



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Gordon Institute of Business Science

The Balanced Scorecard framework aiding retail investment decision making processes

Mduduzi Nsibande

20306602

A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration.

25 January 2014

© University of Pretoria

Abstract

Current real estate investment decision making frameworks fail to recognise differences posited by the retail sector. The investment decision stage concerned with forecasting expected returns relies on financial and quantitative models such as those derived from the Modern Portfolio Theory. In a shopping mall environment, however, future performance is driven by nonfinancial factors, for example tenant mix and superior customer experience. Therefore, forecasting expected returns in a retail environment requires a nuanced approach relative to other commercial property sectors.

Using a Balanced Scorecard framework, this study investigated the usefulness of nonfinancial factors in forecasting expected returns in retail. An electronically administered survey using a sample of institutional investors that contributed to South Africa's SAPOA/IPD Index for 2012 was conducted. Only officials occupying investment decision making positions were invited to participate in the survey. Nonfinancial factors identified from the literature were presented to the respondents on a Likert-Style scale. In aggregate, participants to the survey possessed 156 years of commercial property experience and 56 years of retail experience. Mean scores obtained from participants' responses were used to analyse the research findings.

The study found nonfinancial factors useful when forecasting expected returns in a retail investment decision environment. Further, the study suggested the use of a Balanced Scorecard framework in order to guide developments in the area of retail investment decisions. In conclusion, the study gave direction for future research in the retail sector.

List of key words

Investment Decision Making, Nonfinancial Factors, Institutional Investors, Shopping Mall /Centre, and Balanced Scorecard

Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Signature: _____

Name: Mduduzi Nsibande

Date: 25 January 2014.

Acknowledgements

I would like to give credit and appreciation to the individuals who contributed and made this dissertation possible.

- To my supervisor Dr Douw Boshoff, whose insightful guidance and coaching resulted in the successful completion of this project.
- To my wife Rejoice, my pillar of strength, for being able to successfully play a dual parental role in the lives of our children, while I was away, but physically present. I could not have done this without your support.
- To the staff at the GIBS Information Centre, thank you so much for your ever willingness to assist.
- To my classmates, especially the MBA Full-Time group, thank you for shaping my thinking during the initial stages of the project.
- To all my former colleagues at Menlyn Park Shopping Centre, your assistance has been quite invaluable.
- To the property practitioners who participated in my study, thank you for making the time to respond to my questionnaires.
- And above all, to the **Almighty Father**, from whom all things are made possible. Thank you **Lord** for giving me this chance.



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Dedication

In Loving Memory of

Daliya Bernard Mabaso,

Our family will forever be indebted to the sacrifices you made for us

You are and always will be our Giant

Thank You.

Table of Contents

1	Chapter 1 - Definition of the Problem	1
1.1	Introduction.....	1
1.2	Research Problem	1
1.3	Research Aims	2
1.4	Research Scope.....	2
1.5	Research Motivation	3
1.6	Definition of Terms	6
1.7	Conclusion.....	7
2	Chapter 2 - Theory and Literature Review	8
2.1	Commercial Property	8
2.2	Globalisation and Commercial Property	14
2.3	Retail Commercial Property.....	16
2.4	Real Estate Investment Decision Making.....	19
2.5	The Balanced Scorecard.....	23
2.6	Conclusion.....	28
3	Chapter 3 - Research Hypotheses.....	29
3.1	Introduction.....	29
3.2	Research Hypotheses	30
4	Chapter 4 – Research Methodology.....	31
4.1	Choice of Methodology.....	31
4.2	Population.....	35
4.3	Sampling and Sampling Unit	36
4.4	Data Analysis	37
4.5	Assumptions.....	40
4.6	Research Limitations	40
4.7	Validity and Reliability.....	42
4.8	Summary	42
5	Chapter 5 – Research Results	44
5.1	Introduction to Results.....	44
5.2	Documentation of Response Rate.....	44



5.3	Sample Characteristics	45
5.4	<i>Hypothesis 1: Prioritisation of Investment Decision Stages</i>	47
5.5	<i>Hypothesis 2: Usefulness of Nonfinancial factors</i>	50
5.6	<i>Hypothesis 3: Subjectivity of Professional Valuation Services</i>	55
5.7	<i>Hypothesis 4: Factors Influencing Diversification Strategies</i>	61
5.8	Relevance of Financial Information	70
5.9	Overall Results	73
6	Chapter 6 – Discussion of Findings	75
6.1	Introduction.....	75
6.2	<i>Hypothesis 1: Prioritisation of Investment Decision Stages</i>	75
6.3	<i>Hypothesis 2: Usefulness of Nonfinancial Factors</i>	78
6.4	<i>Hypothesis 3: Subjectivity of Professional Valuation Services</i>	81
6.5	<i>Hypothesis 4: Factors Influencing Diversification Strategies</i>	84
6.6	Relevance of Financial Information	89
6.7	Summary	94
7	Chapter 7 - Conclusion	95
7.1	Introduction.....	95
7.2	Research Background and Objectives.....	95
7.3	Key Insights from Research Results	96
7.4	Conclusion.....	97
7.5	Direction of Future Research.....	98
8	References	102
9	Appendices	111
9.1	SAPOA/IPD SA Property Index Contributors for 2012	111
9.2	JSE Listed Property Funds (31 Dec 2012).....	112
9.3	Africa’s Projected GDP growth rates (% change y/y 2012 -2017).....	114
9.4	Africa’s Rise to Middle Class	115
9.5	Roberts & Henneberry’s Decision Framework.....	116
9.6	Parker’s Decision Framework	117
9.7	Farragher & Savage’s Decision Framework	118
9.8	Classification Hierarchy of Tenants	119
9.9	Draft Research Questionnaire.....	120



9.10	ICSC Shopping Centre Classification	127
9.11	Covering Letter to Questionnaire	128

ABBREVIATIONS, ACRONYMS, AND GLOSSARY

BSC	Balanced Scorecard
C & I	Commercial and Industrial
CIO	Chief Investment Officer
E & Y	Ernst and Young
FDI	Foreign Direct Investment
GIBS	Gordon Institute of Business Science
GLA	Gross Lettable Area
GDP	Gross Domestic Product
ICSC	International Council of Shopping Centres
IPD	Investment Property Databank
IRR	Internal Rate of Return
JSE	Johannesburg Stock Exchange
MBA	Master of Business Administration
MNPC	Multinational Property Company
MPT	Modern Portfolio Theory
MV	Market Value
PV	Professional Valuation
REIT	Real Estate Investment Trust
SA	South Africa
SAPOA	South African Property Owners Association
UK	United Kingdom

1 Chapter 1 - Definition of the Problem

1.1 Introduction

Today shopping malls of various types and sizes are ubiquitous in both urban and rural areas of our societies. Due to the capital intensity associated with ownership, it is widely reported that ownership of these retail assets is relatively limited to institutional investors, for instance, insurance and pension fund institutions (Kaiser, 2005; Parker, 2013). Ownership of commercial property is usually facilitated through investment decision making frameworks. In the real estate industry, investment decision making frameworks that aid acquisition decisions have been the subject of study for decades. To date, however, there is no universally agreed decision making framework (Sah, 2011).

1.2 Research Problem

Current normative decision making frameworks vary in terms of the decision stages involved in the entire decision making process. In a study conducted by Farragher and Savage (2008), the investment stage concerned with forecasting expected returns was identified by a sample of institutional investors as most important. In order to forecast expected returns, rational investment frameworks presently make use of financial as well as mathematical information. The investment stage concerned with forecasting expected returns, therefore, is biased towards financial information at the expense of nonfinancial.

Downplaying the important role of nonfinancial in driving future performance makes present decision making frameworks inadequate for the retail sector. According to Mittal, Huppertz, and Khare (2008), retail performance is generated by the nonfinancial attribute of superior customer experience. There is therefore a need to incorporate nonfinancial factors into retail decision making frameworks.

Kaplan and Norton (1996) introduced the Balanced Scorecard (BSC) in order to prevent the tendency of bias in favour of financial information when forecasting future performance. According to Drury (2009), the BSC framework retains financial indicators (lagging indicators), but only in so far as aiding the understanding of the drivers of such performance (lead indicators). For purposes of investment decision making in retail, therefore, using a BSC framework might offer invaluable insights when forecasting expected returns.

1.3 Research Aims

The study uses a South African environment to test academic theory, and had the following aims:

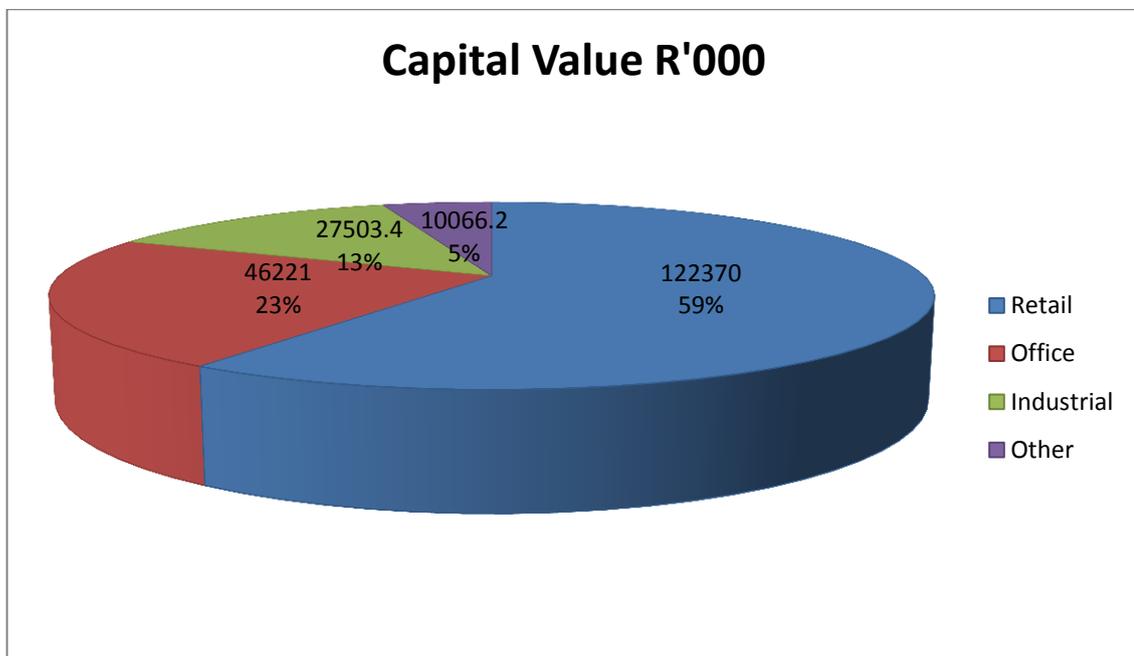
- To understand the views of South African institutional investors on the usefulness of nonfinancial information during the investment decision stage concerned with forecasting expected returns in a retail environment.
- To gain an understanding of the decision making stages that are prioritised by South African institutional investors.
- To understand the extent to which South African institutional investors would place reliance on the work of the professional valuer in market value determination when faced with an investment decision.

1.4 Research Scope

The research focussed mainly on soliciting views of institutional investors on the usefulness of nonfinancial information in forecasting expected returns in a retail environment. In order to test the proposed hypotheses, the study used an electronic questionnaire method to obtain the views of key players in the South African real estate industry. Respondents were drawn from a list of contributors to the SAPOA/IPD South Africa Annual Property Index for 2012 (Appendix 9.1). These contributors represented a capital value of R206bn in commercial

property holdings. For the same period, according to McGregor BFA the total market capitalisation of the Listed Property Sector on the JSE was about R231bn (Appendix 9.2). Retail property accounted for about 60 per cent of the total value of R206bn (Figure 1.1). Therefore, the group of institutional investors selected for the study was considered to be quite representative of the entire South African property market.

Figure 1.1: SAPOA/IPD Index 2012: Capital Values



1.5 Research Motivation

1.5.1 Why Retail Investment Decision Making

The primary purpose of this report was to investigate the usefulness of nonfinancial factors when forecasting expected returns in a retail investment decision making setting. Current investment decision making frameworks are designed to apply across all property sectors, and put emphasis on financial factors when forecasting expected returns. A number of studies, however, suggest that the retail sector's future financial performance is dependent on

nonfinancial factors (Meija and Benjamin, 2002; Kaiser, 2005; Allard, Babin, and Chebat, 2009). Therefore, based on these studies, retail investment decision processes need to incorporate nonfinancial factors into the decision framework. It was therefore expected that the results of this study will contribute towards the understanding of retail investment decision making frameworks.

1.5.2 Why Africa?

Africa's retail sector looks set to gain increased investment interest from global institutional investors. According to E&Y (2012), the continent's retail sector remains grossly underdeveloped, save for South Africa which boasts of shopping centres that meet world standards. Globally-renowned real estate consultancy firm Knight Frank (2013), however, reported that the continent is set for an unprecedented growth in retail in the years ahead. As infrastructure development continues to improve across the continent, quality shopping malls will emerge, and therefore likely to stimulate investment interest from international investors.

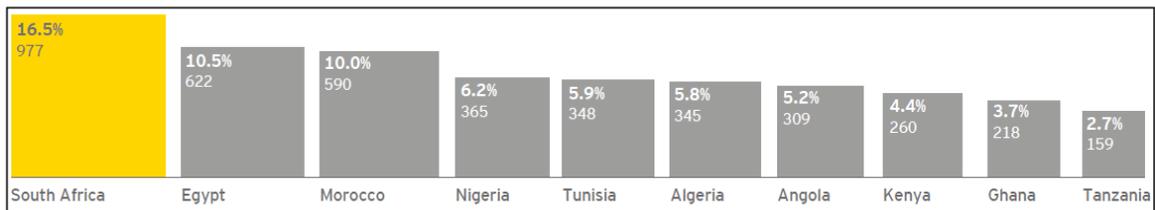
According to Knight Frank (2013), the investment climate and consumer income levels are improving across Africa. This is further supported by research projections conducted by E&Y (2012) on Gross Domestic Product (GDP) and the profile of the middle class population across the continent (See Appendix 9.3 & 9.4). To this end, the consultancy firm concluded that this will accelerate the pace at which the quality of retail assets improves, and likely to provoke strong diversification interest by global institutional investors.

The IMF (2012) reported that seven of the fastest growing economies in the world are located in Africa. While the Human Development Index (HDI) indicated widespread challenges across the continent (UNDP, 2012), The World Bank and IFC (2013) reported significant progress on the ease of doing business ranking by the countries identified to be among the fastest growing economies in the world. All these positive attributes bode well to engender global investor confidence on the African continent.

1.5.3 Why SA's Retail Sector

The African continent as a whole has been the major focus of foreign investors since the global recession. For South Africa, according to Games (2012), foreign investors consider the country to be the gateway to the rest of the continent given its relatively investor-friendly business conditions. At position 39 on the global ease of doing business index (The World Bank and IFC, 2013), South Africa ranks First on the Index when measured against other African countries. According to E&Y (2012), the country also ranks highest in attracting Foreign Direct Investment (FDI) since 2003 (Figure 1.2), and this has seen major retailers such as Walmart enter the local shores. On this backdrop, it can be argued that the local economy is viewed in good light by the global investment community.

Figure 1.2: Top 10 African FDI destinations since 2003 (E&Y, 2012)



From a real estate perspective, South Africa's real estate industry has undergone major improvements since the dawn of democracy in 1994. According to Knight Frank (2013), in the year 2000 the country had only 240 shopping centres compared to over 1500 in the year 2013. In terms of property returns, South Africa's real estate industry has measured well against property returns registered elsewhere in developed markets. According to the SAPOA/IPD South Africa Annual Property Index (2007), the country's Total Real Estate Return of 31% was the highest in the world in the year 2007, and such stellar performance was quite a commendable achievement given that it came from an emerging economy. Structurally, in 2013 the listed sector introduced the Real Estate Investment Trust (REIT) investment vehicle. The REIT is a globally renowned investment vehicle (Parker, 2013), and therefore such move is likely to

generate even more investment traction into the economy, particularly by multinational property companies (MNPCs).

While retail construction activity is reportedly gaining momentum across the African continent (Beattie, 2013), South Africa remains the only country in Africa with shopping centres that meet global standards (Knight Frank, 2013). In terms of performance, the country's Eight Super Regional Centres delivered a strong total return performance in 2012 (17.7%), up from 10 percent the previous year (Viruly, 2013). Total return for the entire real estate industry, however, was softer at 15.2 per cent, with the retail sector outperforming other sectors at 17.1 per cent (SAPOA/IPD South Africa Annual Property Index, 2012). Notwithstanding the fact that the industry's performance falls short when compared with performance levels achieved in 2007. The buoyant performance by the retail sector looks set to stimulate global investment interest. In light of the foregoing discuss, from a research perspective SA's commercial property industry is fertile ground for conducting quality research that might reshape global thinking in real estate.

1.6 Definition of Terms

The terms listed below are important for this study and their meaning in the context of this study is briefly explained:

- *Centre management*
The term refers to the site management team in a shopping mall responsible for its administration, either as landlord, or agents appointed by the landlord.
- *Institutional investors*
This refers to contributors to the SAPOA/IPD South Africa Property Index.
- *Investment decision making*
The term refers to the entire decision making processes that confront investors when faced with a decision to acquire commercial property.

- *Listed property sector*

In the context of this study, listed property sector refers to property funds listed on the Johannesburg Stock Exchange (JSE).

- *Shopping centre / mall*

‘A group of retail and other commercial establishments that is planned, developed, owned and managed as a single property single, typically with on-site parking provided’ (Dawson and Lord, 2012, p.1).

1.7 Conclusion

This study investigates the usefulness of nonfinancial factors in aiding investment decision making frameworks, in particular, in forecasting expected returns in a retail environment. To this end, the study proposes the use of a BSC framework to assist current retail investment decision making processes.

The research report is divided into Seven Chapters: Chapter 1 discusses the research problem and also outlines the purpose of the study. Chapter 2 provides an overview of theory and literature within which the research problem is framed. The research hypotheses are presented in Chapter 3. The research methodology adopted in addressing the problem is detailed in Chapter 4. The results of the study are presented in Chapter 5, and the analysis of results occurs in Chapter 6. Chapter 7 is the conclusion which also presents recommendations and the direction of future research. References and Appendices are presented after Chapter 7.

2 Chapter 2 - Theory and Literature Review

The literature review below takes the form of three broad commercial property discussions. Firstly, a section dealing with the attributes of commercial property as an asset class is presented. Under this section, scholarly work addressing demand – supply factors, globalisation, and differences posited by the retail sector, is covered. Secondly, there is focus on the theory covering real estate investment decision making frameworks. The last section deals with the BSC in the context of retail investment decision making processes.

The literature review supports the need for research in the area of retail sector investment decision making processes. To this end, this leads to the research questions presented in Chapter Three.

2.1 Commercial Property

2.1.1 Introduction

Investment participation in commercial property, according to Doppegieter and Rode (2002), is viewed from two perspectives: *direct* and the *indirect* property markets. In the direct market, the investor directly holds the physical assets, hence has the opportunity to influence the operational aspects. Indirect investment, conversely, refers to securitised commercial property, usually through portfolio investment, and the investor has no window of opportunity to influence operations in as far as the portfolio of assets constituting the portfolio is concerned.

A number of studies document institutional investors' dominance in real estate ownership, and such dominance is also reported to be gaining momentum (Newell and Seabrook, 2006; Lieser and Groh, 2011; Clayton, Ling, and Naranjo, 2009). Most studies attribute this paradigm to the need by institutional investors to diversify their portfolios on a global scale.

Jackson (2006) conducted a study to explore the relationship between town planning affecting retail property and investment by institutional investors. In the study it was argued that access to town planning policies by institutional investors contributes toward creating a performing and functional retail market. The study stated that institutional investors tended to factor important town planning information into their investment strategies.

Real estate literature is replete with studies analysing the correlation behaviour between direct and indirect property markets. Figure 2.1 presents the advantages of each property market:

Figure 2.1: Direct and Indirect property advantages (Idzorek, Barad, & Meier, 2007)

<p><u>Direct: Advantages</u></p> <ol style="list-style-type: none">1. Direct Control2. Ability to sell individual properties3. Greater capacity (size) <p><u>Indirect : Advantages</u></p> <ol style="list-style-type: none">1. Investor access2. Lower costs (most investors)3. Liquidity4. Independent analysis5. Corporate governance6. Real-time pricing in capital markets
--

According to Idzorek *et al* (2007), there are a number of studies that concur that the behaviour of the two property markets posits certain resemblances, while also posing distinct attributes. The authors argued that performances of investment vehicles such as REITs, pose similar returns to individual property

returns due to the fact that both markets are influenced by one set of property fundamentals factors.

Niskanen and Falkenbach (2010) examined the behaviour of European REITs relative to other asset classes like equity and bonds. Evidence of a positive correlation between REITs and equities was found, while a negative correlation was observed with fixed income securities. The authors also noted that the REIT structure and tax regimes applicable to each specific region tended to create unique characteristics of the indirect market.

A number of studies have analysed the performance of real estate investments from the perspective of ownership structure, in particular, shareholder activism by institutional investors (Chan, Leung, and Wang, 1998; Kaiser, 2005). Chan *et al* (1998) found REITs shares which had a higher institutional-investor ownership to be performing better relative to those with less. This was attributed to the institutional investor's ability to take control of the asset, particularly direct property. It was also concluded that institutional investors often possess the required skill and financial power, to enable the implementation of any intended control and monitoring mechanisms that would result in higher performance.

Kaiser (2005) stated that shareholder activism in direct property can involve a myriad of control mechanisms, such as being involved in operational decisions that pertain to refurbishments, redevelopments, tenanting, and changing the composition of Centre Management. The purpose of the study was to analyse real estate portfolio returns, and the study concluded that managerial control in direct property investments may be the biggest driver of performance relative to the usual two portfolio theory factors of *beta* and *alpha*. In a study seeking to determine the sources of excess returns, however, Fuss, Richt, and Thomas (2012) found no evidence to support active property management by institutional investors as a source of excess portfolio returns. Therefore, the efficacy of shareholder involvement in driving positive portfolio performance remains inconclusive.

2.1.2 Supply and Demand

DiPasquale and Wheaton (1992) divided the real estate sector into two markets: the market for real estate space (Demand) and the market for real estate assets (Supply), and then offered an explanation on the connection between these markets. Attractive rental levels tend to stimulate demand for retail assets and in order to meet this demand, developers respond by entering into asset-construction phase. The time lag between delivery and actual demand, however, causes the market to go into disequilibrium, a phenomenon also consistent with the economic laws of supply and demand. On the contrary, an oversupply of assets has the effect of depressing rental levels which in turn causes property assets to be unattractive to own. According to the authors, this marks the main connection between these markets.

The property sector has 'experienced more pronounced cycles than the general economy' (O'Neill, 2009, p.44). Therefore, given the challenges associated with the lag associated with the restoration of the equilibrium point as a consequence of demand-supply fluctuations, investment decisions in property need to have a long term perspective. Institutional investors, according to a number of studies such as Kaiser (2005), already adopt a long-term perspective when making investment decisions.

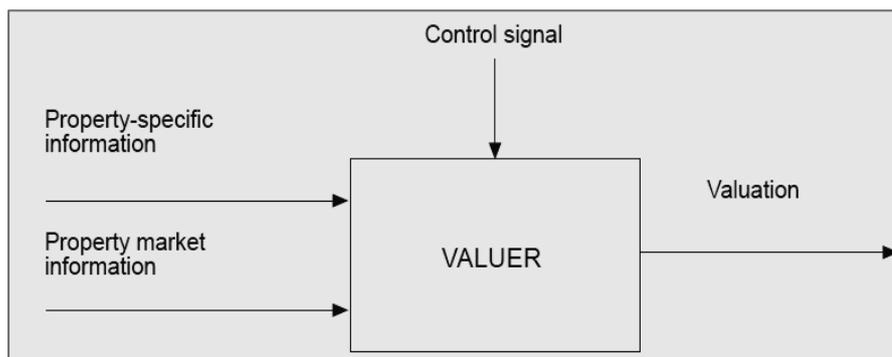
2.1.3 Market Value (MV) Determination

Compared with other asset classes, such as equity securities and bonds, the challenge facing two interacting parties wishing to conclude a property transaction lies in the determination of the market price (Boshoff, 2008). With respect to other asset classes, MVs are determined through market forces prevalent in the capital markets. Real estate, however, suffers from infrequency of trade, heterogeneity, and hence pricing is often determined using prices at which comparable assets trade (Levy and Schuck, 2005). According to Levy and Schuck (2005), the subjective nature of the valuation process in real estate has created the emergence of market valuation services (the professional valuer).

Professional Valuation (PV) differs from investment-financial valuation (IFV). According to Artemnikov, Mikerin, and Artemnekov (2008), PV is concerned with the valuation of illiquid assets such as real estate, while IFV relates to assets traded on capital markets (efficient or near-efficient) and uses valuation methods flowing out of the MPT. Due to the fact that PV is broader in scope, in a market that is far from perfect, Artemnikov *et al* (2008) argue that the attribute of subjectivity during the market value determination processes marks the main difference between these valuation approaches.

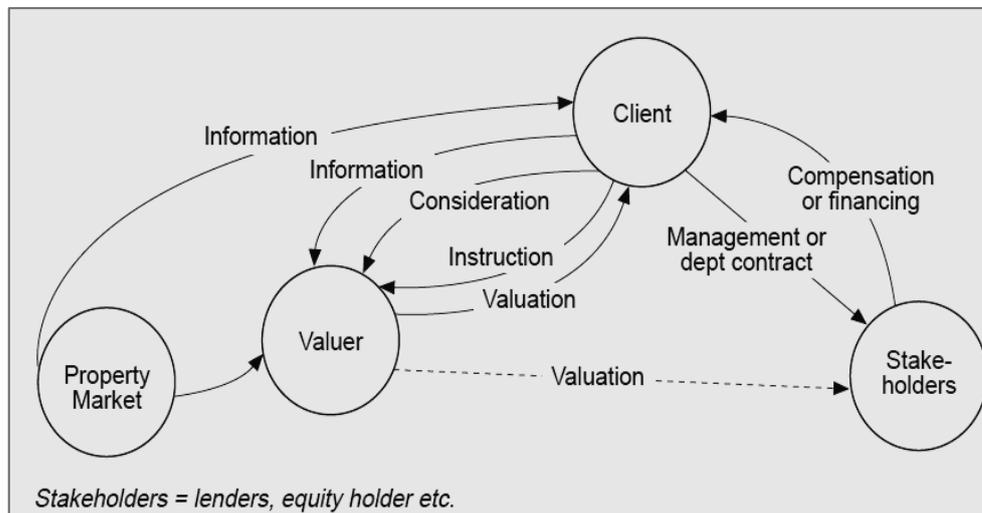
Levy and Schuck (1999) explained real estate valuation as encompassing both normative and behavioural aspects, graphically represented in Figure 2.2 below:

Figure 2.2: The descriptive model (Levy & Schuck, 1999, p.382)



According to the authors, during the normative stage the professional valuer is assumed to be acting rational when involved with analysing and infiltrating property specific and market information for purposes of MV determination for the specific property. The *Control Signal* phase, however, denotes the multiplicity of relationships within which the valuation process takes place, which can result in bias conduct by the professional valuer during the MV determination (Figure 2.3).

Figure 2.3: Valuation within the commercial environment (Levy & Schuck, 1999, p.383)



Academic literature is littered with cases documenting biases related to professional valuation assignments. Biases in PV can either be endogenous, that is arising out of the professional valuer's own internal professional know-how, or exogenous, which pertains to bias behaviour triggered by the environment within which the valuation process happens (Levy & Schuck, 1999).

In a study conducted in New Zealand by Halvitigala, Murphy, and Levy (2011), the authors found that professional valuers tended to avoid valuation assignments that are occasioned by non-standard lease structures. According to the authors, such paradigm results from the tendencies of markets being dominated by one lease structure, which in turn deprives professional valuers the experience on other lease structures.

Professional valuers have also been found to be influenced by their assignment clients, for example, the study by Crosby, Lizieri, and McAllister (2010). The study was conducted in the UK, and sought to test the level of influence by clients on valuations where properties had covenant-linked MVs. The study was conducted around the second half of 2007 when the UK property market was on the decline. Leveraged property owners, therefore, had a motive to hold back

falling property values in order to circumvent violation of loan-to-value covenants. In this study, the professional valuers were found to have acceded to influences of their clients, and thus resulting in inflated property values.

One factor that seems to promote the above malpractice is the various valuation practices evident in a number of countries. In the UK and Australia, for instance, the valuation process involves discussions with the client before finalisation of the MV, and this paradigm creates the platform for the generation of bias behaviour (Levy and Schuck, 1999; Crosby *et al*, 2010). In this regard, therefore, the final value of a property becomes the subject of a negotiated settlement between the professional valuer and the client.

In conclusion, the literature reviewed in this section suggests that professional valuation services cannot always be relied on to produce reliable MVs that aid investment decision making processes. There is therefore uncertainty around the derived MVs, and according to Dhar and Goetzmann (2006), uncertainty – as opposed to risk – negatively affects investor appetite in real estate.

2.2 Globalisation and Commercial Property

There is a strand of literature documenting globalisation activity by multinational property companies (MNPCs) (Newell and Seabrook 2006; Topintzi, Chin, and Hobbs, 2008; Lieser and Groh, 2011). Globalisation is defined within the context of foreign MNPCs permeating local markets in search for new investment opportunities and returns. According to Too, Harvey, and Too (2010), companies that have opted not to immerse themselves in the global market place are not precluded from the business impact caused by globalisation. In order to compete meaningfully with MNPCs on local shores, all competitors would be required to conjure up global strategies that will minimise the effects of competition as a result of new entrants into the local market. Therefore, MNPCs cause competition to intensify and this is facilitated by a strong financial capability.

According to Kaiser (2005), MNPCs also possess the necessary skills required to influence investment performance.

In a study conducted by Dhar and Goetmann (2006), real estate institutional investors entering foreign markets were found to be mostly motivated by the benefits of diversification. De Wit (2010) attributed the global increase in diversification by Multinational Property Companies (MNPCs) to the decrease in information asymmetry as companies like the Investment Property Databank (IPD), Jones Lang LaSalle (JLL), and others, started providing property performance benchmarks across real estate markets on a global scale. There is an ongoing global re-convergence of property vehicles that are in use across markets, in particular, the pervasive adoption of the Real Estate Investment Trust (REIT) by emerging markets, an investment vehicle quite common in developed markets (Idzorek *et al*, 2007). According to Moshirian (2008), the advancement in technology has also facilitated the ease of information flow across markets.

Economic factors such as rising income levels and increasing GDP also fuel the advent of globalisation by MNPCs (Too *et al*, 2010; Lieser and Groh, 2011). Lieser and Groh (2011) also found MNPCs able to amass a number of relatively cheaper investment properties due to the strength of their home currency. De Wit (2010) argued that the size of the local market, relative to the foreign, is another economic factor that propels MNPCs to explore offshore investment opportunities.

Acemoglu and Robinson (2012) referred to a stable political climate as a necessary factor in drawing foreign investment into a country. The authors argued that, globally there is a move towards the creation of stable political institutions, which in turn has brought about a climate in which widespread property rights are safeguarded. This phenomenon is reportedly rife in emerging economies such as those located in Africa. The authors though also throw caution against some other key countries which are still failing to transform.

Uncertainty as a result of an unstable political climate therefore negatively affects investment decisions.

2.3 Retail Commercial Property

2.3.1 Growth

Shopping malls are ubiquitous in both urban and rural locations. In the UK based study by Jackson (2006), relative to other property classes, retail investment was found to be increasingly dominating investment portfolios of institutional investors. The retail sector therefore features quite strongly in investment strategies of institutional investors, hence a need to bring better understanding of current retail investment frameworks.

According to Reinartz, Dellaert, Krafft, Kumar, and Varadarajan (2011), there is a growing trend of retailers from developed markets entering emerging economies. These retailers are reportedly attracted by new growth opportunities in those markets, in particular improving economic conditions such as GDP and income levels. From this study, it can be concluded that as a result of globalisation the quality of shopping mall property assets in emerging markets is set to improve.

2.3.2 Retail Difference

Any investment decision, according to DiPascale and Wheaton (1992), represents the purchase of current and future income streams. According to Robins (2007, p. 21), 'commercial property is all about leases and tenants.' Therefore, a lease agreement forms the basis of the process of future expected returns' determination.

According to Pitt and Musa (2009), however, the structure of the retail lease is different from that of other property classes, for example, Commercial and Industrial (C&I). In delineating the structural nature of a retail lease, Carter (2009) pointed out that a retail lease has two rental sources; a *fixed rental*

portion which escalates in terms of the stipulated contractual escalation rate, and a *variable rental* portion (Turnover Rental). Turnover rental is a function of total sales generated by the tenant such that the higher the sales achieved by the tenant the higher the variable rental and vice-versa. A trade-off, however, exists between these two rental types. The fixed rental is based on a minimum threshold sales amount, and therefore the percentage rental phenomenon only triggers upon the tenant reaching the minimum threshold. In retail, minimum threshold is referred to as breakpoint (Wheaton, 2000).

The advantage of a variable rental payment therefore makes retail assets attractive over other property classes. This advantage, however, can only be realised if the centre management team is successful in creating a climate where tenants can excel and deliver turnover figures that surpass breakpoint. The retail sector is dynamic and highly competitive (Jackson and Watkins, 2011). Therefore, in order to match the ever changing consumer demands in an intensely competitive environment, the centre management team will also be required to come up with competitive and relevant strategies that match challenges presented by the operating environment. The *location factor* only is no longer a guarantee for future property performance (Allard *et al*, 2009).

Porter (1996) presented **differentiation** as one of three strategies an organisation can use to compete in the marketplace. In a retail environment, the *tenant mix* serves as a source of differentiation for the shopping centre. Burnaz and Topcu (2011) defined *tenant mix* as the clustering of tenants in a shopping mall such that the overall volume of foot-traffic is enhanced. Allard *et al* (2009) argued that a tenant mix strategy makes the shopping mall unique in its offering, and therefore fosters competitiveness.

The foregoing discussion highlighted the importance of tenant sales in driving shopping centre performance. On the same vein, the uniqueness of the retail sector lease relative to other sectors was discussed. The next paragraph presents the main challenge confronting centre management in ensuring the

completeness of tenant sales, in furtherance of the objective of maximising turnover rental income for the shopping mall.

Yuan and Krishna (2008) dealt with the challenge of *sales leakage*, that is, tenant sales generated through the internet platform which elude the variable rental calculation net, intentionally or otherwise. The challenge facing the centre management team, therefore, is how to track internet generated sales. In order to circumvent such challenge, Yuan and Krishna (2008) suggested that it might be a safer option for the landlord to consider this risk during the process of fixed rental determination given that there is a trade-off between these two rental streams. Nonetheless, such inability by the centre management team to confidently account for all sales amounts generated by each tenant has the potential to negate property performance.

2.3.3 Conclusion

The investment community, largely dominated by institutional investors, faces enormous challenges when faced with a property investment decision. Decision making happens under imperfect conditions given the nature of property as an asset class. Furthermore, the nuanced characteristics of the retail sector compound the situation of uncertainty. As discussed above, such paradigm might result in suboptimal decision making by investors.

The investment stage concerned with forecasting expected returns in a retail environment therefore cannot be premised only on financial and mathematical information. In this regard, cognisance of the fact that retail performance is driven by nonfinancial factors must be brought to the fore by the professional valuer during the process of MV determination. Processes that rely purely on quantitative data will result in an uncertain decision making climate which in turn, as argued by Dhar and Goetzmann (2006), reduces the demand for investment property.

2.4 Real Estate Investment Decision Making

2.4.1 Introduction

Academic literature reviewed to this point has dealt with the context and climate within which real estate investment decisions happen. This section reviews real estate investment frameworks presently used in the process of decision making. Firstly, the work covers studies dealing with rational frameworks, before concluding the discussion by referring to decision making models dealing with the behavioural aspects of decision making processes.

2.4.2 Rational Frameworks

Rational or normative decision making frameworks are based on the notion that the individual investor is a utility maximiser, or profit-maximiser in the case of corporates. The investor is therefore assumed to be acting rationally when faced with an investment decision (MacCowan and Orr, 2008; Atherton, French, and Gabrielli 2008). The notion of rationality is further perpetuated in portfolio allocation theories such as MPT and Capital Asset Pricing Model (Dhar and Goetzmann, 2006).

According to Jackson and Watkins (2011), to date research literature is littered with several variants of rational real estate investment decision models. The authors further observed that such models are in essence summarised versions of the model contained in the study by Roberts and Henneberry (2007). In order to come up with their rational decision model, Roberts and Henneberry (2007) also analysed and combined previous real estate investment decision models. In their study, the authors presented a 10 step normative decision making framework (Appendix 9.5), which to date is widely reported to be the basis of current rational decision frameworks (Sah, Gallimore, and Clements, 2010; Sah, 2011; Jackson and Watkins, 2011). The study by Roberts and Henneberry (2007) concluded by stating that decision frameworks have to be stylised in order to suit each country.

Attracted by the size of the unlisted property market in Australia, Parker (2013) conducted a similar study to the above with a purpose to investigate the use of investment decision frameworks in the real estate industry. Using a 20 step framework (Appendix 9.6), the study concluded that the decision making process is multi-step, linear and sequential. Apart from the increased investment stages, this study's framework did not materially differ from that of Roberts and Henneberry (2007).

In order to investigate investment decision making processes by equity investors, Farragher and Savage (2008) varied Roberts and Henneberry's (2007) model and produced a nine step model (Appendix 9.7). The study concluded that respondents ranked the following three investment decision stages as most important (p.29):

- Searching for investment opportunities
- Forecasting expected returns; and
- Evaluating expected returns

In terms of evaluation measure, the study found the following measures as important:

- Internal Rate of Return (IRR)
- Cash-on-Cash Rate Return; and
- Payback

The study also identified a number of variables likely to influence investor diversification strategies, from which respondents had to indicate their selection. **Geographical location** and the **property type** were preferred by the respondents over other factors, namely **economic location, tenant type, property size, and property age**.

Arising out of constructs of behavioural finance, a number of studies have emerged that deal with the question of efficacy of rational frameworks in property investment decision making processes. In the midst of uncertainty, an investor is

required to make a decision based on arbitrary judgement and that may not coincide with the assumption of rationality (French, 2001; MacCowan and Orr, 2008). Therefore, when faced with the prospect of forecasting expected returns in a retail environment, there is a strong argument that reliance on purely rational information may not result in an optimal decision. Instead, consideration ought to be given to other irrational information, such as making a judgement call as to what influence the quality of centre management bears on the shopping centre's performance.

2.4.3 Behavioural Aspects

Clayton *et al* (2009) offered reasons why investors often deviate from rational frameworks when faced with a real estate investment decision. Aspects of behaviour in decision making are a result of the factors of complexity, illiquidity, and information asymmetry of property markets. The study also observed that investors sometimes base decisions on sentiment and not on property fundamentals.

In the study by Jackson (2006) mentioned earlier, the author argued from the perspective of institutional investor involvement in town planning decisions. The study therefore supports the argument that behaviour influences investment decision making. Investment decisions have also been found to be dependent on comments by brokers (Fogel and Berry, 2006).

Sah (2011) conducted a study between experts and novices (trained but not yet experienced) in order to analyse if any behavioural aspects influenced their decision making processes. The author found that the experience possessed by experts had an impact on their decision processes although such finding was not found by the author to be conclusive.

In summary, the Sections 2.4.2 and 2.4.3 above highlighted the complexities within which investment decisions are taken in real estate. A number of studies

presented rational frameworks as a plausible approach to taking investment decisions, while the influence of behavioural finance challenged this approach to decision making. To date, therefore, it is perhaps understandable why there is no universally agreed decision making framework (Sah *et al*, 2010).

2.4.4 Retail Sector Implication

The retail sector as discussed above posits key performance bearing differences and therefore, current investment decision making frameworks in their present form are inadequate. There is a strand of academic literature that supports reliance on leading indicators (nonfinancial) as opposed to lagging indicators (financial) of performance when seeking to drive future returns (Ittner and Larcker, 1998; Grewal, Levy, and Kumar, 2009). Preceding sections of this report elaborated on the integral role played by nonfinancial factors in the context of driving future returns. Therefore, in a retail setting, investment processes failing to incorporate such important levers of future performance seem likely to result in suboptimal investment decisions.

The investment decision stages concerned with forecasting expected returns and the evaluation of expected returns rank highly in the investment decision process of institutional investors (Farragher and Savage, 2008). In a C&I environment, forecasting expected returns presents less difficulty given that the fixed-rental structure of the lease agreement permits this process with mathematical ease. Also, under such rental structure, the evaluation of expected returns only involves the process of probability apportionment of the risk connected with payment default by the tenant.

On the contrary, the process of forecasting expected returns in a retail environment goes further than simply taking into consideration the fixed-rental portion of the rental income. In order to optimally forecast expected returns, the

process needs to provide an estimate forecast of tenant sales that will allow the calculation of the variable rental component as a result of tenant sales surpassing breakpoint. The estimate on forecast sales levels can only be possible if the decision maker is appraised with the factors that propel tenant sales. In this regard, reliance on purely financial data and mathematical models in order to forecast expected returns looks set to yield suboptimal investment decisions.

Given the foregoing discussion on the challenges posed by current decision frameworks in the context of forecasting expected returns in retail, the next section advances a case for the use of a BSC framework in order to aid current decision frameworks. Reference is also made to some literature that has heralded the success of the BSC framework in refocusing investor attention to the drivers of future performance, rather than purely on financial information.

2.5 The Balanced Scorecard

2.5.1 Introduction

According to Drury (2009), the BSC was developed by Kaplan and Norton (1996, 2001) in response to the absence of an integrated performance measurement system that combined both financial and nonfinancial factors in the context of driving future performance. Prior to the introduction of the BSC, performance measurement systems in existence then were dominated by financial measures, and in cases where nonfinancial factors were included, such inclusion was fragmented (Kaplan and Norton, 1996). The introduction of the BSC, therefore, ushered renewed focus on the role of nonfinancial indicators in driving future performance.

The BSC has Four perspectives (**Financial, Customer, Internal business process, & Learning and growth**), and these perspectives are underpinned by

their interconnectedness in that they all have a ‘cause and effect’ relationship (Kaplan and Norton, 2001). Further, the model consists of two performance measures, **lagging** and **leading measures**, versus traditional measures which have a bias towards financial measures (Drury, 2009). In forecasting future performance, the framework therefore recognises the input of both financial and nonfinancial factors with increased focus on nonfinancial information which drives future financial performance.

In the context of retail, and using the framework of a BSC, decision frameworks seeking to forecast expected returns cannot be biased towards lagging measures of performance, but rather leading indicators of performance. The use of a BSC framework, therefore, should result in improved investment decisions in retail. Decisions based on the biases towards historical seem likely to result in poor investment decisions, and as stated by Lim, Berry, and Sieraki (2013), ‘past returns are never a guarantee of future investment returns’ (p.264).

The perspectives of the BSC, in the context of retail performance, are discussed below:

2.5.2 Financial Perspective

The financial perspective of the BSC specifies the economic financial objectives expected as a result of achievement of measures set on the other perspectives (Kaplan and Norton, 2001). Revenue growth and mix, cost reduction, and asset utilization are three core financial themes that are identified as enabling business success (Kaplan and Norton, 2001).

In a retail environment, the interest of landlords in driving growth in turnover levels achievable by the individual tenants stems from the concept of turnover-based rental. Increases in achievable sales by tenants result in reaching breakpoint levels, which ultimately therefore translates into the generation of variable rental. The Urban Land Institute (ULI) (Appendix 9.8) presents tenant

categories which can be used to track and forecast turnover growth from different angles within the shopping centre.

Meija and Benjamin (2002) attributed the growth of turnover levels in a shopping centre to aspects such as tenant mix and the image of individual retailers. According Grewal *et al* (2009), however, higher turnover is a function of superior customer experience and superior customer experience is defined as including every point at which the shopper interfaces with the product or service as connected to the mall. Grewal *et al* (2009), therefore, offers a broader perspective which, by implication, includes not just harder factors such as the number of reputable retailers present in the mall, but also softer factors such the entire service experience enjoyed during the journey of shopping.

On the theme of cost reduction, according to Resilient Property Fund (2013), operating costs remain topical in the retail environment, the implication being that of earnings' erosion if costs' increases are not properly managed. Efficiency in operations helps in reducing overall costs of running the shopping centre. The aspect of innovation in the area of facilities management, for example energy saving initiatives, impacts the process of cost reduction. According to Franceschini, Galetto and Turina (2013), the learning and growth perspective of the BSC, in the form of research and development initiatives, promotes innovation.

Positive asset utilization measures are dependent on the attainment of rental growth rates that exceed expenditure growth rates. According to Drury (2009), asset utilization measures include measures such as Return on Investment (ROI) and Economic Value Added (EVA).

2.5.3 Customer Perspective

According to Drury (2009), this perspective is concerned with identifying measures that will promote superior customer experience. As stated by Grewal

et al (2009), attainment of superior customer experience results in positive economic benefits and by implication the attainment of increased variable rental levels.

In analysing the influence of Centre Management on retail performance, Kaiser (2005) stated that, in order to attain asset performance, institutional investors need to choose their centre managers carefully. Verhoef, Lemon, Parasuraman, Roggeveen, Tsiros, and Schlesinger (2009) pointed out that superior customer experience is a function of both controllable and uncontrollable factors. Therefore, the appointment of a quality centre management team is expected to result in the optimal selection of performance-enhancing strategic initiatives, for example, a competitive tenant mix strategy.

The efficacy of a tenant mix strategy is something that is within the influence of the centre management team. This can be achieved through careful selection of tenants for the target consumer segment (differentiation) during the process of filling out vacancies in the mall (Allard *et al*, 2009). According to Meija and Benjamin (2002), tenant mix is about both the image of the tenants assembled as well as the mix.

Apart from clustering and dispersion, which refers to the agglomeration of tenants across the shopping mall, Carter and Haloupek (2002) stated that there is a common sense dimension to tenant mix. In order to preserve the mix of tenants, for instance, the centre management team might stagger lease expiry dates so as to minimise risk of vacation by same category tenants. The successful execution of this strategic initiative is likely to result in enhanced future expected returns.

2.5.4 Internal Business Process

In the context of retail, the internal business process perspective of the BSC requires the centre management team to identify critical internal business

processes that will impact the financial and customer perspective (Drury, 2009). The attainment of this objective, however, will rely strongly on the judgement of the centre management team.

With regards to this perspective, any judgement by the centre management team needs to be aligned to the attainment of superior customer experience. Internal business processes, for instance, must be capable of highlighting customer complaints, and according to Mittal *et al* (2008), businesses are interested in the antecedents of customer complaints. A customer complaint serves as an opportunity to the landlord to address any shortcomings that could have otherwise resulted in customer loss to competitors. Therefore, in order to protect the future performance of a business, complaints identification mechanisms must be functional.

2.5.5 Learning and Growth

This perspective is concerned with the entity's infrastructural development (people, systems, and organisational procedures), and seeks to facilitate the accomplishment of the other three perspectives (Drury, 2009). Therefore, this perspective is concerned with the creation of a retail environment where innovation thrives in order to meet the ever changing customer needs. According to Grewal *et al* (2009), a cardinal aspect to retailing is that of making a connection with customers in order to understand and satisfy their needs.

As discussed before, Yuan and Krishna (2008) highlighted the problem of the increasing incidents of sales leakage as very topical in the retail environment. Therefore, one challenge confronting landlords is how to protect retail performance in the form of devising innovative ways that will curb the incidence of sales leakage.

Internal business processes might also identify customer complaints that affect tenants' staff. This paradigm might require the centre management team to

prescribe customer-facing training programmes for tenants' staff. The attainment of this perspective, however, relies on good judgement by the centre management team.

2.6 Conclusion

Chapter Two established a theoretical framework of reference that informed this commercial property investment decision making study. The chapter explored a body of literature addressing the inherent risks associated with investment decision making processes. Decision making frameworks currently in use were also reviewed.

The focus of the study is on retail investment decision making processes in particular, the investment decision stage concerned with forecasting expected returns. In this regard, it was argued that current frameworks are inadequate for retail investment decision making processes. In forecasting expected returns, decision making frameworks currently in use rely on quantitative information. Yet the antecedents of performance in a shopping mall are nonfinancial factors that are centred on delivering superior customer experience.

This research study therefore seeks to fill the gap in retail investment decisions frameworks as a result of the reliance on financial factors when forecasting expected returns. In order to test proposed hypotheses, the study uses the BSC framework, in a South African context. To this end, the following chapter, Chapter Three, presents the research hypotheses.

3 Chapter 3 - Research Hypotheses

3.1 Introduction

The main aim of this study was to ascertain whether the use of nonfinancial measures of performance, using a BSC framework, can aid investment decision when forecasting retail future returns. To conduct the study, individuals with asset management oversight were selected from contributors to the SAPOA / IPD South Africa Annual Property Index as at December 2012.

The literature reviewed in Chapter Two discussed why institutional investors dominate when it comes to investment in commercial property. In order to execute investment decisions, however, institutional investors rely on the investment skills possessed by the individuals selected for this study.

The literature reviewed in Chapter Two also highlighted the following about institutional investors:

- The investment decision stage concerned with forecasting expected returns ranks highly in normative decision making frameworks;
- Institutional investors globalise because of the need to diversify their portfolios; and
- Market Values (MVs) obtained through the services of a professional valuer are subjective due to the influence of bias behaviour during the process of valuation.

To this end, in addition to the main aim of the study, the above points were also investigated.

3.2 Research Hypotheses

Hypothesis 1: Institutional investors perceive the stage concerned with forecasting expected returns important in investment decision making processes.

Hypothesis 2: Nonfinancial factors are regarded as important by institutional investors when forecasting expected returns in retail decision making processes.

Hypothesis 3: Institutional investors perceive Market Values (MVs) derived through professional valuation processes as subjective.

Hypothesis 4: Institutional investors diversify portfolios based on geographic location and the property type.

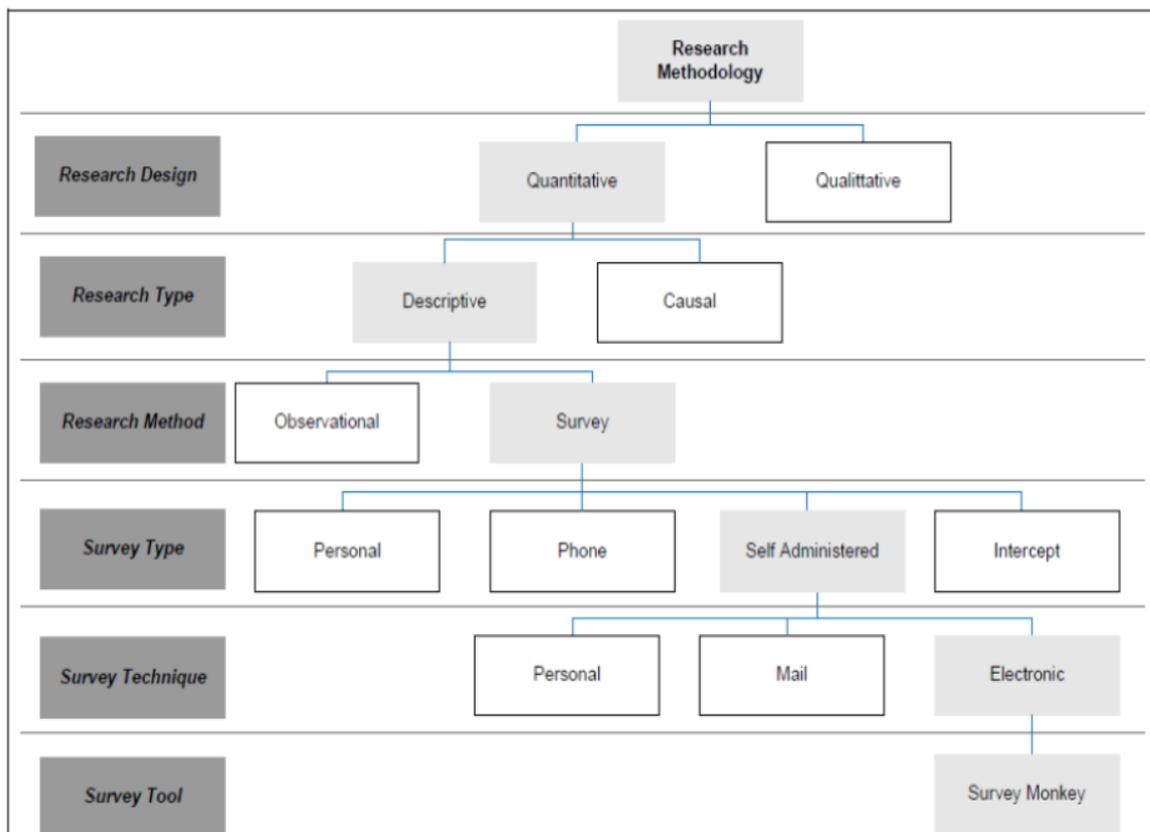
Based on the theories and literature presented in Chapter two, a total of four (4) hypotheses were formulated for investigation in this chapter. The research methodology followed in order to test the above hypotheses is explained in the following chapter, Chapter four.

4 Chapter 4 – Research Methodology

4.1 Choice of Methodology

In order to achieve the objectives of the study, this research followed a quantitative descriptive approach using a questionnaire research tool, distributed electronically using SurveyMonkey. Appendix 9.9 presents the Draft Questionnaire used for the research and Figure 4.1 presents an overview of the research process adopted for the study.

Figure 4.1: Overview of research methodology (Zikmund, 2003)



4.1.1 Use of Survey Method

According to Saunders and Lewis (2012), a questionnaire is tool of data collection which asks each participant the same set of questions in the same order. Leedy and Ormond (2010) posit that a questionnaire method has the

ability of being sent to a large number of people efficiently and in a cost effective manner. Given the limited time available to conduct the study, coupled with budgetary constraints, the data collection method and instrument chosen for the study was therefore considered appropriate.

In the property decision making paradigm, a number of surveys were conducted using the questionnaire method of data collection. French (2001) used a survey to solicit the opinions and expectations of respondents regarding inflation, property returns and the correlations with other assets classes such bonds and equity. Farragher and Savage (2008) used a survey to conduct research on the whole decision making framework. In the study, 188 questionnaires were mailed to respondents, and a response rate of 23 percent was obtained.

This study posits certain similarities with the research conducted by Farragher and Savage (2008). The authors surveyed institutional investors using questionnaires which were mailed to participants. As discussed above, the study by these authors focussed on the entire decision making framework. In this study, however, the focus was on the investment stage concerned with forecasting expected returns. The study also distributed questionnaires electronically using SurveyMonkey as opposed to mailing participants. Furthermore, this study was centred on the retail sector as opposed to the broader real estate industry.

Consideration was given by the researcher to conduct face-to-face interviews with the participants. Leedy and Ormond (2010) argued that data collected through the internet yields comparable results to that collected face-to-face. Therefore, apart conducting the study under time and budgetary constraints, the choice of method selected was deemed appropriate to achieve the stated objectives.

4.1.2 Questionnaire Development

The questionnaire was designed in manner that helps achieve the objectives of the study. Before sending out the questionnaire to participants, a pilot study was conducted using one of the participants. According to Saunders and Lewis (2012), the advantage of conducting a pilot study is that the process helps in testing the understanding of the questions being posed to participants hence validate the instrument.

The institutional investor selected for the pilot study was selected because it was a major local player in the retail sector, and had a significant shareholding in Three of the only Nine Super Regional Malls in South Africa (See Appendix 9.10 for Shopping Centre classification). This institution also differentiated itself in that it only invested in local retail property, and therefore had no investment interest in the other property sectors. No amendments were made to the questionnaire during the process of conducting the pilot study.

A covering letter was also emailed to participants together with the questionnaire (See Appendix 9.11). The purpose of the covering letter was to seek permission for participation by respondents while also clarifying the aims of the study and the criteria used to identify participants to the study.

4.1.3 Contents of the Questionnaire

The questionnaire was designed with brevity so as to enable ease of completion by respondents and was divided into four (4) parts.

Part 1 – Personal Information: Part 1 of the questionnaire was designed to ensure that the individual selected to participate in the survey possessed the requisite investment decision making authority. The questionnaire included open-ended and closed-ended questions on the respondent's job title, brief description of functions of current position, years in the commercial property

industry, years in retail at the current institution, and the level of academic achievement by the respondent.

Part 2 – Portfolio Information: Part 2 of the questionnaire was designed to obtain information about the commercial property portfolio of the institution. This section contained only closed-ended questions, and covered the size of the portfolio, global geographical split of the portfolio, the property sectors invested in, and the size of retail investment. Respondents were also asked to profile their institution’s diversification strategy.

Part 3 – Investment Decision Making: Part 3 of the questionnaire centred on the investment process followed when faced with a decision to acquire a shopping centre asset. As discussed in Chapter Two, the work of professional valuation forms an integral part in the process of MV determination. Question 12, therefore, was meant to solicit views of respondents on the work of a professional valuer, and posed some closed-ended questions. For Question 13 – 16, respondents were asked to assume that they were faced with an investment decision concerning the acquisition of a Community Shopping Centre. Question 13 asked respondents to pick the Top 4 important investment decision stages in Farragher and Savage’s (2008) framework. The rationale behind Question 13 was to assess if the investment stage concerned with forecasting expected returns will be prioritised as important by the respondents. Question 14 dealt with financial ratios that indicate future financial performance, and Question 15 gave respondents an opportunity to suggest any other ratios not mentioned in Question 14. Question 16 dealt with the importance of the tenant mix concept, as well as the role of Centre Management in influencing future retail performance.

Part 4 – Conclusion: Part 4 formed the conclusion and asked respondents to suggest any other retail areas that warrant future research. Lastly, respondents were thanked for their participation in the study.

4.2 Population

According to Saunders and Lewis (2012), a population is any complete group of members with similar characteristics and need not be persons. The study aimed to investigate investment decision making processes of South African institutional investors, who also happen to be significant players in the local retail property market. Therefore, the population and population criteria were set in order to meet the objectives of the study.

According to Zikmund (2000), when conducting a study the target population is often different from the sampling frame (also referred to as the working population). The working population provides a list that can be used to conduct the study operationally. The following characteristics define the working population selected for this study:

- The population consisted of all companies and funds that were contributors to the SAPOA/IPD South Africa Property Index for the year 2012. Contribution to the Index was not mandatory and therefore it was anticipated that some institutional would not be represented on the Index. For instance, a number of institutional investors with a presence on the Listed Sector were not part of the contributors to the SAPOA/IPD Index (See Appendix 9.2). MNPCs make use of the IPD Index to compare global performance trends across markets (De Wit, 2010), and therefore the population chosen for the study was justified.

- The total capital value of property to the Index was R206bn compared to a market capitalisation of about R231bn on the Listed Sector, according to McGregor BFA (See Appendix 9.1 & 9.2). Further, insight obtained from websites of some of these players revealed global property investment interests in Australia, Europe, and Africa. About 60 per cent of the total capital value to the Index represented retail property investment.

- The total initial number of contributors to the Index was 21; however, a subsequent ownership verification exercise revealed the existence of dual ownership in some of the funds and properties. Therefore, after taking into account funds owned by the same owner(s), the population size was reduced to only 16 participants. Furthermore, it was established that one contributor represented a Super Regional Centre that was owned in a Joint Venture structure (JV) by two other companies who were already individual contributors to the Index. Finally, for purposes of the study, the population size was reduced to only 15 participants.

4.3 Sampling and Sampling Unit

According to Saunders and Lewis (2012), a sample is a group of elements selected from the population. For purposes of this study, however, the working population of 15 contributors was used as the sample for the study. The study therefore followed a nonprobability purposive method because the researcher concluded that the list of contributors to the Index was information-rich enough to allow the study to proceed, as justified under Section 4.2 above.

Zikmund (2000) defined a sampling unit as a single element or a group of elements within a sample that is /are subject to selection. The study assumed that for purposes of making an investment decision in a retail setting, a group of individuals are usually collectively involved in the process given the relatively high cost associated with shopping mall acquisition. Therefore, only individuals judged to be part of each institution's investment decision making processes were invited to participate in the study.

Out of the working population of 15 contributors, only 12 contributors were emailed invites to participate to the survey. In order to increase the chances of a higher response rate, it was planned that questionnaires will be sent to two participants in each institution, and thus a total of 24 questionnaires were planned to be emailed through SurveyMonkey. Four institutional investors

declined to allow another individual to participate in the study, hence a total number of 20 questionnaires were actually sent out.

As mentioned above, only 12 institutions were sent questionnaires out of the working population of 15 contributors to the Index. In an effort to establish the profile of the Three institutions which were left out of the study, it was established that the one contributor was made up of a scheme by some high net-worth individuals investing in shopping centres, the management of which was subcontracted to one of SA's top property management company. The other two contributors to the Index simply declined to participate to the study. IPD South Africa also declined to reveal any information on the commercial property values of these non-partaking contributors due to confidentiality agreements signed with contributors to the Index.

4.4 Data Analysis

According to Fowler (2009), raw data collected through a survey needs to be translated into an appropriate form in order to facilitate meaningful analyses of the results. In this study, the data obtained was downloaded from SurveyMonkey into an Excel format file, which in turn facilitated the upload into Statistical Package for Social Sciences software package (SPSS). Statistical techniques were then used to analyse the data.

Hitherto, there is a plethora of statistical techniques that can be used to aid the analysis of data. For purposes of this study, however, only the following techniques were utilised to test the statistical relevance of the variables.

- Cronbach's Alpha
- Shapiro-Wilk
- Descriptive Statistics

The individual statistical techniques are explained herein below:

4.4.1 Cronbach's Alpha

Cronbach's Alpha is a measure of internal consistency of a list of items within a group. According to Tavakol and Dennick (2011), because researchers are worried about the accuracy of their assessment and evaluation, there is therefore a need to check for validity and reliability of a measurement instrument. According to Julie (2007), Cronbach's Alpha is concerned with the extent to which items within a scale 'hang together', namely that all the items within a scale measure the same construct.

The number of items in a group, their inter-relatedness, and their dimensionality affects the value of alpha (Julie, 2007; Tavakol and Dennick, 2011). An increase in the number of items in a group leads to an increase in the value of alpha, however, a lower inter-item correlation reduces the value of alpha. Therefore, a group with a high number of inter-related items will result in a higher value of alpha. Julie (2007) posits that the ideal value of alpha should be above 0.7. According to Tavakol and Dennick (2011), however, an alpha value that is close to 0.6 is still acceptable, and thus making the group items valid for statistical interpretation.

It is imperative to calculate the Cronbach's Alpha coefficient where a study utilises Likert-Style questions (Gliem and Gliem, 2003). In this study, there are a number of questions posed to respondents that assume the Likert-Style format.

4.4.2 Shapiro-Wilk

The sample used in this study was less than 30 ($n < 30$) because of the smaller number of participants in the South African commercial property market. According to Weiers (2011), where a sample size of less than 30 is used, there is a requirement to assume that the population is normally distributed.

The Shapiro-Wilk Test was developed by Shapiro and Wilk (1965), the purpose of which was to test for the complete normality of a sample. Shapiro and Wilk

(1965) reasoned that many statistical procedures were based on the assumption of normality, hence a need to develop a tool that will test the normality of a sample. If the normality assumption is violated, the interpretation and inferences made on the study may not be reliable and valid (Razali and Wah, 2011).

According to Razali and Wah (2011), the test was initially designed to cater for smaller samples ($n < 50$), however, subsequent improvements made by other researchers have also catered for larger samples ($n > 50$). In their study, where the power of the different available normality tests were compared, Razali and Wah (2011) concluded that the Shapiro-Wilk Test was the most powerful test for all types of distribution and sample sizes.

The value of the test (W) lies between 0 and 1. Values of W approaching the value of 1 result in the acceptance of normality, while small values of W lead to the rejection of normality.

4.4.3 Descriptive Statistics

In order to give meaning to the data, categorical as well as continuous variables descriptive statistics were used in this study. Categorical variables make use of frequencies (Julie, 2007), and in this study the Job Tiles and Job Functions occupied by respondents were cross-tabulated together with other important data. According to Julie (2007), continuous variables aid the researcher by providing summary statistics, for instance the mean, median, and standard deviation. In this study, mean scores were calculated in order to obtain the positional view of respondents on the questions asked. Some categorical variables were collapsed into smaller groupings in order to allow for shorter, but still insightful, interpretation of the data.

Farragher and Savage (2008) used descriptive statistics in order to investigate the whole investment decision making framework. This study used descriptive statistics in order to make conclusions about the stage concerned with

Forecasting expected returns in the investment decision framework. Therefore, the choice of data analysis tools employed in this study was justified.

4.5 Assumptions

The following assumptions are applicable to the study:

- That the respondents to the study answered the questionnaire truthfully, and without any form of bias, in particular where both respondents in the one institution returned the completed questionnaire. At the time of conducting the study, the GIBS MBA brand had also made strides in international rankings compared to other business schools in the continent (Financial Mail, 2013). Therefore, an assumption was also made that such recognition did not influence the answers given by respondents; and
- That SA's institutional investors employ rational investment frameworks similar to Farragher and Savage's (2008) when faced with an investment decision and that behavioural influence, as discussed in Chapter Two, play an insignificant role when making the investment decision.

4.6 Research Limitations

The following limitations were identified as applicable to the study:

- The main limitation to the study relates to the sample size (n=12). In spite of South Africa's position as the gateway to Africa, the country is an emerging economy still in the process of reintegrating itself into the world economy following years of political isolation as a result of past repressive laws. Therefore, the number of commercial property institutional investors in the country is quite limited. Furthermore, in the recent past, media reports have reported heightened mergers and acquisitions activity in the real estate industry locally (eProp, 2013), which in turn will further reduce the number of investors in the market. Nevertheless, the fact that the value of commercial

property held by contributors to the Index stood at R206bn, when the Listed Sector was at R231bn, rendered the data both presentable and reliable. The size of the sample, however, presented limitations to the number of statistical measures employed to interpret the results of the study.

- ❑ In the study by Farragher and Savage (2008), certain differences were identified between institutional investors and private investors. Private investors were defined to be relatively small investors as opposed to financial behemoths like insurance and pension funds. The South African property market is replete with a number of influential private investors; however, none was represented in the list of contributors to the Index. Therefore, there might be an argument that the results of the study lack the investment views of private investors, which views might offer invaluable insights into the understanding of SA's commercial property market.
- ❑ The study was conducted during the last quarter of the calendar year, which was also the last quarter of the financial year for most of the participating institutions, according to information gathered during questionnaire follow-up with respondents. Therefore, it could be possible that not the full attention to the process was given by respondents, as was perhaps viewed as a distraction to year end tasks.
- ❑ A number of the institutional investors selected for the study also had in-house professional valuation departments yet the questionnaire did not solicit such indication from participants. It could be argued that Institutional investors with professional valuation services in-house might have taken a less critical view on the services of the professional valuer.
- ❑ Lastly, it was discovered during the research process that a number of cross-shareholdings existed among South African property institutions. In this regard, it can be argued that there could be a convergence of investment philosophies among these investors, and therefore result in the lack of variance in the responses provided by participants.

4.7 Validity and Reliability

According to Saunders and Lewis (2012), validity is concerned with the question of whether or not the methods employed for the research measure what they were intended to measure. As mentioned earlier, Part 1 of the questionnaire dealt with background information of the participant. In this regard, in order to ensure validity, only responses from participants occupying investment decision making positions were included in the results.

Saunders and Lewis (2012) define reliability in relation to the ability of the research methods used in producing consistent findings. According to Zikmund (2000), questions posed to respondents which are unclear, ambiguous, or leading in nature, can jeopardise the reliability of research work, and efforts to prevent such pitfall were taken in this study. Prior to the pretesting of the reliability of the questionnaire with the institutional investor mentioned under **Section 4.1.2** above, the researcher personally answered the questionnaire through the use of a dummy email address, and a number of corrections were made. Further, in order to eliminate the occurrence of missing data on key sections, selected questions of the questionnaire were made compulsory.

Farragher and Savage's (2008) research work found certain differences between the investment philosophies of institutional investors and private investors. As mentioned earlier, this study focussed only on institutional investors and therefore cannot be generalised to also include private investors. In summary, therefore, the validity and reliability of this study is only limited to SA's institutional investors.

4.8 Summary

In conclusion, this chapter discussed the methodology adopted in testing the hypotheses presented in Chapter Three. Contributors to the SAPOA/IPD Index defined the working population for the study. The South African property market, however, is characterised by the presence of a few players in the commercial

property space. In this regard, and in order to analyse the data, the small number of investors limited the study to a select few statistical techniques. The research findings and interpretations thereto are presented in the following two chapters respectively.

5 Chapter 5 – Research Results

5.1 Introduction to Results

Chapter Four presented a description of the methodology adopted by this study to test the hypotheses outlined in Chapter Three. In this chapter, the results of the study are presented in accordance with the statistical methods outlined in Chapter Four. Following this chapter is Chapter Six which analyses the results presented in Chapter Five, while also synthesising theory and literature discussed in Chapter Two.

5.2 Documentation of Response Rate

As discussed under **Section 4.3** above, a total of 20 questionnaires were emailed to respondents representing 12 contributors to the Index. A total of 11 questionnaires representing 11 contributors were completed by respondents. Of the 11 questionnaires received from respondents, 64 per cent (7) of the respondents had skipped at least one of the only two optional questions in the questionnaire (**Question 15 and 17**).

Measured against the total of 20 questionnaires emailed to respondents, the response rate of 11 respondents represented a 55 percent response rate. One questionnaire emailed to a CIO was completed by an Analyst employee behalf of the initially targeted respondent. Therefore, this feedback was discarded as it did not meet the criteria of a respondent outlined in Chapter Four. This further dropped the response rate to 50 percent (10). Efforts to increase the response rate in this regard were met with a common answer across respondents, namely that a dual response amounts to duplication. **An 83 percentage response rate**, however, was achieved when measured against the 12 contributors emailed questionnaires for the study. The response rate, therefore, was considered to be acceptably representative of the sample selected for the study.

5.3 Sample Characteristics

5.3.1 The Respondents

Question 1 and **Question 2** of the questionnaire were open-ended compulsory questions that solicited the Job Title, and a brief Job Description of the respondent respectively. Responses obtained from participants in Question 2 were categorised into Two (2) areas of responsibility:

Category 1: The responsibility to drive retail performance through other managers; and

Category 2: The responsibility to drive retail performance through other managers, including decision-making on retail acquisitions, sales, extensions and redevelopment.

Table 5.1: Job Title and Job Function of Respondents

Job Title	Job Function	Frequency	%age
Chief Investment Officer	Category 2	2	20
Fund Manager	Category 2	3	30
Asset Manager	Category 1	5	50
	Total	10	100%

Table 5.2: Profile of Achieved Highest Academic Qualification

Job Title	Frequency	%age
Matric	2	20
Undergraduate	4	40
Postgraduate	4	40
Total	10	100%

Table 5.1 reflects an even split of Five individuals between the Two Categories, while Table 5.2 reflects that 80 percent of the participants had at least an undergraduate degree.

Table 5.3: Experience Descriptive Statistics of Respondents

Experience (years)	n	Mean	Median	Mode	Standard deviation	Min	Max
Commercial Property	10	15.4	15.5	6*	5.719	6	25
Retail	10	8.4	9.5	4*	3.627	3	14

*multiple modes exist, smallest value reported

For commercial property experience, the aggregate total experience of respondents equals **154 years**, while retail experience amounts to **56 years**.

5.3.2 The Institutional Investors

All 10 institutions operate in the South African market, while only Four institutions also have representation elsewhere in Africa, and a further Three institutions also operating outside of Africa. All 10 institutions have a retail component in their portfolios, while 80 percent of institutions also operate in C&I Sectors, the balance of 20 percent also investing in other property sectors, such as Leisure and Residential.

The total global retail investment exposure by these institutional investors is presented in Tables 5.4 and 5.5 below:

Table 5.4: Retail Sector Investment Exposure – South Africa

Retail Value	Frequency	%age
Between R1bn & R5bn	3	30
Above R5bn but less than R10bn	2	20
Above R15bn	5	50
Total	10	100%

Therefore, there was an even split of Five investors each between the categories **up to R10bn** and **more than R10bn**.

Table 5.5: Retail Sector Investment Exposure – Other

Retail Value	Frequency	
	Elsewhere in Africa	Rest of World
Up to R1bn	3	1

Only the investors with retail investment values in excess of R10bn operated outside the borders of South Africa.

5.4 Hypothesis 1: Prioritisation of Investment Decision Stages

Question 13 asked respondents to select, in order of importance, only Four out of the Nine investment decision stages contained in Farragher and Savage’s (2008) investment decision making framework (See Appendix 9.7 for Farragher & Savage’s investment decision framework).

Table 5.6: Distribution of Investment Stage Rankings by Respondents

Stage No.	Detail	Top Priority	Priority No. 2	Priority No. 3	Priority No. 4	Total
1	Setting Strategy	8	0	0	0	8
2	Establishing Return/Risk Objectives	0	5	3	0	8
3	Searching for Investment Opportunities	0	2	2	0	4
4	Forecasting Expected Returns	2	1	2	1	6
5	Evaluating Forecasts	0	2	0	0	2
6	Assessing & Adjusting for Risk	0	0	2	3	5
7	Decision-Making	0	0	1	4	5
8	Implementing Accepted Proposals	0	0	0	1	1
9	Auditing Operating Performance	0	0	0	0	1

The table below records the frequencies of each Stage's selection, but split by the investor's exposure to the Retail sector.

Table 5.7: Rankings Split by RETAIL Property Value

Retail Value	n	Investment Stage									Stage 4 Excluded (Frequency)
		1	2	3	4	5	6	7	8	9	
Up to R10bn	5	5	4	3	1	0	3	3	1	0	4
More than R10bn	5	3	4	1	5	2	2	2	0	1	0
Overall	10	8	8	4	6	2	5	5	1	1	4

All the Four institutional investors that did not prioritise Stage 4 were from the category with **up to R10bn** of retail investment.

Table 5.8: Rankings Split by Job Function occupied by Respondent (see Table 5.1 for Job Function Category Classifications)

Job Function	n	Investment Stages									Stage 4 Excluded (Frequency)
		1	2	3	4	5	6	7	8	9	
Category 1	5	3	4	1	4	2	2	3	0	1	1
Category 2	5	5	4	3	2	0	3	2	1	0	3
Overall	10	8	8	4	6	2	5	5	1	1	4

The above tables have profiled responses obtained from respondents. In relation to the stage of Forecasting Expected Returns, the answers obtained posit a number of differences between respondents' groupings and these will be discussed in detail in the following chapter, Chapter Six.

Presented henceforth are results from the study, in the context of hypotheses 2 – 4 stated in Chapter Three. Under each hypothesis, the results are analysed using

- **Retail portfolio value** held by the investor, and
- **Job Titles** in terms of Category 1 and 2, as discussed under Section 5.3.1 above.

5.5 Hypothesis 2: Usefulness of Nonfinancial factors

Question 16 assumed a Likert-Style format, and required respondents to rank in order of importance, Five nonfinancial factors identified from Chapter Two as possible drivers of future financial performance in retail (**1=least important, 2=not important, 3=neutral, 4=important, and 5=most important**). **Question 16.1 to Question 16.4** was centred around the concept of **Tenant Mix**, while **Question 16.5** focussed on the **Quality of the Centre Management team**.

Table 5.9: Normality Tests (Split by RETAIL Exposure)

Retail Value	Variable	Shapiro-Wilk		
		W	df	Sig.
Less than R10bn	Tenant Mix	.803	5	.086
More than R10bn	Tenant Mix	.821	5	.119
Less than R10bn	Centre Management	.867	5	.254
More than R10bn	Centre Management	.881	5	.314

As per the discussion under **Section 4.4** above, all values of W were deemed acceptable because they were closer to 1. The normality assumption about the population from which the sample of independent observations was drawn, was therefore not violated. It was therefore in order to proceed with other statistical methods.

5.5.1 Tenant Mix

Table 5.10: Tenant Mix Cronbach's Alpha

Cronbach's Alpha	n
0.604	4

As discussed under **Section 4.4**, because the Cronbach’s Alpha coefficient was above the 0.60 benchmark, reliability in the group of **Tenant Mix** questions was achieved.

Table 5.11: Tenant Mix Scores (1=least important, 2=not important, 3=neutral, 4=important, & 5=most important)

Question No.	n	Mean	Median	Mode	Standard Deviation	Min	Max
Q16.1	10	5.00	5.00	5	.000	5	5
Q16.2	10	4.10	4.00	4	.568	3	5
Q16.3	10	3.30	3.00	3	.675	2	4
Q16.4	10	3.90	4.00	4	.568	3	5
Overall	10	4.08	4.13	4*	.355	2	5

*multiple modes exist, smallest value reported

Figure 5.1: Tenant Mix Boxplot (Split by RETAIL Exposure) (1=least important, 2=not important, 3=neutral, 4=important, & 5=most important)

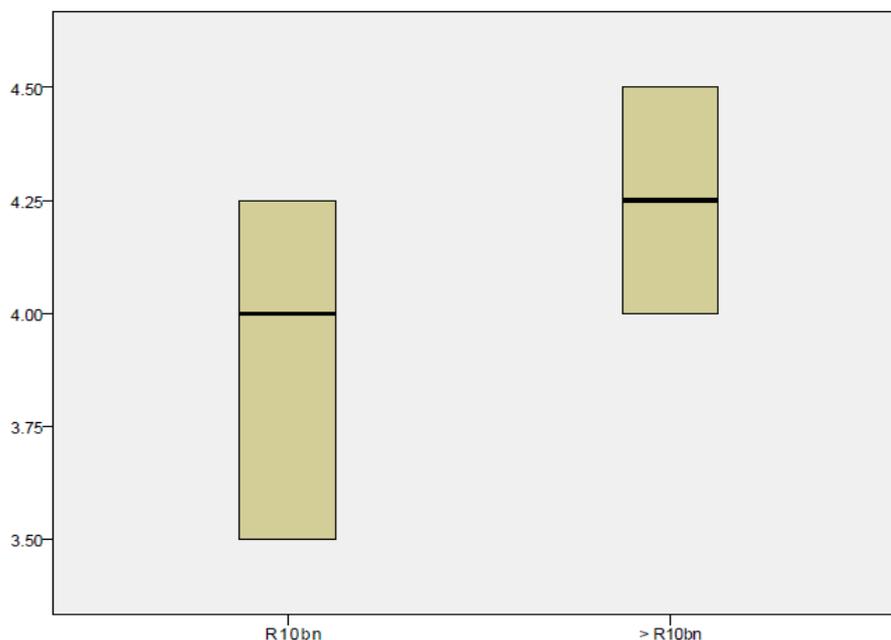


Table 5.12: Tenant Mix Scores (Split by RETAIL Exposure) (1=least important, 2=not important, 3=neutral, 4=important, & 5=most important)

Retail Value	n	Mean	Standard Deviation
Up to R10bn	5	3.90	.379
More than R10bn	5	4.25	.250

Figure 5.2: Tenant Mix Boxplot (Split by Job Function occupied by Respondent) (1=least important, 2=not important, 3=neutral, 4=important, & 5=most important)

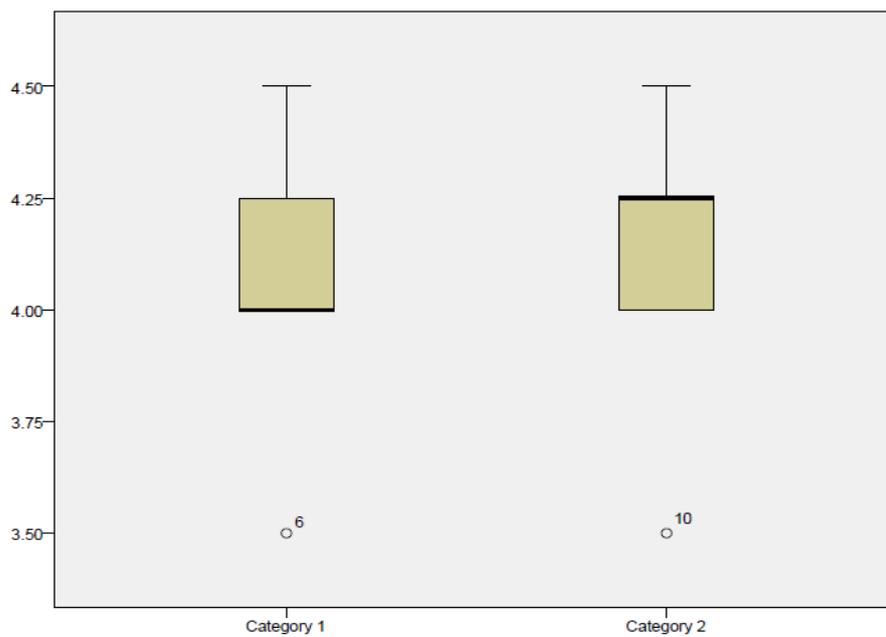


Table 5.13: Tenant Mix Scores (Split by Job Function occupied by Respondent) (1=least important, 2=not important, 3=neutral, 4=important & 5=most important)

Job Function	n	Mean	Standard Deviation
Category 1	5	4.05	.371
Category 2	5	4.10	.379

5.5.2 Quality of Centre Management

Question 16.5 covered a rating on the quality of the Centre Management team, and the scores by respondents are summarised below:

Table 5.14: Centre Management Scores (1=least important, 2=not important, 3=neutral, 4=important, & 5=most important)

Question No.	n	Mean	Median	Mode	Standard Deviation	Min	Max
Q16.5	10	3.80	4	5	1.398	1	5

Figure 5.3: Centre Management Boxplot (Split by RETAIL Exposure) (1=least important, 2=not important, 3=neutral, 4=important, & 5=most important)

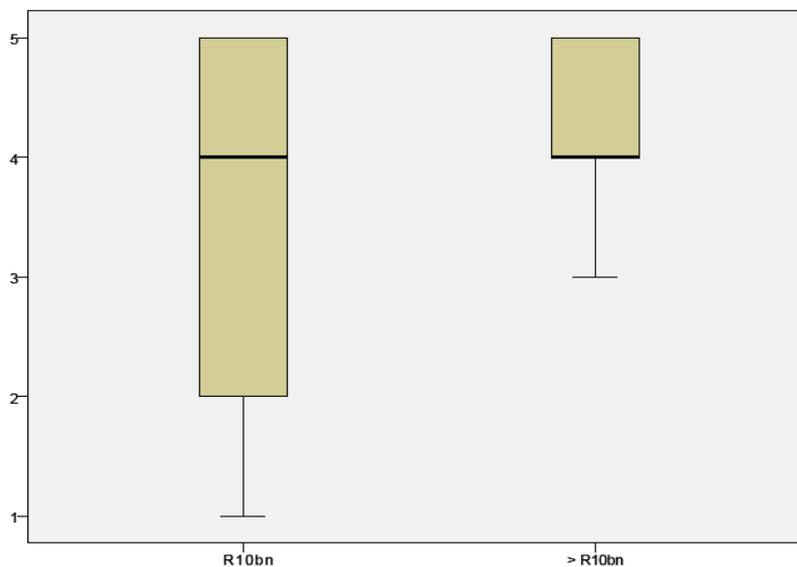


Table 5.15: Centre Management Scores (Split by RETAIL Exposure) (1=least important, 2=not important, 3=neutral, 4=important, & 5=most important)

Retail Value	n	Mean	Standard Deviation
Up to R10bn	5	3.40	1.817
More than R10bn	5	4.20	.837

Figure 5.4: Centre Management Boxplot (Split by Job Function occupied by Respondent) (1=least important, 2=not important, 3=neutral, 4=important, & 5=most important)

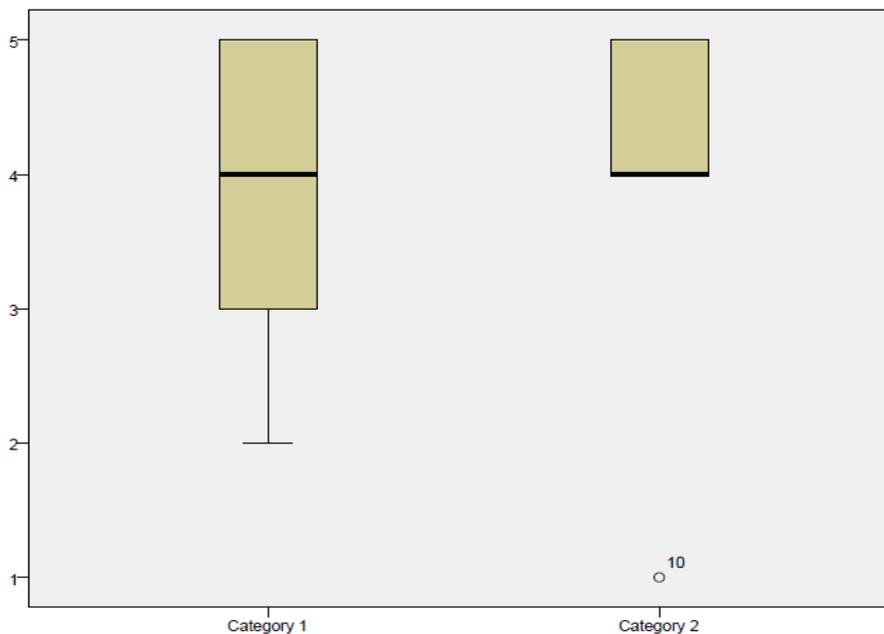


Table 5.16: Centre Management Scores (Split by Job Function occupied by Respondent) (1=least important, 2=not important, 3=neutral, 4=important, & 5=most important)

Job Function	n	Mean	Standard Deviation
Category 1	5	3.80	1.304
Category 2	5	3.80	1.643

In summary, the **overall nonfinancial factors’ mean score is 4.02** which equates to a rating of **important** on the measurement scale. The Tenant mix ranking (**Mean=4.08**) however was slightly higher than Centre Management ranking (**Mean=3.80**).

5.6 Hypothesis 3: Subjectivity of Professional Valuation Services

Given the background on professional valuation biases discussed under **Section 2.1.3** in Chapter Two, **Question 12** was posed to participants in order to obtain an understanding of the extent of reliance on MVs derived through the valuation process. The Question assumed a Likert-Style format, and therefore tests of normality and reliability were conducted. **Question 12.1, 12.2, 12.3, and 12.5** dealt with biases caused by **exogenous** factors while **Question 12.4** dealt with **endogenous** bias influences.

Table 5.17: Normality Test Scores (Split by Source of Bias Influence)

Source	Retail Value	Shapiro-Wilk		
		W	df	Sig.
Exogenous	Less than R10bn	.881	5	.314
	More than R10bn	.940	5	.666
Endogenous	Less than R10bn	.552	5	.000
	More than R10bn	.552	5	.000

Normality scores for **exogenous** variables were overwhelmingly acceptable because they were closer to the 1 coefficient, while that of **endogenous** factors were still acceptable because it did exceed the half-mark, although less convincing relative to the former.

5.6.1 Exogenous Bias Influences

Table 5.18: Exogenous Bias Influences' Cronbach's Alpha

Cronbach's Alpha	n
0.688	4

The coefficient of Cronbach's Alpha was therefore considered appropriate because it was in line with the benchmark discussed under **Section 4.4.1**.

Table 5.19: Exogenous Bias Influences' Scores (1=strongly agree, 2=agree, 3=neutral, 4=disagree, & 5= strongly disagree)

Question No.	n	Mean	Median	Mode	Standard Deviation	Min	Max
Q12.1	10	2.90	2.50	2.00	1.101	2.00	5.00
Q12.2	10	2.90	2.50	2.00	1.287	1.00	5.00
Q12.3	10	2.50	2.00	1.00*	1.434	1.00	5.00
Q12.5	10	2.90	3.00	3.00	.738	2.00	4.00
Overall	10	2.80	2.38	2.25	.840	1.00	5.00

*multiple modes exist, smallest value reported

Figure 5.5: Exogenous Bias Influences' Boxplot (Split by RETAIL Exposure) (1=strongly agree, 2=agree, 3=neutral, 4=disagree, & 5=strongly disagree)

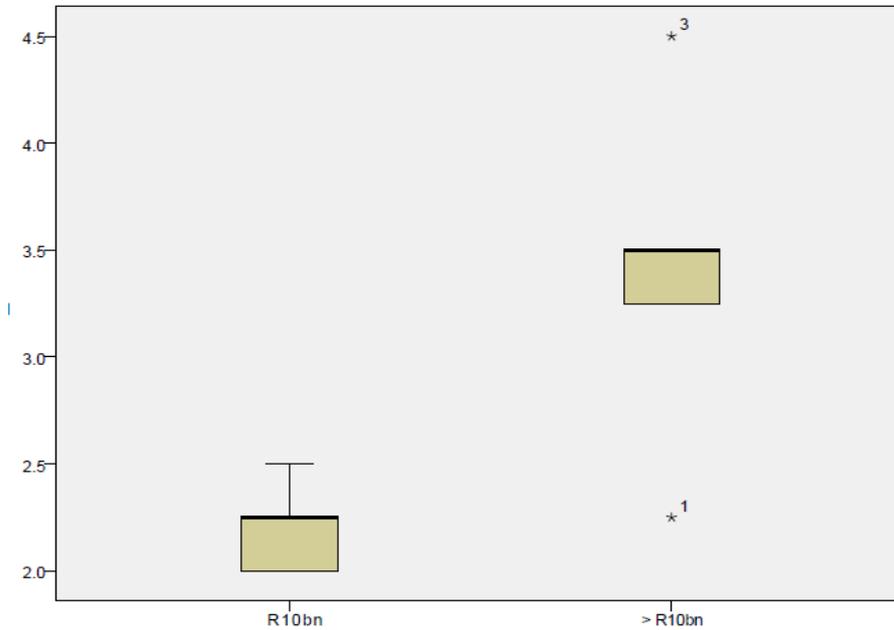


Table 5.20: Exogenous Bias Influences' Scores (Split by RETAIL Exposure) (1=strongly agree, 2=agree, 3=neutral, 4=disagree, & 5=strongly disagree)

Retail Value	n	Mean	Standard Deviation
Up to R10bn	5	2.20	.209
More than R10bn	5	3.40	.802

Figure 5.6: Exogenous Bias Influences' Boxplot (Split by Job Function occupied by Respondent) (1=strongly agree, 2=agree, 3=neutral, 4=disagree, & 5= strongly disagree)

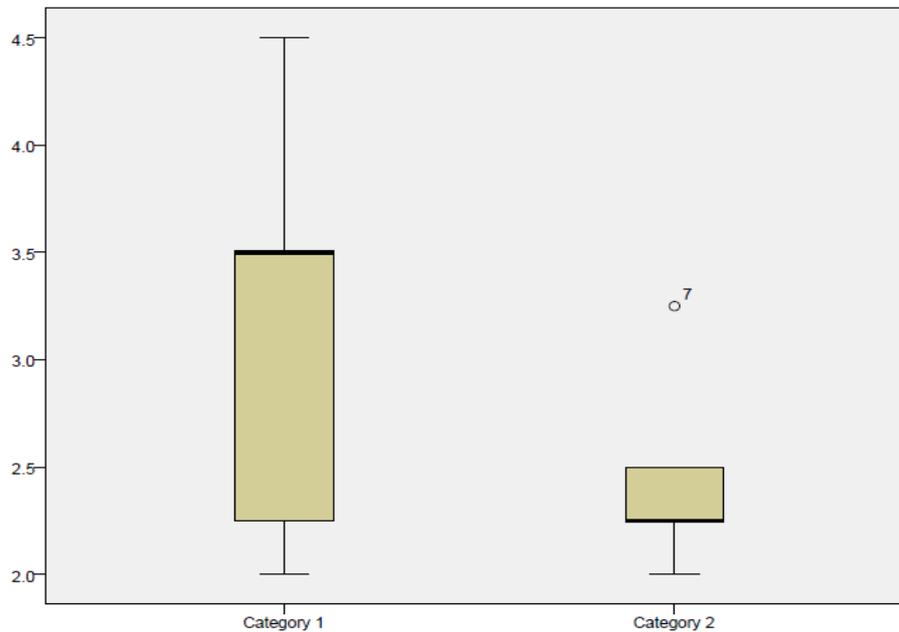


Table 5.21: Exogenous Bias Influences' Scores (Split by Job Function occupied by Respondent) (1=strongly agree, 2=agree, 3=neutral, 4=disagree, & 5= strongly disagree)

Job Function	n	Mean	Standard Deviation
Category 1	5	3.15	1.025
Category 2	5	2.45	.481

5.6.2 Endogenous Bias Influences

Table 5.22: Endogenous Bias Influences' Scores (1=strongly agree, 2=agree, 3=neutral, 4=disagree, & 5= strongly disagree)

Question No.	n	Mean	Median	Mode	Standard Deviation	Min	Max
Q12.4	10	2.6	2.5	2	.699	2	4

Figure 5.7: Endogenous Bias Influences Boxplot (Split by RETAIL Exposure) (1=strongly agree, 2=agree, 3=neutral, 4=disagree, & 5= strongly disagree)

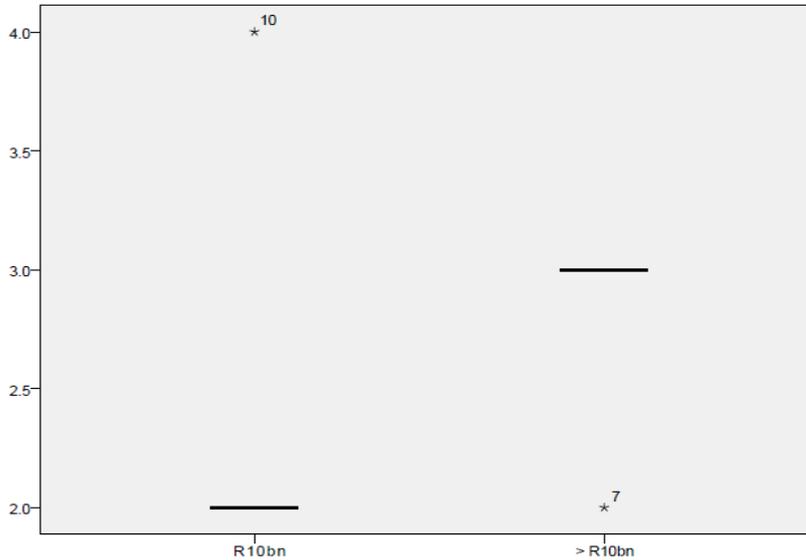


Table 5.23: Endogenous Bias Influences' Scores (Split by RETAIL Exposure) (1=strongly agree, 2=agree, 3=neutral, 4=disagree, & 5= strongly disagree)

Retail Value	n	Mean	Standard Deviation
Up to R10bn	5	2.40	.894
More than R10bn	5	2.80	.447

Figure 5.8: Endogenous Bias Influences Boxplot (Split by Job Function occupied by Respondent) (1=strongly agree, 2=agree, 3=neutral, 4=disagree, & 5= strongly disagree)

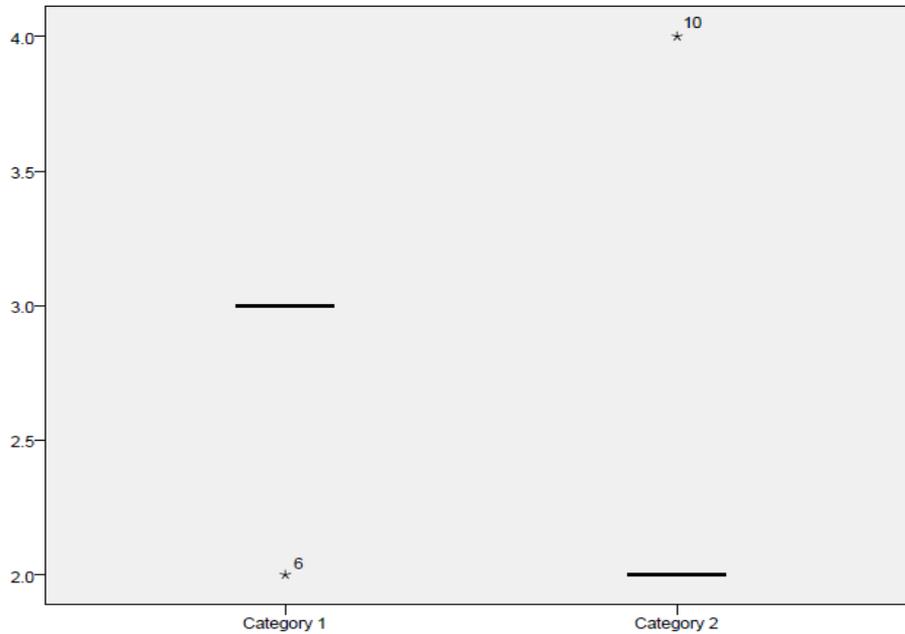


Table 5.24: Endogenous Bias Influences' Scores (split by Job Function occupied by Respondent) (1=strongly agree, 2=agree, 3=neutral, 4=disagree, & 5= strongly disagree)

Job Function	n	Mean	Standard Deviation
Category 1	5	2.80	.447
Category 2	5	2.40	.894

Research findings on the views of institutional investors on the work of PV, in the context of MV determination during investment decision making, will be analysed in detail in the following chapter, Chapter Six.

5.7 Hypothesis 4: Factors Influencing Diversification Strategies

Theory and literature reviewed in Chapter Two revealed that Institutional Investors pursue their diversification strategies based on a number of variables. Drawing from the literature, in **Question 11** a number of these variables were presented to respondents from which they had to indicate their preferences on a Likert-Style Scale (**1=strongly agree, 2=agree, 3=neutral, 4=disagree, & 5=strongly disagree**). For purposes of testing the stated hypothesis in Chapter Three, these variables are hereinafter divided into two (2) groups:

Group 1: Geographic Location and Property Type (Q11.1 & Q11.2).

Group 2: Economic Location, Tenant Type, Property Size, and Property Age (Q11.3 to Q11.6).

Table 5.25: Cronbach's Alpha

Variable	Cronbach's Alpha	n
Group 1	.924	2
Group 2	.499	4

While *group 1* items are fewer and therefore susceptible to a lower Cronbach's Alpha coefficient, the coefficient sits above the normal benchmark of 0.7, and therefore acceptable. *Group 2's* Cronbach's Alpha coefficient is lower than the floor benchmark of 0.6 suggested by Tavakol and Dennick (2011). According to Julie (2007), it is sometimes necessary to *reverse* the coefficient of the individual items in a group in order to improve the value of Cronbach's Alpha. For *group 2* variables, however, the value of Cronbach's Alpha did not improve even after applying the *reverse* principle. In order to allow for meaningful statistical inferences, therefore, the individual variable's mean score in *group 2* was compared with the overall mean score of *group 1* variables.

Table 5.26: Normality Test Scores (Split by Diversification variable)

Variable		Retail Value	Shapiro-Wilk		
			W	df	Sig.
Group 1		Less than R10bn	.881	5	.314
		More than R10bn	.750	5	.030
Group 2	Economic Location	Less than R10bn	.684	5	.006
		More than R10bn	.867	5	.254
	Tenant Type	Less than R10bn	.771	5	.046
		More than R10bn	.552	5	.000
	Property Size	Less than R10bn	.902	5	.421
		More than R10bn	.767	5	.042
	Property Age	Less than R10bn	.883	5	.325
		More than R10bn	.828	5	.135

All normality scores for both groups of variables were found to be acceptable because they were closer to the 1 coefficient.

5.7.1 Group 1 (*Geographic Location and Property Type*)

Table 5.27: Group 1 Scores (1=strongly agree, 2=agree, 3=neutral, 4=disagree, & 5= strongly disagree)

Question No.	n	Mean	Median	Mode	Standard Deviation	Min	Max
Geographic Location Q11.1	10	2.00	2.00	2.00	1.155	1.00	5.00
Property Type Q11.2	10	1.80	1.50	1.00	1.229	1.00	5.00
Overall	10	1.90	1.50	1.50	1.499	1.00	5.00

Figure 5.9: Group 1 Variables' Boxplot (Split by RETAIL Exposure) (1=strongly agree, 2=agree, 3=neutral, 4=disagree, & 5= strongly disagree)

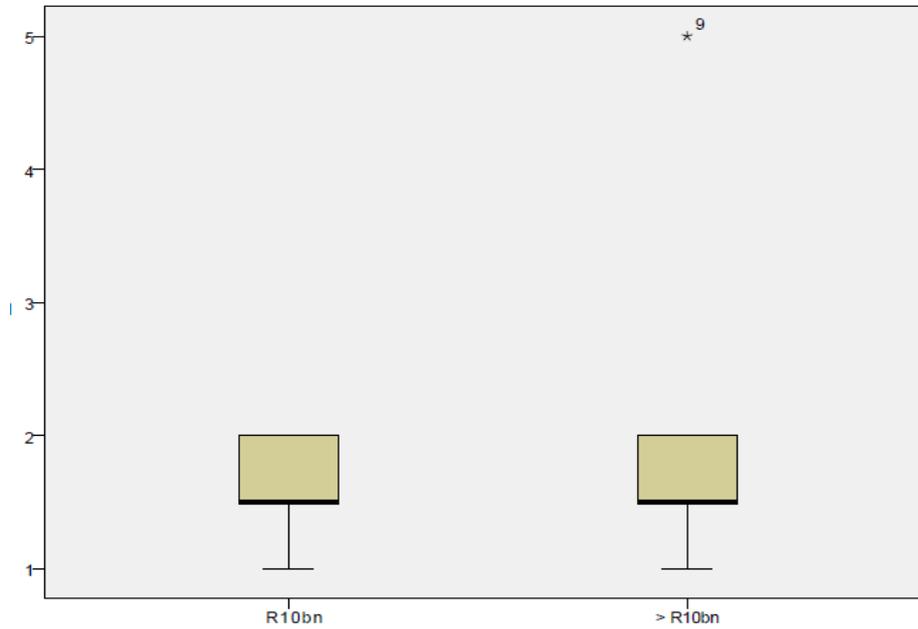


Table 5.28: Group 1 Variables' Scores (Split by RETAIL Exposure) (1=strongly agree, 2=agree, 3=neutral, 4=disagree, & 5= strongly disagree)

Retail Value	n	Mean	Standard Deviation
Up to R10bn	5	1.60	.418
More than R10bn	5	2.20	1.605

Figure 5.10: Group 1 Variables' Boxplot (Split by Job Function occupied by Respondent) (1=strongly agree, 2=agree, 3=neutral, 4=disagree, & 5= strongly disagree)

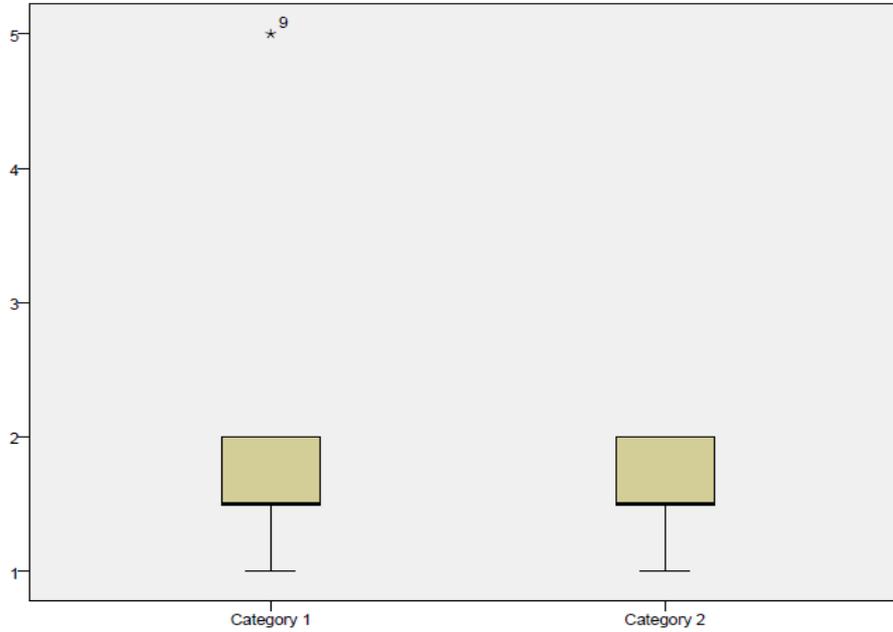


Table 5.29: Group 1 Variables' Scores (Split by Job Function occupied by Respondent) (1=strongly agree, 2=agree, 3=neutral, 4=disagree, & 5= strongly disagree)

Job Function	n	Mean	Standard Deviation
Category 1	5	2.20	1.605
Category 2	5	1.60	.418

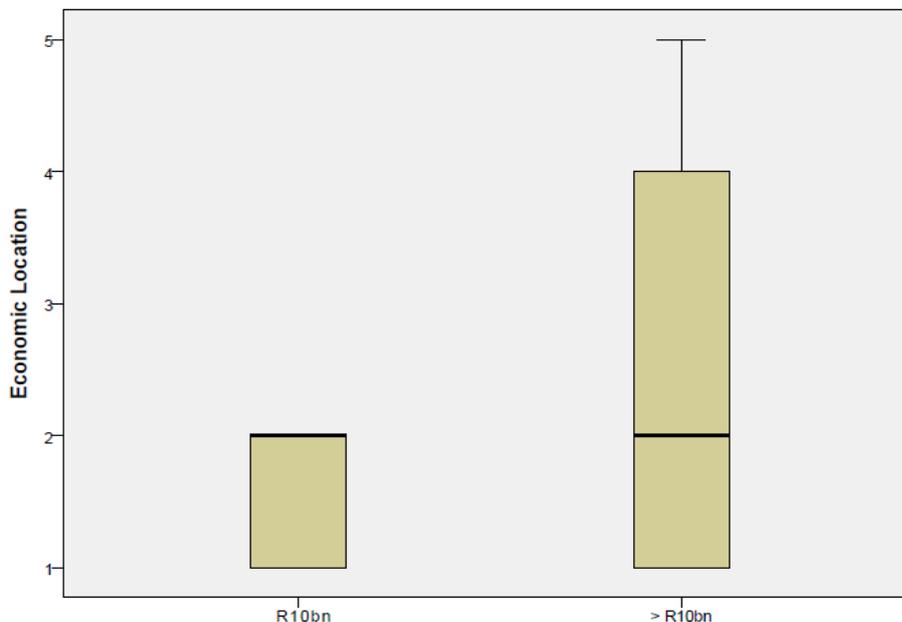
5.7.2 Group 2 (Economic Location, Tenant Type, Property Size, & Property Age)

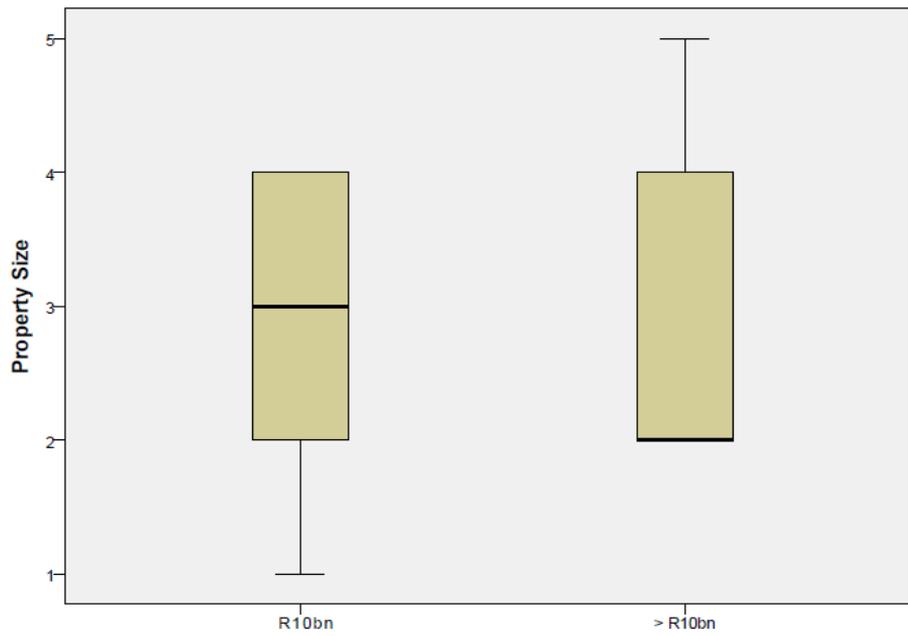
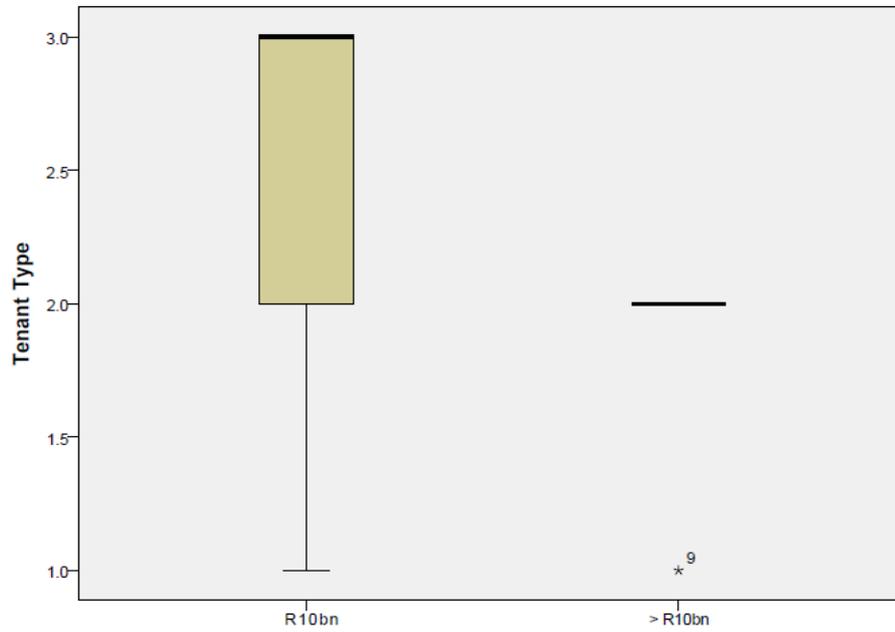
Table 5.30: Group 2 Scores (1=strongly agree, 2=agree, 3=neutral, 4=disagree, & 5= strongly disagree)

Variable	n	Mean	Median	Mode	Standard Deviation	Min	Max
Economic Location Q11.3	10	2.10	2.00	1.00*	1.370	1.00	5.00
Tenant Type Q11.4	10	2.10	2.00	2.00	.738	1.00	3.00
Property Size Q11.5	10	2.90	2.50	2.00	1.287	1.00	5.00
Property Age Q11.6	10	2.60	2.50	2.00	.966	1.00	4.00

*multiple modes exist, smallest value reported

Figure 5.11: Group 2 Variables' Boxplots (Split by RETAIL Exposure)





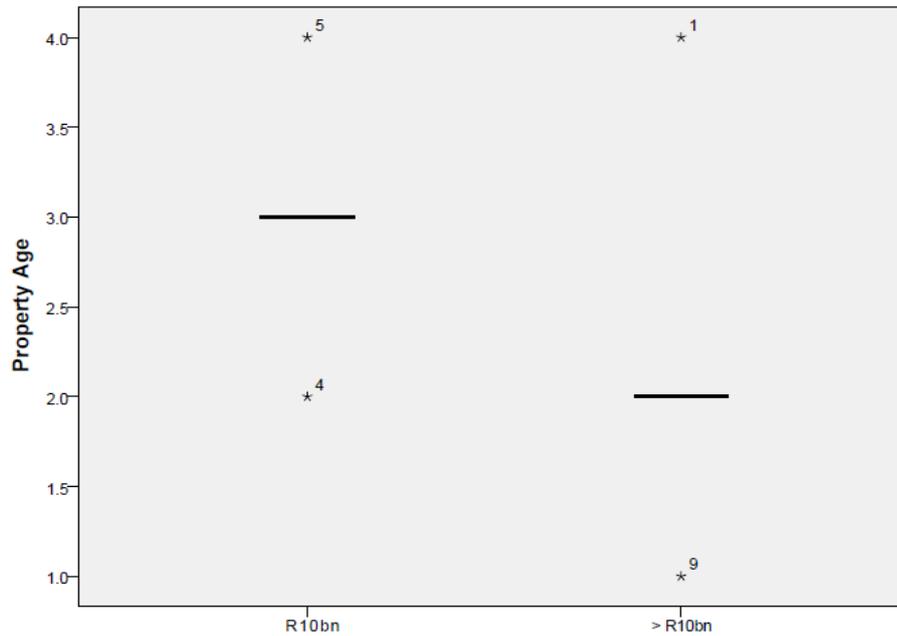
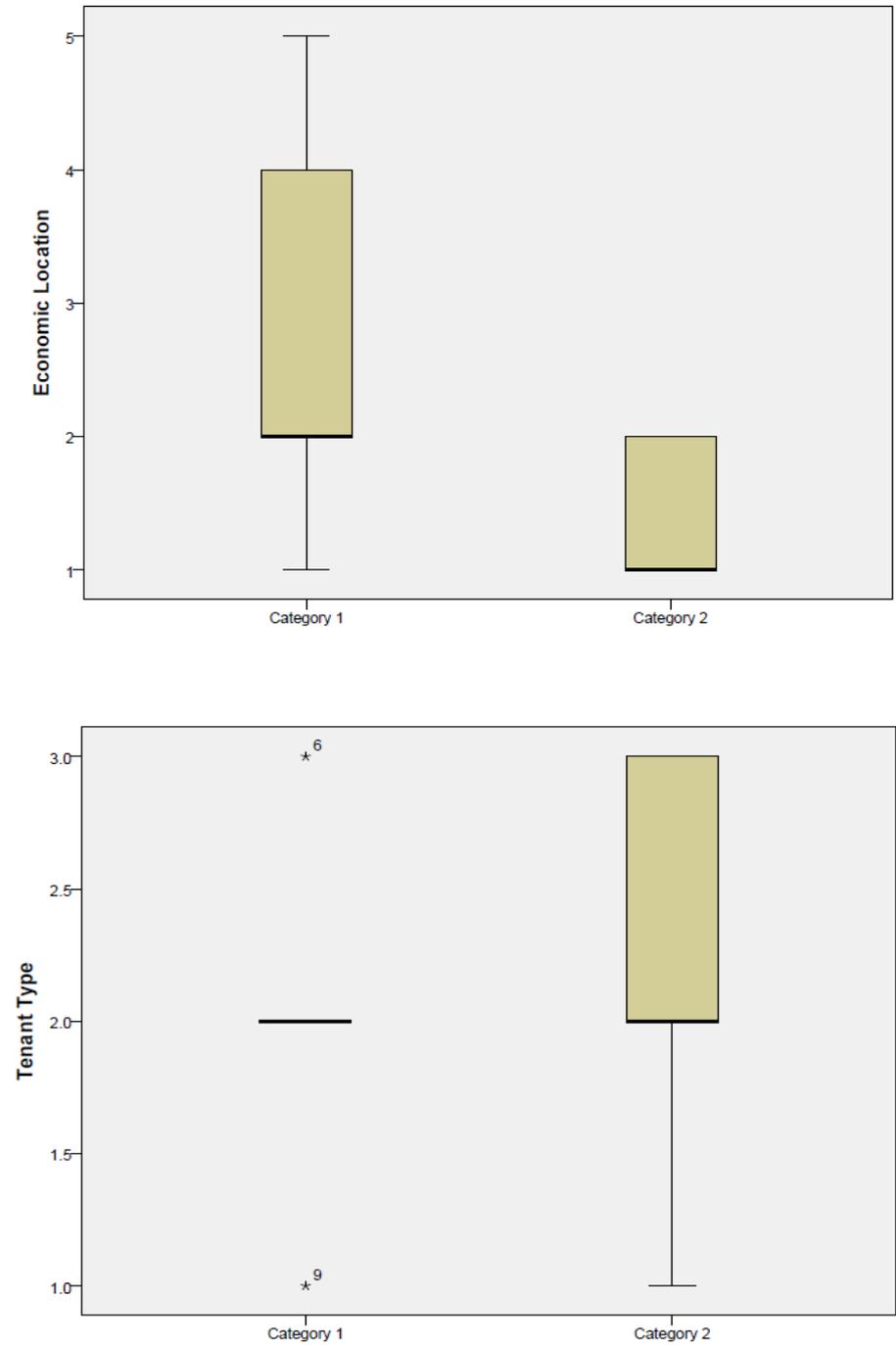


Table 5.31: Group 2 Variables' Scores (Split by RETAIL Exposure) (1=strongly agree, 2=agree, 3=neutral, 4=disagree, & 5= strongly disagree)

Variable	Retail Value	n	Mean	Standard Deviation
Economic Location Q11.3	Up to R10bn	5	1.60	.548
	More than R10bn	5	2.60	1.817
Tenant Type Q11.4	Up to R10bn	5	2.40	.894
	More than R10bn	5	1.80	.447
Property Size Q11.5	Up to R10bn	5	2.80	1.304
	More than R10bn	5	3.00	1.414
Property Age Q11.6	Up to R10bn	5	3.00	.707
	More than R10bn	5	2.20	1.095

Figure 5.12: Group 2 Variables' Boxplots (Split by Job Function occupied by Respondent)



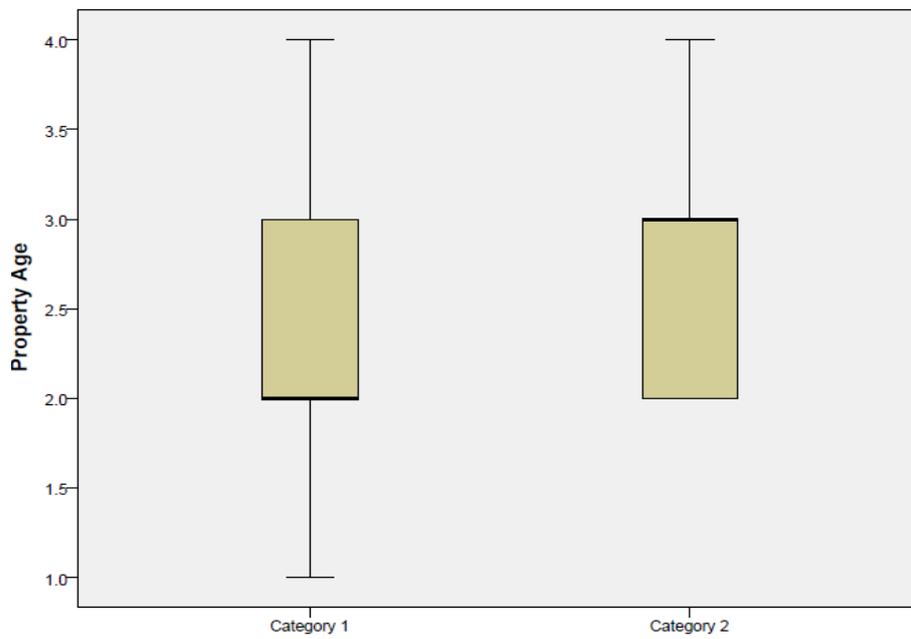
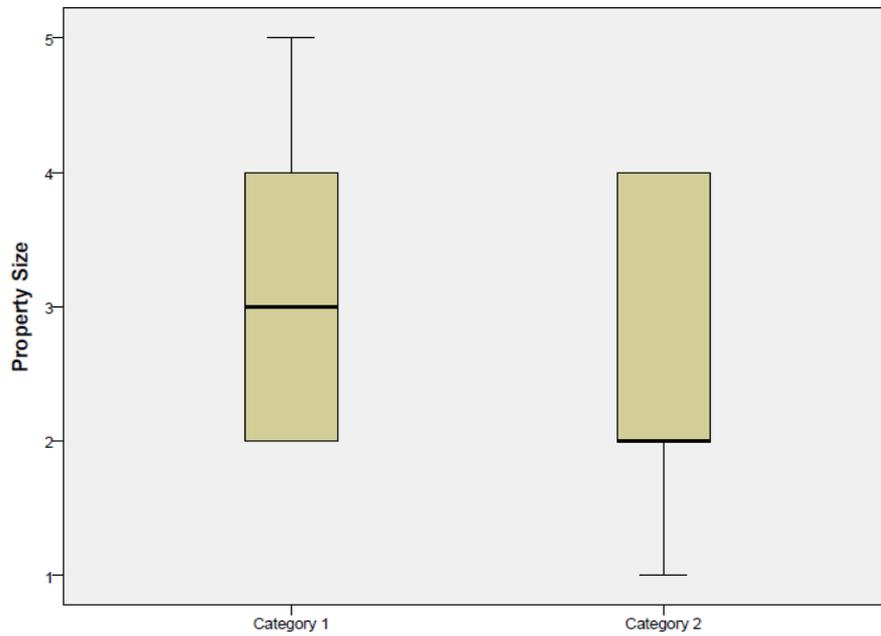


Table 5.32: Group 2 Variables' Scores (Split by Job Function occupied by Respondent) (1=strongly agree, 2=agree, 3=neutral, 4=disagree, & 5= strongly disagree)

Variable	Job Function	n	Mean	Standard Deviation
Economic Location Q11.3	Category 1	5	2.80	1.643
	Category 2	5	1.40	.548
Tenant Type Q11.4	Category 1	5	2.00	.707
	Category 2	5	2.20	.837
Property Size Q11.5	Category 1	5	3.20	1.304
	Category 2	5	2.60	1.342
Property Age Q11.6	Category 1	5	2.40	1.14
	Category 2	5	2.80	.837

5.8 Relevance of Financial Information

In line with the principles embedded in the structure of a Balanced Scorecard (BSC), namely that both financial and nonfinancial information form the basis of projecting future performance, **Question 14** required respondents to rate certain financial ratios identified as indicators of future financial performance. **Question 15** was a follow up on Question 14 by soliciting for any other financial ratios respondents felt were also important in this regard. The results of the survey are presented below (1=least important, 2=not important, 3=neutral, 4=important & 5=most important):

Table 5.33: Financial Ratios Cronbach's Alpha

Cronbach's Alpha	n
0.636	5

The coefficient of Cronbach's Alpha was therefore considered appropriate because it was in line with the benchmark discussed under **Section 4.4.1**.

Table 5.34: Financial Ratios Score Rankings (1=least important, 2=not important, 3=neutral, 4=important, & 5=most important)

Financial Ratio	n	Mean	Median	Mode	Standard Deviation	Min	Max
Efficiency Ratio	10	4.20	4.50	5.00	.919	3	5
Turnover Growth Ratios	10	4.00	4.00	4.00	.816	2	5
Net Rental over Turnover	10	4.30	4.00	4.00	.675	3	5
Gross Property Income over Turnover	10	3.80	4.00	4.00	1.229	1	5
Spend per Head Ratio	10	3.30	3.00	2.00*	1.160	2	5
Overall	10	3.92	3.90	3.80*	.6268	1	5

*multiple modes exist, smallest value reported

The above financial ratios all but one (Efficiency Ratio) deal directly with the question of measuring aggregate turnover levels achieved by the shopping mall. The Spend per head ratio is derived using the formula below:

$$\text{Spend per head} = \text{Turnover} / \text{Foot-traffic}$$

For example, if the Total Turnover registered by a Community Shopping Mall in a given month stands at R100m, and the total foot-traffic for the same month stands at 200 000 people, the spend per head is therefore R500.

Table 5.35: Financial Ratios Score Rankings (Split by Job Function occupied by Respondent) (1=least important, 2=not important, 3=neutral, 4=important, & 5=most important)

Job Function	n	Mean	Standard Deviation
Category 1	5	4.24	.684
Category 2	5	3.60	.400

5.8.1 Other suggested Financial ratios

As mentioned above, Question 15 was a follow up question on Question 14 by asking respondents to offer suggestions on other relevant ratios not mentioned in Question 14. The question was an optional open-ended question and below is a summary of answers obtained from respondents:

Table 5.36: Other Suggested Financial Ratios

Financial Ratio	n
1) Trading Densities (Turnover / GLA)	3
2) Utility Recovery Ratios (Excluding Rates)	1
3) Rates Recovery Ratios	1
4) IPD Performance benchmark Ratios	1
5) Total Utility Recovery Ratios (Rates & Other combined)	1
6) Cost to Income Ratios	1
7) Net Expense Growth Ratios	1
8) Capitalisation Rates Trends	1

While the question required respondents to assign a rating on the level of importance on each suggested ratio, most respondents did not make use of the rating. Therefore, for purposes of these results, it was assumed overall that all ratios were important to respondents; otherwise they would not have been put forward for suggestion.

5.9 Overall Results

The results from a total of 10 respondents were presented above. As mentioned, these respondents were well experienced to answer the questions posed – **154 years** of commercial property experience; **56 years** of retail sector experience. The institutional investors represented by these participants control a sizeable asset base in the South African real estate industry. A summary of the supported hypotheses in the study is presented in Table 5.37 below:

Table 5.37: Summary of Results Analysis

No	Hypothesis	Hypothesis Status	Outcome
H ₁	Investment stage concerned with Forecasting expected returns important to institutional investors	Supported	Ranked 2 nd ; In line with ranking obtained by Farragher and Savage (2008)
H ₂	Nonfinancial factors important when Forecasting expected returns in retail	Supported	Tenant Mix (Mean=4.08, important) Centre Management (Mean=3.80, important)
H ₃	Market Values derived through Professional Valuation are subjective	Not Supported	Exogenous Factors(Mean=2.8, neutral); Endogenous Factors (Mean=2.6, neutral)
H ₄	Portfolio Diversification based on Geographic location and Property type	Supported	Group 1 (Mean=1.90, agree); Group 2 (Means leaning towards neutral)

The following chapter presents an analysis of the results presented in Chapter Five.

6 Chapter 6 – Discussion of Findings

6.1 Introduction

This chapter discusses the results of the research as presented in the previous chapter, Chapter Five. Hypotheses were formulated in Chapter Three, and this chapter analyses the results in the context of the stated hypotheses. Conclusions on each hypothesis are also stated, while in the process synthesising findings of past research work already discussed in Chapter Two.

6.2 *Hypothesis 1: Prioritisation of Investment Decision Stages*

6.2.1 Introduction

Question 13 required respondents to prioritise the Top 4 decision making stages out of Farragher and Savage's (2008) investment decision framework. The rationale behind this question was to find out if the sample of institutional investors selected for the study prioritised Forecasting Expected Returns (Stage 4) as important when faced with an investment decision. Prioritisation of Stage 4 presents no further implications in so far as other commercial property sectors like C&I are concerned. For the retail sector, however, as discussed in Chapter Two, future returns are driven by nonfinancial factors, such as tenant mix and customer experience. In order to enhance the quality of the investment decision, therefore, these drivers of future performance must be incorporated into the decision process.

Hypothesis 1 hypothesised that Forecasting expected returns in investment decision making processes is important to SA's institutional investors. In this regard, the results of the survey investigation presented in Chapter Five are discussed below. The **overall** results obtained are discussed first, before analysing responses in terms of the **size of the retail portfolio** held by the investor, and also reclassifying responses in accordance with the **job function** of the position occupied by the respondents.

6.2.2 Discussion of Research Results

An **overview** of the choices made by investors is presented in **Table 5.6**. Both Setting strategy and Establishing return/risk objectives were selected by 80 percent of the respondents, followed by Forecasting expected returns (60%), both Assessing and adjusting for risk, and Decision making at 50 percent, and Searching for investment opportunities at 40 percent. The least selected investment stages were Evaluating forecasts (20%), and Implementing Accepted Proposals and Auditing operating performance both at 10 percent.

While the most favoured investment stages were Setting strategy and Establishing return/risk objectives (both 80%), Setting strategy was ranked **top priority** by all Eight respondents, versus the Establishing return/risk objectives' stage where Five respondents awarded **priority 2** status, and the balance of Three respondents awarded a **priority 3** status. The only stage to have been selected on **all priority rankings** was Forecasting expected return (See **Table 5.6**).

The study by Farragher and Savage (2008) reported that investors identified the Top 3 Stages of the process as Searching for investment opportunities; Forecasting expected returns, and Evaluating expected returns. Consistent with their findings, forecasting expected returns ranks second in both studies. In this study, there were two instances where decision stages received an equal ranking by respondents and this could be attributed to the small size of the sample. While Farragher and Savage's (2008) received a low response rate (23%) compared to this study (83%), their study received a total of 188 responses compared to the 10 for this study.

Table 5.7 presents the results of this section according to the **size of the retail portfolio** held by each institutional investor, that is, **Up to R10bn** and **More than R10bn**. The number of investors in both categories was even (5). The Forecasting expected returns' stage was more important to investors in the band 'more than R10bn' (50%) relative to the band 'up to R10bn' (10%). Therefore, all

four investors that did not prioritise Stage 4 as important in the decision process were from the 'up to R10bn' band. In the study by Farragher and Savage (2008), results were not sorted using the commercial property value parameter because no material differences were found amongst the investment values. This study also did not find any material differences to warrant conducting such an analysis.

Table 5.8 presents the results of the survey sorted by **Job Function occupied by respondents**, that is, **Category 1** and **Category 2** (as discussed in **Section 5.3.1** above). As presented in **Table 5.1**, the number of respondents in each category is even at five per category. Category 1 respondents valued the 'Forecasting expected returns' stage more (40%) relative to Category 2 respondents (20%). Therefore, only one respondent from Category 1 did not rank Stage 4 as the most important stage in the process, relative to Three from Category 2 respondents. In conclusion, the results show that Asset Managers, people who are entrusted with the responsibility of driving shopping mall performance through an oversight role on the duties of the Centre Management team, value the forecasting stage more relative to Fund Managers and Chief Investment Officers (CIOs). The duties of Fund Managers and CIOs extend beyond just driving shopping centre performance as explained under **Section 5.3.1**. In order to understand drivers of future performance in a decision making setting, however, it is logical to expect Fund Managers and CIOs to rely on the insightful knowledge of Asset Managers, given that these individuals focus only on performance matters, versus Fund Managers and CIOs, who become inundated with other tasks, such as portfolio rebalancing strategies.

6.2.3 Conclusion

According to results of the survey analysed above, Forecasting expected returns was identified as most important by SA's institutional investors. Therefore, the **Hypothesis 1** stated in Chapter Three is **accepted**.

6.3 Hypothesis 2: Usefulness of Nonfinancial Factors

6.3.1 Introduction

Meija and Benjamin (2002) discussed the important role played by anchor tenants, and the presence of substitute and complementary tenants in moulding a differentiation strategy (Tenant mix) in a shopping centre environment. An effective Tenant mix strategy, as discussed in Chapter Two, drives turnover rental in a shopping centre. Increased sales levels achieved by tenants facilitate surpassing **breakpoint**, and attainment of breakpoint triggers the application of the turnover rental clause of the lease agreement. Given this background, **Question 16** presented to respondents for rating on a Likert-Style Scale, a list nonfinancial indicators of future performance that were identified from the literature.

Hypothesis 2 stated that institutional investors do consider the nonfinancial factors alluded to above important in a decision process. In order to evaluate this hypothesis, the results of the survey presented in Chapter Five are discussed below. The nonfinancial factors are discussed under the concept of Tenant Mix and the Quality of Centre Management team. An **overview** of both sections is presented first, before conducting an analysis based on **retail portfolio value**, and the **job function** occupied by the respondent on both Tenant Mix and the Quality of the Centre Management team.

6.3.2 Discussion of Research Results

Table 5.11 presents the results of the variables supporting the Tenant Mix concept, and **Table 5.14** presents results on Centre Management. The overall Tenant Mix **mean score was 4.08** which indicate that respondents view the variables presented as **important**. Respondents think the variable *presence of anchors* to be most important (**Mean=5; Std Deviation=0.00**), while adopting an indifferent stance on the variable *presence of franchised & independent stores* (**Mean=3.30; Std Deviation=0.675**). On the *Quality of the Centre Management*

team, respondents also rated this variable as important (**Mean=3.80; Std Deviation=1.398**), although on a lesser scale relative to *Tenant Mix*. Therefore, overall nonfinancial factors' mean score was **4.02** which equates to a rating of **important** on the measurement scale.

Tenant Mix

In **Figure 5.1** and **Table 5.12** the results of this section are presented using **retail portfolio value**. While both groups of *Up to R10bn* (**Mean=3.90; Median=4.00**) and *More than R10bn* (**Mean=4.25; Median=4.25**) consider the Tenant Mix variables important indicators of future expected returns, the latter group has a relatively higher scoring.

The mean scores of Asset Managers (**Mean=4.05; Median=4.00**), and CIOs and Fund Managers (**Mean=4.10; Median=4.25**) are quite close though when the results are analysed by **job function** (**Figure 5.2 & Table 5.13**). In each group, however, there was one outlier respondent.

The size of the sample was small (n=12), which therefore could make the results to be not representative of the views of SA's commercial property institutional investors. Notwithstanding the foregoing comment, given that all respondents in this study concurred with the important role of the tenant mix variables presented to them in forecasting expected returns, the conclusions made about the study can therefore be considered valid.

Centre Management

The importance of the Centre Management team in driving future performance can be explained using the perspectives of a Balanced Scorecard (Kaplan and Norton, 2001). Under the **Customer perspective**, for example, in order to enhance the superior customer experience which ultimately results in turnover rental through increased tenant sales (Huppertz and Khare, 2008), the team would be required to deal decisively with any complaints raised by shoppers.

As discussed in Chapter Two, the incidence of *sales leakage* negatively affects shopping mall performance, and therefore poses operational challenges to the team. Apart from ensuring that on-going operational processes dealing with this phenomenon are in place (**Internal Business perspective**), another aspect that demonstrates a prudent business approach would be to continually look for innovative ways (**Learning and Growth perspective**) of curbing such a counter-performance act by tenants.

The discussion above highlighted some of the performance-enhancing initiatives that the on-site team could implement in managing the shopping centre. In the context of forecasting expected returns in a decision making process, therefore, it would be important to assess the capabilities and quality of the centre management team. Given this background, the results for this study on the quality of the Centre Management team are analysed further below.

Figure 5.3 and **Table 5.15** present an overview of the results analysed using the institution's **retail portfolio value**. The results show that the *Up to R10bn* category of investors considers the role of Centre Management less important (**Mean=3.40; Std Deviation=1.817**) relative to investors with retail portfolio values in excess of R10bn (**Mean=4.20; Std Deviation=0.837**).

Although a later study by Fuss *et al* (2012) did not find conclusive evidence by earlier studies linking shareholder activism to improved performance (Chan *et al*, 2005; Kaiser, 2005), it could still be argued that there is room for more research in this area so as to establish a firm scholarly view on the subject. In this study, investors found to have investment interests beyond SA were those with retail portfolios in excess of R10bn. Therefore, drawing from Kaiser (2005), it could be argued that these investors value the importance of Centre Management in influencing performance, hence awarding a relatively higher score when compared to the other investors. The sample size (n=12) used in this study though prevented an in-depth analysis on the dimension of the role of centre management.

The findings of the study analysed by **job function** occupied by the respondent are presented in **Figure 5.4** and **Table 5.16**, and the results show that both categories of employees rate the variable of Centre Management equally (**Mean=3.80, important**). Category 1 scores, however, have a lower standard deviation relative to Category 2 (**1.304 versus 1.643**). In summary, both groups of respondents consider the aspect of Centre Management important in the process of influencing expected returns. Consideration therefore must be given to the quality of the Centre Management team when forecasting expected returns in a decision making process. Reliance on purely financial information at the expense of nonfinancial one might result in non-optimal decisions.

6.3.3 Conclusion

Consistent with literature reviewed in Chapter Two, South African investors consider the use of nonfinancial information **important** when faced with a decision to forecast expected returns in a retail environment. Therefore, the **hypothesis** stated in this section is **accepted**.

6.4 *Hypothesis 3: Subjectivity of Professional Valuation Services*

6.4.1 Introduction

The literature reviewed under **Section 2.1.3** suggested widespread subjectivity in MVs derived through professional valuation processes. In the context of investment decision making, Question 12 presented to respondents a list of factors identified from the literature, which could cloud the process of MV determination.

Hypothesis 3 stated that investors perceived MVs derived through professional valuation services to be subjective. The results of the study presented in Chapter Five are analysed below in two categories, namely **internal** and **external** sources of bias behaviour. The analysis further analyses the results in

accordance to the **size of the investor's retail portfolio**, as well as the **job function** of the position occupied by a respondent.

6.4.2 Discussion of Research Results

Table 5.19 presents respondents' scores on external sources of bias on the valuation process. The overall average mean score on the four questions presented to respondents was **2.80**, which suggests that on the whole the investors preferred to withhold their views on the subjectivity matter. Also, no noticeable material difference was evident in the individual scores making up the average of 2.80.

In the South African real estate market, most of the major institutional investors have in-house valuation departments given that frequent property valuation assignments (usually quarterly) have to be carried out for reporting purposes on the Listed Sector. It is therefore possible that a leaner view on the subject was adopted by investors also offering valuation services in-house. In this regard, a firmer conclusion could have been possible had respondents been also asked to indicate if they offered such services in-house.

Figure 5.5 and **Table 5.20** present the results of the study split by the investor's **retail portfolio value**, namely **up to R10bn** and **more than R10bn**. Investors with the smaller portfolio lean towards supporting the subjectivity claim (**Mean=2.20**), while investors with retail investment exposure in excess of R10bn firmly disagree with the subjectivity claim (**Mean=3.40**). In line with the discussion above on the provision of in-house valuation services, it could therefore be argued that investors with larger portfolios have set-up in-house valuation departments because of their financial muscle, relative to the smaller-sized portfolio investors, who tend to outsource most of their noncore activities. The former group of investors, therefore, would adopt a less critical view on one of its own departments.

Figure 5.6 and **Table 5.21** present the results of the study according to the two **job functions** identified under **Section 5.3.1** in Chapter Five. Assets Managers registered a rather neutral score (**Mean=3.15**), although the spread of results was relatively wider as evidenced by a **standard deviation of 1.025**. CIOs and Fund Managers, on the other hand, leaned towards agreeing with the statement that MVs derived through valuation processes are subjective (**Mean=2.45**). It could be that, relative to Asset Managers, CIOs and Fund Managers spend more time negotiating acquisition deals, and therefore have more experience on the frailties associated with MV determination.

There was only one question pertaining to **internal factors** influencing professional valuation biases and the results of the study are presented in Table 5.22. A **mean score of 2.60** was registered for this type of question, which was more towards a neutral stance, even though a **mean score of 2.00 (agree)** was registered for at least one of the respondents.

In terms of an analysis based on **retail portfolio value**, as presented in **Figure 5.7** and **Table 5.23**, the results show no material differences from the mean score of 2.6 above. Both bands had an outlier, however the **up to R10bn category** had a **mean score of 2.40 (more on agree)** versus the **more than R10bn** category score of **2.80 (closer to neutral)**.

An analysis based on the **job function** of the position occupied by the respondent is presented in **Figure 5.8** and **Table 5.24**. The scoring trend in this area assumes a similar fashion to that observed under external factors. Asset Managers once again adopted a more neutral stance (**Mean=2.80**), while CIOs and Fund Managers tended to lean towards agreeing with the argument of subjectivity (**Mean=2.40**).

6.4.3 Conclusion

Chapter Two presented a strand of literature demonstrating the subjectivity associated with MV determination through the services of PV. These studies were conducted in a number of developed real estate markets. No similar studies coming out of emerging economies like South Africa were identified during literature review. While South Africa is considered relatively developed when compared to other African countries, as an emerging economy, it would however be expected that it will still possess some of the institutional voids associated with such markets (Acemoglu and Robinson, 2012). Therefore, it might rather be incomprehensible that a group of investors possessing a total of **154 years** of commercial property experience find such market free of the professional valuation challenges widely reported in developed real estate markets.

The results though gave a slightly different perspective when analysed in terms of **retail portfolio value** and the **job function** of the position occupied by the respondent. Therefore, this might be an indication that an in-depth study with a larger sample size would present different results.

In conclusion, the results of the survey failed to support the stated hypothesis that institutional investors perceive MVs derived through PV services to be subjective. Therefore, **hypothesis 3 is rejected**.

6.5 *Hypothesis 4: Factors Influencing Diversification Strategies*

6.5.1 Introduction

According to Business Day (2013), a growing number of South African property companies seem to be infiltrating the rest of the African continent in search for new growth opportunities. While the continent is reportedly lagging behind in terms of availability of quality shopping centres (Knight Frank, 2013), Beattie (2013) reported widespread construction activity of malls meeting world standards across most of the continent's economic hubs, for example in Nigeria,

Ghana, Kenya, and others. The emergence of quality retail assets there looks set to stimulate acquisition activity across markets in the continent. To this end, **Question 11** of the questionnaire aimed at obtaining views of institutional investors on the factors that influence their diversification strategies, as they infiltrate the rest of the continent in search of better investment opportunities.

Based on the study by Farragher and Savage (2008), **hypothesis 4** stated that institutional investors' diversification strategies were based on *geographic location*, and the *property type*. The results of the study presented in Chapter Five are analysed below.

6.5.2 Discussion of Research Results

The following summary presents an overview of the results in this study alongside the findings of Farragher and Savage (2008).

Table 6.1: Summary Mean Scores

Variable	Study		Farragher & Savage	
	Score	Ranking	Score	Ranking
Geographic Location	2.00	2	87%	1
Property Type	1.80	1	81%	2
Economic Location	2.10	3	50%	4
Tenant Type	2.10	3	44%	5
Property Size	2.90	5	59%	3
Property Age	2.60	4	31%	6

(1=strongly agree, 2=agree, 3=neutral, 4=disagree, & 5= strongly disagree)

In **Table 5.27**, the results of variables **geographic location** and **property type** are presented under the theme *group 1* variables. The average mean score for

the Two variables was **1.90**, which lies between *strongly agree* and *agree* on the rating scale, although leaning more towards *agree*. Compared with the rest of the variables, **Table 6.1** shows that these variables occupied the top two positional rankings in both studies.

Diversification based on geographic location seems plausible for SA's institutional investors. As reported by Knight Frank (2013), the country has experienced an unprecedented increase in shopping centres since the dawn of democracy in 1994. With the local market nearing saturation, property companies have seemingly resorted to local acquisition strategies in an effort to boost earnings (For example, See eProp, 2013). Consolidation though presents limited opportunities, hence South African companies are reportedly infiltrating new geographies beyond the local borders (Business Day, 2013), where income levels are rising. With a strong emergence of a middle class population as a result of the rising income levels, Beattie (2013) reported that such section of the population has aspirations, yet remaining chronically underserved. As stated in Chapter One, 60 percent of the capital value of properties held by the institutions used for this study is retail and therefore it can be reasonably expected that these investors would gravitate towards the retail property type. As discussed earlier, the variable rental structure presents relatively attractive investment opportunities for returns- seeking landlords.

Chapter Four elaborated on the limitations associated with the small size of the sample used in this study. In this vein, the results show that an analysis on these variables (geographic location and property type) based on retail value (**Figure 5.9** and **Table 5.28**), or job function of position occupied by respondent (**Figure 5.10** and **Table 5.29**), give no useful dimension to the study, hence no further commentary has been provided.

The results of *group 2* factors are presented in **Figure 5.11 & 5.12**, and **Table 5.30 & 5.31**. Respondents in the study rated **economic location** and **tenant type** equally (**Mean=2.10** which approximates an 'agree' rating), while next was

property type (Mean=2.60), and lastly **property size (Mean=2.90)**, both the latter variables leaning towards a **neutral** rating. While property size ranked last in this study (**Table 6.1**), in Farragher and Savage's (2008) study this variable ranked after geographic location and property type. Furthermore, in an earlier study conducted by Louargand (1992), the variables of **property type** and **geographic location** ranked higher than any other variables presented to respondents for selection.

While the small size (n=12) of the sample continues to hinder an in-depth analysis of the results, a few points of note are evident from the results when analysed using **retail value**, and the **job description** of the position occupied by respondents. In both the categories, all variables but *economic location* and *tenant type* posit similar means scores, more on the bands *neutral* to *disagree*, noticeably with no responses leaning towards *strongly disagree*.

Analysed by retail portfolio value (**Figure 5.11 & Table 5.31**), investors in the band **up to R10bn** consider the variable Economic Location an important diversification factor (**Mean=1.6; Std Deviation=0.548**), while investors on the **more than R10bn** band are indifferent (**Mean 2.60; Std Deviation=1.817**). **Figure 5.11** though shows that both groups have a similar median (**median = 2**). In terms of variable Tenant Type, the **more than R10bn** group supports this variable as a factor that influences diversification strategies (**Mean 1.80, Std Deviation=0.447**), while the **up to R10bn** group remains indifferent (**Mean=2.40; Std Deviation=0.894**).

Analysed by **job function**, the results show that Asset Managers are indifferent towards Economic Location influencing diversification strategies (**Mean=2.80; Std Deviation=1.643**), versus CIOs and Fund Managers who strongly agree (**Mean=1.40; Std Dev=0.548**). Contrary to the Economic Location variable scoring, with respect to the Tenant Type, both groups concurred and agreed that this variable is important in diversification decision processes (**Category 1 Mean=2.00; Category 2 Mean=2.20**)

Overall, the study presented a mixed set of results when compared with findings by Louargand (1992), and Farragher and Savage (2008). Although not the same factors, both these studies revealed that respondents favoured by far two of the diversification factors presented to them. As discussed, the top two factors identified as important by SA investors were similar to the study by Farragher and Savage (2008). SA's investors, on the contrary, did not rate poorly the other diversification factors relative to the study by these authors.

6.5.3 Conclusion

The following conclusions can be drawn from the results of this section of the study:

- Two groups of variables were presented to respondents for selection by this study: *group 1* (Geographic Location and Property Type) and *group 2* (Economic Location, Tenant Type, Property Size, and Property Age). Participants to the study supported *group 1* variables (**Mean 1.90**) over *group 2's* (**Mean 2.43**).
- On the Likert-Style type Scale used for this section, the *group 1* mean score equates to an **agree** ranking, while *group 2* mean leans towards a **neutral** ranking by the investors. Noteworthy in *group 2*, the variables Property Size (**Mean 2.90**) and Property Age (**Mean 2.60**) were much closer to the neutral ranking, relative to Economic Location and Tenant Type (**both Mean=2.10**).
- The study concurred with findings by Farragher and Savage (2008), however not with earlier findings by Louargand (1992).
- Therefore, given the results discussed above, **hypothesis 4 is accepted**.

6.6 Relevance of Financial Information

6.6.1 Introduction

Relative to other fragmented systems, according to Norreklit (2000), the BSC possesses the advantage of linking all performance drivers of an entity as a result of its *cause-and-effect* principle. Therefore, the framework forces an entity to consider other areas of business when forecasting expected returns versus placing unfettered reliance on historical financial information. Discussed in this section, are financial ratios that assist in the process of projecting future financial performance, but only in concert with the other three perspectives of the BSC already discussed herein above. In this context, the suggested financial ratios by respondents are also incorporated.

6.6.2 Discussion of Research Results

Table 6.2 below presents an overview of the financial ratios used for the survey, combined with other relevant ratios suggested by respondents:

Table 6.2: Financial Perspective overview

Survey Financial Ratio	Mean Score	Linked Suggested Ratio(s) (Table 5.36)	Linked BSC perspective	Relevant Areas
Efficiency Ratio	4.20	Item 2,3,5,6, &7	Customer; Internal Business; Learning & Growth	Costs Containment; Turnover growth
Turnover Growth Ratios	4.00	Item 1	Customer; Internal Business; Learning & Growth	Tenant mix; Customer Satisfaction
Net Rental over Turnover	4.30	None	Internal Business	Centre Management
Gross Property Income over Turnover	3.80	None	Internal Business	Centre Management
Spend per Head Ratio	3.30	None	Customer; Internal Business	Centre Management
Overall	3.92			

According to the survey results presented, as obtained from respondents, all ratios but *Spend per Head* ratio are **important**. For the *Spend per Head* ratio, respondents were indifferent (**neutral rating**). Further, **Table 5.35** shows that, when analysed by **job function**, Assets Managers perceived the financial ratios to be more important (**Mean=4.24**) when compared to the category of CIOs and Fund Managers (**Mean 3.60**).

The discussion below relates to each of the five financial ratios presented to respondents:

Efficiency Ratio (Expenses over Income)

According to Hays, Lurgio, and Gilbert (2009), the Efficiency Ratio is the most used ratio in business and looks at the level of expense needed to support one monetary unit of operating revenue. The ratio therefore, can be improved by either reducing costs levels or increasing revenue levels. From an investment decision making perspective, a healthy Efficiency Ratio gives comfort to the investor to project favourable future returns. The healthy Efficiency Ratio position, however, is driven by performances in the other Three BSC perspectives.

Excellence in offering superior customer experience results in increased tenant sales (leads to turnover rental). For purposes of attainment of this position, the BSC framework posits that the centre's internal processes (**internal business perspective**) must identify and drive the levers enabling such position. For instance, costs containment might be a result of specifically initiated innovative ways by centre management designed to achieve targeted profitability levels. Therefore, the attainment of a healthy Efficiency Ratio position can only be achieved through excellence in the other BSC perspective and so investment decision makers must be in a position to make this cause-and-effect connection if optimal decisions are to be made.

Respondents rated this ratio highly (**Mean=4.20**) and further suggested other ratios that (**Table 6.2**), in this report, it is argued that they already form part of the Efficiency Ratio.

Turnover Growth Ratios

Turnover growth ratios are designed to assess the effectiveness of a **tenant mix** strategy, as well as attainment of **superior customer experience**. Turnover growth can be measured on three levels, namely

- Month-on-month growth (m/m)
- Year-on-year growth (y/y)

- Growth at tenant level

In this report, the important role of a tenant mix strategy and superior customer experience, in driving shopping centre financial performance has been well elaborated on using academic theory from a number of authors (Meija and Benjamin, 2002; Grewal *et al*, 2009; Verhoef *et al*, 2009). Under the financial perspective, the emphasis is on obtaining a scorecard on the effectiveness of the other perspectives (nonfinancial). Overall, softer turnover growth percentages reflect the ineffectiveness of tenant mix and superior customer experience initiatives by Centre Management. In an investment decision context, this would result in a softer position on future expected returns.

Respondents rated this ratio as important (**Mean=4**), however also suggested the *Trading Density* ratio. In this report, it is argued that the suggested ratio facilitates comparisons of turnover performances, at the level of tenants belonging to a specified category (See Appendix 9.8 for tenant categories). For instance, when all other pertinent factors likely to affect tenant trade are considered by Centre Management, disparities between Trading Density ratios of tenants in the same category might highlight issues for further investigation on the underperforming tenant. One issue could be the existence of sales leakage practices.

Net Rental over Turnover

No scholarly work was identified in this study that covers this ratio. In terms of performance, however, it could be considered prudent for Centre Management to compare this ratio with industry benchmarks, such as provided by the IPD. A softer ratio, however, could indicate low rentals charged to tenants in relation to the turnover generated by those tenants. Therefore, in terms of the BSC perspective on **Internal Business**, such a position could warrant a review by Centre Management of the operational systems. Respondents awarded the highest ranking to this ratio (**Mean=4.30**) relative to the other financial ratios presented to them.

Gross Property Income over Turnover

This ratio is similar to the one discussed above, save for the inclusion of other income streams, for instance, Signage Income, and Exhibition Income. It can be argued that a quality Centre Management team would have the capacity to identify other income streams that assist to propel the financial performance of the shopping centre. In an investment decision process, when forecasting expected returns the decision maker must be cognisant of the different income streams in a shopping centre (present and potential). Although still considered important, respondents awarded the second-lowest rating to this ratio (**Mean=3.80**).

Spend per Head

Using the facility of foot count equipment, this ratio calculates the turnover spend per customer that visits the shopping mall, mathematically represented as follows:

$$\text{Spend per Head} = \text{Turnover divided by Footcount}$$

Generally, a high ratio indicates positive performance. However, caution must be exercised on literal implication without understanding the drawbacks associated with ratio analysis. For instance, a drop in foot count (triggered by failure to provide superior customer experience) improves the Spend per Head ratio. The use of this ratio therefore must be viewed in the context of all factors driving shopping centre performance. Investment decisions taken purely on the basis of a healthy Spend per Head ratio could be suboptimal. A comparison with benchmarks from the IPD might prove insightful in this regard. Respondents rated this ratio poorly relative to the rest of the other financial ratios presented to them (**Mean=3.30**).

6.6.3 Conclusion

From an investment decision making point of view, the financial ratios discussed above do not drive financial performance. Their value is embedded in providing

insightful feedback on the effectiveness of the strategic imperatives contained in the other perspectives of the BSC. Forecasting expected returns, therefore, happens under the **financial perspective** of the BSC. To achieve a credible forecast in a retail environment demands that a clear appreciation of the drivers of future performance be made.

6.7 Summary

In this chapter, the results presented in Chapter Five were explained, while in the process also synthesizing scholarly work covered in Chapter Two. A total of four hypotheses were presented for investigation, and only one was not supported. The results showed the complexity within which property investment decisions are taken. For retail, the arguments presented demonstrated that such challenges are even harder in this commercial property sector.

The following chapter draws conclusions based on the findings of this study.

7 Chapter 7 - Conclusion

7.1 Introduction

This chapter gives an overview and summary of the research work carried out in this study. Key insights coming out of the study are briefly discussed before highlighting some areas for future research which are judged to be interwoven with the main areas of investigation by this study.

7.2 Research Background and Objectives

As mentioned in Chapter One, to date there is no universally accepted investment decision framework in real estate (Sah, 2011). While this debate continues, decision frameworks currently in use fail to account for the nuanced differences driving retail performance. Therefore, in the context of the retail sector, forecasting expected returns without this consideration is likely to yield suboptimal investment decisions.

The last economic meltdown has limited investment opportunities globally. Reports, however, suggest that investment opportunities are abundant in emerging markets, such as in Africa (E&Y, 2012). Africa's economic situation is improving, with seven of the world's fastest economies located on the continent (IMF, 2012). Therefore, with the European crisis remaining firmly a topical matter in investment circles, emerging economies like those located in Africa look destined to being preferred investment destinations globally.

The objectives of this study were to investigate retail decision frameworks that aid shopping centre acquisitions. Africa's retail sector remains grossly underdeveloped, and its shopping centres are below par in terms of meeting world standards (Knight Frank, 2013). Nonetheless, the situation is vastly improving given the move by world-class retailers infiltrating the continent (Reinartz *et al*, 2011). There is also flaring construction activity across the continent which also perpetuates infrastructural improvement (Beattie, 2013). On

this backdrop, the years ahead are likely to be punctuated by heightened activity in the area of mall acquisition transactions, as traction develops as a result of the availability of world-class mall stock. The acquisition activity is likely to be dominated by Institutional investors such as MNPCs, as they try and diversify their portfolios (Kaiser, 2005; Lieser and Groh, 2011).

This study was based on the views of South African institutional investors on the efficacy of decision frameworks currently in use. The South African commercial property industry is comparable to other markets elsewhere in developed markets, and therefore the market was well suited for conducting this study. Local MNPCs though are underrepresented in retail on the African continent (**Table 5.5**). In order to increase their footprint, acquisition entry seems likely to be the most viable option. Given the high investment risk reportedly associated with such markets (Acemoglu and Robinson, 2012; Beattie, 2013), there is therefore an added need to improve current investment decision frameworks.

The findings in this study represent only the views of institutional investors, in a South African context. Other types of investors have been found to hold different investment views from those held by institutional investors (Farragher and Savage, 2008). Therefore, the study cannot be generalised.

7.3 Key Insights from Research Results

The following key insights can be drawn from the study:

- Farragher and Savage (2008) found that institutional investors consider the investment decision stage concerned with forecasting expected returns important. In this study, SA's institutional investors also concurred with this finding.
- The services of professional valuation remain important between contracting parties, through the process of market value determination. Real estate

literature is littered with studies alluding to bias behaviour during the process of market value determination. The literature covered in Chapter two on the bias behaviour therefore suggested that MVs obtained through the valuation process must be treated with caution. From a business viewpoint, the theory calls for treading with caution when dealing with MVs derived through the process of PV. Notwithstanding such widespread scholarly work documenting bias practices in the profession, SA's institutional investors do not associate professional valuation services with bias behaviour.

- The common practice of bias in favour of financial information at the expense of nonfinancial information is perpetuated in current retail investment decision making processes. Failure to incorporate nonfinancial information during the stage concerned with forecasting expected returns is likely to result in suboptimal decision making. On this vein, there is a need to improve current investment decision processes when dealing with the retail sector. This report posits that using a Balanced Scorecard framework would offer invaluable decision making insights.

7.4 Conclusion

This study highlighted the nuanced approach required in investment decision making when considered in the context of the retail sector. While there is ongoing debate in the area of finding a universally accepted decision framework (Sah, 2011), decision making frameworks presently in use fail to consider the unique performance-related attributes of the retail sector. In such a fiercely-contested economic environment, as a result of the recent economic meltdown, therefore, there is a need to improve current real estate investment decision making processes. This study suggested the use of a Balanced Scorecard framework to aid current retail investment decision processes.

7.5 Direction of Future Research

The study mainly investigated the usefulness of nonfinancial factors in retail decision making frameworks, using South African data to test the proposed hypotheses. While there was progress made into gaining insight on retail decision processes in a South African context, the study also touched on other areas of interest which might warrant further scholarly investigation.

- This study investigated the usefulness of nonfinancial information in the context of informing investment decisions, in particular, forecasting expected returns in a retail setting. In this regard, the study found nonfinancial information to be of invaluable input. Subsequent studies could pursue this area further, and design a Balanced Scorecard to aid retail decision making processes.

- According to Knight Frank (2013), there are over 1500 shopping centres in South Africa today. Due to a number of constraints alluded to earlier in this study regarding attainment of a bigger sample size, this report focussed only on a small sample of institutional investors. Given the high number of shopping centres in the country, it would be useful to obtain a much more broader view on the issues investigated by this study. In particular, it would be interesting to emulate the study by Farragher and Savage (2008) and also solicit the input of private investors.

- The area of *sales leakage* warrants further investigation given that sales figures eluding the turnover calculation net can result in an understatement of the shopping mall's variable rental income. In a South African context, where the number of shopping malls has grown tremendously since 1994, increased competition will continue to be a key feature of business in the real estate industry. Using Porter's (1996) framework of strategy, attractive returns as generated by rising turnover levels seem likely to come from differentiation, in the form of a tenant mix strategy. Increased sales, however, will not translate into variable/turnover rental if the adage of sales leakage is not adequately

addressed by landlords. Therefore, there is a need to understand the factors that perpetuate the incidence of sales leakage in shopping malls. The current practice by South African landlords is to engage the services of external auditors in order to identify transgressors within tenants in a shopping mall. To some extent, such audits might serve as a deterrent for tenants to refrain from such counter-performance practices, particularly as a consequence of the stiff penalties imposed by landlords on offenders. Audits, however, are by nature reactive, and therefore fall short in so far as advancing an understanding of the antecedents of such incongruent tenant behaviour.

- There is a myriad of operational challenges facing landlords in the South African real estate market. On the income side, one obvious challenge is that of how to control the incidence of sales leakage as discussed above. Yet on the costs side, a seemingly common theme evident in a number of property company's financial reports is that of flaring operational costs (See Figure 7.1, for example). All such factors have a negative impact on financial performance. To date, such challenges have on the whole been tackled at firm level, yet they do not seem to subside as they are persistently reported on in yearly reports. Reid (2009) advances the concept of **open innovation** as a possible solution to common problems faced by an industry. Open innovation is defined in the context of competing firms joining forces in order to address an industry-wide challenge. Therefore, given this common costs challenge encountered by SA landlords, an investigation into how the concept of open innovation can be embraced by competing landlords is perhaps warranted.

Figure 7.1: Note on Operational Costs

KEY RISK	BUSINESS IMPACT
South Africa is experiencing significant increases in administered prices including electricity, rates and municipal levies.	Resilient is bearing the increased cost of utilities that cannot be recovered from tenants. This reduces distributable income.
The ability of tenants to absorb the increasing cost of occupancy is limited.	The increased cost of occupancy may result in more tenant business failures and legal action leading to higher vacancies and increased legal costs and bad debts.

Source: Resilient Property Fund (2013, p.24)

- ❑ As discussed in Chapter Two, the existence of the variable rental component in retail forms the bedrock of retail performance. This phenomenon also differentiates the retail sector from other commercial property sectors (Pitt and Musa, 2009). Therefore, in order to maximise returns, it is important that the landlord captures all the financial rewards generated by the presence of an efficient tenant mix strategy (differentiation). Drawing from anecdotal experience, there is an argument that the local approach followed in the determination of the percentage rate to be included under the turnover clause of the lease agreement, is controversial. National tenants seem to escape with a lower percentage rate relative other smaller-sized retailers. An understatement of such percentage obviously downplays the realisation of all rewards accruing from the implementation, by Centre Management, of an effective differentiation strategy.

- ❑ Lastly, the South African real estate industry has several variants of lease structures that are in use. An obvious purpose of the lease agreement is that of minimising tenancy risk for the benefit of the landlord. With such a wide

array of lease structures in operation, perhaps an investigation into which lease structure(s) are appropriate for which property sector(s) is warranted.

8 References

- Acemoglu, D. & Robinson, J.A. (2012). The making of prosperity and poverty. Why Nations Fail: *The Making of Power, Prosperity and Poverty*, New York: Crown Publishers, 70 – 95.
- Artemenkov, A. I., Mikerin, G. I., & Artemenkov, I. L. (2008). Professional Valuation and Investment-Financial Valuation: Distinctions in Valuations for Private and Public Markets. *The Appraisal Journal*, 76(4), 355 - 370.
- Allard, T., Babin, B.J. & Chebat, J. (2009). When income matters: Customers evaluation of shopping malls' hedonic and utilitarian orientations. *Journal of Retailing and Consumer Services*, 16, 40 – 49.
- Atherton, E., French, N., & Gabrielli, L. (2008). Decision theory and real estate development: A note on uncertainty. *Journal of European Real Estate Research*, 1(2), 162-182.
- Beattie, A. (2013). *African opportunities: Balancing risk and reward*. Retrieved from <http://www.financialmail.co.za/specialreports/propertyhandbook/2013/07/26/african-opportunities-balancing-risk-and-reward> [Accessed: 19 August 2013].
- Boshoff, D. G. (2008). Valuing Real Estate as Contractual Cash-Flow with a Put-Option. *economics*, 356 - 357.
- Burnaz, S. & Topcu, Y.L. (2011). A decision support on planning retail tenant mix in shopping malls. *Procedia Social and Behavioural Sciences*, 24, 317 – 324.
- Business Day, (2013). *There are opportunities for property investors and developers to achieve high returns in Africa, says head of Africa at property consultancy Knight Frank*. Retrieved from <http://www.eprop.co.za/news/item/15712-developers-heed-irresistible-draw-of-malls.html> [Accessed 7 October 2013].

- Carter, C.C. (2009). What we know about shopping centers. *Journal of Real Estate Literature*, 17(2), 165 – 180.
- Carter, C. C., & Haloupek, W. J. (2002). Dispersion of stores of the same type in shopping malls: theory and preliminary evidence. *Journal of Property Research*, 19(4), 291-311.
- Chan, S.H., Leung, W.K., & Wang, K. (1998). Institutional investment in REITs: evidence and implications. *Journal of Real Estate Research*, 16(3), 357-374.
- Clayton, J., Ling, D.C. & Naranjo, A. (2009). Commercial real estate valuation: Fundamentals versus investor sentiment. *Journal of Real Estate Financial Economics*, 38, 5 - 37.
- Crosby, N., Lizieri, C., & McAllister, P. (2010). Means, motive and opportunity? Disentangling client influence on performance measurement appraisals. *Journal of Property Research*, 27(2), 181-201.
- Dawson, J., & Lord, D. (Eds.). (2012). *Shopping Centre Development (RLE Retailing and Distribution)*. Routledge.
- De Wit, I. (2010). International diversification strategies for direct real estate. *The Journal of Real Estate Finance and Economics*, 41(4), 433-457.
- Dhar, R., & Goetzmann, W. N. (2006). Institutional perspectives on real estate investing. *The Journal of Portfolio Management*, 32(4), 106-116.
- DiPasquale, D., & Wheaton, W. C. (1992). The markets for real estate assets and space: a conceptual framework. *Real Estate Economics*, 20(2), 181-198.
- Doppegieter, J., & Rode, E. (2002). *Capitalisation rates and property yields: an analysis of the South African commercial property market*. School of Business Administration.
Retrieved from
<http://0citeseerx.ist.psu.edu.innopac.up.ac.za/viewdoc/download?doi=10.1.1.1.98.6432&rep=rep1&type=pdf> [Accessed: 30 September 2013]

Drury, C. (2009). *Management Accounting for Business*. Hampshire: Cengage Learning.

eProp, (2013). *Acquisition opportunities returning to listed property sector*.

Retrieved from

<http://www.eprop.co.za/news/item/15589-acquisition-opportunities-returning-to-listed-property-sector.html> [Accessed 28 August 2013].

Ernst and Young. (2012). Africa getting down to business.

Retrieved from

<http://www.ey.com/ZA/en/Issues/Business-environment/2012-Africa-attractiveness-survey> [Accessed: 4 November 2013].

Farragher, J. & Savage, A. (2008). An investigation of real estate investment decision-making practices. *Journal of Real Estate Practice and Education*, 11(1), 29 – 40.

Financial Mail (2013). The Rankings: MBAs.

Retrieved from

<http://www.financialmail.co.za/coverstory/2013/09/26/the-rankings-mbas> [Accessed: 25 October 2013].

Fogel, S., & Berry, T. (2006). The Disposition Effect and Individual Investor Decisions: The Roles of Regret and Counterfactual Alternatives. *Journal of Behavioral Finance*, 7(2), 107-116.

Fowler, F.J. (2009). *Survey research methods*. (4th Ed.). California: Sage.

Franceschini, F., Galetto, M., & Turina, E. (2013). Techniques for impact evaluation of performance measurement systems. *International Journal of Quality & Reliability Management*, 30(2), 197-220.

French, N. (2001). Decision theory and real estate investment: An analysis of the decision-making processes of real estate investment fund managers. *Managerial and Decision Economics*, 22, 399 – 410.

Fuss, R., Richt, J., & Thomas, M. (2012). Excess return sources of active property management: A case study. *Journal of Property Investments and Finance*, 30(4), 354 – 374.

Games, G. (2012). *Business in Africa: Corporate insights*. Rosebank: Penguin Books.

Gliem, J. A., & Gliem, R. R. (2003). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education.

Retrieved from

<http://www.alumnisu.org/midwest/midwest%20papers/Gliem%20%26%20Gliem--Done.pdf> [Accessed: 23 December 2013].

Grewal, D., Levy, M. & Kumar, V. (2009). Customer experience management in retailing: An organizing framework. *Journal of Retailing*, 85(1), 1 – 14.

Halvitigala, D., Murphy, L., & Levy, D. (2011). Dominant and non-dominant lease structures and their effect on place-based valuation practices. *Journal of Property Investment & Finance*, 29(6), 595-611.

Hays, F. H., De Lurgio, S. A., & Gilbert, A. (2009). Efficiency ratios and community bank performance. *Journal of Finance and Accountancy*, 1, 1-15.

Idzorek, T. M., Barad, M., & Meier, S. L. (2007). Global commercial real estate. *The Journal of Portfolio Management*, 33(5), 37-52.

International Monetary Fund (2012). *World economic outlook database*

Retrieved from

<http://macromon.wordpress.com/2012/11/13/top-30-fastest-and-slowest-growing-economies/> [Accessed: 30 September 2013]

- Ittner, C. D., & Larcker, D. F. (1998). Are nonfinancial measures leading indicators of financial performance? An analysis of customer satisfaction. *Journal of accounting research*, 36, 1-35.
- Jackson, C. (2006). Retail planning and institutional property investment. *Regional Studies*, 40(5), 555-561.
- Jackson, C. & Watkins, C. (2011). Planning policy and retail property investment in the UK. *Urban Studies*, 48(11), 2321 - 2338.
- Julie, P. (2007). *SPSS Survival manual: A step by step guide to data analysis using SPSS for Windows Version 15*. Open University Press, UK.
- Kaiser, R. W. (2005). Analyzing real estate portfolio returns. *The Journal of Portfolio Management*, 31(5), 134-142.
- Kaplan, R. S., & Norton, D. P. (1996). Using the balanced scorecard as a strategic management system. *Harvard business review*, 74(1), 75-85.
- Kaplan, N.S. & Norton, D.P., (2001). Transforming the Balanced Scorecard from performance measurement to strategic management: Part 1. *Accounting Horizons*, 15(1), 87 – 104.
- Knight Frank, (2013). *Africa report*.
Retrieved from
<http://my.knightfrank.co.uk/research/?regionid=3> [Accessed: 25 July 2013].
- Leedy, P. & Ormrod, J. E. (2010). *Practical Research: Planning and Design*, 9th Ed, New Jersey: Pearson Education International.
- Levy, D., & Schuck, E. (1999). The influence of clients on valuations. *Journal of Property Investment & Finance*, 17(4), 380 - 400.
- Levy, D., & Schuck, E. (2005). The influence of clients on valuations: the clients' perspective. *Journal of Property Investment & Finance*, 23(2), 182-201.

- Lieser, K. & Groh, A.P. (2011). The attractiveness of 66 countries for institutional real estate investments. *Journal of Real Estate Portfolio Management*, 17(3), 191 – 211.
- Lim, L.C., Berry, J. & Sieraki, K. (2013). Prime versus secondary real estate: When to buy and sell. *Journal of Property Investments and Finance*, 31(3), 254 – 266.
- Louargand, M. A. (1992). Survey of pension fund real estate portfolio risk management practices. *Journal of Real Estate Research*, 7(4), 361-73.
- MacCowan, R. J., & Orr, A. M. (2008). A behavioural study of the decision processes underpinning disposals by property fund managers. *Journal of Property Investment & Finance*, 26(4), 342-361.
- McGregor BFA (2013).
- Retrieved from
<https://expert.mcgregorbfa.com> [Accessed: 25 July 2013].
- Mittal, V., Huppertz, J.W., & Khare, A. (2008). Customer complaining: The role of tie strength and information control. *Journal of Retailing*, 84(2), 195–204.
- Mejia, L. C., & Benjamin, J. D. (2002). What do we know about the determinants of shopping center sales? Spatial vs. non-spatial factors. *Journal of Real Estate Literature*, 10(1), 1-26.
- Moshirian, F. (2008). Globalisation, growth and institutions. *Journal of Banking and Finance*, 32, 472–479.
- Newell, G. & Seabrook, R. (2006). Factors influencing hotel investment decision making. *Journal of Property Investment & Finance*, 24(4), 279–294.
- Niskanen, J., & Falkenbach, H. (2010). REITs and correlations with other asset classes: A European perspective. *Journal of Real Estate Portfolio Management*, 16(3), 227-239.

- Norreklit, H. (2000). The balance on the balanced scorecard a critical analysis of some of its assumptions. *Management accounting research*, 11(1), 65-88.
- O'Neill, F. (2009). The property cycle. *Accountancy Ireland*, 41(1), 44–45.
- Parker, D. (2013). Unlisted property fund decision making: Decision maker survey preliminary findings. *19th Annual Pacific-Rim Real Estate Society Conference*. Melbourne Australia, 13-16 January.
- Pitt, M. & Musa, Z.N. (2009). Towards defining shopping centres and their management systems. *Journal of Retail and Leisure Property*, 8(1), 39 - 55.
- Porter M. (1996). What is strategy? *Harvard Business Review*, 74(6), 61–80.
- Razali, N. M., & Wah, Y. B. (2011). Power comparisons of shapiro-wilk, kolmogorov-smirnov, lilliefors and anderson-darling tests. *Journal of Statistical Modeling and Analytics*, 2(1), 21-33.
- Reid, P.M. (2009). Open innovation: An evolving entrepreneurial technique. *International Review of Entrepreneurship*, 7(1), 83-96.
- Reinartz, W., Dellaert, B., Krafft, M., Kumar, V., & Varadarajan, R. (2011). Retailing innovations in a globalizing retail market environment. *Journal of Retailing*, 87, S53-S66.
- Resilient Property Fund (2013). Interim Financial Statements as at 30 June.
- Retrieved from
<http://www.resilient.co.za/FileBrowser/EditorFiles/Resilient%20-%202013%20Integrated%20Report.pdf> [Accessed: 1 October 2013]
- Roberts, C. & Henneberry, J. (2007). Exploring office investment decision-making in different European contexts. *Journal of Property Investment & Finance*, 25(3), 289–305.
- Robins, E. (2007). Measuring performance. *The Property Handbook*, Rosebank: Johnnic Publishing Media Services, 20–21.

- Sah, V., Gallimore, P., & Clements, J.S. (2010). Experience and real estate investment decision-making: A process tracing investigation. *Journal of Property Research*, (27)3, 207–219.
- Sah, V. (2011). Asset acquisition criteria: A process tracing investigation into real estate investment decision making. *Journal of Property Investment & Finance*, 29(1), 7–18.
- SAPOA/IPD South African Annual Property Index (2007). *Results for the year to December 2007*. Morningside, South Africa: Investment Property Databank.
- SAPOA/IPD South African Annual Property Index (2012). *Results for the year to December 2012*. Morningside, South Africa: Investment Property Databank.
- Saunders, M. & Lewis, P. (2012). *Doing Research in Business & Management*. Essex: Person Education Limited.
- Shapiro, S. S., & Wilk, M. B. (1965). An analysis of variance test for normality (complete samples). *Biometrika*, 52(3/4), 591-611.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55.
- The World Bank, & International Finance Corporation. (2013). *Doing business 2013, smarter regulations for small and medium sized enterprises*. 10th Ed. Washington: doi:10.1596/978-0-8213-9615-5.
- Too, L., Harvey, M., & Too, E. (2010). Globalisation and corporate real estate strategies. *Journal of Corporate Real Estate*, 12(4), 234–248.
- Topintzi, E., Chin, H., & Hobbs, P. (2008). Moving towards a global real estate index. *Journal of Property Investment & Finance*, 26(4), 286-303.
- UNDP (2012). *Human Development Report*.

Retrieved from

http://hdr.undp.org/en/media/HDR_2013_EN_complete.pdf [Accessed: 4 June 2013]

- Urban Land Institute, (2008). Dollars and Cents of Shopping Centers. *The Land Urban Land Institute*. Washington, DC.
- Verhoef, P.C., Lemon, K.N., Parasuraman, A., Roggeveen, A., Tsiros, M., & Schlesinger, L.A. (2009). Customer experience creation: Determinants, dynamics, and management strategies. *Journal of Retailing*, 85(1), 31–41.
- Viruly, F. (2013). *Property investment: Tread with more restraint*
Retrieved from
<http://www.financialmail.co.za/specialreports/propertyhandbook/2013/07/26/property-investment-tread-with-more-restraint> [Accessed: 15 August 2013]
- Weiers, R.M. (2011). *Introductory Business Statistics*. South-Western: Cengage Learning Limited.
- Wheaton, W. C. (2000). Percentage Rent in Retail Leasing: The Alignment of Landlord–Tenant Interests. *Real Estate Economics*, 28, 185–204.
- Yuan, H. & Krishna, A. (2008). Pricing of mall services in the presence of sales leakage. *Journal of Retailing*, 84(1), 95–117.
- Zikmund, W. G. (2000). *Business research methods* (6th Ed). Dryden London: Harcourt Brace.
- Zikmund, W.G. (2003). *Business research methods* (7th Ed). Oklahoma: South Western.

9 Appendices

9.1 SAPOA/IPD SA Property Index Contributors for 2012

- 1) Atterbury Investment Holdings
- 2) Business Venture Investments No 1360 ◀
- 3) Capital Property Fund ▶
- 4) Community Property Fund
- 5) Emira Property Fund
- 6) Fountainhead Property Trust
- 7) Growthpoint Properties Limited
- 8) Hyprop Investments
- 9) Liberty Life Property Portfolio
- 10) Metropolitan Life Properties ♥
- 11) Momentum Property Investment Portfolio ♥
- 12) Old Mutual Direct Property Fund ₪
- 13) Old Mutual Triangle Core Fund ₪
- 14) Pareto Limited
- 15) Rapfund ▲
- 16) Redefine Income Fund Limited
- 17) Resilient Property Income Fund
- 18) Retail Africa Direct Fund ▲
- 19) SA Corporate Real Estate
- 20) Vukile Property Fund Limited
- 21) Wingspan ▲

Source: IPD South Africa

Notes

- ◀ Jointly owned by Old Mutual & Pareto Limited
- ▲ Funds owned by Retail Africa (Pty) Ltd
- ▶ Owned by Resilient Properties
- ♥ Owned by Momentum Health (FirstRand Group)
- ₪ Owned by Old Mutual Property

9.2 JSE Listed Property Funds (31 Dec 2012)

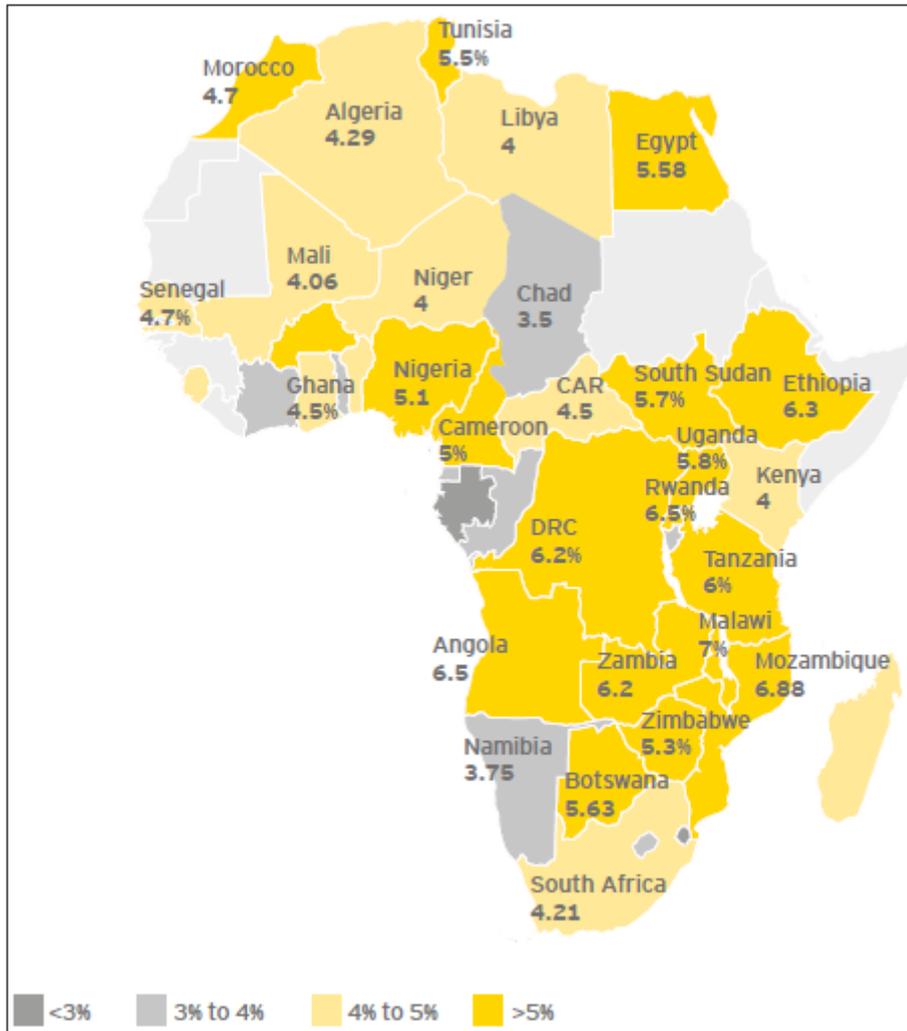
	<u>Fund Name</u>	<u>Market Capitalisation</u>
		<u>R</u>
1	REB - Rebois Property Fund Lt	2,887,621,831
2	ACP - Acucap Properties Ltd	8,258,172,968
3	BNT - Bonatla Property Hldgs	35,567,138
4	ANA - Adrenna Property Grp Ltd	19,570,180
5	ITU - Intu Properties Plc	42,207,787,848
6	ARD - Ardor Sa Ltd	3,259,184
7	FFA - Fortress Inc Fund Ltd A	4,389,059,322
8	FFB - Fortress Inc Fund Ltd B	2,157,080,349
9	VIF - Vividend Income Fund Ltd	1,062,379,424
10	HYP - Hyprop Inv Ltd	17,747,261,337
11	ING - Ingenuity Property Inv	546,527,000
12	NEP - New Europe Prop Inv Plc	7,867,737,284
13	OCT - Octodec Invest Ltd	2,110,385,881
14	ORE - Orion Real Estate Ltd	201,823,580
15	PNG - Pinnacle Point Group Ltd	83,111,224
16	PPR - Putprop Ltd	207,309,319
17	RES - Resilient Prop Inc Fund	14,787,255,622
18	VKE - Vukile Property Fund Ltd	7,444,064,582
19	AWA - Arrowhead Properties A	1,193,470,881
20	AWB - Arrowhead Properties B	1,170,069,491
21	IPF - Investec Property Fund L	4,574,003,000
22	SGA - Synergy Inc Fund Ltd A L	496,724,609
23	SGB - Synergy Inc Fund Ltd B L	690,228,828
24	VPF - Vunani Prop Inv Fund Ltd	1,157,933,568



25	DIA - Dipula Income Fund A	1,720,854,954
26	DIB - Dipula Income Fund B	1,219,955,555
27	CCO - Capital&Counties Prop PI	25,229,781,400
28	FVT - Fairvest Property Hldgs	381,543,387
29	GRT - Growthpoint Prop Ltd	43,306,287,195
30	HPA - Hospitality Prop Fund A	1,890,135,073
31	HPB - Hospitality Prop Fund B	437,912,482
32	MSP - Mas Real Estate Inc.	471,215,140
33	PMM - Premium Properties Ltd	2,790,561,340
34	QPG - Quantum Prop Group Ltd	29,065,076
35	RDF - Redefine Properties Ltd	26,003,913,193
36	TDH - Tradehold Ltd	1,143,177,015
37	ANP - Annuity Properties Ltd	1,029,231,043
38	AIA - Ascension Prop Ltd A	760,883,245
39	AIB - Ascension Prop Ltd B	742,258,736
40	ROC - Rockcastle Global Real E	1,498,000,000
41	OPI - Osiris Properties Int Lt	8,966,430
42	DLT - Delta Property Fund Ltd	1,385,457,066
	Total Market Capitalization	231,347,602,780

Source: McGregor BFA

9.3 Africa's Projected GDP growth rates (% change y/y 2012 -2017)



Source: E & Y, 2012.

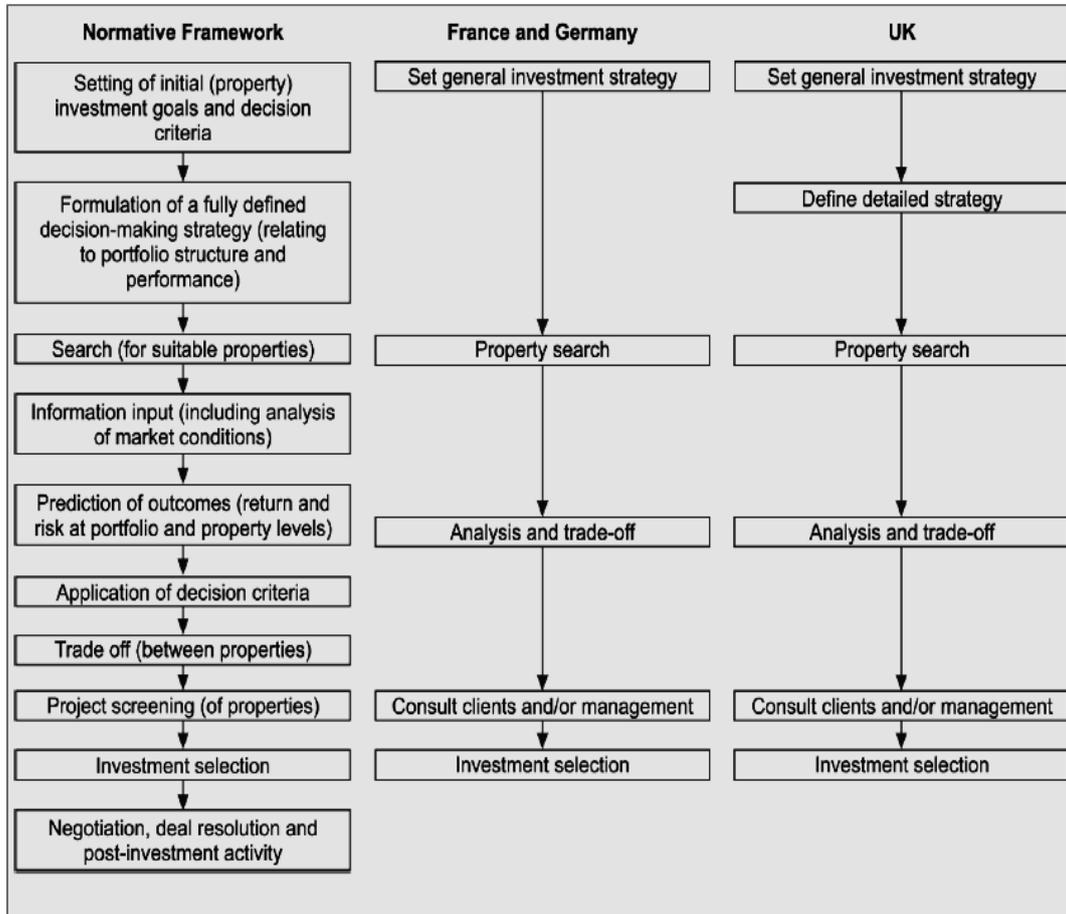


9.4 Africa's Rise to Middle Class



Source: E & Y, 2012.

9.5 Roberts & Henneberry's Decision Framework



Source: Roberts & Henneberry (2007, p.298)

9.6 Parker's Decision Framework



Source: Parker (2013, p.3-4)

9.7 Farragher & Savage's Decision Framework

Stages

Setting strategy

Establishing return/risk objectives

Searching for investment opportunities

Forecasting expected returns

Evaluating forecasts

Assessing and adjusting for risk

Decision-making

Implementing accepted proposals

Auditing operating performance

Source: Farragher & Savage (2008, p.32)

9.8 Classification Hierarchy of Tenants

<u>Level 1</u>	<u>Level 2</u>	<u>ULI Code</u>
Goods	- Clothing, Footwear, & Accessories	D, E
	- Books, Toys, & Gifts	M, N
	- Electronics & Electrical Appliances	G
	- Watches, Jewelry, & Ornaments	P
	- Health & Beauty	S, T
	- Daily Merchandise	A
	- Home Furnishings & Household goods	F, H
	- Specialty Stores	A, K, M
	- Foodstuffs	B
	- Food & Beverages	C
Services	- Financial Services	X
	- Real Estate	X
	- Tailors & Shoemakers	T
	- Health Services	Y
	- Education	W
	- Personal Services	T
	- Travel	T
	- Housekeeping	T
	- Government, Institution, or Community	Y
- Entertainment	W	

Source: ULI – abbreviated, 2008.

9.9 Draft Research Questionnaire

Questionnaire

1.) Respondent Number.....

Please indicate the most accurate answer(s) by ticking the appropriate box / boxes.

Part I - PERSONAL INFORMATION

2.) What is your current Job Title?

1.1 Chief Executive Officer

1.2 Chief Investment Officer

1.3 Acquisitions Manager

1.4 Asset Manager

1.5 Portfolio Manager

1.6 Other _____

3.) Please briefly describe the key functions of your current position?

4.) For how many years have you been in the **COMMERCIAL PROPERTY** industry, in a decision-making position?

.....

5.) For how many years have you been in the **RETAIL** property sector where you **currently** work (in a decision-making position)?

.....

6.) Please indicate your highest academic qualification:

Matric	
Undergraduate	
Postgraduate	

Part II - PORTFOLIO INFORMATION

7.) What is the approximate size of commercial property investment held by your institution?

≤ R1bn	
> R1bn ≤ R5bn	
> R5bn ≤ R10bn	
> R10bn ≤ R15bn	
> R15bn	

8.) In which geographical market(s) does your institution invest?

South Africa	
Other African countries	
Rest of the world	

9.) In what property types does your institution invest in?

Commercial (Offices)	
Industrial (Warehouses)	
Residential	
Retail	
Other	

10.) What is the approximate total exposure to **RETAIL** property by your institution?

	South Africa	Other African Countries	Rest of the world
≤ R1bn			
> R1bn ≤ R5bn			
> R5bn ≤ R10bn			
> R10bn ≤ R15bn			
> R15bn			

11.) In your institution, portfolio diversification is based on the following factors:

(1=Strongly Agree; 2=Agree; 3=Neutral; 4=Disagree; 5=Strongly Disagree)

Statement	1	2	3	4	5
Geographic location					
Property type					
Economic location					
Tenant type					
Property size					
Property age					

Part III – INVESTMENT DECISION MAKING

12.) The purpose of the Professional Valuer (PV) is to establish the Market Value (MV) of the property. Please rate the following statements?

(1=Strongly Agree; 2=Agree; 3=Neutral; 4=Disagree; 5=Strongly Disagree)

Statement	1	2	3	4	5
PVs sometimes compromise their professional integrity by providing MVs in line with client requests					
PVs earning a disproportionate fee from one client are likely to succumb to client influence					
PVs from larger firms are likely to resist client influence relative to those from smaller firms					
PVs sometimes compromise MVs through lack of experience in certain lease structures					
Big clients (e.g. Banks) are more likely to influence PVs relative to small clients					

For purposes of answering **Questions 13 – 15**, assume that your institution is faced with an investment decision to acquire a Community shopping mall

- 13.) The following list represents a 9 stage, linear investment decision-making framework.

Stage	Description
1	Setting strategy
2	Establishing return/risk objectives
3	Searching for investment opportunities
4	Forecasting expected returns
5	Evaluating forecasts
6	Assessing and adjusting for risk
7	Decision-making
8	Implementing accepted proposals
9	Auditing operating performance

Listed in order of importance, in your opinion, which top **four (4)** stages will be considered important to the investment decision?

Ranking	Stage	Description
1st		
2nd		
3rd		
4th		

- 14.) When forecasting **future** financial performance, please rate the importance of the following **historical** financial performance information to the investment decision?

(1= least important, 2=important, 3=neutral, 4=important, and 5= most important).

Statement	1	2	3	4	5
Efficiency Ratio (Expenses over Income)					
Turnover Growth Ratios					
Net Rental over Turnover					
Gross Property Income over Turnover					
Spend per head					
Other (please specify)					

- 15.) When **forecasting future financial** performance, please rate the importance of the following **nonfinancial** information to the investment decision?

(1= least important, 2=important, 3=neutral, 4=important, and 5= most important).

Statement	1	2	3	4	5
Presence of Anchor tenants in the Mall					
Presence of Substitute and Complimentary tenants in the Mall					
Presence of Franchised versus Independent stores in the Mall					
Brand image of Mall tenants					
Quality of Mall management					



9.10 ICSC Shopping Centre Classification

ICSC SHOPPING CENTER DEFINITIONS—U.S.							
TYPE OF SHOPPING CENTER	CONCEPT	SQUARE FEET (INCLUDING ANCHORS)	ACREAGE	TYPICAL ANCHOR(S)		ANCHOR RATIO*	PRIMARY TRADE AREA**
				NUMBER	TYPE		
MALLS							
Regional Center	General merchandise; fashion (mall, typically enclosed)	400,000-800,000	40-100	2 or more	Full-line department store; jc. department store; mass merchant; discount department store; fashion apparel	50-70%	5-15 miles
Superregional Center	Similar to regional center but has more variety and assortment	800,000+	60-120	3 or more	Full-line department store; jc. department store; mass merchant; fashion apparel	50-70%	5-25 miles
OPEN-AIR CENTERS							
Neighborhood Center	Convenience	30,000-150,000	3-15	1 or more	Supermarket	30-50%	3 miles
Community Center	General merchandise; convenience	100,000-350,000	10-40	2 or more	Discount department store; supermarket; drug; home improve- ment; large specialty/ discount apparel	40-60%	3-6 miles
Lifestyle Center	Upscale national chain specialty stores; dining and entertainment in outdoor setting	Typically 150,000-500,000, but can be smaller or larger.	10-40	0-2	Not usually anchored in the traditional sense but may include book store; other large-format specialty retailers; multi-plex cinema; small department store.	0-50%	8-12 miles
Power Center	Category-dominant anchors; few small tenants	250,000-600,000	25-80	3 or more	Category killer; home improvement; discount department store; warehouse club; off-price	75-90%	5-10 miles
Theme/Festival Center	Leisure; tourist-orient- ed; retail and service	80,000-250,000	5-20	N/A	Restaurants; entertainment	N/A	N/A
Outlet Center	Manufacturers' outlet stores	50,000-400,000	10-50	N/A	Manufacturers' outlet stores	N/A	25-75 miles

Source: International Council of Shopping Centres (ICSC)

9.11 Covering Letter to Questionnaire

Dear Sir / Madam

REQUEST FOR ASSISTANCE IN RESEARCH: RETAIL INVESTMENT DECISION MAKING FRAMEWORKS

I am an MBA Student at **The Gordon Institute of Business Science (GIBS)**, University of Pretoria. The goal of my research is to investigate the role of nonfinancial information in a retail investment decision making setting.

An electronic Questionnaire was compiled after studying the appropriate Real Estate decision making literature and theories. The Questionnaire is being distributed to contributors to the **SAPOA/IPD South Africa Property Index for 2012**.

If my request meets your approval, please click on the link below to complete the questionnaire, which **will take approximately 15 minutes** to complete. The first question requires your Respondent Number which is also provided below.

Your participation in the study is voluntary and you can withdraw at any time. **All participants will remain anonymous throughout the research, and once the questionnaire has been completed, all data will be confidential.**

Please complete and submit the survey by

If you have any concerns, please contact me or my research supervisor (details below).

	Researcher	Supervisor
Name	Mdu Nsibande	Dr Douw Boshoff
Cell Number	076 176 1849	083 287 2639
Email	Nsibandemb@gmail.com	douw.boshoff@up.ac.za

LINK:

Respondent Number:

Best Regards

Mdu Nsibande (Project Researcher)