Real Estate Appraisal;

The valuation process from an investors point of view

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"You can't do today's job with yesterday's methods and be in business tomorrow"
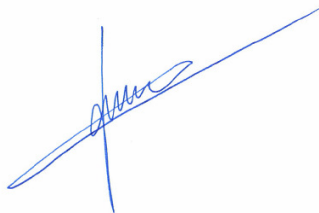
– Anonymous -

Preface

In front of you lies a copy of my master thesis. This thesis is the final hurdle in order to graduate from the Real Estate studies program from the Faculty of Spatial Sciences in Groningen.

During this research I focused on the valuation process from an investors point of view. I have conducted my research at the management office of the Dutch portfolio from Unibail-Rodamco ("UR"). The relationship between appraiser and investor is changed due to current market conditions, therefore I conducted research designed to establish an innovative and more standardized method to reflect the risk premium in a more transparent way. The scope of this thesis is the Dutch real estate market.

This preface provides an excellent opportunity to thank everyone who has helped me prepare my thesis. First of all, I would like to thank UR for allowing me write my thesis based at their headquarters in Schiphol-WTC. UR has the perfect company profile for my thesis subject, being the largest real estate investor in Europe. It manages an outstanding pan-European property portfolio. Working in this professional environment helped and encouraged me immensely. I also wish to thank all people from Unibail-Rodamco who were a reliable and strong source for gathering background information, holding informal conversations and participating in brainstorming sessions, allowing me to improve the scope and quality of my thesis. Due to the help of my supervisor drs. Mark Hoedjes MRE, from Unibail Rodamco, and my supervisor dr. Henk Brouwer from the University of Groningen, I have managed to write my thesis in three months. I would like to sincerely thank them for their insightful feedback, provision of critical notes and inspirational conversations. The cooperation with them was invaluable and enabled me to critically consider my subject in order to present this thesis to you. Furthermore the external analysis I have conducted could not have been completed without the interviews held with the external appraisers Chris Tolsma (Partner Valuation Advisory Services Cushman and Wakefield), Jacques Boeve (Partner Valuation DTZ Zadelhoff) and Paul Verheggen (National Director Jones Lang Lasalle). Thank you for your time and cooperation. Also special thanks goes out to Bella Ward who grammatically corrected my thesis.

Finally, I would like to thank my family who has always supported and encouraged me whilst studying. Without their support I would not be able to have studied for six and a half years.

Allard Steenbeek

Amsterdam, December 2009

Executive summary

With a proactive management style, real estate investors have a stronger need for more understanding in the value development of its assets. An appraisal is an estimate at a certain point of time about the most likely market value (Van Gool, 2007).

The value adding variables of a shopping centre are: (WPM, 2002).
- Quality of the surroundings; aspects such as market area and local authorities.
- Location quality; aspects which are related to the location, including public transport accessibility and parking possibilities of the shopping centre.
- Functional state; function of the centre, leisure, run or fun shopping, and retail mix.
- Physical quality; aspects which relate to the appearance of the shopping centre (For example, the maintenance).
- Commercial quality; image of the shopping centre, how many people are attracted to the shopping centre?

These variables can be divided into internal and external variables. The synergy of the internal and external characteristics is eventually the potential of a shopping centre (De Kroon, 2002).

Differences in valuations arise from differences in input, differences in arithmetic and differences in models (Smit and Vos, 2006). The elimination of these facts will improve valuation quality.

internal research also supports Smit and Vos's conclusion that valuation results should be more or less identical, and not dependent upon the chosen model. However, practice and experience at UR leads to the conclusion that this is not the case. Differences after corrections of over 13% percent were shown. Consequently, This diminishes the quality and the reliability of the valuation reports.

Based on the expert interviews the conclusion can be drawn that besides the difference in output model there is also a difference in the calculation model.

The standardised valuation method should be the discounted cash flow ("DCF") method with a ten year holding period. The DCF is a sophisticated model whereby the discount can show the sentiment and value adding components such as a liquidity premium, and specific premium based on the location, the key features and the occupation of each property.

When assessing conflicting risks that can occur when implementing this method, it becomes apparent that the advantages outweigh the possible disadvantages. One of the most significant advantages is the improved consistency. This will assist in improving the quality of the valuation process, in addition to being faster and easier for the investor. Importantly, the investor will understand completely the rationale behind the number.

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1 Introduction

This chapter describes the background of the thesis subject and tries to explain why this subject has been chosen. In the second paragraph the method of research is explained and the third paragraph is an extensive exploration of the conceptual model. In this model all the relative variables and influences considering the subject are discussed. The last paragraph shows the structure of the thesis and gives a short introduction of all the coming chapters.

§1.1   Background of the problem

Since September 2008, the economy has experienced a severe downturn. The real estate investment climate has suffered from this downturn. This led to large real estate investors realising the vital importance in understanding and implementing the best models and techniques when valuing their underlying assets, the real estate. Investing in real estate is not a simple business, especially when investing in real estate as a listed company. A thorough explanation about investing in real estate (shopping centres) is mentioned in chapter two. As a listed company there are a lot of stake holders involved and the investor has to meet a lot of expectations, including from shareholders. One of the most important expectations or goals is to show the value (increase) of the real estate on the balance sheet (Maas, 2001).

The real estate appraisers determine the 'value' of the real estate. This has to be done in accordance with rules set by the International Financial Reporting Standards (IFRS). There are also company rules (codes of conduct). Valuation standards and company codes of conduct require there to be more than one appraiser responsible for conducting the valuations. However the question arises, how are these appraisers instructed by the principals, i.e. the investor, of the valuations? Do they all work in accordance with the same instructions and are they able to access the same information?

The problem lies within this key element. There are several appraisers responsible for appraising a part of each portfolio. Each appraiser uses a slightly different valuation method (DCF, Cap rate, Top slice). In other words, there is no standardized valuation method used. Another problem is the lack of transparency in the methods appraisers adopt when translating risk into market value. Such facts make it difficult to interpret and compare these figures. The interpretation of these figures is an essential element for the board to determine the short, mid and long term strategy for the company.

This report is written with the goal to find the best and most transparent valuation method for a listed retail real estate investor. This report relies on the knowledge and experience from several leading experts in the business.

§1.2   Methodology of the research

Following the background of the problem, this paragraph will initially introduce the conceptual framework and the methods applied in the research. The conceptual framework essentially defines the variables that will be examined. The chapter introduces the research questions and the methods employed in proposing answers to these questions.

Central research question

What is the best valuation procedure for commercial real estate in the Netherlands for a listed institutional retail investor, whilst satisfying its financial performance rules?

Research objective

Is there a preferable valuation procedure which can show in a transparent way the risk, sentiment and emotion for a listed institutional retail investor?

Sub-questions

The sub-questions are mentioned to divide the central research question into a set of variables. Which variables do I have to identify, understand and recognize to answer the research question? The answers to these sub-questions should lead to an overall answer on the central research question.

- Shopping centres as an investment
    - Type of shopping centre management and the influence on its value
    - What are the 'value creating' characteristics of shopping centres and the amount of influence on its value?
    - In what ways can a real estate investor control and/or influence the value creating characteristics?
- The valuation process
    - What is the goal of a real estate investor specialised in 'retail' with the valuation of its real estate?
        - Is there a difference in valuation per property type? For instance, when valuing grocery stores, high street shops or shopping centre's?
        - Is it possible for an real estate investor to 'steer' the valuation officer to obtain a better/higher valuation?
    - Which valuation methods are used in the Netherlands?
        - Describe the 'Cap Rate' method
        - Describe the 'DCF' method
    - Definition of real estate value
        - What does legislation say about the definition of 'value' listed investors have to use in their annual reports and quarterly results?
        - Fair value (market value)
    - Valuation rules

- IFRS
- Corporate rules
  - What influence do these different valuation techniques have on the value of a real estate portfolio?
- Standardized valuation method
  - Which methods are being used by current valuation officers?
  - DCF; does the same input lead to different output from different valuation officers?
    - If so, where do these differences arise?
  - What preferences does a retail real estate investor have?

§1.3   Conceptual model

All the sub-questions are put together in the conceptual model as shown in figure 1 below.

The conceptual model forms the basic principle of this thesis, whereby the correlation between the real estate investor, appraisers and the legal framework is strategically important. The yellow boxes indicate the legal framework the appraisers and the investors are obliged to stay within. The white boxes display the role of the appraisers. The appraisers are strongly influenced by the investors but have to remain in a certain stage of independency. This is to guarantee that they determine the best 'fair' market value as required by the IAS 40 document. The way the investor exerts influence is by handing over the tenant overview from the buildings the appraisers have to work on.

The green boxes display the role of the real estate investor. The shareholders from UR play an important role. Shareholders are the motivating factor for UR to show the value of their underlying assets, i.e. the real estate.
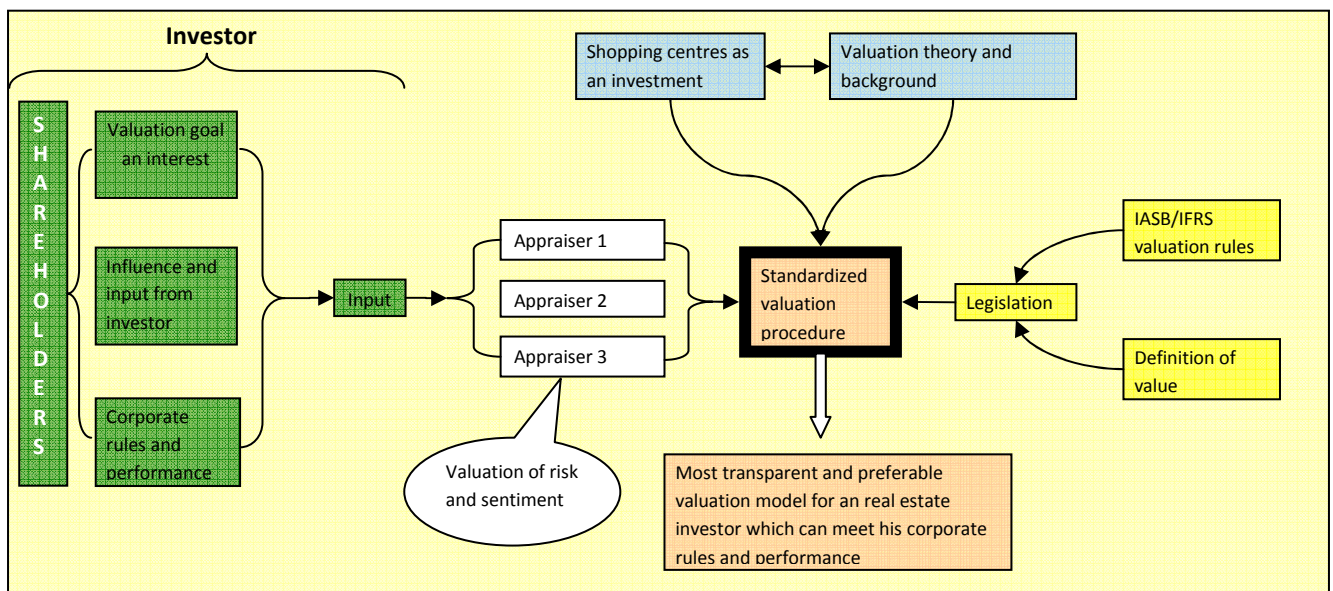

Figure 1: Conceptual model

The blue boxes display the theory behind the valuations. The box shopping centres as an investment will explain what the basic principles derive from investing, investing in real estate and eventually

investing in shopping centres. The box valuation theory and background comprehends the valuation methods which are used.

The pink boxes in the conceptual model display the eventual output of this thesis, being the standardized valuation procedure which is transparent and most preferable from the investor's perspective.

§ 1.4 Conceptual model; a close up

This paragraph will clarify and provide additional background information about all the boxes which are a part of the conceptual model as shown in figure 1 above.

The Business of Real Estate

The vast majority of real estate used by business firms is leased and not owned. In spite of all the buildings with signs that carry a name of a major corporation on the exterior, it is usually not owned by that corporation. Generally, real estate investors own these buildings. This paragraph explains why companies choose to rent space to conduct their activities. Tenants find leasing usually more cost-effective than owning. Purchasing would generally not be optimal due to the following factors:

- Owning would require a large amount of capital to purchase a building. This capital could alternatively be invested in the core business activities.
- The purchase of a building would "put the user in the real estate business". That is, the user would have to take the risk of owning and also have the real estate business "know how" to lease, collect rental income and maintain the premises.
- Owning would reduce operating flexibility.
- If the firm decided to size down from using x square feet as the owner of the building it would need to engage a broker to find an additional user or buyer for the excess space. This would mean undertaking unrelated real estate business activities (Brueggeman & Fisher, 2008).

There are a lot of functions requiring specialised skills to perform most cost-effectively, whereas real estate investors are specialized in providing such skill subsets. It has been estimated that over 80 percent all retail properties are leased to tenants (Brueggeman & Fisher, 2008).

Advantages and disadvantages of renting

The previous statement from Breuggeman & Fisher shows that most retailers rent property. There are both benefits and disadvantages from owning a property. One of the advantages in owning a property is that a retailer can create value add into the property when business is prosperous. Owning a property can be a successful investment when business is prosperous, but when business is declining, the value of the investment is also declining rapidly due, in part, to lower rental income. In addition, a poorly operating store is a negative factor for the value of real estate (Breuggeman & Fisher, 2008). Another disadvantage arises when if retailers owned their property, in that fragmented ownership of a centre or a high street store makes it difficult to manage and influence the properties as a collective whole. An example of this is mentioned below.

Example: MBO
The "Maatschappij voor Bedrijfs Objecten" (MBO) is a predecessor of the ING bank. The MBO was specialised in developing real estate properties for retailers. The MBO used a special legal construction whereby the MBO rented the properties out for a period of ten years and after this period sold the real estate for a predetermined price to the tenants. This resulted in that ownership became fragmented, whereby all the single tenants were owner of a little piece of the centre. When the centre had to be renovated it was really hard to come to an agreement amongst all the owners. This usually led to the impoverishing from the centres (Brouwer, 2009).

This is a pivotal example of what the benefits include for retailers in renting a property. Tenants are searching for locations that provide the highest profit and real estate investors provide these properties in exchange for rent. The rent is influenced by various variables, including the national economic forecasts, the economic base of the area in which the property is located, the demand for retail space supplied by the property, and the supply of competitive space.

Main characteristics of real estate as an investment

What is investing in real estate?:

> *"To transfer capital into real estate where the primary goal is to benefit from its services and products which the real estate provides" (Marquard 2009).*

An 'efficient' market is one that is characterized by goods or services that are easily produced and readily transferable, with a large number of buyers and sellers. An 'inefficient' market , on the other hand is precisely the opposite. Goods and services are not readily produced or easily transferable and there are no readily identified group of buyers and sellers active in a particular marketplace. The differences between an efficient market and an inefficient market are illustrated in table 1 below.

Characteristics	Efficient Market (stock market)	Inefficient market (real estate)
Products	Homogeneous	Unique
Inventory of Buyers and Sellers	Large number	Few
Prices	Uniform/Stable/Low (most can afford)/quality tends to uniformity at a set price	Variable/Inconsistent/High (limited affordability)
Restrictions	Self Regulating/Few Government restrictions	Many restrictions
Supply and demand	Balanced (daily) due to competition	Often unbalanced (for months/years)
Organized Conduit	An exchange	None
Goods	Ready available/consumed quickly/supplied easily/ transportable	Years to consume/months or years to supple/immobile

Table 1: Contrasts of an efficient market and inefficient market (Carr, 2003)

Based on these characteristics described in table 1 above, real estate tends to operate in an inefficient market. Often, real estate transactions are confidential and limited information is available via public records. This fact necessitates the data collection process to be of significant importance when appraising real estate (Carr, 2003).

Such unique characteristics also apply for shopping centres and high street shops. This is due to the fact that the performance of the real estate is not only dependent of the user, i.e. the tenant, but also from the end user of the shopping centres and high streets, i.e. the consumers. As a corollary, shopping centres and high street shops are placed in a fundamentally different sub category within real estate (Hoogland, 2000).

When investing in retail real estate, the focus cannot solely be on retrieving the highest rent for an object, as there also has to be a focus on the variables which cause people to go to shopping centres or high street stores. There is a relationship between the tenant and consumer. Potential tenants, i.e. retailers, make their decision to rent an object based on the possible turnover they can achieve for that specific object. The variables which are important to the potential turnover are mainly influenced by the behaviour of consumers. The Dutch retail infrastructure is highly competitive and can be described as dense and well planned (De Kroon, 2002).

To create a 'positive' environment for retailers, investors can try to establish an optimal composition of tenants to influence the consumers and to reach a larger or more attractive catchment area.

Due to the extra consumer dimension, the conclusion is that investing in shopping centres and high street shops is complicated.

The management style which the investor uses to manage shopping centres during the exploitation phase can be important for the market value. There are two main management styles; the passive management style and the proactive management style. The passive management style is managing assets by ensuring there is no vacancy, the maintenance is done, the rent is collected etc. The passive management style is not 'hands on' and the return on investment comes mainly from the 'yield shift'. The proactive management style is 'hands on' management, where the optimal tenant mix is used in order to generate high footfall, which eventually will lead to greater rental income. marketing is also important and organising events will lead to more footfall and 'brand awareness' from the shopping centre amongst the consumers. In this context it is advisable to explore all the *value adding variables* and to link these to the real estate exploitation. This will create a better insight and understanding for the value development of shopping centres and high street shops in the long term (Zimmer, 1995).

There is only one certainty for the investor in this process, that the value forecasts will never occur exactly as predicted. This uncertainty is an actual risk as property management is closely linked to the value of the real estate. As a result, there is also a connection between property management and asset management which affects acquisition and disposition decisions and policy.

Based upon this knowledge, the conclusion can be drawn that an investor has to use an active management style, with the focus on aiming towards achieving value creating variables. On the other hand, when an investor uses a passive management style the opposite effect is being achieved, i.e. devaluation of its assets (Maas, 2001).

Role of the investor
The role of the real estate investor is pivotal for the purposes of this thesis. The investor provides the valuation assignment to appraisers and this is when the valuation process is initiated. The instructions delivered by the investor to appraisers is very important and can greatly influence the possible outcome.

Investing in real estate involves ownership of property which produces future cash flow. Real estate has some main characteristics (as shown in table 1 above). if these characteristics are not well understood and managed by the investor, real estate becomes a hazardous investment.

Real estate investors have a strong need for greater understanding of the value development of their assets. Consequently, internal valuations are of great importance to keep track of the value development. External valuations are more and more functioning as a control instrument for investors to calculate if their internal valuations were correct (De Kroon, 2002).

Prior to exploring this value creating process, it is important to understand why there are companies investing in real estate. The following paragraph explains the business of real estate.

Valuation goal

The valuation goal is crucial when appraising real estate. The appraiser has to know the valuation goal because this will the decide the framework from which the value is developed. This is important because the valuation goal determines what value definitions will be used. The valuation goal for an investor will presumably be to determine the fair value for the financial statements (Ten Have & Legerstee, 2007). This will be clarified in chapter three if this is indeed the valuation goal. Valuations are crucial for an investor as they determine the book value of its assets. When valued too high the investor has a high liquidity risk. According to Dijkstra it will become harder to sell assets, because below book value nothing will be sold. Also, the shareholders will doubt the credibility of the company if its assets are valued too high. On the other hand, if assets are valued too low the chance that a merger or acquisition takes place increases, as other investors may see an opportunity for buying the company based on the potential revaluation gain they foresee.

Role of appraiser

The appraiser's role in the valuation process is crucial. External appraisers determine the market value, thus the appraiser's output is important for this research. How does this output formulate? An appraiser has to do his job independently in order to establish an objective market value (IVSC, 2007). The appraiser has strong financial interests with the outcome of the valuations. The principal of the valuations, i.e. the investor, can exert a lot of pressure on the appraiser to produce value forecasts or lower market values. In the current market conditions, it is possible that an appraiser can lose his valuation assignments if he does not value property at the requested market values (Van Gool, 2007). The appraisers have to maintain an objective role whilst appraising real estate, however it is an inevitable fact that appraisers face a difficult dilemma when the principal requests a desired outcome.

Valuation theory

In this subsection the focus will be on the various methods that can be used to estimate the market value of a property. Market value is a key consideration when financing or investing in income-producing property such as shopping centres and high street shops. Market value is also described as fair value by the IFRS. This research will use the terminology 'market value'. It is defined as follows:

> *The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and passing of title from seller to buyer (Brueggeman &Fisher, 2008).*

The definition of market value from Brueggeman and Fisher is in accordance to the definition of the fair value from the IFRS *(see paragraph IFRS Valuation rules).* When making investment decisions, an investor will not pay more than the market value of a property. Appraisal reports are a part of the documentation required by lenders when considering whether to make mortgage loans. Investors

use appraisals in decision making as they are familiar with the generally accepted approaches to appraisals or valuation.

An appraisal is an *estimate* of value. In making this estimate, appraisers use a systematic approach, referred to as the appraisal process as shown in table 2 below.
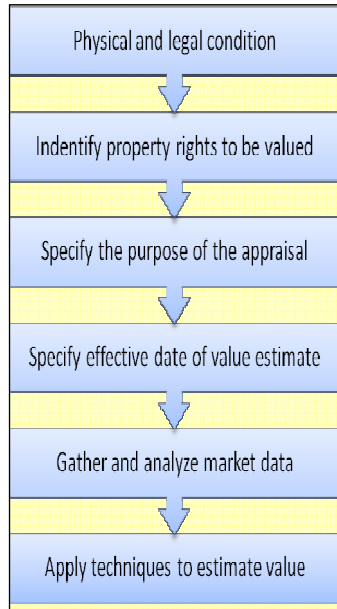

Table 2 Appraisal process
(Brueggeman &Fisher, 2008)

In the appraisal process, a considerable amount of market data must be collected and analyzed. Market data includes rents, costs, vacancies, supply and demand factors, expenses and any other information considered to be an important influence on property values. Such market data must be collected, summarized and interpreted by the appraiser when making an estimate of value. The role of appraisers can not be overemphasized because appraised values are used as a basis for lending and investing. Methods and procedures used in establishing values are thoroughly reviewed and evaluated by lenders to prevent overborrowing on properties and by investors to avoid overpaying for properties.

The IFRS guidelines for valuation techniques have been used as a fundamental basis for this research. a company may choose two options, the fair value model or the cost model.

The *Fair value model*: under which an investment property is measured, after initial measurement, at fair value with changes in fair value recognised as profit or loss; or

The *Cost model*: which requires an investment property to be measured after its initial measurement at depreciated cost (less any accumulated impairment losses). An entity that chooses the cost model discloses tin addition the fair value of its investment property (IASC Education Foundation, 2009).
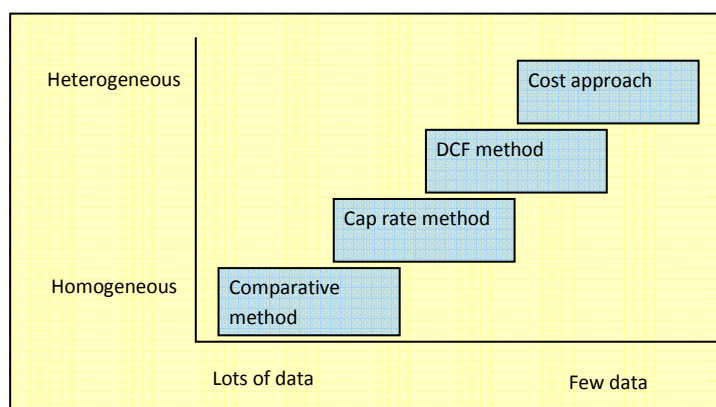
Figure 2: Appraisal methods (Marquard, 2009)

investors are more likely to choose the fair value method, thus there will be a short description of the applicable methods.

As depicted in figure 2 , the amount of data and the typology of the asset (either homogeneous or heterogeneous) determines which valuation technique is the most desirable for investors.

The comparative method is most commonly used if there is significant amounts of data available from the type of property. An example is comparable property deals in the surroundings.   This

method of valuation is mostly used when appraising residential properties. The cap rate method is used when appraising properties with less available data on comparable properties. The DCF method is used on properties with fewer suitable market comparisons. A shopping centre is difficult to compare and is not often for sale. As a result, it is difficult to provide reliable market evidence to contribute to the valuation process. The cost method is only used when estimating the costs to rebuild a property and is an uncommon method. Only very unique properties, with no availability of comparable data, are appraised using the cost approach method. Shopping centres are heterogeneous, and there is normally not a significant amount of data available on the market. This is due to the fact that they are not frequently for sale or being sold. Therefore, the DCF method is the most preferable valuation process to use when appraising shopping centres.

DCF Method

This approach to property valuation is based on the principle that the value of a property is related to its ability to produce cash flow. Determining the value for a property that is expected to produce income over a very long economic life requires many assumptions and in-depth knowledge. This makes finding present values over long economic lives difficult.

$$Value = \sum_{t=1}^{n} \frac{NOI}{(1+i)^t} + \frac{REV}{(1+i)^t}$$

Equation 1: DCF (Marquard, 2009)

Value = fair value, market value
NOI = net operating income
n = number of periods
i = discount rate
REV = reversion value/ resale price

The equation above explains the DCF method (Marquard, 2009). The net rent is a forecast of net operating income. The 'n' represents the number of periods or the holding period of the investment. The discount rate is identical to the required internal rate of return over the holding period. A risk premium for real estate ownership and its attendant risks related to operation and disposition should also be included to achieve at an acceptable discount rate.

Figure 3 shows the risk premium involved with different types of investment. After the discount rate is set the last step in the DCF method is establishing the reversion value. The reversion value is capitalized (with the DCR rate) rent roll of the last year of the holding period.

This can be done in several ways. Reversion value arises when investors are too opportunistic about the reversion value. As a result, investors face the risk of not reaching target discount rates (Gool, Jager & Weisz 2007).
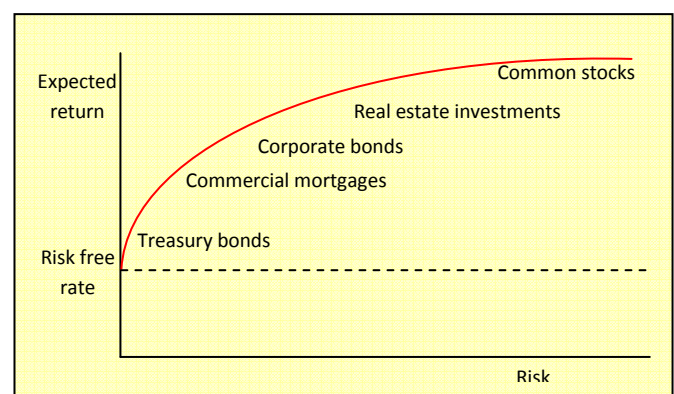

Figure 3 Risk and return trade-off by type of investment (Brueggeman &Fisher, 2008)

Capitalisation rate

Capitalization rate is a ratio between the net operating income produced by an asset and its capital cost, or alternatively its current market value. The capitalization rate equation is:

$$Value = \frac{NOI/R}{1 + pc}$$

Value = fair value, market value

NOI = net operating income

R = capitalisation rate (%)

pc = purchasing cost

Equation 2: Capitalisation rate (Gool, Jager & Weisz 2007)

The capitalisation rate is often referred to as 'direct capitalization'. It is most used for appraising income producing real estate. The ´cap rate´ is based on comparable assets. This is also a delicate assumption that has to be made. Fluctuations in the cap rate can result in large differences in outcome. The comparability means very similar characteristics in the quality, construction, size, functionality, location and operating efficiency. As a result the 'correct' cap rate is difficult and an incorrect one could result in a serious pricing error (Brueggeman &Fisher, 2008).

When considering cap rates of comparable properties an appraiser can also examine the spread between the available market cap rates. If the spread is larger, the reliability of its comparables reduces. If the spread is small, the reliability and the quality of the market evidence will be larger (Brouwer, 2009).

Same input same output?

In 2003 Smit and Vos published an interesting article about variations in valuations. It did not appear that identical input would provide identical output. The major conclusion of this article was that differences in valuations originate from several levels in the valuation process as follows:

- Differences in input;
- Differences in arithmetic; and
- Differences in models.

Differences in input was clarified by the fact that appraisers use different information for the input variables in their valuation models.

Differences in arithmetic can be described as differences in the arithmetical approach of a specific problem by the valuer himself or by the arithmetical model used. This leads to differences between appraisers, namely in operating expenses, first year rent, adjustment to market rent, end value, outgoing value and time period. Smit and Vos concluded that: "The choice of the way a specific arithmetical problem eventually is applied in the calculation model will depend on the knowledge and insight of the appraiser himself".

Differences in model arise through various techniques being applied within the same valuation method. For instance, the income valuation method based on the cap rate, lead to other valuations results than when using the DCF method. Theory suggests that valuation results should be more or less identical, independent of the chosen model, however practical experience shows this is not the case (Smit & Vos, 2003).

Variations in valuations will always exist. Yet It is important to prevent the differences in valuations when possible. The recommendations of the Smit and Vos article are clear. the best way to rule out differences in valuations is to use the same model, provide exactly identical input formats and strive for less arithmetical ambiguity. This can be achieved by improving arithmetical definitions and guidelines in the model used (Smit & Vos 2003).

Rent review legislation

When appraising real estate based on rental income for a certain period, it is important to understand the legislation system in the Netherlands concerning rent renewals. The rent renewals for retailers (article 290 specifies the defined businesses which are applicable for the article 303). These rent renewals are regulated in the Netherlands and are often referred to as a 303 adjustment (referring to the section of the law). This legislation has been implemented to protect the rights of tenants. Both the tenant and the landlord can opt for an adjustment to the rent, in case the minimum guaranteed rent (MGR) is not in line with the MGR for similar assets in the region. rents can be adjusted after the lease agreement period has ended, or after a term of five years when the lease agreement period is indefinite. To determine the new rental adjustment or estimated rental review value (ERRV) a judge will refer to the average rental value of similar assets in the region over the past five years (Burgerlijk Wetboek 7, 2009).

Given the protective nature of the leasing legislation, landlords have limited ability to increase the rent level to reflect current market rentals. As a result of this legislation, landlords may have a significant upward potential in the estimated rental value's (ERV) but are limited in aligning the rent with the actual market rent (Moerman, 2009).

IFRS Valuation rules

All the listed real estate investors in the Netherlands are committed to the IFRS accounting standards (Gool, Jager & Weisz 2007). These standards determine the current valuation procedure. The IFRS is a set of accounting standards, developed by the International Accounting Standards Board (IASB). This standard is becoming globally accepted for the establishment of financial statements. The general definition of fair value is as follows:

"Fair Value is the price that would be received for an asset or paid to transfer a liability in a transaction between market participants at the measurement date."(IAS 40)

To establish the fair value or market value the IASB has developed standards which are described in the technical summaries 30-32, 35-37 & 40. IAS 40 describes the real estate from an investor as 'Investment Property'. The definition is as follows:

"Investment property is property held to earn rentals or for capital appreciation or both, rather than for:
(a) use in the production or supply of goods or services or for administrative purposes; or (b) sale in the ordinary course of business" (IAS 40, 2009).

After recognition, investment property is valued at *fair value*. The fair value is measured twice a year by an independent external appraiser. A discount is applied to the gross value in order to reflect the disposal costs and transfer taxes. Transfer taxes are valued on the assumption that the property is sold directly, even though the cost of these taxes, in certain cases, can be reduced by selling the property's holding company. The discount rate varies by country and by the tax situation of the property. Fair value gains and/or losses are recorded in the profit and loss for the period of each half-year.

§1.5 Conclusion

The conclusion from this chapter is that the business of real estate revolves around transferring capital into real estate with the primary goal to benefit from its services and products which the real estate provides (Marquard, 2009). The reason why retailers predominantly rent is because owning real estate would require a large amount of capital investment, which they cannot otherwise invest in their core business. Owning the building would classify the user as being in the real estate business. A symbiotic relationship is formed via tenants seeking locations that provide the highest profit return and real estate investors supplying these properties in exchange for rental income.

When evaluating the valuation process it becomes clear that there is a connection between property management and asset management designed to make acquisition and disposition decisions. An investor must use an active management style with the focus on steering towards value creating variables.

The role of the real estate investor in a valuation leading the process whereas the investor is the principal of the valuation assignment. The main valuation goal is to establish a fair market value for the financial statements. The market value is described as:

> *The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and passing of title from seller to buyer (Brueggeman &Fisher, 2008).*

When investing in real estate parties will not want to pay more then the market value. When deciding valuations the emphasis must be on the fact that an appraisal is an estimate at a certain point of time about the most likely market value.

The valuation methods discussed are the DCF method and the capitalisation rate. The capitalisation rate is based on market evidence from comparables. If a situation arises where there are fewer transactions or the real estate is very heterogeneous, the market evidence is very hard to establish. In this situation a more detailed DCF method can be applied.

Smit and Vos's research which was about the fact if the same input also delivers the same output came to the conclusion that differences will arise as follows: differences in input, differences in arithmetic, differences in models. The elimination of these facts will improve the quality of the valuations.

The Netherlands has also a very specific rent legislation, called the 303. This means that all contracts (which are defined in article 290) are indefinite and renewals can take place based on an ERRV whereby a judge will refer to the average rental value of comparable assets in the region over the past five years. Landlords have limited ability to increase the rent level to reflect the current market rent.

§1.6   Structure of the thesis

The structure of this thesis follows the phases in which the research has been performed. Chapter two describes investments in shopping centres. It will describe the 'value added' variables of a shopping centre. Chapter three is the internal analysis which will describe the current valuation procedure and the valuation goal. interviews were conducted with internal experts whose work includes the valuation process. Chapter four contains the external analysis. In the external analysis, interviews held with the external experts are discussed. In addition, the comparison between the different valuation interpretations and methods used by the appraisers will be discussed. Chapter five endeavours to determine a standardised valuation method from all the gathered data and considered to be the most preferable for an investor to implement. Chapter five includes a brief SWOT analysis, to describe the possible conflicting interest from the internal and external analysis. Chapter six contains the conclusion of the thesis and will provide an answer to the central research question and suggest recommendations to UR.

2 Shopping centres as an investment

It is of great importance to know what products companies invest in. Value and return on investment are greatly dependent on the performance of a shopping centre. This chapter will describe what investing in a shopping centre entails and will take a closer look at the performance variables of a shopping centre. These variables are 'value adding' to the shopping experience and therefore important to be aware of them and to know how to manage them.

§ 2.1   The operational process of shopping centres

This paragraph will describe the operational process of the shopping centre, the centre management and the management of the retailers. The performance of a shopping centre is connected to the operational management from the retailers or by the tenants. During the lifecycle of a shopping centre, investments must be made in order to guarantee future cash flow. These investments can be described as a cyclic process. This is due to the ever changing nature of a shopping centre is in. The environment of a shopping centre is dynamic which influences the EBIT (Earnings Before Interest and Taxes) from the tenants. These developments in the environment of a shopping centre can be described using a macro - economic analysis. Macro-economic variables are mentioned in the textbox on the right.

- Demographic
- Economic
- Socio-cultural
- Technological
- Ecological
- Political and legislation

The dynamic that results from these variables influences the behaviour of consumers and the retailer tries to conform his way of conducting business to the behaviour of consumers. Such macro-economic variables will also affect the investor of a shopping centre. In the worst scenario this means a shopping centre investor has to make an additional investment to adapt the shopping centre to new conditions. In figure 4 below, three management styles are described, which can be attributed to the performance of shopping centres. The management styles eventually lead to the maximal operating results.
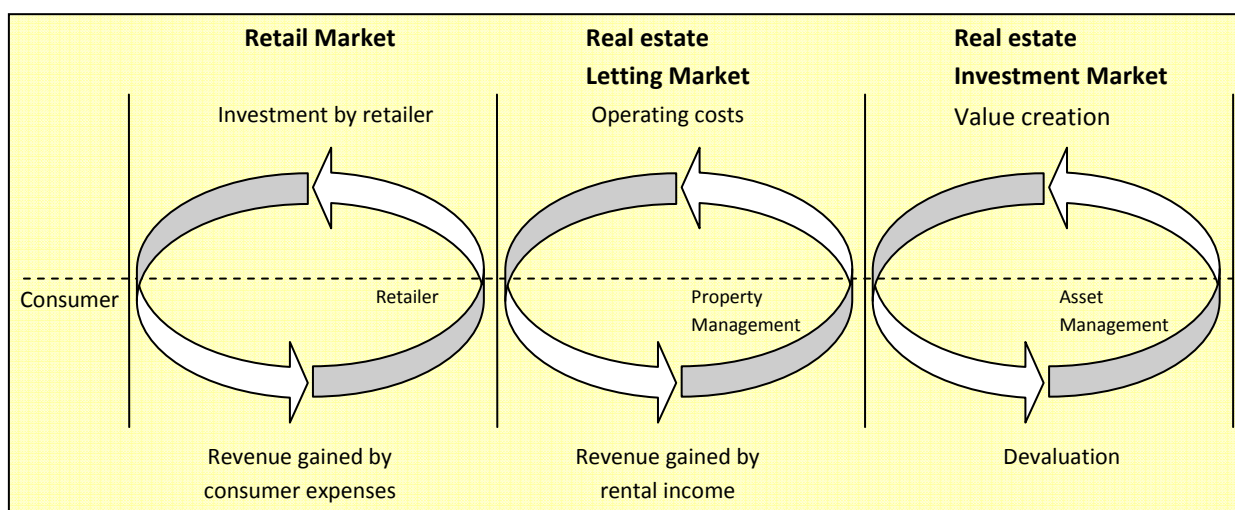

Figure 4: Operational process of a shopping centre (De Kroon, 2002)

The retailer is focused on achieving maximum profit in the short term and creating long term continuity of its business. in a shopping centre a retailer has competitors with the same goals. The retailer attempts to achieve the highest profit, aimed at outsmarting his competitors. This should eventually lead to more consumers who will buy goods in the shopping outlet. However, before a retailer achieves a good revenue he has to invest in the preconditions of generating revenue. This implies that the retailer has to invest in the products he offers and also in the accommodation. On this level, the relationship between the retailer and the investor becomes evident. The investor, as the owner of the shopping centre, offers accommodation to the retailer, where he can gain revenue. For the accommodation the retailers pays rent.

The operating process of an investor exists of two components; the exploitation and the investment component. The result of the exploitation cycle is the net rental income (NRI) which is optimised by the property management. The NRI is called the 'direct' return. The 'indirect' return is the development of the market value of the property. The market value is connected with the NRI, or cash flow, produced by the shopping centre. The value development can be seen as the main target for a shopping centre investor. In the in investment cycle, the investor strives for an optimal indirect return.

The relationship between the retailer and the investor is volatile. The retailer strives to pay as low as possible rent whilst the investor is motivated by extracting as much rent as possible. Both parties have to reach a consensus whereby the retailer only accepts high rents when the accommodation is capable of producing enough revenue. When this succeeds, a shopping centre is a very lucrative investment.

the performance of a shopping centre is closely linked to the local authority. The local authorities create the preconditions for shopping centres to perform well. These preconditions can include the parking policy and extending trading hours. An additional factor is the development of neighbourhoods which can have a direct impact on the performance of a shopping centre. Although the local authorities are not directly involved in the performance of a shopping centre, they contribute to its performance by establishing the preconditions to perform well.

§ 2.2   Market analysis

The market analysis of a shopping centre starts with supply and demand. The demand of a shopping centre lies with the investors who consider shopping centres as an investment opportunity. These investors can include pension funds, insurance companies, public and private real estate investors. On a unit level, the real estate is a letting market. However, the real estate investment market is more interested in the shopping centres. Different goods and services are being traded at different transaction prices. Figure 5 below shows a transaction process. Before a transaction in the real estate investment market occurs, two decisions are made; the seller has made the decision to sell for a certain price, and the purchaser has made the decision to buy the asset for a certain price. The purchaser and the seller both predict an upward potential benefit otherwise they would not pursue a direct interest.
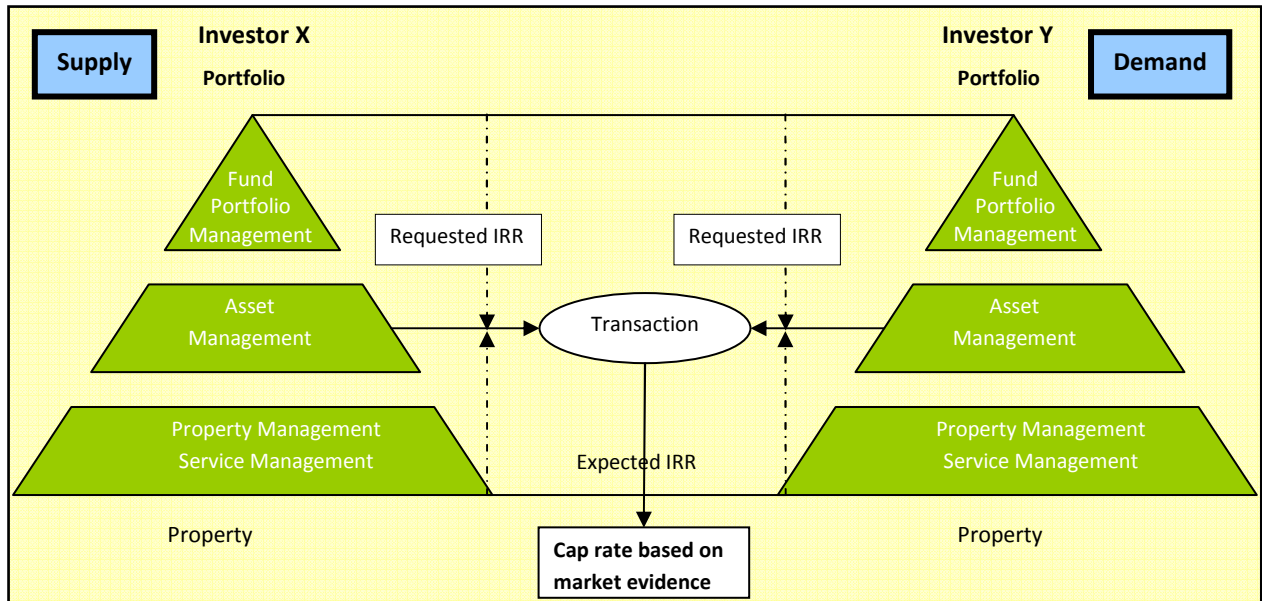
Figure 5: Transaction process in the real estate investing market (De Kroon, 2002)

The transaction takes place when both the purchaser and the seller reach an agreement on the sale price. Figure 4 above, is based on the cap rate pricing method where the cap rate is used to established the market value. In figure 4 above, the market forces are displayed and show, in an abstract way, the real estate investment market.

§ 2.3   Lifecycle of a shopping centre

After the second world war the shopping infrastructure grew very rapidly. The Dutch shopping infrastructure is very delicate and precisely established. The shopping infrastructure is very diversified, including high streets, community centres, neighbourhood centres, strip centres, regional centres and super regional centres. Each asset has different characteristics. Every asset, from the moment it begins operating or being used, starts to age. This will eventually lead to the development over time to the weakening or disappearance of the attraction factor (refer to figure 6). At this stage, a new investment has to be generated to increase the performance level.
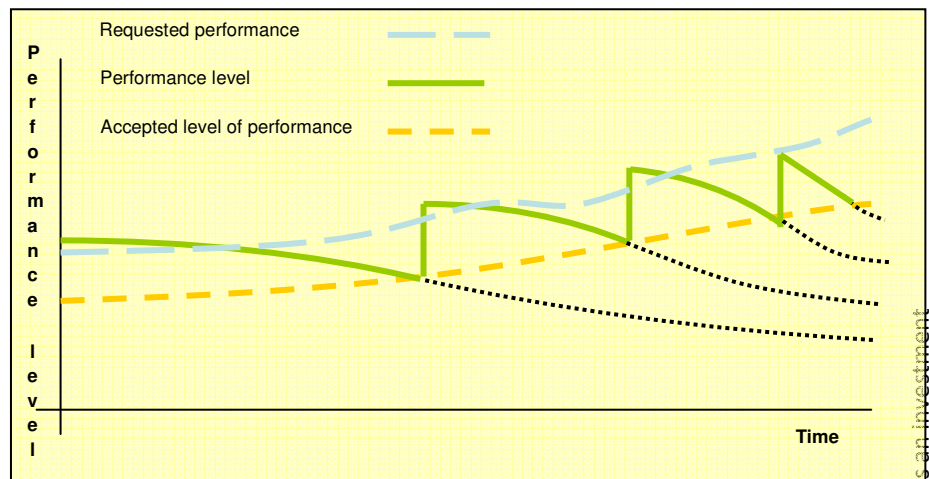
Figure 6: Lifecycle of a shopping centre (own revision,

Figure 6 above, displays how the ageing of a shopping centre influences the performance level during its lifecycle. The different phases can be described as 'usage', 'acceptance' and 'reuse'/'demolition'. The reuse phase is important for an investor because of the future cash flow. The acceptance phase is the phase between the usage and reuse phase. When a shopping centre is in the acceptance phase

Chapter: 2 Shopping centres as an investment

it no longer meets the required performance level. This phase is identifiable when the green line is between the blue and yellow line in figure 6, above.

Ageing of the shopping centre shortens the exploitation period, so an investor will attempt to consider the possibilities so as to adjust the assets in a way that it can adjust with new standards. This could be via a refurbishment, redevelopment, rebranding the asset or, in the worst case scenario, demolishing the asset.

The term ageing can be divided in two parts, the technical ageing and the economical ageing. Figure 7, below shows the two ageing variants.
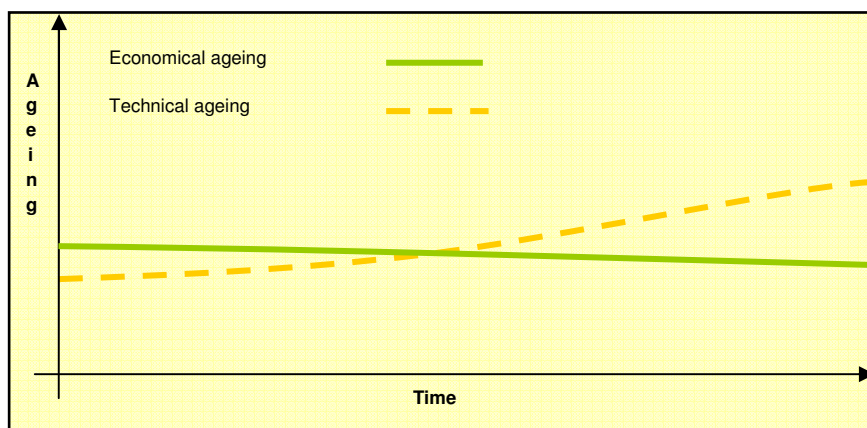
Figure 7: Ageing of a shopping centre (own revision, 2008)

Technical ageing is related to the physical structural state of the asset. The ageing appears through the wear and tear, originating from the usage. Erosion influences the financial performance of the asset. Economical ageing is related to the period where the asset can meet the required financial performance targets.

§ 2.4   Value adding characteristics

When investing in shopping centres it is important to know and to understand the 'production' characteristics. These are responsible for the value creation or depreciation. This paragraph highlights these important characteristics.

The categorisation is done by the WPM method, which is also used in their shopping centre's working documents (WPM, 2002) and include the following:
- Quality of the surroundings: qualities aspects such as market area and local authorities.
- Location quality: aspects which are related to the location such as public transport accessibility and parking possibilities of the shopping centre.
- Functional state: function of the centre, leisure, run or fun shopping and retail mix.
- Physical quality: aspects which relate to the appearance of the shopping centre (For example, the maintenance).
- Commercial quality: image of the shopping centre, how many people are attracted by the shopping centre.

§ 2.4.1 Scope of control

As stated in the previous paragraph, there are several factors which influence the income producing character of a shopping centre. This paragraph will categorise how much influence an investor can exert on such characteristics.

Not / very hard Manageable	Passive Manageable	Active Manageable
Location quality	**Environment quality** Adapt to new developments	**Functional qualities** New retailing mix
		Physical qualities Revitalisation
		Commercial qualities Optical and cosmetically adjustments

Table 3: The scope of control on the production qualities of a shopping centre (own revision, 2008)

In table 3, above the scope of control is displayed on the producing qualities of a shopping centre. It becomes evident when analysing this table, that the location and environmental aspects are more difficult to control. Environmental qualities are only manageable in a passive way, e.g. by adapting to new circumstances and situations. The functional, physical and commercial qualities are actively manageable (Zimmer, 1995).

§ 2.4.2 Adjusting quality

It is of great importance to know the relationship between the different producing qualities of a shopping centre (Kroodsma, 1998). Investors look at a potential in a shopping centre and compare this with actions done to improve the potential. Based on this analysis it is possible to divide the asset qualities into internal qualities and external qualities (Kroodsma, 1998).

The external qualities consist of the location and environmental aspects. These dynamic and external aspects, such as changes in the catchment area or a new city council, etc., and are determined by rigid factors.

Internal qualities consist of the functional, physical, and commercial qualities of the shopping centre. Such internal qualities facilitate the possibility to produce revenue for retailers.

Both internal and external qualities assist in the creation for the preconditions of a good functioning shopping centre. This synergy is eventually the potential of a shopping centre (De Kroon, 2002).

It is fundamental that the internal qualities are more than the sum of its parts. These qualities are complementary to each other. Therefore it is essential to optimize these qualities to each other.

§ 2.5   Conclusion

Based on the previous paragraph, the conclusion can be drawn that a shopping centre investment can be seen as a cyclical process. The retailer tries to adapt his way of conducting business to the behaviour of consumers. The Dutch shopping infrastructure can be characterised as a very delicate and precise set up. Every asset is, from the moment it is put into use, 'aged'. At a certain stage a new investment is necessary to boost the performance level. The producing, and therefore value adding, characteristics of a shopping centre are the quality of the surroundings, location quality, functional state, and physical quality of the asset. Adjusting the quality and the producing characteristics can be done via analysing external qualities such as, location and environmental aspects. These internal and external producing characteristics facilitate the possibility to produce revenue for retailers. The synergy of the internal and external characteristic is eventually the potential of a shopping centre (De Kroon, 2002).

3 Internal analysis

This chapter describes the internal analysis from the investor's perception. This is purely focused on the investors point of view when it comes to valuations. The general information came from UR and the peer group. The valuation goal will be discussed and also the valuation procedure. Finally, a preferred model will be discussed. Interviews were held with Bert-Jaap Dijkstra (group director valuations), Mark Hoedjes (director investment management NL), and Nico van Warmerdam (head of control NL).

§ 3.1   Valuation procedure

The current appraisal process is that UR is the principal and gives the assignment to the appraisers. There is a difference in the sort of appraisal used. These are classified as: 'full new', 'light' and and 'update'. The 'full new' is a complete new appraisal, a 'light' is a less comprehensive appraisal and an 'update' is a control check to determine if the existing numbers and values are still correct. In this research, only the full new appraisals will be discussed.

Valuation Goal

The valuation goal should be the same for all companies. As all companies in the peer group are listed they have to value their underlying assets (i.e. the real estate) for their financial statement reporting requirements.

Information given to the external appraiser

This information is based on an interview with Mark Hoedjes, responsible for the valuation procedure for the Dutch UR portfolio, and cross referenced via interviews conducted with external appraisers.

Rent roll consists of:
- Address
- Square meters
- Property income (cash flow existing from rent roll, service charges,etc.)
- Property expenses (operating costs, tax, etc.)
- Vacant units

Other documents:
- Property title, leasehold info, urbanization documents.
- Floor plan
- Current litigations
- Additional information –footfall, doubtful debtors,

Table 4: Input delivered to appraisers from UR

Table 4, above shows the information given to the appraisers. The additional information provided includes issues which can influence the value, such as tax consequences, running legal issues, possible tenant renewals etc. Such variables are important for an appraiser to recognize and understand as this will influence the cash flow. It is of crucial value to state a good cash flow. Every euro in income is divided by the discount rate which implies that it will add or extract x amount divided by the discount rate.

§ 3.2 Arithmetic ambiguity?

Al the valuations are performed according to international valuation standards. These standards are IVSC, RICS and the codes of conducts and apply for all the valuation reports for financial statements. The appraisers will use the definitions as determined by the RICS and IVSC. Consequently, there is no room for arithmetical ambiguity.

§ 3.3 Interviews internal experts

This paragraph displays the information gained from the interviews held with internal experts in UR. These interviews were about identifying the valuation procedure, valuation goals and how valuations can be done in the near future.

When looking back at the past UR has conducted many appraisal 'rounds' for generating financial statements. The trend used to be to let the appraisers decide everything concerning the output model, the calculation model etc. The only thing the principal was interested in was the market value. UR has explicitly chosen to focus more on the value steering process by using proactive management (Unibail-Rodamco SE, 2009). This is to better understand why values change. Such recognition can only be done when UR knows everything about the value of a property and what influence the management style has on the value creating process. This is easier when it is possible to compare assets within the group. Therefore appraisals have to be consistent with each other in order to make a good comparison.

To achieve this UR wants to have more control in the valuation process. This starts with a good valuation model where every appraisal can be compared with other assets in the group. The current situation shows that the output models and calculations models are different. To make these appraisals comparable controllers recalculate appraisal reports -which is very time consuming and not desirable- in order to make them comparable.

Bert-Jaap Dijkstra (group director asset management) is responsible for the valuations for the entire group and explains that a new valuation model has to be implemented in order to make better comparisons of the value evolution. The goal is to have a consistent valuation method for shopping centres and single high street properties. The standardized model should contain a calculation model and output model which will be the same for the whole group.

A ten year DCF method is mentioned as a preferred model, thus the discount rate should be based on a risk free rate plus corrections. Ten years is used because this is the holding period used by the company. The discount rate can be referenced with market evidence. This will make a valuations report more transparent and will clarify value fluctuations much better. Hoedjes makes a critical remark: the basis for the DCF should be well chosen, this should be the MGR + corrections for ERRV (art.303) procedures or the ERRV level + corrections for the MGR/ERV.

Nico van Warmerdam (head of control of the Dutch portfolio from UR) tells an interesting example he has experienced whilst processing the valuation reports from the appraisers. The example was a property (currently not owned anymore by UR) in Groningen. After an appraiser changed, the value from the valuation showed a significance difference whilst there had not been any changes in the rent roll. After investigation it turned out that the market value had declined by 19 percent. Even in

the current economic situation this is not acceptable and after corrections for the write offs of the whole Dutch portfolio, the gap was over 13 percent! A standardized method will not always avoid such large differences but it will help improve the consistency.

§ 3.4 Conclusion

What becomes clear in this chapter is that the current valuation procedure is far from efficient. Controllers have to recalculate the outcome to make valuation reports comparable. A consistent standardized calculation and output model has to be implemented to achieve these goals. Therefore in chapter 5 a first step is made to a new standardized model based on the outcome of the internal and external research.

4 External Analysis

This chapter will focus on one of the most important parties in the valuation process: the external appraisers. These are in the case of UR: Cushman and Wakefield (C&W), DTZ Zadelhoff (DTZ) & Jones Lang Lasalle (JLL). The appraisal methods are analyzed in paragraph 4.1 and in paragraph 4.2 the peer group is analyzed based on the information from their financial statements. Paragraph 4.3 focuses on the composition of the capitalization and discount rate. Paragraph 4.4 is a summary from the output of the expert interviews.

§ 4.1   Comparison of appraisers and their valuation methods

This paragraph will describe the different valuation methods used by the external appraisers from UR. These appraisers areC&W, DTZ and JLL. The comparison is drawn based on the valuation reports as shown in appendix I.

C&W: Capitalisation method

The method C&W uses is the capitalisation method, this valuation method is basically the same as the capitalisation rate as described in paragraph §1.4. The estimated rental value (ERV) is calculated based on market evidence. C&W determines the ERV for each asset they value, this is done on unit level. For each separate unit they determine the ERV. The operating costs are subtracted from the sum of these ERV's. The result is divided by a net yield before corrections.

$$Value = \frac{\left(ERV - \frac{OC}{NetYield}\right) - corrections}{1 + pc}$$

Equation 3: C&W valuation method

Value	= fair value, market value
ERV	= estimated rental value
OC	= operating costs
Corrections	= various corrections
Net Yield	= Net yield before corrections (incl. pc)
pc	= purchasing cost of 7 %

Corrections (consisting of void periods, letting fees, lease incentives, renovations costs) are subtracted from the value calculated from the ERV divided by the net yield. The value is adjusted with acquisition costs and are generally calculated at seven percent of the purchase price.

JLL: DCF with hardcore top slice

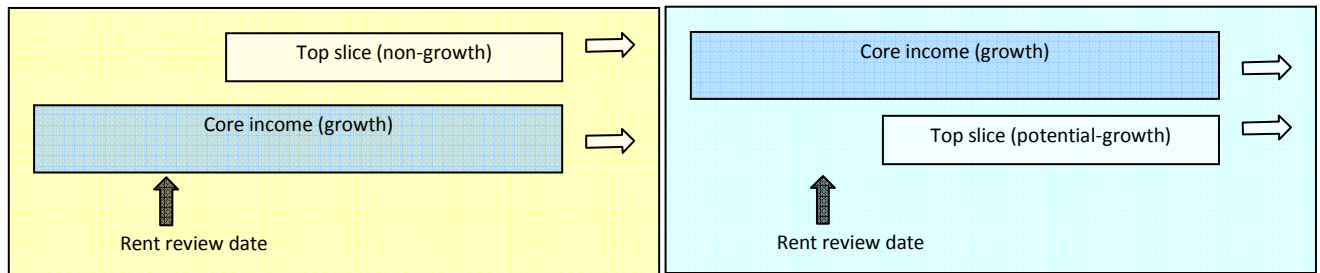The JLL valuation method is the DCF method with a hardcore top-slice (HCT) specialization.

Figure 8: The layered method applied (Sayce et al, 2006)

HCT method

The HTC method is described as a layer method in figure 4, above. When a property is 'over rented' (i.e. when the rental income is higher than the ERV) the method sought is to split incomes into the (hard)-core growth element and the non-growth risk-full top slice. The HCT is a convenient method but the top slice (the 'over rented' part of the NRI) will decay over the periods because rental values recover or increase (Sayce et al, 2006). This method can be applied in an 'under' rented situation as well. The top slice will represent corrections for potential growth in the MGR.

Explanation JLL

The rental income is based on the information given by UR. The ERV is estimated by the appraisers from JLL and they determine the units which will be in the top slice part. The DCF method is applied based on the net and gross cash flow. The DCF Jones uses has a 20 year horizon, this is because a longer horizon will have less impact on the market value. When using a ten year horizon the end value has 40% influence on the market value whereas a 20 year horizon end value only has 10% influence on the market value (Verheggen, 2009). The yield used for the HCT part of the valuation is slightly lower which results in a higher value. After the DCF and HCT calculations are made, the weighted average is calculated, which is the final market value.

The risk is reflected in the yield which is the net initial yield (net income divided by the gross value) and the gross initial yield (gross income divided by the rounded net value). The complete detailed method can be found in appendix I.

DTZ: DCF combined with the capitalisation method

The method which DTZ makes use of is very similar to the C&W method. The main difference is that the DTZ method is more detailed and makes use of a clear combination of the DCF method and the capitalisation method.

$$Value = \frac{\left(ERV\middle/NetYield\right) - capialised\,(ERV - MGR) - corrections}{1 + pc}$$

Equation 4: Hybrid between DCF and Capitalisation method (Van Gool, 2007)

Value = fair value, market value
ERV = estimated rental value
Net Yield = net yield before corrections (excl. pc)
MGR = minimum guaranteed rent(contract rent)
Corrections = various corrections
pc = purchasing cost of 7 %

In this method the surplus of rent is capitalized And eventually displays a more realistic market value (Boeve, 2009). Also other assets or liabilities can be capitalized such as maintenance costs due in four years (Van Gool, 2007). DTZ starts with the desired discount rate, annual market rental value increase or decrease and the gross initial yield at the end of the review period. The DCF horizon is set at ten years. The letting details, annual maintenance and operating costs are discussed in detail. Following this, DTZ calculates the difference between the market rental value and the current rental income. This leads to a rental value capitalisation which has a market yield determined by DTZ. If a yield shift occurred, the report should display the difference with the old valuation reports or other properties. The discounted cash flow is similar to the JLL cash flow, however the horizon of the DCF is ten years.

§ 4.2   Peer group methods

This paragraph will describe the valuation methods used in the so called 'peer group' of UR. This peer group consists of comparable companies who also invest in commercial real estate and are specialized in retail.
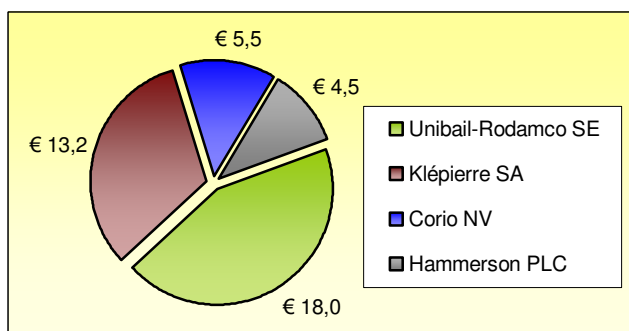
Figure 9: retail share in portfolio peer group in € billion, reference date 31-12-2008 (own revision, 2009)

As figure 9, above shows UR is the largest investor in retail with an portfolio of almost € 18 billion (Unibail-Rodamco SE, 2009). Klépierre, a French investor listed on the French CAC 40 follows, with a retail portfolio of € 13,2 billion (Klépierre SA, 2009), Corio, a Dutch investor listed on the Amsterdam Exchange index (AEX) has a portfolio of € 5,5 billion (Corio NV, 2009), Hammerson, a British investor listed on the London Stock Exchange, has a retail portfolio of € 4,5 billion.

All these companies have a valuation methodology enclosed in their annual report (see text box below). In general all companies make use of big international firms for their valuations. They all meet the following requirements:

- External valuation advisory firm, with an international network
- Comply to the IVSC and or RICS standards
- Use market evidence as bases for the yield composition (the primary source of evidence should be recent transactions of comparables)

Corio:

" The valuation methods used are the discounted value method and the direct capitalisation method, in which market parameters concerning market rents, yields and discount rates are based on comparable and current market transactions" (Corio NV, 2009).

UR:

" Independent appraisers determine the fair market value bases on the results of two methods: the discounted cash flow and the yield methodologies. The resulting valuations are cross-checked against the initial yield and the fair market values established through actual market transactions" (Unibail-Rodamco, 2009).

Klépierre

" On the basis of yields and the DCF method" Klépierre defines the applied DCF method as follows: "The appraiser estimates all of the asset's expected revenues and expenses and derives a terminal future value at the end of the period of analysis (10 years on average). By comparing market rental values and face rent values, the appraiser captures the property's rental potential by using market rental values at lease expiration less costs incurred to relet the property. Finally, the appraiser discounts these projected cash flows in order to determine the present value of the property asset. The discount rate takes into account the prevailing risk-free rate (10-year AT), to which will be added a real estate market risk and liquidity premium, and also a specific premium based on the location, the key features and the occupation of each property (Klépierre, 2009).

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§ 4.3 Focus on risk

The risk factor in these methods is displayed in the discount rate. This discount rate can determine every desired outcome. The valuation discount rate is derived from comparable evidence gained from recent transactions involving similar properties. Using contacts within the property industry, in-house data, and online information like vastgoedmarkt.nl and propertynl.com can provide appraisers with information on comparable objects and transactions (Sayce, et al 2006).

Yield on a property = risk free rate of return + risk premium − rental growth
investment

=

Target rate of return
Required rate of return
Discount rate
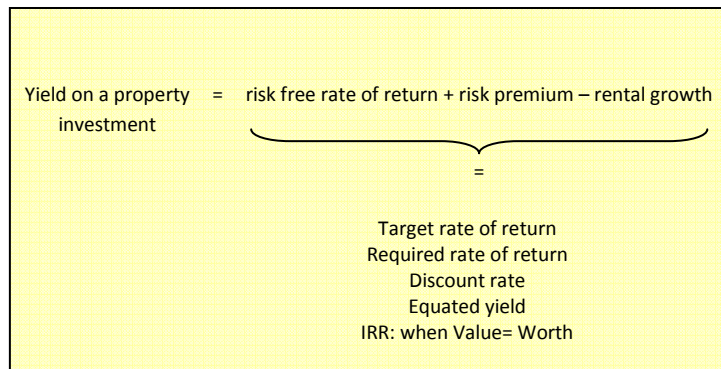Equated yield
IRR: when Value= Worth

Figure 10: Context of a property yield (Sayce et al, 2006)

As the theory suggests, the yield composition should be clear and transparent showing the different variables. A real estate investor is very interested in the risk premium composition. Where does a specific risk originates from? Is there a change in the catchment area? Or a transformation from the location, maybe a local shopping centre has had a major renovation and causes a higher risk premium. These variables mentioned are the value creating characteristics of shopping centres and therefore are of great importance to know and understand. The external appraisers do not use these in- depth discount rate compositions yet. Instead they use a standard yield which set a certain level with no clarification of the risk premium used. Another variable the yield should consist of is the market sentiment and the emotional value. This can be hard to describe but can give strong insight into what the external appraiser considers when he is appraising a shopping centre.

§ 4.4 Expert Interviews

This paragraph contains the output from the interviews I conducted with the valuation experts. The valuation partners which were interviewed are: Chris Tolsma (Partner Valuation Advisory Services from Cushman and Wakefield), Jacques Boeve (Partner Valuation at DTZ Zadelhoff) and Paul Verheggen (National Director Jones Lang Lasalle). The interviews were based on a standard questionnaire which can be found in appendix II.

This paragraph is divided into three parts; input, arithmetical ambiguity and model. Each of these subjects can cause a significant difference between valuations, as research from Smit and Vos proved.

Input

The input delivered from UR to the appraisers is identical. All the questioned appraisers gave the same shortlist of delivered information they receive from UR for an appraisal:

Rent roll consists of:	Other documents:
• Address • Square meters • Property income (cash flow existing from rent roll, service charges,etc.) • Property expenses (operating costs, tax, etc.) • Vacant units	• Property title, leasehold info, urbanization documents. • Floor plan • Current litigations • Additional information –footfall, doubtful debtors,

Table 5: Input delivered to appraisers from UR

Table 5, above displays the basic information and the principal of the valuation also provides additional information about the property. For instance, legal issues which can influence values, or possible rent renewals. Also extra information is given which is hard to observe when appraising, for example the condition of the technical installations on the roof. The input for all the three appraisers is exactly the same as chapter three also indicated.

Arithmetical ambiguity

The next step was to determine if there was arithmetical ambiguity. The appearance of arithmetical ambiguity is opposed through working with international valuation standards. These are the RICS Redbook standards combined with the IFRS rules. Appraisers also mentioned that the principal is leading in the output format. The current situation is that UR does not have a detailed template with the value definitions. UR stated that the existence of these extensive guidelines from the RICS and the IFRS is sufficient to exclude arithmetical ambiguity.

Model

As mentioned in paragraph 4.1 the appraisers do not use the same models when appraising real estate. In the interviews, appraisers clarified that this has to do with the operational process from their companies. The real estate advisors work with an calculation model which they use for every appraisal. Appraisers in the company are used to working with these calculating models. Adapting the model for every customer would cost a lot more time and will decrease the quality of valuations. The output from the calculation model is transferred into a template as requested by the principal from the valuation. This means that there is also a difference in the basis of the valuations; the calculating model. According to the appraisers, a solution can be to work with an standardized output model. This can eliminate a part of the differences and can increase consistency. As paragraph 4.3 shows it is hard to produce a clear yield composition or discount rate. When asking the appraisers if it was possible to split up the yield or discount rate into basis points for every risk or value adding component, several answers were given. In general it is hard for an appraiser to display how the yield is build up. Verheggen said that is possible to give a clear composition but it hugely depends on the calculation model used with the valuation. If the calculating model is very simple from origin, it is difficult to display a sophisticated yield composition. When the calculating model is comprehensive, it is easier to display the yield composition. Although it is possible to display a break

down of the yield composition into several parts with a risk free rate as base, appraisers also mention it is very important to use the market evidence to compare whether the assumptions made are connecting to what is happening in the current market. This means the market evidence should be leading when establishing a yield or discount rate. The principal should determine what is important as output, i.e. should this be based on market evidence or purely on a risk free rate plus several factor as location, building appearance, etc. etc?

Appraisers find the DCF model with a 10 (C&W and DTZ) or 20(JLL) year holding period the ideal model when appraising shopping centres. A hybrid is also possible with the capitalisation method. The capitalisation method is used to establish the discount rate based on market evidence. Appraisers keep focussing on the market evidence when appraising real estate, if there is sufficient market evidence they will use it to either determine a market value or use it as a check whether their calculations correspond to the current market conditions.

There is a critical remark appraisers make when using the DCF method. The role of the appraiser should be very clear, it is their role to establish independently a market value. When using a DCF method an appraiser is using information from the principal, and is effectively interpreting and analysing information given by the principal. The outcome can be greatly influenced through the information given by the principal.

When asking the individual appraisers about whether the difference in output is acceptable when the three different appraisers value the same property, the answer is that this margin should be between 2 and 3 percent. As chapter three discussed, this is not always the case.

§ 4.5   Conclusion

The main result of this chapter is the difference in techniques from the three external appraisers from UR to determine the market value of real estate. As aforementioned, Smit and Vos conducted extensive research about variations in valuations. The main reasons postulated for differences were differences in input, differences in arithmetic ambiguity and differences in model. This chapter showed that the models being used for valuations are different and these alone can cause significant differences in valuations. These differences in models harm the reliability and consistency from the valuation reports. Also a clear yield composition is absent in the valuation reports and especially the risk premium is poorly substantiated. Based on the expert interviews, the conclusion can be drawn that besides the difference in the output model, there is also a difference in the calculation model. Another conclusion is that appraisers find a margin from 2 till 3 percent acceptable when the different appraisers value the same property.

5 Standardized valuation method

This chapter aims to produce, based on the previous chapters, a standardized valuation method as an answer to the central research question. This solution is my own interpretation of the literature study, internal analysis and external analysis. The standardized method is submitted to a SWOT analysis to see if there are conflicting elements in the model.

§ 5.1   Standardized method

As previous chapters conclude there should be a standardized method for both the calculation model and the output model. The bases for the valuations should be exactly the same as this will guarantee consistency. Therefore, a closer look at the process is made. The bases is the information pack the investor gives to his appraisers (see figure 11). This indicates the role the investor has in the process.

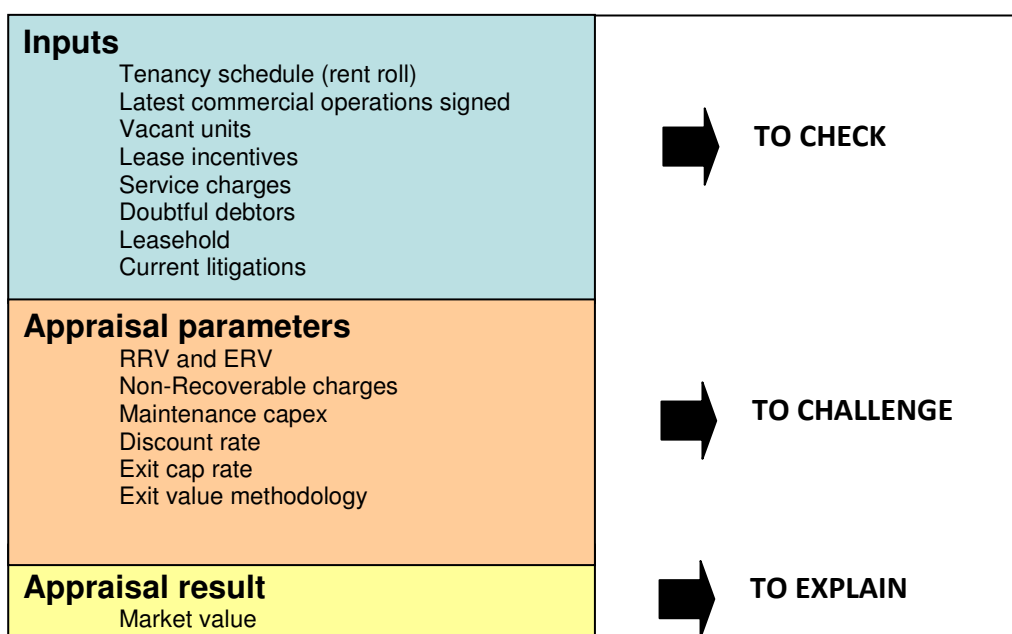| **Inputs**	
Tenancy schedule (rent roll)	
Latest commercial operations signed	
Vacant units	**TO CHECK**
Lease incentives	
Service charges	
Doubtful debtors	
Leasehold	
Current litigations	
Appraisal parameters	
RRV and ERV	
Non-Recoverable charges	
Maintenance capex	**TO CHALLENGE**
Discount rate	
Exit cap rate	
Exit value methodology	
Appraisal result	
Market value	**TO EXPLAIN**

Figure 11: Role of the Investor in the appraisal process (Own revision, 2009)

The blue box represents the responsibility of the investor the process. He should ensure that the information pack is correct. The orange boxes display the appraisal parameters. The investor should challenge them if all parameters are right. This is done based on the internal knowledge of the investor. Internal valuations are used to check whether these are in line with the values given by the appraisers. After this is done, the appraiser comes with a market value. The investor can now explain why the appraiser came up with this market value because he has provided the input, challenged them and checked the appraisers parameters.

Following this process, the method is of next importance. The calculation model should be the DCF model and based on a 20 year holding period. The risk should be taken into account in the discount rate (and not in the projected cash flow). As basis for the cash flow , the MGR should be taken with corrections for ERRV(303) risk/opportunities : DCF

The appraiser estimates expected revenues and expenses. Terminal future value is derived at the end of the period. By comparing market rental values and face rent values, the appraiser captures the property's rental potential by using market rental values at lease expiration less costs incurred to re-let the property. Finally, the projected cash flows should be discounted in order to determine the present value of the property asset. The discount rate takes into account the prevailing risk-free rate (10-year government loan), to which will be added a real estate market risk and liquidity premium, and also a specific premium based on the location, the key features and the occupation of each property. The discount rate should be compared with the market evidence. The discount rate and market evidence should be the same in order to make them comparable.

Why the DCF?

The DCF is the most sophisticated model of the three main accepted valuations methods. Both appraisers, and internal experts agreed that the DCF method is best for appraising shopping centres as shopping centres tend to be heterogeneous and there is normally not a lot of data available on the market. This is due to the fact that shopping centres are not frequently for sale (or being sold). Therefore, the DCF method is the most preferable method when appraising shopping centres and high street shops. For high street shops the DCF is also applicable but more in a hybrid form using the capitalisation method.

Why a 20 year holding period?

As Verheggen showed, the reversion value of a 10 year DCF has a 40% influence on the end value. When using a 20 year holding period, it has only 10% influence on the end value. The 10 year investment horizon from UR this should not be used. Why not? When looking at the 'core' assets from UR in the Netherlands –Amstelveen, Almere etc. – it becomes clear that UR has no intention to sell these landmarks after 10 years. Therefore a 20 year holding period is best while using the DCF method.

Why is risk projected in the discount rate?

This will provide a better insight into the rationale of the appraisers. Appraisers should benchmark it with current transactions of comparable assets, but when these transactions are not conducted, this should be the basis.

Why the MGR as basis instead of the ERRV?

The MGR is the minimal income a property will generate. Therefore this should be taken as basis for downside and upside ERRV risks. This will eventually reflect the value in a more balanced cash flow.

A very helpful supplement to this valuation report can be to give a verdict about the potential value or intrinsic value of the asset. This is not necessary for a appraisal to determine 'fair market value'. However, it would give the owner a better insight about the possibilities to capture the potential from its assets. This can be done for instance, by giving an indication about the chances to evict tenants in order to reach market rents and avoid ERRV risks.

The previous subsection provides an answer to the sub question mentioned in chapter one - in what ways can a real estate investor control or influence the value creating process? The appraiser will

give an indication on the value creating variables. An investor can try to direct the value of an asset by influencing such value creating characteristics.

§ 5.2   SWOT, are there conflicting interests between internal and external parties?

This paragraph contains a SWOT analysis of the new standardized method as proposed in the previous paragraph. The goal of this SWOT analysis is to examine if there are any conflicting goals between the stakeholders from the appraisals.

Stakeholders

Amongst the stakeholders who should be considered include the following:

- Appraiser
- Principal of the appraisal (real estate investor)
- Shareholder of the real estate investor

All these stakeholders have their interest in the appraisals. In figure 12, below a SWOT analysis is shown.
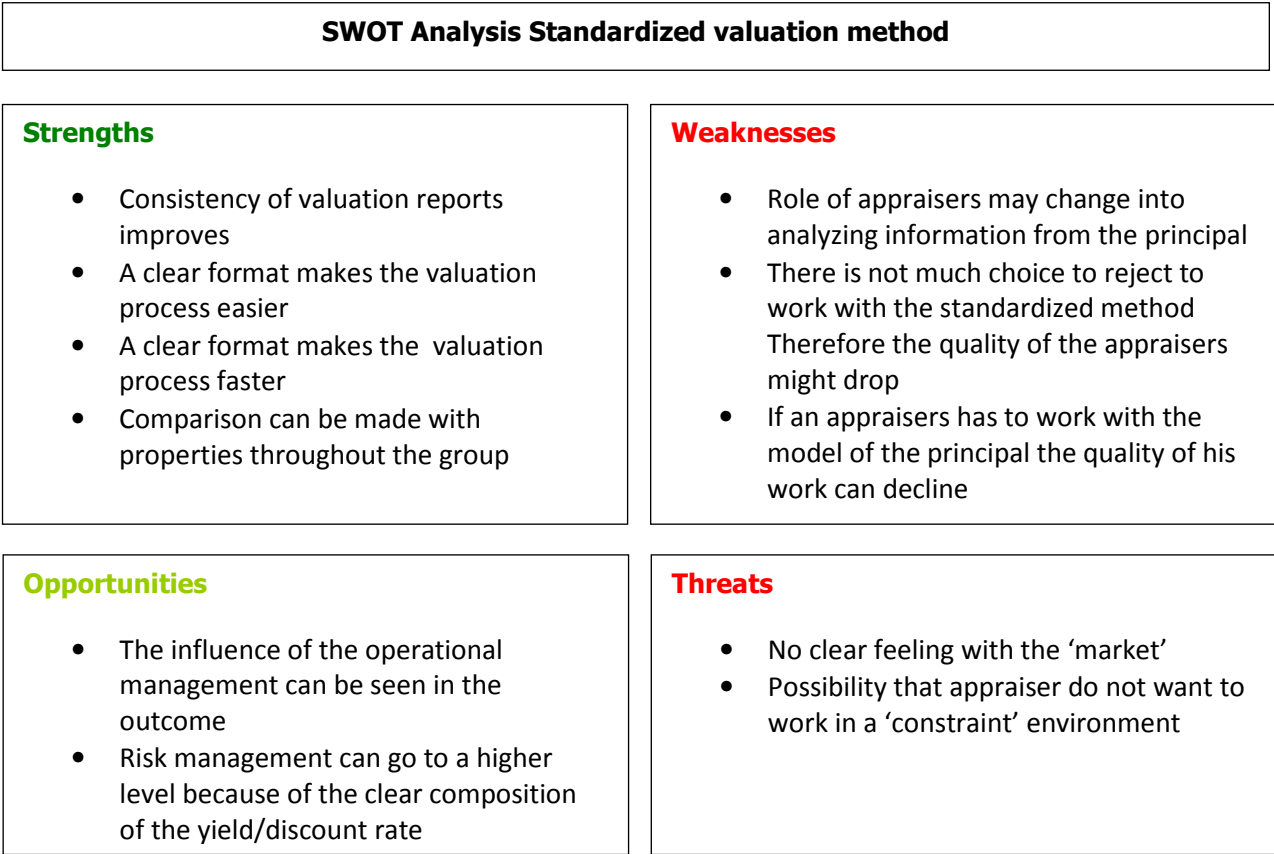

SWOT Analysis Standardized valuation method

Strengths

- Consistency of valuation reports improves
- A clear format makes the valuation process easier
- A clear format makes the valuation process faster
- Comparison can be made with properties throughout the group

Weaknesses

- Role of appraisers may change into analyzing information from the principal
- There is not much choice to reject to work with the standardized method Therefore the quality of the appraisers might drop
- If an appraisers has to work with the model of the principal the quality of his work can decline

Opportunities

- The influence of the operational management can be seen in the outcome
- Risk management can go to a higher level because of the clear composition of the yield/discount rate

Threats

- No clear feeling with the 'market'
- Possibility that appraiser do not want to work in a 'constraint' environment

Figure 12: SWOT Analysis Standardized Valuation Method

The SWOT analysis on figure 12, above reveals some interesting results. Many benefits are realized when implementation of a standardized method is done. However, a critical analysis has be made to exclude or predict any conflicting interests between the stakeholders.

Stakeholders and their role/interests

The **appraiser** has a interest in winning the assignment from the principal. This is their lifeline and core business. When a large institutional investor is the principal of a big valuation assignment, the interest is high for the appraiser to get this assignment. This means that the appraiser is particular dependent on the investor. The investor can set the rules. This can lead to conflicting interest because the appraiser has to establish a market value in a independent way, according to rules set by the IVCS and the RICS.

When it comes to the principal of the valuations, it has to be clear what the goal is of the valuations being performed.

The **principal** of the valuation i.e. the investor, has a different aim. The investor wants a valuation for the financial statements which will reflect the value of its underlying assets; the real estate. Based on these valuations the book value will be established. Therefore it is of great importance that the valuations are performed accurately and transparently. These figures will form the basis for the calculations of the financial ratios. the financial ratios are very important for a company, showing its solvency, liquidity etc. Therefore, the investor has a vested interest in the valuations being performed correctly.

The **shareholders** of the listed real estate conduct analysis of the company based on a wide range of variables. One of those variables is the intrinsic value (Brouwer, 2009).

"Stocks have intrinsic value, because they represent partial ownership of an entity with the power to earn money and eventually distribute it as dividends. Real estate has intrinsic value, in that its owner can charge a rental fee for its use" (Brueggeman & Fisher, 2008).

The ratio intrinsic value versus stock value can indicate a lack of value in the stock or, on the other hand, an over -valued real estate portfolio. This is a good indicator for shareholders to assess the value of a real estate company. Therefore, it is of great importance for the share holder that the underlying assets are valued properly and showing their true market value. Requests for more liquidity are assessed based upon these financial ratios.

§ 5.3   Conclusion

Based upon the data gained from the literature study and the empirical research, in my opinion, the standardised valuation method should be the DCF method with a twenty year holding period. When assessing conflicting risks which can occur when implementing this method, it becomes clear that the advantages outweigh the possible disadvantages. A great deal of the advantages will be the improved consistency and efficiency. This will enable the process to become a lot faster and easier for the investor.

6 Conclusion and recommendations

This is the last chapter and will reveal the conclusion and pose an answer to the central research question. This chapter is divided into three parts; the conclusion based on the literature, the conclusion based on the empirical research, and finally I will deliver my recommendations to UR.

Literature research

Based on the extensive literature study from chapters one and two, several conclusions can be drawn concerning the valuation process of an investor in commercial real estate.

The essence of investing in real estate is about transferring capital into real estate with the primary goal to benefit from its services and products which the real estate provides (Marquard, 2009). Retailers search for locations that provide the highest profit and real estate investors provide these properties in exchange for rent.

When it comes to managing the real estate, several styles can be seen. The two main management styles are the passive management style and the proactive management style. The passive management style is managing assets in a not 'hands on' manner and focuses mainly on the yield shift. The proactive style is 'hands on' management where the optimal tenant mix is used in order to generate high footfall, which eventually will lead to more revenue for the retailers which results in his ability to pay more rent (Zimmer, 1995). Therefore, real estate investors have a stronger need for more understanding in the value development of its assets. Accordingly, internal valuations are of great importance to keep track of the value development. External valuations are increasingly functioning as a control instrument for investors to determine if their internal valuations were correct (De Kroon, 2002).

The principal of the valuations, i.e. the investor, can exert a lot of pressure on the appraiser to report higher or lower market values. In the current market conditions, it is possible that an appraiser can lose his valuation assignments if he does not value property at the requested market values (Van Gool, 2007).

When investing in real estate, parties will not want to pay more then the market value. An appraisal is an estimate at a certain point of time about the most likely market value (Van Gool, 2007).

The value adding variables of a shopping centre are: (WPM, 2002).
- Quality of the surroundings: qualities aspects such as market area and local authorities.
- Location quality: aspects which are related to the location such as public transport accessibility and parking possibilities of the shopping centre.
- Functional state: function of the centre, leisure, run or fun shopping, and retail mix.
- Physical quality: aspects which relate to the appearance of the shopping centre. For example the maintenance.
- Commercial quality: image of the shopping centre, how many people are attracted by the shopping centre.

These variables can be split up in internal and external variables. The synergy of the internal and external characteristics is eventually the realisation potential of a shopping centre (De Kroon, 2002).

Differences in valuations come from: differences in input, differences in arithmetic and differences in models. The elimination of these facts will improve the quality of the valuations.

The valuation method applied primarily for shopping centres is the DCF method. This method is closely linked to the characteristics of shopping centres, which tend to be heterogeneous. Furthermore, there is a lack of data available on the market, especially in current market conditions. This is due to the fact that they are shopping centres are not frequently for sale (or being sold). Therefore, the DCF method is the most preferable valuation method employed when appraising shopping centres and high street shops.

When using market evidence it is important to only use strong evidence generated from comparable assets. The comparability derives from being very similar in quality, of construction, size, functionality, location and operating efficiency. As a result the 'correct' cap rate is difficult and an incorrect one could result in a serious pricing error (Brueggeman &Fisher, 2008).

Variations in valuations will always exist. It is important to prevent the differences in valuations when possible. The best way to rule out differences in valuations is to use the same model, provide exact identical input formats and strive for no arithmetical ambiguity. This can be done by improving arithmetical definitions and guidelines in the model used (Smit & Vos 2003).

Empirical research

Internal research

What becomes clear after conducting the internal research was that the current valuation procedure is far from efficient. Controllers have to recalculate the outcome to make valuation reports comparable. A consistent standardized calculation and output model has to be implemented to achieve these goals. This is in contrast with the new focus of UR and those in the peer group who want to create value by using a proactive management style. The internal research also confirms the conclusion from Smit and Vos, that valuation results should be more or less identical and not dependent upon the model chosen, however empirical research proves that this is not always the case. Differences after corrections of over 13% percent were shown. This diminishes the quality and the reliability of the valuation reports.

External research

The main result of the external research is that there are differences in techniques used by the three external appraisers from UR to determine the market value of real estate. Additionall, a clear yield composition is absent in the valuation reports and especially the risk premium is poorly substantiated. Appraisers said it is possible to give a clear composition but it hugely depends on the calculation model used for the valuation. If the calculating model is very simple from origin it is hard to display a sophisticated yield composition. When the calculating model is comprehensive it is easier to display the yield composition

Based on the expert interviews the conclusion can be drawn that besides the difference in the output model there is also a difference in the calculation model. The appearance of arithmetical ambiguity is

opposed via working with international valuation standards. The existence of the extensive guidelines from the RICS and the IFRS is sufficient to exclude arithmetical ambiguity.

According to appraisers, differences in output is acceptable when different appraisers value the same property within a margin between 2 and 3 percent. As chapter three proved, this is not always the case.

The central research question of this thesis was:

What is the best valuation procedure for commercial real estate in the Netherlands for a listed institutional retail investor which can meet with its financial performance rules?

Based upon the data gathered from the literature study and the empirical research, my opinion is that the standardised valuation method should be the DCF method with a twenty year holding period. The discount rate takes into account the prevailing risk-free rate (10-year government loan), to which will be added a real estate market risk and liquidity premium, and also a specific premium based on the location, the key features and the occupation of each property.

When assessing conflicting risks which can occur when implementing this method, it becomes clear that the advantages outweigh the possible disadvantages. A significant advantage is the improved consistency. This will help to improve the quality of the valuation process, and it will be faster and easier for the investor to rely upon.

The basis is the information the investor gives to his appraisers (see figure 11). This indicates the role the investor has in the process. The investor should always challenge the appraisers parameters and the output when assessing the market value. The investor can now explain why the appraiser came up with this market value because he provided the input, he challenged the appraisers and considered the appraisers parameters. In other words, he understands and can interpret the rationale behind the valuation conclusively.

The research objective was:

Is there a preferable valuation procedure which can show, in a transparent way, the risk, sentiment and emotion for a listed institutional retail investor?

The current situation is that risk and sentiment is not transparently shown. There is a preferable valuation procedure which can show this. The model should be the DCF model with a twenty year holding period. The DCF is a sophisticated model whereby the discount can show the sentiment and value adding components such as a liquidity premium and specific premium based on the location, the key features and the occupation of each property.

Recommendations

My recommendations to UR concerning the valuation process is to be very strict and adopt a market leading stance in the valuation process. The principal of the valuation assignment is leading and a required output and calculation model should be implemented. A tender should be held to see which

appraisers are conforming to the new UR standards. This can reduce indirect costs arising due to the processing of the data (market values) taking less time for the UR staff to process.

It will still be essential to make sure that the information given to the appraisers is correct and identical to what is given to other appraisers. Following this, the role will change from an information provider into challenging the appraisers parameters and output. UR can implement this because it has gathered comprehensive knowledge about all of its assets.

Turning to consistency, UR compares all its assets with an international focus (all the assets owned by UR). The appraisers should also do this to align with such international direction. This will add quality to the valuation report and will provide valuable insight into the international market.

Striving for a better insight in risk and sentiment, UR is free to form its own policy about reporting the risk and sentiment. As mentioned, a discount rate consisting out of market evidence plus corrections will be compared with a yield composition based on a risk free rate, plus corrections for value adding components. My recommendation is that by implementing this comparison will bring the real estate perception into the valuation report.

Critical remarks

When looking back at my research I can conclude that the research is done properly. However, there are always some aspects which could be done differently. Improvements regarding the research could be:

- Involve more investors in the research. These could be the investors from the peer group and could demonstrate that not only UR is facing these difficulties concerning the valuation process.

- Working with a large data set. This can substantiate the conclusions of this research with statistical evidence. Given the timeframe this was not possible to create. An additional consideration is that the market values of individual assets are very confidential and therefore it is difficult to build a data set.

- How is it possible to prove the market values produced by the appraisers are truly the market values? Is there a certain spread in the valuation report yields and the actual sale prices? Every market value in a valuation report are hypothetical and therefore not always correct.

- Intrinsic value, what would happen if the total rent roll of the company would be compared with a market yield. Would this be comparable with the appraisal dates stock price?

- When using a DCF it is harder to establish a clear feeling with the market. Even a small difference between appraisers in valuation reports won't guarantee a good value. The ultimate check whether a valuation is right is when a market transaction is done of a comparable asset.

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