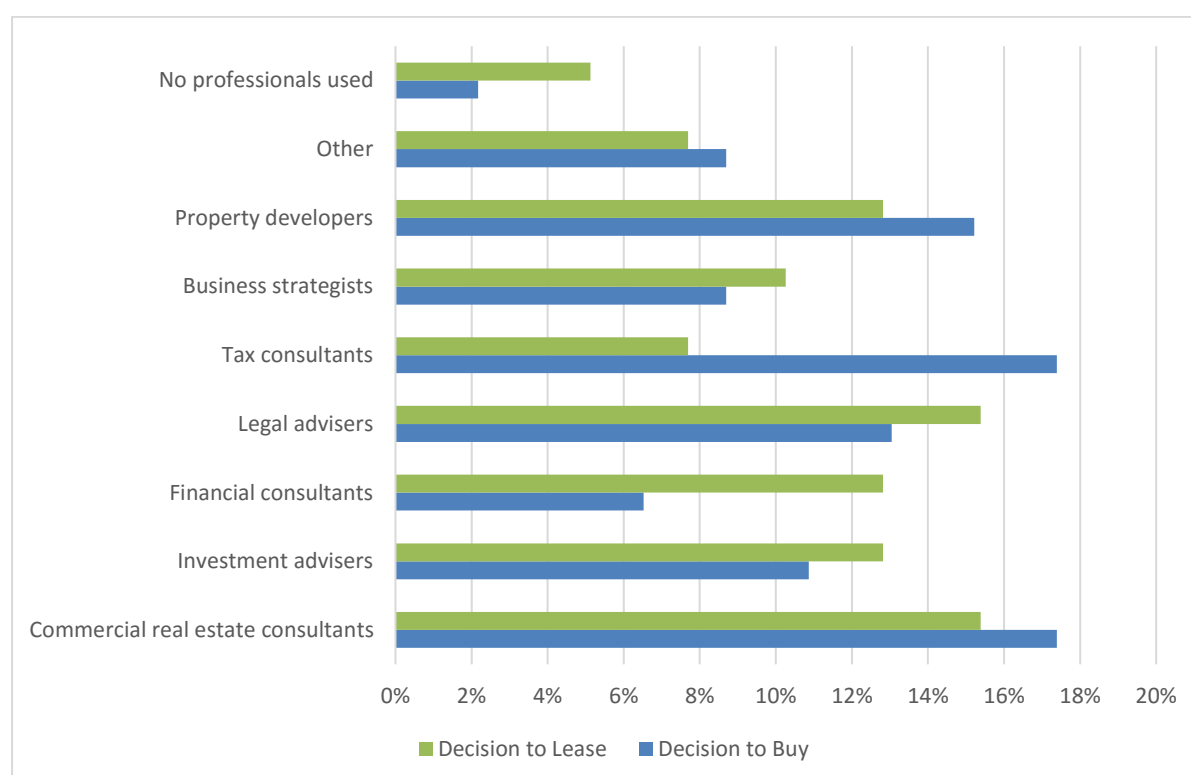
\* Reponses do not add to 100% as companies were able to provide more than one response

#### **4.8. Use of Professionals in the Lease versus Buy Decision**

Within this section the author set out to determine if corporate real estate decision makers made use of professional services when making their corporate real estate buy or lease decision. Respondents were asked to indicate the discipline of professional used and if said professionals were in house or outsourced.

Figure 4.11 below compares the weighted average of professionals used when buying or leasing corporate real estate. The figure illustrates that the most common professionals used in the decision to buy included commercial real estate consultants and tax consultants (both at 17%). In comparison with leasing, commercial real estate consultants were also noted as the most common professional used (15%) however, only 8% of respondents used tax consultants. In the decision to lease, legal advisors were noted as one of the most commonly used professionals (15%), whereas 13% of

respondents used legal advisors in the decision to own. Property developers represented 15% of professionals used in the decision to buy compared to 13% when leasing. Other consultants used in the buy or lease decision included: investment advisors at 11% and 13% respectively; business strategists at 9% and 10% respectively; financial consultants at 7% and 13%; respectively and other professionals not referenced at 5% and 8% respectively. 2% of buyers and 5% of lessees used no professionals.



*Figure 4.11 Professionals used within the Decision to buy or Lease Corporate Real Estate*

In the buy decision, as seen in table 4.14 below, a total of sixty-eight professionals were reported to be used within the various professional disciplines. Of these, 32% of professionals were reported as in-house and 68% being outsourced. Of the of in-house professionals: 27.27% were made up of business strategists; 18.18% were financial consultants and legal advisers; 13.64% were property developers; 9.09% were other professionals and commercial real estate consultants; and investment advisers and tax consultants each made up 4.55%. Of the outsourced professionals: commercial real estate consultants made up 17.39%; investment advisers and tax

consultants made up 15.22% each; financial consultants, legal advisors and property developers contributed 13.04%; and business strategists and other professionals contributed 6.52%

*Table 4.14 In-house or Outsourced Professionals used in the Buy Decision*

|                                    | In House   |       | Outsourced |       | Total |
|------------------------------------|------------|-------|------------|-------|-------|
|                                    | Percentage | Count | Percentage | Count |       |
| Commercial real estate consultants | 4.55%      | 1     | 17.39%     | 8     | 9     |
| Investment advisers                | 4.55%      | 1     | 15.22%     | 7     | 8     |
| Financial consultants              | 18.18%     | 4     | 13.04%     | 6     | 10    |
| Legal advisors                     | 18.18%     | 4     | 13.04%     | 6     | 10    |
| Tax consultants                    | 4.55%      | 1     | 15.22%     | 7     | 8     |
| Business strategists               | 27.27%     | 6     | 6.52%      | 3     | 9     |
| Property Developers                | 13.64%     | 3     | 13.04%     | 6     | 9     |
| Other                              | 9.09%      | 2     | 6.52%      | 3     | 5     |
| Total                              | 100.00%    | 22    | 100%       | 46    | 68    |

In the lease decision, as shown in table 4.15 below, a total of fifty-three professionals were reported to be used within the various professional disciplines. Of this, 25% of professionals were reported as in-house and 75% were outsourced. When in house professionals were, used they included: business strategists at 23.8%; commercial real estate consultants, investment advisers, legal advisors, and property developers each at 15.38%; and financial consultants and tax consultants at 7.69% each. Of the outsourced professionals: tax consultants made up 17.5%; commercial real estate consultants and legal advisors made up 15%; investments advisers, financial consultants and property developers each made up 12.5%; other professionals not listed made-up 10%; and business strategists the least used at 5%

*Table 4.15 In-house or Outsourced Professionals used in the Lease Decision*

|                                    | In House   |       | Outsourced |       | Total |
|------------------------------------|------------|-------|------------|-------|-------|
|                                    | Percentage | Count | Percentage | Count |       |
| Commercial real estate consultants | 15.38%     | 2     | 15.00%     | 6     | 8     |
| Investment advisers                | 15.38%     | 2     | 12.50%     | 5     | 7     |
| Financial consultants              | 7.69%      | 1     | 12.50%     | 5     | 6     |
| Legal advisors                     | 15.38%     | 2     | 15.00%     | 6     | 8     |
| Tax consultants                    | 7.69%      | 1     | 17.50%     | 7     | 8     |
| Business strategists               | 23.08%     | 3     | 5.00%      | 2     | 5     |
| Property developers                | 15.38%     | 2     | 12.50%     | 5     | 7     |
| Other                              | 0.00%      | 0     | 10.00%     | 4     | 4     |
| Total                              | 100.00%    | 13    | 100%       | 40    | 53    |

#### **4.9. Cross Tabulation of Results**

The author attempted to cross tabulate the survey responses in terms of: financing methodology, industry and company size; leasing, industry and company size; owning, industry and company size and lease vs. buy evaluation methods, industry and company size.

In order to determine the significance of the cross tabulation results, hypothesis testing was done using the chi squared test of independence. This method of hypothesis testing was chosen over correlation testing due to the variables mainly being categorical in nature. When a hypothesis test is performed, a calculated p-value assists in determining the significance of results. In all circumstances of the above mentioned tests the derived p-value was greater than 0.05 meaning that there is no significant relationship between the cross tabulated variables. The primary reason for these insignificant results is likely to be the small number of responses.

#### 4.9.1. Financing Methodology of CRE, Industry and Company Size

Figures 4.12 - 14 below shows the significance of the results for the cross tabulations of financing methods and industry sector; financing method and company size in terms of turnover; and financing method and company size in terms of staff count.

The null hypothesis ( $H_0$ ) for each case is that there is no relationship between financing methods and industry sector; financing method and turnover; and financing method and staff count respectively. The alternative hypothesis ( $H_a$ ) for each case is that there is a relationship between financing methods and industry sector; financing method and turnover; and financing method and staff count respectively.

In all scenarios we the derived p-value was greater than 0.05 meaning that there is no significant relationship between the cross tabulated variables and therefore there is insufficient evidence to reject the null hypothesis.

|                                                                  |                    | How does your company finance the real estate it uses?<br>(check all that apply) |
|------------------------------------------------------------------|--------------------|----------------------------------------------------------------------------------|
| Which of the following sectors best describes your organisation? | Chi Square         | 69.19*                                                                           |
|                                                                  | Degrees of Freedom | 120                                                                              |
|                                                                  | p-value            | 1.00                                                                             |

Figure 4.12 Cross Tabulation Results: Financing Methods and Industry Sector

|                                                                 |                    | How does your company finance the real estate it uses?<br>(check all that apply) |
|-----------------------------------------------------------------|--------------------|----------------------------------------------------------------------------------|
| What is the approximate size of your firm in terms of turnover? | Chi Square         | 66.20*                                                                           |
|                                                                 | Degrees of Freedom | 60                                                                               |
|                                                                 | p-value            | 0.27                                                                             |

Figure 4.13 Cross Tabulation Results: Financing Methods and Turnover



| What is the approximate size of your firm in terms of staff count? | How does your company finance the real estate it uses? (check all that apply) |        |
|--------------------------------------------------------------------|-------------------------------------------------------------------------------|--------|
|                                                                    | Chi Square                                                                    | 57.13* |
|                                                                    | Degrees of Freedom                                                            | 96     |
|                                                                    | p-value                                                                       | 1.00   |

*Figure 4.14 Cross Tabulation Results: Financing Methods and Staff Count*

#### **4.9.2. CRE Leasing, Industry and Company Size**

Figures 4.15 – 4.17 below shows the significance of the results for the cross tabulations of characteristics of leasing and industry; characteristics of leasing and company size in terms of turnover; and characteristics of leasing and company size in terms of staff count.

The null hypothesis (Ho) for each case is that there is no relationship between characteristics of leasing and industry; characteristics of leasing and turnover; and characteristics of leasing and staff count respectively. The alternative hypothesis (Ha) for each case is that there is a relationship between characteristics of leasing and industry; characteristics of leasing and turnover; and characteristics of leasing and staff count respectively.

In all scenarios we the derived p-value was greater than 0.05 meaning that there is no significant relationship between the cross tabulated variables and therefore there is insufficient evidence to reject the null hypothesis.

|                                                                  |                    | Does your firm lease any real estate? | Have the leases been structured as: | Have any of the leases contained an option to buy the property? | Has your company used sale-leaseback arrangements on any of its properties? |
|------------------------------------------------------------------|--------------------|---------------------------------------|-------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------|
| Which of the following sectors best describes your organisation? | Chi Square         | 16.43*                                | 5.54*                               | 6.17*                                                           | 13.72*                                                                      |
|                                                                  | Degrees of Freedom | 10                                    | 20                                  | 10                                                              | 10                                                                          |
|                                                                  | p-value            | 0.09                                  | 1.00                                | 0.80                                                            | 0.19                                                                        |

*Figure 4.15 Cross Tabulation Results: Characteristics of Leasing and Industry*

|                                                                 |                    | Does your firm lease any real estate? | Have the leases been structured as: | Have any of the leases contained an option to buy the property? | Has your company used sale-leaseback arrangements on any of its properties? |
|-----------------------------------------------------------------|--------------------|---------------------------------------|-------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------|
| What is the approximate size of your firm in terms of turnover? | Chi Square         | 3.50*                                 | 4.71*                               | 3.59*                                                           | 4.62*                                                                       |
|                                                                 | Degrees of Freedom | 5                                     | 10                                  | 5                                                               | 5                                                                           |
|                                                                 | p-value            | 0.62                                  | 0.91                                | 0.61                                                            | 0.46                                                                        |

*Figure 4.16 Cross Tabulation Results: Characteristics of Leasing and Turnover*

|                                                                    |                    | Does your firm lease any real estate? | Have the leases been structured as: | Have any of the leases contained an option to buy the property? | Has your company used sale-leaseback arrangements on any of its properties? |
|--------------------------------------------------------------------|--------------------|---------------------------------------|-------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------|
| What is the approximate size of your firm in terms of staff count? | Chi Square         | 3.69*                                 | 7.57*                               | 3.43*                                                           | 9.34*                                                                       |
|                                                                    | Degrees of Freedom | 8                                     | 16                                  | 8                                                               | 8                                                                           |
|                                                                    | p-value            | 0.88                                  | 0.96                                | 0.90                                                            | 0.31                                                                        |

*Figure 4.17 Cross Tabulation Results: Characteristics of Leasing and Staff Count*

#### **4.9.3. CRE Ownership, Industry and Company Size:**

Figures 4.18 – 4.20 below shows the significance of the results for the cross tabulations of results for: ownership and industry; ownership and company size in terms of turnover; ownership and company size in terms of staff count.

The null hypothesis (Ho) for each case is that there is no relationship between ownership and industry; ownership and turnover; ownership and staff count respectively. The alternative hypothesis (Ha) for each case is that there is a relationship between ownership and industry; ownership and turnover; ownership and staff count respectively.

In all scenarios we the derived p-value was greater than 0.05 meaning that there is no significant relationship between the cross tabulated variables and therefore there is insufficient evidence to reject the null hypothesis.

|                                     |                    | Which of the following sectors best describes your organisation? |
|-------------------------------------|--------------------|------------------------------------------------------------------|
| Does your firm own any real estate? | Chi Square         | 11.86*                                                           |
|                                     | Degrees of Freedom | 10                                                               |
|                                     | p-value            | 0.29                                                             |

*Figure 4.18 Cross Tabulation Results: Ownership and Industry*

|                                     |                    |                                                                 |
|-------------------------------------|--------------------|-----------------------------------------------------------------|
|                                     |                    | What is the approximate size of your firm in terms of turnover? |
| Does your firm own any real estate? | Chi Square         | 6.71*                                                           |
|                                     | Degrees of Freedom | 5                                                               |
|                                     | p-value            | 0.24                                                            |

*Figure 4.19 Cross Tabulation Results: Ownership and Turnover*

|                                     |                    |                                                                    |
|-------------------------------------|--------------------|--------------------------------------------------------------------|
|                                     |                    | What is the approximate size of your firm in terms of staff count? |
| Does your firm own any real estate? | Chi Square         | 3.79*                                                              |
|                                     | Degrees of Freedom | 8                                                                  |
|                                     | p-value            | 0.88                                                               |

*Figure 4.20 Cross Tabulation Results: Ownership and Staff Count*

#### **4.9.4. Lease vs. buy evaluation of CRE, Industry and Company Size**

Figures 4.21 – 4.23 below shows the significance of the results for the cross tabulations of results for: lease vs. buy evaluation method and industry; lease vs. buy evaluation method and company size in terms of turnover; and lease vs. buy evaluation method and company size in terms of staff count.

The null hypothesis (Ho) for each case is that there is no relationship between lease vs. buy evaluation method and industry; lease vs. buy evaluation method and turnover; and lease vs. buy evaluation method and staff count respectively. The alternative hypothesis (Ha) for each case is that there is a relationship between lease vs. buy evaluation method and industry; lease vs. buy evaluation method and turnover; and lease vs. buy evaluation method and staff count respectively.

In all scenarios we the derived p-value was greater than 0.05 meaning that there is no significant relationship between the cross tabulated variables and therefore there is insufficient evidence to reject the null hypothesis.

| Which of the following sectors best describes your organisation? | Which of the following methods are used to evaluate the alternatives of leasing versus buying rea... |        |
|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------|
|                                                                  | Chi Square                                                                                           | 25.03* |
|                                                                  | Degrees of Freedom                                                                                   | 40     |
|                                                                  | p-value                                                                                              | 0.97   |

*Figure 4.21 Cross Tabulation Results: Lease vs. Buy Evaluation Method and Industry*

| What is the approximate size of your firm in terms of turnover? | Which of the following methods are used to evaluate the alternatives of leasing versus buying rea... |        |
|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------|
|                                                                 | Chi Square                                                                                           | 12.31* |
|                                                                 | Degrees of Freedom                                                                                   | 20     |
|                                                                 | p-value                                                                                              | 0.90   |

*Figure 4.22 Cross Tabulation Results: Lease vs. Buy Evaluation Method and Turnover*

| What is the approximate size of your firm in terms of staff count? | Which of the following methods are used to evaluate the alternatives of leasing versus buying rea... |        |
|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------|
|                                                                    | Chi Square                                                                                           | 18.66* |
|                                                                    | Degrees of Freedom                                                                                   | 32     |
|                                                                    | p-value                                                                                              | 0.97   |

*Figure 4.23 Cross Tabulation Results: Lease vs. Buy Evaluation Method and Staff Count*

#### **4.10. Discussion**

Conventional theory suggests that the goal of a firm is to maximize profit and market value, (Modigliani and Miller, 1958). This value maximization theory is achieved through maximizing the value of equity (shareholder value) and all other financial claims on the company (Jensen, 2001). In order to achieve this, a company must first define the objectives of its business activities and then develop strategies to accomplish these objectives.

Forming part of the overall business strategy should be a real estate management strategy. Real estate may contribute a significant portion of a firm's asset base; have a large negative impact on a firm's operating costs; add strategic value to a firm in both an operational and investment context; and add to a company's competitive advantage (Zeckhauser and Silverman, 1983); Veale, 1989; Johnson and Keasler, 1993; Bon and Luck, 1998; Roulac, 2001; Brounen & Eichholtz, 2004). Therefore, the importance of having a real estate strategy is to guide real estate decisions in support of the overall objectives of the business (Rodriguez and Sirmans, 1996; Lindholm and Levainen, 2001 and Hwa, 2003).

##### **4.10.1. The Lease versus Buy Decision**

Acquisition is the first stage of the corporate real estate management process with three main transactional decisions available: leasing, buying or sale and leaseback (Manning, 1991). Given the above findings a number of conclusions could be drawn on the acquisition approach adopted by South African corporate real estate decision makers. A large proportion of South African firms probably use some form of leasing (mainly long term leasing) in acquiring their corporate real estate. This may suggest that South African corporations often chose to lease rather than own their corporate real estate assets. This may be due to real estate leases traditionally being operating leases, meaning that they provide off-balance sheet financing from the tenant's perspective (Nourse 1990, cited in Ghyoot 2003). Furthermore, leasing may be preferred as it may: provide for a lower cost of financing assets relative to debt financing; allow for tax benefits; have less risks compared to ownership; demands less capital investment, provides greater liquidity and allow for greater flexibility. However,

this finding, if true, is in contradiction to that of Redman and Tanner (1991) who suggested that the primary form of corporate real estate acquisition is through outright purchase and hence ownership.

#### **4.10.2. Sources of Financing Corporate Real Estate Acquisition**

Furthermore, we note that South African firms may choose to own their corporate real estate through the use of external sources of funding rather than internally generated funds. Decision makers likely make use of external sources of funding to finance their acquisition through the use of mortgages secured by the acquired property, mortgage backed securities and sale of unsecured bonds. Internal sources of funding include retained earnings and cash flow generated from operations. However, if this finding were reflective of the corporate landscape, it would contradict Redman and Tanner (1991) who note that the primary sources of corporate real estate funding is through internally generated cash rather than external sources.

Additionally, in line with Redman and Tanner (1991), external financing in the form of sale of securities appears to be an insignificant source of funds. This conclusion is based on the fact that no respondents reported the use of sale of common and preferred stock, nor the sale of commercial paper as a method of financing corporate real estate acquisition.

Financial theory suggests that funds for capital investment is secured through a combination of external and internal sources and the cost of such capital is therefore determined by the optimal combination of funding sources. Given that the results might reflect funding from both internally and externally, although biased to externally generated sources, it can be assumed that this is in line with financial management theory. A reason why South African CRE decision makers may favour external sources of funding may be due to greater liquidity for expansion purposes. It may also be due to the cheaper cost of debt relative to the cost of equity. However, as noted above, favourable loan terms was cited as one of the least important factor in the decision to own.

Surprisingly, barter deal was also noted as a method of corporate real estate financing and a portion of respondents noted other items not included within the provided list of options as a means of acquisition. This may suggest that future studies should be done to investigate the strategy of using barter deals and the other acquisition methods used. Rodriguez and Sermans (1996) in their findings noted that real estate may be acquired through merger activities and joint ventures. This 'other' component may include mergers as this option was not allowed for however joint ventures was not recognised as a favoured acquisition method.

#### **4.10.3. Financial Considerations in Leasing Versus Owning**

The decision criteria for the acquisition of corporate real estate include both financial and non-financial determinants. Research suggests that financial determinants are dominant in influencing the lease versus buy decision. Given the above findings, the most common financial benefits cited by South African CRE decision makers in their leasing versus owning decision making process includes: taxation related matters, financial flexibility, access to credit markets and various accounting implications.

The opportunity to avoid or reduce tax through the form of tax shields is noted as a benefits of ownership. Where a company owns an asset which is subject to depreciation, accounting treatment may allow for a depreciation allowance resulting in a tax benefit for the company (Lasfer, 2005). However, this depreciation tax allowance will only benefit a company if they are in a profit making position. Compared to the tax benefits of ownership, theory suggests that one of the main reasons for the existence of the leasing market is the opportunity to avoid or reduce tax (Benjamine, et al., 1998). As shown in the above findings, a possible benefit favouring leasing is that it allows for a tax benefit in the form of tax deductibility of lease payments. The effect of this benefit is due to lease payments negatively affecting the profit and loss account of the company and therefore a greater tax loss being experienced (Meharn et al., 1999). However, as noted by Gyhoot (2003) in referencing Lewellen et al., (1976) taxes are an important consideration in the acquisition decisions, but conclude that the preference for leasing versus owning depends on specific tax conditions.

Both leasing and ownership of corporate real estate offer different forms of flexibility and the advantages offered by one form of acquisition may not necessarily outweigh the advantages of the other. The decision as to which option is preferred may therefore depend on the company's business strategy. Corporate real estate ownership may allow for the benefit of avoidance of long term commitments to lease terms and conditions, avoidance of rent increases and control over operating costs. However, ownership requires large capital commitments and given that real estate is less liquid a company may have less cash flexibility (Ghyoot, 2003).

In comparison, the greatest benefit cited for leasing is that it provides off balance sheet financing. With off balance sheet financing, no liability is reported on a company's balance sheet. This allows for greater liquidity whilst avoiding leverage and therefore improves the overall financial picture of the company (Investopedia , 2016). Furthermore, leasing does not require companies to make large capital commitments for the acquisition of the assets and therefore allows for flexibility in terms of allocation of capital. Leasing does however negatively affect a company's cash flow given the requirement for periodic lease payments.

Furthermore, access to credit markets may influence the lease versus buy decisions. The finding above note that leasing may be preferred amongst firms where capital costs are high, a finding supported by Sharp and Nguyen (1995). Leasing may offer a lower cost of financing an asset relative to debt financing. Where companies have high levels of debt funding their leverage ratios will consequently be higher. With an increase in leverage ratios the company's ability to raise further debt may be adversely affected resulting in even higher capital costs (Sharp and Nguyen, 1995). Furthermore, where corporate lenders perceive a company to be risky, debt funding may only be offered at higher costs. The above factors may therefore result in leasing being a more favoured form of corporate real estate acquisition.

Another benefit in favor of ownership is the associated reward of asset appreciation and hence capital gain. However, this benefits may only be experienced in times of positive economic conditions as market risk effects the residual value of property. A disadvantage of this is that were appreciating assets are carried at book values



corporate raiders may be attracted which may result in hostile takeovers. Further in favor of ownership, is the potential benefit associated with long term development opportunities of the acquired asset. In times of positive economic conditions redevelopment of real estate for possible on-selling or leasing to third parties may be economically beneficial. However, this determinant may be considered as an investment real estate decision rather than corporate real estate decision.

#### **4.10.4. Non-Financial Considerations in Leasing Versus Owning**

As noted above, corporate real estate decisions makers further base their real estate acquisition decision on non-financial determinants. Gyhoo (2003) noted that the lease versus buy decision extends beyond the balance sheet as there are multiple intangible and strategic attributes of the real estate asset which influence such a decision.

The findings above suggest that for South African corporate real estate decision makers the most important non-financial benefits of ownership includes: security, unique location and transport links. These findings were similar to that of Barkham and Park (2011) who noted that the probability of ownership is greater where the site is in closer proximity to customer base, skilled labour / strategic human resources and where superior visibility and security is required. However, locational benefits and access to ancillary services were noted as a reason in favour of leasing, which suggests that firm may choose to lease where they cannot purchase a property within the desired location due to limited supply.

Security was noted as a critical consideration made by South African corporate real estate decision makers in their decision to own versus leases. An assumption made is that ownership allows companies to implement and control all security related items of their premises. This findings appears to be in line with South African crime statics which indicated for the 2014/2015 year: business burglary incidents reported were around the 100,000 mark; and stock theft reported incidents at roughly 70 000 (an increase of 1.8% from the 2013/2014 year) (Africa Check, 2014). Furthermore, for the 2015/2016 year, motor vehicle theft incidents were reported at 55 000; hijackings were reported at 14 600 incidents and murder incidents were reported at 19 000, meaning

that nearly 34 murders recorded per 100,000 people in the country (Africa Check, 2016).

Space for expansion was also noted an important benefit of ownership. However, Barkham and Park (2011) note in their findings that size of the company (measured by number of employees) has no effect on probability of ownership, but the larger the required operational site the greater the tendency for ownership. In contradiction, Lasfer (2005) suggests that larger companies and those with higher growth prospects favour leasing.

In comparison, the above findings suggest that South African CRE decision makers value the benefit from flexibility of size when leasing. Leasing allows for companies to acquire the suitable size of premises based on the operational requirements. Furthermore, with leasing there is less risk of being tied to a functionally obsolete building. Gyhoot (2003) suggests that small manufacturing companies, retailers and services providers may lease due to mobility requirements.

Outsourcing of real estate management responsibilities was also suggested to be a benefit of leasing. Firms who are not in the business of real estate and have ownership over their corporate real estate space assume the responsibility of managing this space. Furthermore, outsourcing of these responsibilities may allow for greater efficiency as firms in the business of commercial real estate have superior competencies in managing such property (Benjamin et al., 1998),

Despite noting the non-financial detriments influencing the tenure decision of leasing or buying corporate real estate there is greater emphasis within the existing body of literature in making such a decision based on financial merits (Golan, 1999). The principal focus of financial analysis in the lease versus buy decision is to choose the option that provides the needed space at the least cost or highest return (Etter and Caldwell, 1995). Financial theory suggests that the most appropriate methodology for this analysis is through discounting cash flows and comparing the cost of leasing and owning (Net Present Value). Where the NPV is positive a leasing acquisition strategy should be followed (and vice versa) (Etter and Caldwell, 1995).

#### **4.10.5. Financing Technique for the Evaluation of Corporate Real Estate Acquisition**

Redman and Tanner (1991) noted that the majority of decision makers calculate the net effect of leasing, followed by comparing the undiscounted cash flows for leasing and buying. Barkham and Park (2011) arrive at the same conclusion as they note the decision generally begins with comparing the discounted cash flows of buying and leasing corporate real estate using the company's discount rate (cost of capital). In contradiction however, the findings above suggest that less than a third of South African CRE decision makers used the discounting approach in their decision to own versus lease. Rather, if true, the most common approach used by South African corporate real estate decision makers is comparing the undiscounted cash flow of leasing versus buying. The above findings further suggest that South African CRE decision makers base their decisions to lease or buy by comparing the net income of the property under each alternative. This also goes against conventional theory which suggests that the use such an approach is not a preferred due to real estate generating cash to the company and therefore may lead to inappropriate decision making. Furthermore, a quarter of respondents noted that they do not use any financial metrics to evaluate the lease versus buy decision which is similar to the findings of Redman and Tanner (1991) who note that 80% of their surveyed companies base the lease versus buy decision on financial analysis.

Therefore, these findings, if true, suggest that the majority South African CRE decision makers do not follow the most widely accepted methodology of financial evaluation. This may lead to a problem of inaccurate interpretation of the best strategy to follow and hence not choosing the option that provides the needed space at the least cost. However, where the literature is also in disagreement is the appropriate cash flows and discount rates to be used (Miller, 2001). The choice as to which discount rate to be used in evaluating the lease versus buy decision is open to much interpretation. The findings above suggest that the majority of South African decision makers use the weighted average cost of capital and rate of return on new investment as their discount rate. However, within corporate finance examples the most common discount rate used is the after tax cost of debt, but such examples are based on the leasing of equipment rather than real estate. Barkham and Park (2011) note that the most

appropriate discount rate which is their weighted cost of capital. Despite the uncertainty in the suitable discount rate, financial theory suggests that the discount rate must reflect the risk involved from leasing or buying the asset (Redman and Tanner, 1991). However, decision makers must be cognisant that using different discount rates may lead to different outcomes and where an inappropriate discount rate is used the results provide may not indicate the most suitable outcome.

Literature on sale and leaseback suggests a growing trend of this strategy within an international context. Similarly, Gyhoo (2003) noted this trend amongst South African companies. However, given the above findings it is difficult to support this conclusion due to the limited number of respondents. Of those who do follow such a strategy, and if true, the findings suggest that its main financial benefit is the associated tax advantages from leasing. However, literature on this topic suggests the main advantage of sale and leaseback is that it unlocks funds for working capital requirements which was reported as a moderate benefit in the above findings (Redman & Tanner, 1991).

Other factors supported by South African CRE decision makers which is similar to literature on the topic includes the benefit of easier management of real estate and provides funds to improve earnings per share. Petison (2007) identifies that the primary driver of such a trend is due to the fact that corporations who are not in the business of real estate holdings chose to divest from those operations that are not core to their business functions. Golan (1998) supports this as he noted that investing large amount of funds into assets that are not a core function of a company's business is sub optimal given a company's desire to maximise value, such as Return on Assets and Economic Value added.

#### **4.10.6. The use of Professionals within the Corporate Real Estate Decision Making Process**

Both in house and outsourced professional services were found to be used by South African Corporate Real estate decisions makers when making the lease versus buy decision. However, the majority of professionals used were noted to be outsourced. A reason for this may be due to the human capital cost of employing such services on

a full time basis and therefore corporations chose to outsource these services on an ad hoc basis. In terms of the most widely professionals used, commercial real estate consultants and tax consultants were mainly used when making the buy decision. For leasing, commercial real estate consultants were also noted as the most commonly used professional

### 5. Conclusion

#### 5.1. Summary of Findings

South African firms mainly use some form of leasing in acquiring their corporate real estate. 50% of respondents favoured long term leasing as their real estate acquisition strategy. Where ownership is chosen, the space is mainly financed through the use of external sources of funding rather than internally generated funds. This is noted as mortgages secured by the acquired property is the most common source of funding by South African companies.

For South African CRE decision makers, the most common financial considerations in favour of ownership may include: the prospect for long term development opportunities (at 61.54% of the respondents); control over operating costs (53.85%); and potential for capital gain (46.15%). The most common non-financial considerations in favour of ownership may include: security, unique location and transport links (each at 69.23% of responses). These non-financial considerations are no surprise given reported South African crime statistics.

In terms of leasing, the most common financial benefit cited by South African CRE decision makers may include: the advantage of off balance sheet financing (83.33% of respondents); the lower cost of financing assets relative to debt financing (75%); and the tax deductibility of lease payments (58.33%). The most common non-financial considerations in favour of leasing may include: flexibility of size of space (66.67% of respondents); less risk of being tied to a functionally obsolete building (58.33%); and locational benefits (58.33%).

Conventional theory suggests that decision makers should determine if the real estate asset is worth acquiring and if so then determine the method of financing. However, the findings note that just over half of South African CRE decision makers evaluate this decision (at 56% of respondents). The most common financing technique used by

South African CRE decision makers in their evaluation of CRE acquisition is comparing the undiscounted cash flow of leasing versus buying (at 47% of respondents). This does not follow the conventional discounting approach as suggested by literature. However, where discounting is used, the most common discount rates applied by local companies are the weighted average cost of capital and rate of return on new investment (both at 50% of respondents).

The majority of South African corporations have not historically followed a sale and leaseback strategy (65% of respondents). However, of those who have, the main financial benefit is the associated tax advantages from leasing (83% of respondents); the reduction in the need for debt financing the company's operations; and easier management of real estate (both at 67%). The findings suggest that most common analytical methods being used by South African CRE decision makers to evaluate this decision is the estimation of the net income from the sale (80% of respondents)

South African CRE decision makers make use of professional services when making their lease or buy decision. The majority of these professionals are outsourced and include commercial real estate consultants and tax consultants.

## **5.2. Discussion**

In conclusion, the research undertaken, as included above, was an attempt to bridge a number of research gaps on the financing or corporate real estate acquisition amongst South African companies. In so doing, the author attempted to address the following topics within the South African corporate real estate management process, including: the acquisition methods and financing sources; the decision variables in leasing versus owning; the criterion used in deciding on the financing technique for acquisition; the use of sale and leasebacks and the decision variables used in its evaluation; the use of professionals within the lease and own decision; and the existence of relationships between financing methods, leasing characteristics, ownership characteristics, company characteristics and the evaluation methodology for leasing versus buying.

The tenure decision of corporate real estate is faced by most organisations at some stage of their business cycle and therefore should form part of a company's real estate strategy – to lease, purchase or sale and leaseback. All strategies are followed by South African corporations however, it appears that some form of leasing is preferred.

Tenure decisions are more complex in corporate real estate compared to ordinary tangible assets and therefore several financial and non-financial benefits have been noted in favour of leasing and/or buying. Financial considerations influencing this decision include tax considerations, financial flexibility, cost of debt, liquidity and cost control measures. Non-financial considerations influencing this decision include flexibility of space required, locational benefits, security, and property management responsibilities and functions. Many of these benefits are seen to be common amongst organisations, however when corporate real estate decision makers make their tenure choice it should be made in line with the company's real estate strategy which forms part of the overall business strategy.

Furthermore, even though multiple factors affect the decision to lease or buy, the decision's financial basis is critical, if not the most important. Empirical studies show that there is a shortfall on the consensus as to the most suitable financing technique in assessing corporate real estate acquisition, however using a discounting approach and calculating the net present value is most suitable. Furthermore, the use of discount rate is also an area of disagreement in literature, however it appears that the weighted average cost of capital is the most favoured.

### **5.3. Future Work**

Given the limited number of respondents, future research on this subject within a South African context should aim at securing a significantly larger number of respondents to allow for robustness of results. This may be achieved through securing a significantly larger sample size and employing other methodological approaches such as interviews. Additionally, with a greater response rate, future research should attempt to identify significance in cross tabulation of results between financing methods, leasing, ownership, and company characteristics, and the evaluation of tenure methodology within a South African context. Expanding the methodology to



include regression analysis will also be beneficial to provide greater insight into significance of relationships.

Future investigations should attempt to determine if trends exist in favour leasing, owning or sale and leaseback within the South African context. If trends in favour of sale and leasebacks are identified, research should be done to investigate the determinants influencing this decision and the characteristics of companies following this strategy.

Further investigations should be done to determine if any other financial and non-financial considerations, not included within the survey options, influence the lease versus buy decision. Future research should also identify if alternative financing options are available to South African CRE decision makers given maturing market conditions.

Research should also attempt to investigate the rationale of South African CRE decision makers on their financial technique chosen to evaluate their CRE acquisition decision and their applied discount rates.

## References

- Accounting Explained. (2013). Finance Lease. [Online] Available from: <http://accountingexplained.com/financial/leases/finance-lease/> [Accessed 25 October 2015].
- Africa Check. (2014). Factsheet: South Africa's official crime statistics for 2013/14. [Online] Available from: <https://africacheck.org/factsheets/factsheet-south-africas-official-crime-statistics-for-201314/> [Accessed 9 December 2016].
- Africa Check. (2016). Factsheet: South Africa's 2015/16 crime statistics. [Online] Available from: <https://africacheck.org/factsheets/factsheet-south-africas-201516-crime-statistics/> [Accessed 9 December 2016].
- Ali, Z., McGreal, S., Adair, A., & Webb, J. (2008). Corporate Real Estate Strategy: A Conceptual Overview, *Journal of Real Estate Literature*, 16(1): 3 -21.
- Allen, M., Rutherford, R., & Springer, T. (1993). The Wealth Effects of Corporate Real Estate Leasing. *The Journal of Real Estate Research*, 567 -578.
- Association of Chartered Certified Accountants. (2015). Accounting for Leases. [Online] Available from: <http://www.accaglobal.com/za/en/student/exam-support-resources/fundamentals-exams-study-resources/f7/technical-articles/accounting-for-leases.html/> (Accessed 9 December 2016).
- Barkham, R. & Park, A. U. (2011). Lease versus buy decision for corporate real estate in the UK. *Journal of Corporate Real Estate*, 13(3): 157 -168.
- Benjamine, J., de la Torre, C. & Musumeci, J. (1998). Rational for Real Estate Leasing versus Owning. *Journal of Real Estate Research*, 15(3): 223 -237.
- Bickman, L. & Rog, D. (2009). *The Sage Handbook of Applied Social Research Methods* (2nd ed.). California: Sage Publications.
- Bon, R. & Luck, R. (1998). Outsourcing of property-related management functions in Europe and North America 1993-1998. *Construction Management and Economics*, 17(4): 409 -412.
- Bon, R. & Luck, R. (2002). Annual Survey of Corporate Real Estate Practices. Reading, University of Reading.
- Brounen, D. & Eichholtz, P. M. (2004). Corporate Real Estate Ownership Implications: International Performance Evidence. *Journal of Real Estate Finance and Economics*, 30(4).
- Brown, R. et al. (1993). *Managing Corporate Real Estate*. New York: Wiley & Sons.
- Business Dictionary. (2015). Capital Lease. [Online] Available from: <http://www.businessdictionary.com/definition/capital-lease.html/> [Accessed 25 October 2015].
- Etter, W.E. & Caldwell, F.F (1995). Buy or Lease? Commercial Property Decisions. *The Real Estate Center Journal*, 1064.

- Gale, J. & Case, F. (1989). A Study of Corporate Real Estate Resource Management. *The Journal of Real Estate Research*, 4(3): 23 -34.
- Ghyoot, V. (2003). The Lease V Buy Decision in Real Estate: Theory and Practice. Helsinki, University of South Africa.
- Gibson, V. (2000). The Cost of Choice: How Corporate Real Estate Managers Evaluate Business Space Options. Virginia, University of Reading.
- Golan, M. (1998). The own versus lease decision - myth and reality. *Journal of Corporate Real Estate*, 1(3): 241 -253.
- Guy, G. (1994). Integrating Case Study and Survey Research Methods: An Example in Information Systems. *European Journal of Information Systems*, 3(2): 112 -126.
- Hwa, T. K. (2003). The Reorganisation and Restructuring of Corporate Real Estate. Selangor, University of Technology MARA.
- Investopedia. (2015). Liabilities - Effects Of Capital Vs. Operating Leases. [Online] Available from: <http://www.investopedia.com/exam-guide/cfa-level-1/liabilities/capital-operating-leases-effects.asp/> [Accessed 25 October 2015].
- Investopedia. (2016). Off-Balance-Sheet Financing. [Online] Available from: <http://www.investopedia.com/terms/o/obsf.asp/> [Accessed 9 December 2016].
- Investopedia. (2016). P-Value. [Online] Available from: [http://www.investopedia.com/terms/t/type\\_1\\_error.asp/](http://www.investopedia.com/terms/t/type_1_error.asp/) [Accessed 6 December 2016].
- InvestorWords. (2012). Sale and Leasback. [Online] Available from: [http://www.investorwords.com/4364/sale\\_and\\_leaseback.html/](http://www.investorwords.com/4364/sale_and_leaseback.html/) [Accessed 10 December 2012].
- Jensen, M. C. (2001). Value Maximization, Stakeholder Theory, and the Corporate Objective Function. *Journal of Applied Corporate Finance*, 14(3): 8 -21.
- Johnson, B. R. & Onwuegbuzie, A. J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *American Educational Research Association*, 33(7): 14 -26.
- Johnson, L. L. & Keasler, T. (1993). An industry profile of corporate real Estate. *Journal of Real Estate Research*, 8(4): 455 -473.
- Kenley, R. & Heywood, C. (2000). Corporate Real Estate Management Practice: Contrasts Between Financial And Service Provision Priorities In Corporate And Government Organisations. Melbourn, University of Melbourn.
- Lasfer, M. (2005). Why do Companies Lease their Real Estate Assets?. London, City University.
- Lasfer, M.A. & Levis, M. (1998). The Determinants of the Leasing Decision of Small and Large Companies. London: City University.

- Lee, S. S. K. (2003). Capital and Operating Leases A Research Report. Federal Accounting Standards Advisory Board.
- Libarkin, J. C. (2002). Research Methodologies in Science Education: The Qualitative-Quantitative Debate. *Journal of Geoscience Education*, 50(1): 78 -86.
- Lindholm, A.L., Gibler, K. M. & Levainen, K. I. (2006). Modeling the Value-Adding Attributes of Real Estate to the Wealth Maximization of the Firm. *Journal of Real Estate Research*, 28(4): 445 -475.
- Lindolm, A.L. & Levainen, K. (2006). A framework for identifying and measuring value added by corporate real estate. *Journal of Corporate Real Estate*, 8(1): 38 -46.
- Louko, A. (2005). Corporate Real Estate Disposal Impacts on Corporate Performance. Helsinki, Helsinki University of Technology.
- Manning, C. (1991). Leasing Versus Purchase of Corporate Real Property: Leases with Residual Equity Interests. *The Journal of Real Estate Research*, 6(1): 79 -85.
- Manning, C. & Roulac, S. E. (1999). Corporate Real Estate Research within the Academy. *Journal of Real Estate Research*, 17(3): 265 -279.
- Mehran, H., Taggart, R. & Yermack, D. (1999). CEO ownership, leasing and debt financing. *Journal of Financial Managment*, 28: 5 -14.
- Miller, S. E. (2001). Textbook treatments of the lease versus purchase decision. *Agricultural Finance Review*, 61(2): 199 -207.
- Modigliani, F. & Miller, M. H. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment. *The American Economic Review*, 48(3): 261 -297.
- Mole, T. & Taylor, F. (1992). Facilities Management: *Evolution or Revolution in Facilities Management*. London: RICS Books.
- Nourse, H. O. & Roulac, S. E. (1993). Linking Real Estate Desicions to Corporate Stratergy. *The Journal of Real Estate Research*, 8(4): 475 -494.
- Oluwoye, J., Karantonis, A. & Fakorede, A. (2001). Corporate Real Estate Asset Managment: A Conceptual Framework. *Pacific Rim Property Research Journal*, 7(1): 18 -34.
- Petison, P. K. (2007). A review of lease versus own decision in corporate real estate: the way forward for developing countries such as Ghana. Stockholm, KTH University
- Pinsonneault, A. & Kraemer, K. L. (1993). Survey Research Methodology In Management Information Systems: An Assessment. *Journal of Management Infrmation Systems*, 10(2): 75 -105
- Price, S. R. (2003). Lease-Versus-Buy Cost Analysis. Colorado, Benson Price Commercial
- Redman, A. L. & Tanner, J. R. (1991). The Financing of Corporate Real Estate: A Survey. *The Journal of Real Estate Research*, 6(2): 217 -240.

- Rodriguez, M. & Sirmans, C. (1996). Managing Corporate Real Estate: Evidence from the Capital Markets. *Journal of Real Estate Literature*, 4: 13 -33.
- Roulac, S. E. (2001). Corporate Property Strategy is Integral to Corporate Business Strategy. *Journal of Real Estate Research*, 22(1): 129 -152.
- Rowland, P. (2001). Lease or Buy? How Management of the Asset Upsets the Equivalence. Perth, Curtin University of Technology.
- Rumsey, D. J. (2010). *Statistics Essentials For Dummies* (2nd ed.). Ohio: Wiley & Sons.
- Sale, J. E., Lohfeld, L. H. & Brazil, K. (2002). Revisiting the Quantitative-Qualitative Debate: Implications for Mixed-Methods Research. *Qual Quant*, 36(1): 43 -53.
- Saunders, M., Lewis, P. & Thornhill, A. (2012). *Research Methods For Business Students*. Essex: Pearson.
- Seiler, M. J., Chatrath, A. & Webb, J. R. (2001). Real Asset Ownership and the Risk and Return to Stockholders. *Journal of Real Estate Research*, 22(1): 199 -212.
- Sharp, S. & Nguyen, H. (1995). Capital market imperfections and the incentive to lease. *Journal of Financial Economics*, 39: 271 -294.
- Veale, P. R. (1989). Managing Corporate Real Estate Assets. *Journal of Real Estate Research*, 4(3): 1 - 22.
- Weatherhead, M. (1997). *Real estate in Corporate Strategy*. New York: Palgrave.
- Zeckhauser, S. & Silverman, R. (1983). Rediscover your company's real estate. *Harvard Business Review*, 111 -117.

## **Annexure – Survey**

### **THE FINANCING OF CORPORATE REAL ESTATE ACQUISITION: A SOUTH AFRICAN STUDY**

1. Is your company a listed entity?
  - ☐ Yes
  - ☐ No
  
2. Which of the following sectors best describes your organisation?
  - ☐ Basic Materials
  - ☐ Industrials
  - ☐ Consumer Goods
  - ☐ Health Care
  - ☐ Consumer Services
  - ☐ Professional Services
  - ☐ Financial Services (excluding REITS and Property Investment Companies)
  - ☐ Utilities
  - ☐ Technology
  - ☐ Telecommunications
  
3. What is the approximate size of your firm in terms of turnover?
  - ☐ Less than or equal to R250 million
  - ☐ R251 - R500 million
  - ☐ R501 - R750 million
  - ☐ R751 million - R1 billion
  - ☐ R1 billion - R5 billion
  - ☐ Greater than R5 billion
  
4. What is the approximate size of your firm in terms of staff count?
  - ☐ Less than or equal to 100
  - ☐ 101 - 200
  - ☐ 201 - 300
  - ☐ 301 - 400
  - ☐ 401 - 500
  - ☐ 501 - 600
  - ☐ 601 - 700
  - ☐ 701 - 800
  - ☐ Greater than 800

5. What is the approximate Rand value of new real estate investments your company has made during the past fiscal year?
- ☐ R100 million or less
  - ☐ R101 - R250 million
  - ☐ R251 - R500 million
  - ☐ R501 million - R1 billion
  - ☐ Greater than R1 billion
6. How does your company finance the real estate it uses? (check all that apply)
- ☐ Long term leasing
  - ☐ Mortgages secured by the acquired property
  - ☐ Retained Earnings
  - ☐ Cash flow from operations
  - ☐ Mortgage backed securities
  - ☐ Sale of common stock
  - ☐ Sale of preferred stock
  - ☐ Sale of unsecured bonds
  - ☐ Sale of commercial paper
  - ☐ Sale and leaseback arrangement
  - ☐ Joint ventures
  - ☐ Barter deals
  - ☐ Other
7. Does your firm own any real estate?
- ☐ Yes
  - ☐ No
8. What is the approximate book value of all real estate assets owned by your company?
-

9. Which of the following factors are important in your decision to own real estate?

(Check all that apply)

- ☐ Avoidance of rent increases
- ☐ Avoidance of long term commitments to lease terms and conditions
- ☐ Control over management costs
- ☐ Protection of expensive investment in plant
- ☐ Potential for capital gain
- ☐ Potential for long term development opportunities
- ☐ Contribution to joint venture programs
- ☐ Capital allowances
- ☐ Tax shields
- ☐ Control over operating costs
- ☐ Ability to acquire the property at below market levels
- ☐ Superior achievable yield
- ☐ Favourable loan terms
- ☐ Other

10. Please rank the following factors influencing your decision to own real estate? (1 being most important to 5 being least important)

|                                                                  | 1                     | 2                     | 3                     | 4                     | 5                     |
|------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Avoidance of rent increases                                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Avoidance of long term commitments to lease terms and conditions | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Control over management costs                                    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Protection of expensive investment in plant                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Potential for capital gain                                       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Potential for long term development opportunities                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Contribution to joint venture programs                           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Capital allowances                                               | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Tax shields                                                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Control over operating costs                                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Ability to acquire the property at below market levels           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Superior achievable yield                                        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Favorable loan terms                                             | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Other                                                            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |



11. What other considerations are important in your decision to own real estate?

(Check all that apply)

- ☐ Limited suitable real estate to be rented
- ☐ Security
- ☐ Unique location
- ☐ Unique building design
- ☐ Transport links
- ☐ Safeguarding location for immovable capital equipment
- ☐ Space for expansion
- ☐ To avoid difficult relationships with landlords
- ☐ Ability to brand your own property
- ☐ Other

12. In your decision making process to own real estate, do you make use of the following professionals?

- ☐ Commercial real estate consultants
- ☐ Investment advisers
- ☐ Financial consultants
- ☐ Legal advisers
- ☐ Tax consultants
- ☐ Business strategists
- ☐ Property developers
- ☐ Other
- ☐ None of the above

13. Please select which of these professionals are in house or outsourced.

|                                    | In House              | Outsourced            |
|------------------------------------|-----------------------|-----------------------|
| Commercial real estate consultants | <input type="radio"/> | <input type="radio"/> |
| Investment advisers                | <input type="radio"/> | <input type="radio"/> |
| Financial consultants              | <input type="radio"/> | <input type="radio"/> |
| Legal advisers                     | <input type="radio"/> | <input type="radio"/> |
| Tax consultants                    | <input type="radio"/> | <input type="radio"/> |
| Business strategists               | <input type="radio"/> | <input type="radio"/> |
| Property Developers                | <input type="radio"/> | <input type="radio"/> |
| Other                              | <input type="radio"/> | <input type="radio"/> |

14. Does your firm lease any real estate?

- ☐ Yes
- ☐ No

15. Approximately what percentage of your company's real estate is leased?
- ☐ Less than 25%
  - ☐ 26% - 50%
  - ☐ 51% - 75%
  - ☐ 75%- 100%
16. Have the leases been structured as:
- ☐ Operating leases
  - ☐ Financial leases
  - ☐ Both operating and financial leases
17. Which of the following considerations were important in your decision to lease real estate?  
(Check all that apply)
- ☐ Flexibility of size of space when letting
  - ☐ Ability to test site locality without a long term commitment
  - ☐ Less risk of being tied to a functionally obsolete building
  - ☐ Availability of ancillary services
  - ☐ Freedom of choice over property management
  - ☐ Ability to establish community links in aid of business
  - ☐ Passing on real estate management responsibilities to focus on core business
  - ☐ Market uncertainty
  - ☐ Locational benefits
  - ☐ Other
18. Which other factors were important in your decision to lease real estate?  
(Check all that apply)
- ☐ Tax deductibility of lease payments
  - ☐ Conserving cash
  - ☐ Less risk of being tied to a functionally obsolete building
  - ☐ Lower cost of financing assets relative to debt financing
  - ☐ Easier terms relative to conventional types of debt
  - ☐ Greater liquidity
  - ☐ Greater flexibility in terms of expensive versus cheaper location
  - ☐ Avoidance of municipal rates and taxes and utility costs
  - ☐ Other

19. Please rank the following factors influencing your decision to lease real estate? (1 being most important to 5 being least important)

|                                                                   | 1                     | 2                     | 3                     | 4                     | 5                     |
|-------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Tax deductibility of lease payments                               | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Conserving cash                                                   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Provides off balance sheet financing                              | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Lower cost of financing assets relative to debt financing         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Easier terms relative to conventional types of debt               | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Greater liquidity                                                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Greater flexibility in terms of expensive versus cheaper location | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Avoidance of municipal rates and taxes and utility costs          | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Other                                                             | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

20. In your decision making process to lease real estate, do you make use of the following

- ☐ Commercial real estate consultants
- ☐ Investment advisers
- ☐ Financial consultants
- ☐ Legal advisers
- ☐ Tax consultants
- ☐ Business strategists
- ☐ Property developers
- ☐ Other
- ☐ None of the above

21. Please select which of these professionals are in house or outsourced.

|                                    | In House              | Outsourced            |
|------------------------------------|-----------------------|-----------------------|
| Commercial real estate consultants | <input type="radio"/> | <input type="radio"/> |
| Investment advisers                | <input type="radio"/> | <input type="radio"/> |
| Financial consultants              | <input type="radio"/> | <input type="radio"/> |
| Legal advisers                     | <input type="radio"/> | <input type="radio"/> |
| Tax consultants                    | <input type="radio"/> | <input type="radio"/> |
| Business strategists               | <input type="radio"/> | <input type="radio"/> |
| Property developers                | <input type="radio"/> | <input type="radio"/> |
| Other                              | <input type="radio"/> | <input type="radio"/> |

22. Have any of the leases contained an option to buy the property?
- ☐ Yes
  - ☐ No
- ☐ Q23 In the leases with the option to buy, were the options ever exercised?
- ☐ Yes
  - ☐ No
23. Approximately what percentage of the purchase options in the lease have been exercised?
- ☐ Less than 25%
  - ☐ 25% - 50%
  - ☐ 50% - 75%
  - ☐ 75% - 100%
24. Which of the following methods are used to evaluate the alternatives of leasing versus buying real estate? (check all that apply)
- ☐ We do not evaluate the alternatives of leasing versus buying real estate
  - ☐ Net present value of leasing versus buying
  - ☐ Comparison of cash flows of leasing to the cash flows from buying
  - ☐ Comparison of net income from leasing to net income from buying
  - ☐ Other
25. If you use a discounted cash flow method to decide whether to lease or buy real estate, how is the discount rate estimated?
- ☐ Before tax cost of debt
  - ☐ After tax cost of debt
  - ☐ Weighted average cost of capital
  - ☐ Rate of return on new investments
  - ☐ Rate of return on previous investments
  - ☐ Other
26. For the properties that might be leased, do you evaluate the decision to acquire the property first and then evaluate the alternatives of leasing versus buying the property?
- ☐ Yes
  - ☐ No
27. Has your company used sale-leaseback arrangements on any of its properties?
- ☐ Yes
  - ☐ No

28. What percentage of your firm's real estate involved the use of sale and leaseback transaction?

- ☐ Less than 25%
- ☐ 25% - 50%
- ☐ 50% - 75%
- ☐ 75% - 100%

29. What have been the advantages of using sale-leasebacks? (check all that apply)

- ☐ Provides extra funds for expansion of operations
- ☐ Provides funds for working capital
- ☐ Less need for debt financing of the company's operations
- ☐ Tax advantages
- ☐ Makes the management of real estate easier
- ☐ Provides an off balance sheet method of financing real estate
- ☐ Provides funds to improve earnings per share
- ☐ Provides funds to buy back some of the company's common stock
- ☐ Other

30. What methods are used to evaluate whether a sale-leaseback arrangement should be used?

- ☐ Cash flow from the sale-leaseback
- ☐ Comparison of the present value of the proceeds from the sale with the present value of the costs of the sale-leaseback
- ☐ Estimation of the net income from the sale of the property
- ☐ Other

31. Have the sale-leaseback transactions been structured as:

- ☐ Operating leases
- ☐ Financial leases
- ☐ Both operating financial leases