HOW REAL ESTATE INVESTMENT TRUSTS (REITS) MAKE PROPERTY INVESTMENT DECISIONS: A REVIEW OF THE LITERATURE

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Abstract

Real estate investment trusts (REITs) are companies that invest in income-producing real estate. REITs, unlike other listed companies, are required to distribute a high percentage (70%-90%) of taxable income to shareholders. The acceptance and increase in the use of REITs as a means of investment have increased over time with REIT regimes in over 30 countries and a global market capitalisation of $1.10 trillion by the end of 2018 (EPRA, 2018). REITs provide investors with the ability to invest widely across various property sectors, providing investors with diversification, liquidity, transparency, regular income, and tax efficiency. However, even as REIT regimes continue to receive significant coverage, research on the investment decision-making process undertaken by REITs has mostly been drawn from the United States with limited research done to understand this concept in other REITs regimes.

By using a systematic review of existing literature, this paper aims to document how REITs make property investment decisions by identifying the various steps, stages or sequences adopted when REITs carry out investment decisions. Findings show that normative investment decision-making models guided by a rationalistic theory that assumes the investment decision making is highly structured and formalised are prevalent in research the property investment decision making of developed REITs regimes such as those in the US, UK, France and Germany. Also, there is a growing recognition that property investment decision making is far from rational with an appreciation of the role behavioural biases play in property investment decision making. The behavioural perspective has been recognised to present a more realistic view of a rationalist approach to investment decision making with investment decision making occurring in imperfect and sometimes chaotic markets. This is primarily observed in emerging REIT regimes such as those in South Africa and Nigeria were steps and processes taken to achieve a final decision may deviate from a

rationalist approach. The findings of this study suggest that more work is required to explore REITs investment decision-making steps and process in both developed and emerging regimes.

Background Information

Using a comparison of the market capitalisation reported by MSCI as at May 31st, 2018, MSCI World Real Estate Index ($1.2 trillion) and MSCI World REITs Index ($8.8 billion) it is possible to observe the importance of the REITs to the global listed real estate sector. As REITs are now present in over 30 countries, its attractiveness as an alternative means of investment in real estate remains popular. It has become an essential part of global real estate and listed real estate in both developed and emerging markets globally. REITs now makes up 41% of global listed real estate market, comprising of the developed regimes contributing 51.7% and emerging regimes contribute 7.2% (EPRA, 2017). With recent figures at the end of 2018 showing the 13 developed European REIT regime now accounting for 84% of the EU GDP (EPRA, 2018). While emerging REITs such as those in South Africa, Mexico, Greece, Nigeria, Thailand etc. operated in jurisdictions with high country-level risks, low real estate market maturity, low real estate transparency and ease of doing business index, inadequacies in the strength of corporate governance and listed sector. Developed REITs such as those in the United Kingdom, Netherlands, France, Belgium etc. on the hand are characterised by having large matured real estate sectors, liquid capital markets, high corporate governance and ease of doing business and comprise of both international and domestic investors.

Further observed in the market capitalisation of most developed REITs being generally above $10 billion while emerging REITs are in the range of $2-$10 billion (Ernst & Young, 2016; FTSE, 2017). China classification as emerging is the only exceptions with it accounting for 57.2% of the emerging REITs index due to its extensive real estate market but remains shrouded with issues consistent with an emerging REIT. Table 1 below shows the most recent market capitalisation of REITs on the FTSE EPRA Nareit Global Index as at 31st of July 2019 to help understand the market capitalisation sizes of REITs irrespective of REIT regime maturity.
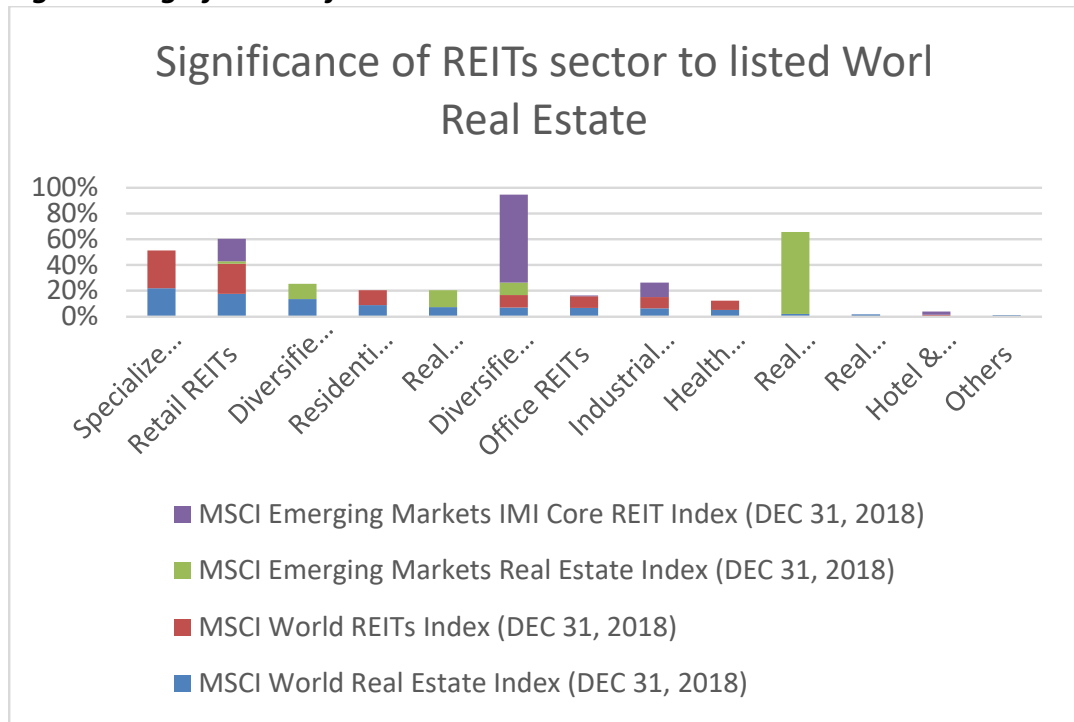
Table 1: Global REIT Index

Country	No. of Cons	Net MCap (USDm)
USA	124	861,063.00
Japan	36	111,056.00
UK	33	58,811.00
Canada	19	42,411.00
South Africa	13	13,765.00
Australia	11	77,498.00
Belgium	11	13,546.00
Singapore	10	28,606.00
France	6	22,483.00
Mexico	6	7,133.00
China	5	5,906.00
Netherlands	5	21,505.00
Turkey	4	585.00
Hong Kong	3	27,793.00
Ireland	3	3,244.00
Malaysia	3	1,927.00
Spain	3	8,705.00
Germany	2	3,269.00
Indonesia	2	783.00
Italy	1	316.00
New Zealand	1	1,531.00
Thailand	1	595.00
Totals	**302**	**1,312,532.00**

Source: FTSE Russell as at 31 July 2019.

Using a depth analysis of 23 Developed Markets, REITs sub-industry (specialized, retail, residential, office etc) weight distribution as published by MSCI World Real Estate Index, account for 74.08% while other sub-industries (listed real estate development companies, real estate operating companies) account for remaining 25.92% of all listed real estate securities. However, REITs significance in the 24 Emerging Markets observed by the MSCI Emerging Markets Real Estate Index is overshadowed by other listed real estate securities. With REITs (diversified and retail) only accounting for 11.58% of the overall index and predominated by South African REITs at the core level (this excludes real estate services and real estate financing companies, that do not own properties) (MSCI, 2018d, 2018c, 2018a, 2018b).

Figure 1: Significance of REITs sector

Significance of REITs sector to listed Worl Real Estate

- MSCI Emerging Markets IMI Core REIT Index (DEC 31, 2018)
- MSCI Emerging Markets Real Estate Index (DEC 31, 2018)
- MSCI World REITs Index (DEC 31, 2018)
- MSCI World Real Estate Index (DEC 31, 2018)

Overall, REIT as an investment option in both developed and emerging regimes play a crucial role in financing property investment through direct or indirect construction development and management through subsidiaries all undertaken with each country's regulatory setting. Regulations of REITs which distinguish it from other listed shares have close similarities with only slight county-level variations; this presents an avenue for researchers to comparative study issues around; corporate governance, investment decision and firm performance (Omokhomion, Egbu and Robinson, 2018). Schulte (2008) expresses this as the openness, interdisciplinary character and multidimensional nature of the real estate. Table 2 below uses classification provided by MSCI to carry out a comparison of the REIT regulations of two emerging REITs (South Africa and Nigeria) and two developed REITs (United Kingdom and United States) to highlight the close similarity in rules.

Table 2: REITS Structure of the United Kingdom and United States & South Africa

	Emerging REIT Regime		Developed REIT Regime	
	South African	**Nigeria**	**U.K.**	**US**
Legal Form	Trust/Company	Trust/Company	Corporate	Corporate
REIT Type	Equity, Mortgage and Hybrid	Equity, Mortgage and Hybrid	Equity, Mortgage and Hybrid	Equity, Mortgage and Hybrid
Regulatory Body	Company REITs (Company Act) and Trust REITs (CISA)	Security and Exchange Commission (SEC)	HM Revenue and Customs; Finance Act of 2006	Internal Revenue Code
Mandatory listing on the exchange	Yes	Yes	Yes	No
Minimum Initial Capital requirements	R300 Million in property	$5million	Listed (£700,000)	No
Income Distribution	At least 75%	Minimum 70%	At least 90%	At least 90%
Leverage	60% gross value of assets	Limited to 15%	1.25 or greater	None
Activity Restrictions	75% of income from rental or from indirect property owned	75% of total asset directly invested in real estate. 25% in real estate related assets provided Level of development is limited to 20%	At least 75% of profit and 75% of total asset value must be related to the property business.	At least 75% must be real estate. 75% of gross income from real estate. 95% from a combination of real estate and passive source.
Shareholding Restriction	Must have 20% held by the public if it must be listed	Minimum of 300	35% of the shares must be freely available to the public. New REITs can be 'close' for the first 3yr	Minimum of 100 on 2nd year. Not more than 50% of shares be held by 5 or fewer.
Taxation at REIT Level	Generally exempted	Exempt on income and capital gain	Generally exempted.	Generally, exempted
Taxation at Shareholder Level	CGT 22.4%. Individuals pay CGT of 40% of gains on taxable income. Effective rate of 7.2% and 16.4%	Corporate and Individual shareholders pay a discounted tax and WT	Domestic corporate shareholders pay CT rate, and individual shareholders are subject to WT, CGT and foreign shareholders pay WT	35% corporate shareholders, 23.8% CGT individual shareholders. Foreign shareholders pay income dividends, CG and return.

While similarity exists amongst most regimes, the empirical research on the property investment decision-making process of REITs in both developed and emerging regimes has received limited attention, given its significance in listed real estate sector. Sah, Gallimore and Clements (2010) rightly state that there is an absence of a normative framework for real estate investment decision-making, with researchers proposing different stages that are used. Majority of these researches examine property investment decision-making generally, though not exclusively from a REIT property investment decision-making process. Following the research by Parker (2014), REITs property investment decision-making process is contextualised as the holistic approach for converting $1 of unitholder capital into an equivalent $1 investment in property.

This research is motivated by the need to investigate the various researches on REIT property investment decision making. This will provide a better understanding on of the property investment decision making process of REITs with the potential to improve transparency, especially for emerging REIT, better capital allocation and identify the stages to the investment process. This study prioritises academic research focused on REITs property investment decision-making process to document how real estate investment decision making is carried out in developed and emerging REITs reaching a valid conclusion.

The objective of this review paper is to identify from the literature the steps or stages employed by REITs when carrying out property investment decision making; this is achieved using a systematic review of the existing literature on REITs and property investment decision making. Using similar methodology applied by Tsai & Wen (2005) and Tober (2011) various popular search engines (Google Scholar, ScienceDirect and Scopus) were initially used to search the critical keywords of "REIT", "real estate investment trust" and "investment decision making" for relevant secondary sources (journal papers, textbooks, conference papers etc). Google Scholar was selected as it provided more relevant publications related to the keywords. A total of 724 research results were initially identified. Sorted by relevance and not by date, the first ten pages of the search results from Google Scholar are used for this paper with selection based on the criteria of identification of keywords. For this paper, a systemic review of literature services to provide crucial theoretical underpinning and an updated picture of the property investment decision-making process undertaken by REITs.

The remaining sections of this paper will look at REIT regulation and structure, the property investment decision-making models identified in literature, the literature on REITs property investment decision-making and finally summarise the conclusions drawn from the systemic literature review of the existing literature.

Reit Regulation and Structure

The legal and organisational settings under which REITs operate globally are relatively similar; REITs are expected to invest a minimum of 75% of total asset in real estate and derive a minimum of 75% of gross income from rental property, mortgage interest by real property; are required to distribute a minimum of 60%-90% of taxable income to shareholders; listed on public stock exchanges regulated by the Securities and Exchange Commission (SEC) or similar bodies; undertake financial disclosure and meet corporate governance obligations if publicly listed on the stock exchange.

REITs regulatory environment differentiates it from other listed firms and real estate companies. Fiduciary responsibilities result in the property investment decision-making process of REITs having some similarity, though some variations occur due to the environment of operation, highlighting the importance of investigating differences in the country-level property investment decision-making process. Eichholtz & Yönder (2015) points out that when investigating corporate property investment decision-making activities, REITs offer the unique advantage of the ability to identify individual property investment decisions. These observations can be carried out at a company or asset level on a going concern basis with performance evaluation undertaken to measure how well property investment decisions perform as a result of its capital-intensive nature, investment by REITs usually revolves around acquisition, operation, sales and occasionally development (Glaser and Weber, 2007).

Additionally, the limited supply of investable grade real estate makes REITs property investment decision even more observable. The importance of construction management and REITs meet at the activity restriction requirement where REITs through there subsidiaries carry out property development to meet property demand, reduce cost, ensure timely delivery and meet quality. It is possible from an academic perspective to study the steps taken and factors that affect decision-makers to reach final property

investment decisions. However, empirical research is limited as the majority of academic studies on property investment decision come from a property valuation perspective done in developed markets such as US and UK (Diaz, 1989; McAllister *et al.*, 2003; Sah, Gallimore and Clements, 2010; Crosby, Devaney and Law, 2012).

Property Investment Decision-Making Model
Harrison (1999) explained that the term 'decision' varies widely across studies focused on the decision-making process, the decision-maker or the decision itself to be made. Studies have defined, 'decision' as an ongoing process evaluating alternatives to attaining an objective, where the desired outcome from a selection of alternatives makes the decision-maker pick a course of action that meets the desired objective. Similarly, French (2001) indicates that the literature on decision-making draws from various theories and principles such as economics, mathematics, operational research, organisational theories and statistics. Over time, from decision-making theories, three distinct models have emerged which are predominately used by the academic researcher on property investment decision-making; normative, descriptive, and prescriptive decision-making models. Normative decision-making models are concerned with 'how decisions should be made'. These models follow a rigid rule like approach to decision making, based on the theoretical underpinning of measurability of decisions against performance. Referred to a rationalistic perspective, it follows models like traditional finance. Decisions are made under the assumptions that markets are efficient; enough time is taken in arriving at a final decision; information is rationally evaluated using tools such as the modern portfolio approach, capital asset pricing models and option-pricing theories to arrive at final decisions (Einhorn and Hogarth, 1981; Baron, 1985; Pyhrr, Cooper and Wofford, 1989; French and French, 1997). This model is criticised as departing from real-world situations due to the difficulty in covering every circumstance, time factor to decision-making and human actions or inactions (Weber and Coskunoglu, 1990; Weirich, 2004).

Descriptive models focus on 'how decisions are made', as decision-makers depart from the normative models what is observed fall within descriptive models. This draws on the subjective and intuitive nature of the decision makers in carrying out investment decision, thereby challenging normative models by behavioural theorists. Kahneman & Tversky (1979) explain this using the "Prospect Theory" that decision-makers have different acceptable

risk levels when faced with opportunities. Using the certainty effect, they explained that when faced with a decision, there is a tendency for decision-makers to pick sure outcomes over probable ones, resulting in a selection of different choice frequencies over expected rational utility calculations.

Additionally, Simon (1955) developed the 'bounded rationality' as a way of looking at normative models differently. Under the bounded rationality, decisions are made under the limitations (information processing and access and time constraints) of the decision maker. A critical flaw of descriptive models is that they are mostly a description of how a process was applied (Weber and Coskunoglu, 1990).

Prescriptive models take in the reality of decision making, acknowledging that it is nearly impossible to cover most eventualities in the selection of the ideal decision. Decisions taken using prescriptive models follow guidance around normative and descriptive models. These models following advice are more applicable to actual complex investment decision making taken by REIT and construction managers (Baron, 1985; Tiesmeier, 2016). Additionally, it accepts the notion that decision makers are 'satisfiers', once a decision which satisfies all necessary criteria is found, search for the optimal conditions stops. When prescriptive models are developed, they should follow some normative foundations to provide theoretical solutions alongside behavioural inputs identified from descriptive models (Köksalan, Wallenius and Zionts, 2013; Tiesmeier, 2016). However, Wierzbicki (1997) states that though prescriptive models attempt to change the rigid notions of normative models, the possibility for experienced decision makers to reject prescriptive models but adopt decisions based on intuition and past experiences exist. On the other, prescriptive models with guidance are more appealing to new decision makers as seen by finding by Roulac (2000) showing that investment decision making evolves and the findings from past and present literature will defer as decision makers within the prevailing dynamics of the time they operate. Agreeing with earlier work of French & French (1997) which concluded that investment decision making should not be viewed as a single outcome but evaluated on the process undertaken by decision-makers to reach a decision; following rational consistency and result from the decision is averagely acceptable.

Reits Property Investment Decision Making

While studies on property investment decision making have remained relatively limited, the bulk of research done so far draw from the United States and the United Kingdom focused mostly on rationalist rules and techniques applied using normative models (Gallimore, Hansz and Gray, 2000; Roberts and Henneberry, 2007). Parker (2012) reviewing publications from US and UK on property investment decision, summaries that in the US property market, investment decisions are driven by portfolio concerns based on traditional finance and commerce theories while UK property investments are based on individual asset evaluations. He also identifies from a review of publications on property investment decision making that no clear distinction is given as to what approach REITs follow, and in some cases, REITs fall under institutional investors. The limited number of empirical studies on emerging markets can be attributed to the maturity level of these markets, associated with an understanding of the role of risk, and assumed higher application of heuristic-driven bias in property investment decision-making. Below, we review some important journal publications on property investment decision making to identify the process, stages or steps documented in these studies. Additionally, input on the role of behavioural-bias in property investment decision making is recognised.

Within the context of strategic property investment decision making of REITs, Table 2 below summarised context identified from the literature. Given the assumptions of an unproblematic perfect market system; information is readily available at the initial stage with enough time given to scrutinise alternatives and readily available funding. A critical issue with documenting property investment decision-making process is the inconsistency of steps and ambiguity in terminology, which is observed in Table 3. Parker (2014) research of the Australian REITs' property investment decision making process provides a suitable solution by expressing the process into four stages comprising of 20 steps. Roberts & Henneberry (2007) (Table 3) also provides a composite model derived from literature to investigate the property investment decision-making process of investment managers in France and Germany. They conclude that these models can be reduced to five stages (strategy setting phase, search phase, analysis and investment phase, the consultation phase and the last phase investment selection). In the UK, an additional phase (define detailed strategy phase) comes after the general strategy setting phase linking this

phase to the requirement for benchmark decisions against larger institutional investors showing that investment managers are likely to exhibit herding behaviour in the UK. Their study points to the heuristic behaviour of REIT investment managers and construction managers to arrive at investment decision-making. Summarising, the studies in Table 3 document empirically evidence of the investment decision making the process of developed REITs regimes in the US, UK and Australia.

From emerging REIT regime point, empirical research is almost absent. Studies examining the property investment decision making process mostly approach this by; determinants of property value that affects real estate stakeholder's decisions to invest in selected region or state drawing from works of (Adair et al. 1996; Baum et al. 2000; and McAllister et al. 2003); the heuristic behaviours of anchoring, adjustment and herding on property valuation and the likely influence on investment decision making process (Diaz, 1989; Kahneman & Tversky 1979); macroeconomic factors within the framework of strategic, political, socio-cultural, legal, and economic analysis that attracts large institutional investors to emerging economies (Jaffe & Sirmans, 1995; Pyhrrn et al. 1999; Lieser & Peter Groh. 2011; and Lim et al. 2006). The literature documenting the property investment decision making steps or stages undertaken by investment managers and REITs managers remains limited.

From an emerging context, Lowies et al. (2016) examined behavioural biases of anchoring, adjustment, and herding behaviour of fund manager of listed property fund managers in South Africa. The result from a questionnaire survey on anchoring and adjustment heuristic-driven bias showed that respondents anchored their decisions to invest in a selected property with the most optimistic forecasts and when new information with more favourable outcome was introduced, they still anchored on to original selection. Additionally, no statistical evidence of herding was observed by listed property fund managers. These behaviours they attributed to socio-political factors that create uncertainty in the South African property market and not a lack of understanding of new information by listed fund managers. This is assigned to the conservative nature of property investment decisions makers due to the fear of making wrong decisions. Recently, Nsibande & Boshoff (2017) examined the investment decision-making frameworks applied by South African REITs when carrying out investment in commercial retail properties. They document that investment

models vary widely and when used in retail investments decision making, it occasionally disregards the effect non-financial drivers such as anchor tenants, centre management and tenant mix have on decision making.

Additionally, empirical research on foreign direct investments (FDI) in the listed real estate and real estate sector of emerging markets show large institutional investors applying macroeconomic factors. These studies provide useful insight into the investment decision making phases and steps involved when deciding to invest in emerging markets. Kukovetz (2002) studying the emerging Chinese market, conceptualised the decision-making process to consist of two main phases- Preparation Phase (related activities, experience generation, and project start-up steps) and Project Decision-Making Phase (development, selection and implementation). He concludes that for emerging markets, extensive preparation and organisational systems that allow for the application of experienced-based intuition and speed are critical when carrying out investment decision-making. He also identified as emerging markets become more matured as in the case of Hong Kong, the decision-making process becomes more sophisticated and quantitative. While emerging REITs regimes such as China and South Africa continue to grow in number operating REITs and market capitalisation, an understanding of how these markets function, processes and steps were taken for investment decision making overall is still empirically studied not fully understood.

Discussion
Even as REITs in both developed and emerging regimes continue to grow, empirical studies on the investment decision making steps taken by REITs exclusively remains limited and inconclusive. As the debate on investment decision-making models continues, country and market conditions change, investment decision making process, steps or stages still would not be able to state the best fit for developed and emerging REITs comprehensively. Theories and empirical studies have helped develop three predominant models of decision-making; a normative model which is the ideal worldview of decision making; a descriptive model which attempts to describe how decisions are made from the observation of outcomes and finally the prescriptive model which provides decision-makers insights and guidance to inform decision.
Furthermore, the behavioural perspective of decision making has been recognised to present a more realistic view of a rationalist approach to

investment decision making. It is accepted that decision making occurs in imperfect and sometimes chaotic markets populated by irrational decision makers; hence, the steps and processes taken to achieve a final decision may deviate from rationalist/normative models. Additionally, emerging REITs regimes so far exhibit high levels of economic uncertainty and lack underlying historical property information, which affects the way investment decision making is carried out; also based on capitalisation and size will likely carry out investment decision making like small companies when compared to larger REITs in developed regimes. The findings of this study suggest that more work is required to explore REITs investment decision-making steps and processes in both developed and emerging regimes and forms part of an ongoing PhD research.

Table 3: Normative model steps of REITs and Property Investment Decision Making

Pyhrr et al. (1989) US	Jaffe & Sirmans (1995) US	Roulac (2000) US	Farragher & Savage (2008) US REITs	Farragher & Kleiman (1996)	Roberts & Henneberry (2007) EU	Baum (2002) UK	Hargitay & Yu (1993) UK	Parker (2012) Australia (REITs)
Determine investment strategy	Identification of goals, objectives, and constraints	Statement of the decision to be made	Setting strategy	Setting strategy/analysis	Setting initial property investment goals and decision criteria	Determination of ideal portfolio structure	Definition of objectives and goals	Envisioning • Vision • Style • Goals • Strategic Plan • Objectives
Generate alternatives	Analyse overall investment environment	Objectives	Establishing risk/return goals	Establishing risk/return objectives	Establishing a fully defined decision-making strategy related to portfolio structure and performance	Identification of target sub-sector	Search for alternative investments that can achieve objectives and goals	Planning • Property Portfolio Strategy • Strategic Asset Allocation • Tactical Asset Allocation • Stock Selection • Asset Identification
Property analysis using financial feasibility models	Apply appropriate decision-making criteria	Identify alternatives	Searching for investment opportunities	Forecast expected cost and returns	Searching for a suitable property	Sourcing new stock from the market	Evaluate, compare and rank alternatives using quantitative risk and returns	Dealing • Preliminary Negotiation • Preliminary Analysis • Structuring • Advanced Financial Analysis • Portfolio Impact Assessment
Negotiation of terms with sellers	Accept or Reject the investment	Identification of decision criteria (multiple)	Forecasting expected return	Assess investment risk	Information input (analysis of market condition)	Appraisal	Choose a satisfactory alternative	Executing • Governance Decision • Transaction Closure • Due Diligence/Independent Appraisal • Settlement • Post Audit

Detailed Feasibility research	The environmental context of decision	Evaluating forecasted returns	Make a risk-adjusted evaluation of forecasted returns	Prediction of outcomes (return and risk at portfolio and property levels)	Modelling of portfolio
Complete financial and tax structuring	The organizational context of decision	Assessing and adjusting risk	Implement accepted proposal (due diligence, formal feasibility etc.)	Application of decision criteria	Acquisition process
DCF analysis	Competitive context of decision	Decision making	Post audit review of operating performance	Trade-off between properties	
Final Negotiation and closing	Analysis (quantitative and qualitative)	Implementing accepted proposals	performance	Property screening	
Manage the property	Synthesis of findings from the analysis	Auditing and operating performance		Investment selection	Evaluate the consequences of the decision taken, conclusion, revise goals and criteria
Terminate the property	Decision (yes, yes conditionally or no)			Negotiation, deal resolution and post-investment activity	

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