Analysis of German real estate funds:
Selection criteria for investment opportunities perspective

Author: Esther Himbert
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Supervisor: Abukar Warsame
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Author Esther Himbert
Department School of Architecture and the Built Environment
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Supervisor Abukar Warsame
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Abstract

This study is focused on real estate funds formed in Germany and has two major purposes: first to investigate the liquidity crisis and followed change of the legal framework for German real estate funds and secondly to demonstrate the impact on investment selection criteria of German real estate investment companies.

By both quantitative and qualitative methods the thesis approaches those two different purposes. The quantitative part provides theoretical background about the construct of open-end and closed-end real estate funds and about the triggers and effects of the liquidity crisis. The qualitative part consists of an online survey that was sent to German real estate investment companies in which respondents indicated their preferred criteria for real estate investment opportunities. Furthermore telephone interviews on this topic were conducted with four German real estate investment experts. In the end the findings from the survey and the interviews are applied to a case study about a trophy asset in Luxembourg, in order to analyze if this property meets the investment criteria of German real estate funds.

The survey and the conducted interviews indicate that German real estate investment companies have adapted to the risk-averse investment behaviour of investors and preferably make safe haven investments in terms of the investment style, the location of the real estate asset and the characteristics of the property itself and its tenants. The case study as well confirms this result.
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Esther Himbert
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<th>Full Form</th>
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<tr>
<td>AIF</td>
<td>Alternative Investment Funds</td>
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<tr>
<td>AIFM</td>
<td>Alternative Investment Fund Managers</td>
</tr>
<tr>
<td>AnsFuG</td>
<td>Investor Protection and Capital Markets Improvement Act (Anlegerschutz- und Funktionsverbesserungsgesetz)</td>
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<td>ARIS</td>
<td>Absolute Return Innovative Strategies</td>
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<td>BREEAM</td>
<td>Building Research Environmental Assessment Method</td>
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<tr>
<td>BaFin</td>
<td>Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht)</td>
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<td>BN</td>
<td>Billion</td>
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<tr>
<td>BVI</td>
<td>Federal association of investment and asset management (Bundesverband Investment und Asset Management e.V.)</td>
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<tr>
<td>CBRE</td>
<td>CB (Coldwell Banker) Richard Ellis</td>
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<tr>
<td>CEREFs</td>
<td>Closed-end real estate funds</td>
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<td>DGNB</td>
<td>German Certification for Sustainable Buildings (Deutsches Gütesiegel Nachhaltiges Bauen)</td>
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<td>DTZ</td>
<td>Debenham Thouard Zadelhoff</td>
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<td>EFAMA</td>
<td>European Fund and Asset Management Association</td>
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<td>EFC</td>
<td>European Fund Classification</td>
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<td>EU</td>
<td>European Union</td>
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<td>GCEREFs</td>
<td>German closed-end real estate funds</td>
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<tr>
<td>GOEREFs</td>
<td>German open-end real estate funds</td>
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<tr>
<td>HQE</td>
<td>French Certification for Sustainable Buildings (Haute Qualité Environnementale)</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>InvG</td>
<td>German Investment Companies Act (Investmentgesetz)</td>
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<td>INREV</td>
<td>Investors in non-listed real estate vehicles - European industry trade association</td>
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<tr>
<td>IPO</td>
<td>Initial public offering</td>
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<tr>
<td>JLL</td>
<td>Jones Lang LaSalle</td>
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<td>KAGB</td>
<td>German Capital Investment Code (Kapitalanlagegegestzbuch)</td>
</tr>
<tr>
<td>LEED</td>
<td>Leadership in Energy and environmental design</td>
</tr>
<tr>
<td>NDA</td>
<td>Non-disclosure agreement</td>
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<tr>
<td>OEREFs</td>
<td>Open-end real estate funds</td>
</tr>
<tr>
<td>UCITS</td>
<td>Undertakings for Collective Investment in Transferable Securities</td>
</tr>
<tr>
<td>VGF</td>
<td>Association of Non-tradable closed-end funds (Verband geschlossene Fonds)</td>
</tr>
<tr>
<td>WALD</td>
<td>Weighted average lease duration</td>
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1 Introduction

Since the late 1980s investments into real estate assets have become more and more popular. One of the most important real estate investment vehicles is indirect investment through real estate funds which can be divided into closed-end and open-end real estate funds. The key differentiator of both fund types is the redemption policy. While closed-end fund shares can only be redeemed at the expiration date of the fund term, open-end fund shares can be redeemed during the term of the fund, at certain point of times.

In particular in Germany real estate funds have been considered as popular real estate investment vehicle. Nowadays German real estate funds are still one of the main players in the European real estate investment management sector but they have passed through a period of dramatic changes in the last six years. The global financial crisis in 2008/2009 not only affected the capital markets but also the entire investment fund industry.

1.1 Problem analysis

In contrast to other European countries real estate funds in Germany proved to be a successful investment vehicle for almost 50 years. However due to the global financial crisis investors lost their confidence in real estate investment funds which resulted in massive withdrawals of their fund shares. The flood of redemption demand exceeded the liquidity ratios of German open-end real estate funds and lead to a period of suspended redemptions and ultimately in the liquidation of a number of open-end real estate funds. Since 2012 real estate assets of €5,6 bn have already been sold by funds in liquidation (DTZ a, 2014).

In 2013 the German government reviewed all regulations of the fund industry and implemented a completely new statutory basis, for all kind of real estate funds, closed-end as well as open-end funds. German real estate funds are positioned in a fully revised legal basis in order to improve the transparency of real estate fund vehicles and to regain investors’ confidence. For open-end real estate funds the new regulations not only introduce notice and holding periods for fund shares which have to be observed but also cancel the key characteristic of daily share redemption. Regarding the closed-end funds the new legal basis implies a completely fresh start due to the fact that for the first time they are bound to specific regulations which require the reorganization of their business processes. If the new legislation will meet the expectation of regaining investors’ confidence is still uncertain and can only be responded in the course of time.
1.2 Purpose and objective

This thesis is focused on real estate funds formed in Germany. The main objective is to explain the construct of open-end and closed-ended real estate funds and to analyze their liquidity problems of the last few years.

- The aim is to understand the triggers and effects of the severe liquidity crisis and to clarify the new legal framework for German real estate funds.

Since real estate investment funds are still in a phase of transition real estate investors are seeking for information in order to understand the new regulations before they will ultimately all come into effect.

- Another objective of this thesis is to determine which impact the liquidity crisis had on the investment selection criteria of German real estate investment companies.

- Which criteria do they consider when evaluating real estate investment opportunities and is there a general trend that can be identified?

1.3 Limitation

Since the new statutory basis for real estate funds in Germany has been implemented quite recently (July 2013) there is only very few data available that tracks investors and real estate funds reaction to those severe changes. Most real estate fund market reports are published annually or semi-annually and it will take more time to judge if investors’ confidence was regained and if the real estate fund industry is heading into a better future.

Concerning the qualitative analysis it resulted quite difficult to receive a significant amount of responses. In total 90 survey recipients have been addressed, out of which about 50 didn’t open the link to the survey, 4 emails bounced due to invalid email addresses and all other recipients had to be given a call reminding them of the survey. Giving a personal call helped to achieve the outcome of 9 completed surveys and 4 interviews via telephone. The reasons for the non-participation that could be figured out were too many survey requests at the same time or that the investment company in general doesn’t provide any information about their acquisition profile. Another reason for the low participation rate certainly was the short time window for conducting the survey. Many recipients were out of office in that time because of business trips or personal holidays and a larger time window would have helped to collect more responses.
1.4 Outline

Following the introduction and the explanation of the chosen methodology this thesis is divided into three sections.

The first section focuses on real estate funds in general, their definition and classification, and leads to a closer look at real estate funds formed in Germany. The recent development and present situation of open-end and closed-end funds is explained in detail.

The second section provides an overview of possible investment selection criteria and discusses the results of the survey and interviews with German real estate investment experts. Additionally this section applies the findings from the theory and the survey about the investment selection criteria to a case study about the disposition of a trophy asset in Luxembourg.

In the last section of the thesis a conclusion is drawn and suggestions for further research are expressed.
2 Choice of methodology

2.1 Data sources

In this thesis both quantitative and qualitative data is used. Quantitative data about real estate funds and in particular about the German real estate funds are mostly taken from academic articles, specific real estate related textbooks and also from the websites of important real estate associations in Germany such as BVI. Further information was retrieved from published reports of real estate service companies such as DTZ, CBRE or JLL. Every company in the real estate business uses these reports which are periodically published in order to keep track of the real estate fund market and to observe performance changes.

The qualitative part of the thesis is comprised by an online survey with real estate investment companies in Germany which focuses on their preferred selection criteria for real estate investments. Email-based campaigns have been sent out to 90 real estate investment experts from 57 different investment companies for real estate. Their contact details could be verified through the company’s homepages or by internal contact lists from DTZ. The emails contained a campaign with a link to the survey and indicated the survey close date. Both the survey and the campaign were designed with the professional research program of DTZ. A campaign is a form of email-marketing which makes it possible to send out numerous personalized emails to identified survey recipients at the same time. Moreover the campaign supports the likelihood of impulsive responses because it offers a direct link to the survey on which interested recipients only need to click (Chaffey et al., 2009). Regarding the survey design the aim was to create a survey which is efficient in terms of comprehensibility and simplicity and which can be completed in less than 5 minutes. It is important that the completion of the survey only requires a few minutes in order that real estate investment experts agree on participating. Therefore the survey only contains very short questions, is clearly structured in two parts and as motivation, the survey participants view a progress bar when completing the survey.

The first section is modelled after the survey that conducted Falkenbach in 2009 when studying the market selection criteria in international real estate investments. It contains general questions about the background of the respondent itself and the investment company. The second part provides 18 possible selection criteria for real estate investments and the respondents should only click on those criteria that they prefer for real estate investments.
2.2 Case Study

In terms of case studies it is possible to differentiate three different types: instrumental, intrinsic and collective case studies. The one included in this thesis is an instrumental case study because the focus is put on the application of the findings about the selection criteria to the disposal project. The project is looked at in detail in order to understand the context but the property itself is of “secondary interest” and only represents other, similar properties that might be on the market (Stake, 1994). This means that the case study only plays a supportive role by figuring out if the findings from the literature and the survey are reflected in a real case and it is not intended to generalize the findings in any form. In contrast to the instrumental case, the intrinsic case is interested in the understanding of the peculiarities of the specific case and not of a general phenomenon. The third type of case study is a collective case study in which a number of cases are analyzed jointly and are compared to each other in order to develop and understand a certain theory (Stake, 1994).

During my internship at DTZ Luxembourg I have been firmly integrated in the disposition of a trophy asset\(^1\) in the City of Luxembourg and I decided to include this project in the master thesis as a case study. It is suitable as case study because among more than 300 contacted possible investors around the globe were also 20 German real estate investment companies. The aim of this triangulation method is first to evaluate if according to the findings from the applied literature about possible investment selection criteria and from the results of the survey or interviews the trophy asset is an interesting investment opportunity for German real estate investment companies. Then secondly these theoretical results are compared to the results from the practice in order to see if they correspond to each other or are completely different.

\(^1\) A trophy asset is a property that can be characterized by being absolutely unique and special in the real estate market. It might be of historical or public interest and commonly requires a high amount of investment (Oak Investment Management Group, 2013).
3 Real estate funds

3.1 Investment fund classification

“Investment funds are specially constituted investment vehicles, created with the sole purpose of gathering assets from investors, and investing those assets in a diversified pool of assets. [...] Small investors can buy exposure to a professionally managed and diversified basket of financial or other assets. Overheads are spread over the pool of investors, reducing average cost for the investor” (European commission, 2006).

The construct of an investment fund has existed since 1774 and has proven as popular investment vehicle up to the present day. The best way to exemplify its structure is with a triangular shape, illustrated in Figure 1. Every monetary investment made by investors is pooled in a depositary bank and not in the investment fund company itself. This capital division ensures that investors’ capital is strictly separated from other funds and own assets of the investment company. In case of bankruptcy this division entails the advantage that investors’ capital is not affected. The main task of the investment fund company is to manage the fund and to make investment decisions (BVI, 2012).

![Figure 1 - Triangular shape of an investment fund](source: Own illustration, modelled after BVI, 2012.)
Real estate fund is a “broad term” and refers to a number of different products which invest in assets of the real estate industry (European commission, 2008). To get an idea about the classification of the fund universe and the integration of real estate funds in this system, the European fund classification system is explained in the following section.

The European Fund and Asset Management Association (EFAMA) developed a European Fund Classification (EFC) system in order to increase the transparency and provide standards for the comparison of funds. The EFC classifies funds according to their main asset type in which they invest and creates six basis fund categories: equity, bonds, multi-asset, money market, absolute return innovative strategies (ARIS) and other kind of funds. This last category “others” contains all type of funds which fall outside the five large fund categories. Apart from asset-backed securities, capital protected funds, commodities, convertibles, guaranteed funds, infrastructure funds, lifecycle funds and REITS, real estate funds, namely open-end and closed-end real estate funds, also belong to this category. (EFAMA, 2012). Figure 2 provides an overview of the fund classification according to EFAMA.

![European fund classification diagram](source: Own illustration)

Real estate funds represent an important category of the fund classification system and provide investors the opportunity to invest in properties, land and other property related assets (Galiniene & Bumeleyte, 2011). Both types of real estate funds, closed-end real estate funds (CEREFs) as well as open-end real estate funds (OEREFs), are analyzed in detail in the following sections.

Figure 2 - EFAMA investment fund classification

Source: Own illustration.
3.2 Open-end real estate funds

Open-end real estate funds pool money from many investors in order that the fund management companies can use this money for investing in real estate assets. An investment into an open-end real estate fund means buying shares of the investment fund company. Open-end real estate funds are not traded on the secondary market such as stocks but investors can purchase and redeem funds to the investment management company (Maurer et al., 2004). Share purchases can be realized every day; however this is not always possible for the redemption of shares because here special rules and time limits have to be observed (BVI a, 2014).

As long as the fund provides liquidity, the price of an open-end real estate fund share corresponds to the net asset value (NAV), which equals the total value of the assets in a portfolio minus liabilities divided by the total number of shares outstanding. This price is calculated at the end of each trading day (CEFA, 2006).

\[ \text{NAV} = \frac{\text{Total value of all securities - liabilities}}{\text{Total number of shares}} \]

Equation 1 - Net asset value

The price of issued fund shares is slightly higher than the NAV because it contains on top an offering charge of about 5% (Maurer et al., 2004). In case the liquidity ratios of the fund drop under the critical line of 5%, share prices are determined by demand and supply and investors have the option to sell their shares in the secondary market (Schweizer & Haß, 2013).

OEREFs invest their capital in commercial properties like offices, retail properties, hotels or logistics. In order to do so fund managers analyze different regions and markets and try to make sure that the investments are well spread between geographical location and property types. Their performance is measured by the rental income, interest income and the valuation of the properties. But in comparison to equity funds, OEREFs are much less volatile and commonly offer stable returns (BVI a, 2014).

Investments in real estate assets are long-term investments carrying a high amount of transactions costs, usually between 4 – 7,5% depending on the individual country in which the fund operates. The high transaction costs derive from management costs and applied
transfer taxes and make investments in OEREFs unsuitable for short-term investments. Generally the investment horizon of OEREFs is at least 5 years (European commission, 2008).

Every European country offering open-end real estate funds has specific regimes under which the OEREFs are regulated. But there are also a few common aspects which are required by all countries. First of all every OEREF and its management company have to be authorized by a financial regulator. OEREFs are obliged to hold minimum liquidity amount in order to guarantee a redemption frequency to investors. A well-functioning liquidity management is enormously important because fund managers continuously have to maintain certain liquidity levels in case investors want to redeem their shares. It is not a big issue if there are only a few investors wishing to withdraw their money from the fund. However if there is massive demand for share redemptions OEREFs are allowed to suspend share redemptions for a certain period of time. This method can only be applied as very last measure and the proceedings differ from country to country. Although the suspension of share redemptions is an absolute uncommon practice it has so far been used in the UK, the Netherlands and two times in Germany (European commission, 2008). The precise circumstances of these two suspended redemption periods are explained in section 3.4.1.3 Liquidity crisis.

As indicated above open-end real estate funds did not prove to be a successful investment vehicle in every country. In the Netherlands the open-end structure could not win acceptance in the long run. One famous example of failed OEREFs is the RODAMCO case. At the end of the 1980s the Robeco group, a Dutch investment fund group, owned one of the largest real estate funds in the world – the RODAMCO fund. The low interest rates at that time favored an investment into the RODAMCO fund because it offered a return that was 3% higher than the one of a bank deposit. The large investment flow however was interrupted by the increase of interest rates in 1990 and a lot of investors started to sell their fund shares. RODAMCOS share policy of buying back shares at NAV if any investor wishes to sell, lead to serious liquidity problems and the structure of the fund had to be transformed to a closed-end real estate fund (Bannier et al., 2007). Although other countries have failed to establish open-end real estate funds as important investment class, in Germany they are by far the most popular investment vehicle for real estate investments (Fecht & Wedow, 2009).
3.3 Closed-end real estate funds

Closed-end real estate funds (CEREFs) pool money from different investors in order to finance properties which are too expensive to be financed by individual investors. Often closed-end funds are comprised by more than 1000 investors. All closed-end fund investments are long-term investments, limited by the expiration date of the fund and focus on tangible assets such as ships, planes and real estate assets (VGF, 2014).

Although closed-end real estate funds were not legally defined in the past they could be characterized by some typical attributes. The key difference to open-end funds is that closed-end fund companies are not obliged to redeem shares. Closed-end funds raise a fixed amount of capital through an initial public offering (IPO) by selling shares through licensed brokers (Anderson et al., 2010). Usually an investment into a closed-end real estate fund requires a minimum investment amount that ranges between €5,000 - €25,000 (VGF, 2014). The fund’s capital is invested in real estate assets which fit in the overall strategy of the fund, but the number of purchased properties is very low (Anderson et al., 2010). Often closed-end real estate funds are launched for individual real estate projects which indicates that they are not risk-balanced (BVI a, 2014).

Every closed-end real estate fund is dedicated to a specific real estate investment which is introduced by the initiator, a general partner of the fund, who not only plays a representative role of the fund company but who is also responsible for the day-to-day management. The investment company’s task is to manage the acquisition and sales processes of properties (Knepel, 2012). There are two possibilities for an investor to become part of the investment fund company. Investors of a closed-end property fund can either invest directly into the fund and become a shareholder for example as limited partner, or they can invest indirect through a trustee (Just, 2012). It is important to note that shares in closed-end funds aren’t securities but represent a share in a company which turns the investor into a partner of the company (Knepel, 2012). A detailed investment structure is comprised in both the partnership agreement and the trustee agreement (Just, 2012). Indirect fund participation commonly is the more popular alternative because direct investment requires some extra efforts like the registration as shareholder in the commercial register which in turn requires the certification by a notary. Banks use to finance the acquisition of real estate assets by providing financial support through bank loans (Hohler, 2012). The following Figure 3 demonstrates the construct of a closed-end real estate fund with all involved parties.
Figure 3 - Structure of closed-end real estate funds
Source: Own illustration, modelled after VGF, 2014.

As soon as the investment period which often lasts around three years is over, it usually takes another 3-5 years until the fund reaches its termination date. At this termination date investors’ assets are sold and their capital is returned (Baum & Hartzell, 2012). Generally closed-end real estate funds invest in different types of property usages whereas the office properties clearly outweigh other types of property usages like retail, residential, hotel, logistics etc. (Knepel, 2012). Once the IPO is completed the fund is closed and the investment company neither issues shares to investors nor redeems shares from investors. However if an investor wants to redeem shares before the expiration of the fund period, they have the possibility to sell their shares to other investors of the fund on the secondary market (Anderson et al., 2010). The secondary market consists of several institutions managed by issuing houses, promoters or institutional investors (VGF, 2014). Those transactions of closed-end investment fund shares are made at market prices, determined by demand and supply on the secondary market, hence the transaction prices are much more volatile than the calculated NAVs. Closed-end funds can be traded at discount or at premium to the NAVs but often the market prices of closed-end fund shares are much lower than the NAVs (Anderson et al., 2010). The price fluctuations derive from investors’ perception about the market, the performance of the fund, the quality of the management and the yield performance (CEFA, 2006). Some funds are even traded at up to 50% below their NAVs (Stein, 2013). The discount to the NAV can result from little performance track of the fund, large investments into an unpopular industry or simply low trading activity of the fund (Hirt & Block, 2012). However it is noteworthy that discounts and premiums are only short-term phenomena and in the long-run CEREFs are related to their NAVs (CEFA, 2006).
3.4 German real estate funds

3.4.1 German open-end real estate funds

Open-end real estate funds are the main real estate investment form in Germany and have almost continuously been successful for over five decades. Originally OEREFs were designed for small private investors but nowadays more and more institutional investors are investing into open-end real estate funds (Just, 2012). Since 1998 the total fund volume has almost doubled (BVI e, 2014). According to the BVI statistic of the 31st March 2014, German open-end real estate funds hold €122.6 bn of real estate assets all over the world (BVI d, 2014).

The first OEREF in Germany was set up in 1959 and since then the number has been growing continuously (Sebastian & Strohsal, 2012). Most growth was recorded after the European Monetary Union which enabled foreign investments without currency risks. Little by little the German open-end real estate funds have gained market share in the European Union (Stein, 2013). GOEREFs often showed a favourable risk/return profile and offered return rates that ranged between 3-6% in most years. Volatilities used to be below 1% but since the liquidity crisis in 2008, volatilities have increased for many companies (Stein, 2014).

3.4.1.1 Peculiarities

The open-end structure indicates that the number of issued shares is not fixed but shares can be bought or redeemed on daily basis (Maurer et al., 2012). Funds need to hold a large amount of liquidity in order to offer well-functioning liquidity insurance for investors. The open-end structure was guaranteed in Germany under the former law, prior to the second liquidity crisis which started in 2008/2009. Due to the global financial crisis, investors lost their confidence in investment funds and used their right of daily share redemptions extensively. Those massive withdrawals provoked a liquidity crisis of German open-end real estate funds and were the beginning of a long period of redemptions, several redemption suspensions and fund terminations (Stein, 2013). Since January 2013, the implementation of a new regulation in Germany changed this main characteristic of daily share redemption (Sebastian & Strohsal, 2012). All new regulations are described in detail in section 3.4.1.4 “New legislative framework”.

Open-end real estate funds can be divided according to their investor type into two groups: Public funds designed for private and/or institutional investors and Spezialfonds which are
exclusively designed for special institutional investors (IPD, 2013). Institutional clients are mostly pension funds and insurance companies but can also consist of other institutions like foundations, governments and sovereign wealth funds (EFAMA, 2013). *Figure 4* illustrates the two different types of GOEREFS.

**Figure 4 - Structure of GOEREFS**

Source: Own illustration.

GOEREFS have to be managed by investment management companies which are commonly owned by banks and insurance companies. In most cases they take the legal form of a limited liability company (GmbH) or sometimes of a stock corporation (AG). Prior to the implementation of the new statutory framework, the legal framework of an open-end real estate fund in Germany was based on the German Investment Companies Act (InvG) which covered the following main regulations:

- **Minimum amount of liquidity**: GOEREFS have to hold a minimum of 5% and a maximum of 49% of their assets in cash (Bannier et al., 2007).
- **Minimum amount of real estate assets**: GOEREFS have to invest at least 51% in real estate assets.
- **Risk diversification**: No single property can have a value that is higher than 15% of the total portfolio value.
- **Debt**: The total amount of debt cannot exceed 30% of the total aggregated value of the fund’s real estate assets.
- **Share redemptions**: GOEREFS are allowed to suspend share redemptions for a period of up to two years in case the fund’s liquidity drops under the 5% threshold. If after the suspension period the fund is still not able to meet investor’s liquidity requests, the fund has to start a process of liquidation (Sebastian & Strohsal, 2012).
Comparing open-end real estate funds throughout Europe, their enormous success in Germany has been an absolute exception. Sebastian & Strohsal (2012) mention two aspects which are responsible for the incomparable success of open-end real estate funds in the past. The first reason is the high-level of risk protection for investors due to liquidity insurance. German investors are extremely uncertain about the moment in which they need to dispose of liquidity. They are risk-averse investors, demand for insurance and smooth return patterns. The daily redemption regulation which is the liquidity insurance perfectly fits into the investment profile of German investors. The smooth returns are ensured by the effect that properties are only valuated once a year. The second factor that led to the success of OEREFs as predominant investment vehicle in Germany is linked to the way of transforming liquidity. If investors mistrust the funds management or its performance they can simply withdraw their money invested in long-term real estate assets within a short time frame, a fact that can even lead to the liquidation of the fund. In Germany however investment funds have a special institutional design. The investment fund company is supervised and controlled by the depositary bank, often powerful universal banks which can support the investment fund companies from a liquidity shortage (Sebastian & Strohsal, 2012). However Fecht & Wedow (2009) point out that the willingness of the depositary banks to support the funds is also limited. If the liquidity demand of funds is too high because it would affect the banks own businesses and responsibilities towards their shareholders, the depositary banks will refuse to support the funds just for the benefit of preserving the fund’s reputation.

3.4.1.2 Valuation

A unique characteristic of the GOEREF structure is the valuation approach for the assets in a fund’s portfolio. In contrast to financial assets whose value is determined by demand and supply on the secondary market, the value of each property in a portfolio is based on a valuation of a professional valuer which makes the valuation to an important component of the fund’s performance (Sebastian & Strohsal, 2012). The whole portfolio has to be evaluated on a 12 month basis and each time a fund acquires or sells properties by an independent group of experts (Bannier et al., 2007). Independent from the fund means that the valuation experts may not work for the fund company for more than five years (Just, 2012).

Voigtländer (2012) points out that each property consists of unique features which make the valuation process very complex and difficult. Properties differ in terms of size, age and
location and the valuation approach has to be adjusted for the different characteristics in order to obtain adequate and comparable property prices. The German law allows three different valuation approaches: the cost approach, the comparable sales method and the income approach.

- **Cost approach**
  
The value of a property determined by the cost approach is the replacement cost of the property. How much would it cost to deteriorate the building and re-build it? Valuers in Germany are only allowed to use this method when there is no comparable transaction available on the market.

- **Comparable sales approach**
  
  This valuation method compares the subject property to a number of similar property transactions in the same segment and determines a price for the building by making adjustments. The determination of similar refers to similarities in terms of property attributes such as type of use, location and site related factors. It is also noteworthy that a sufficient number of comparable property transaction data has to be collected and that this data is not too old. Therefore the comparable sales method is only applied to standard apartments and buildings of which sufficient data is available and which are not characterized by specific property attributes (Schnaidt & Sebastian, 2012).

- **Income approach**
  
  The income approach estimates a property value which is based on expected future cash flows and on the expected rate of return or discount rate. It can be applied by two different methods: the direct capitalization approach and the discounted cash flow method (Fisher & Louziotis, 2013). The particularity of the income approach in Germany is that it distinguishes between a land value and a building value which together result in the final property value. This differentiation is based on the idea that the land value is an everlasting value whereas the value of a building depreciates over time and requires renovation (Meister & Dressel, 2012).

A pilot survey carried out by McParland et al. in 2002 reveals that that the preferred valuation approach of German valuers is the income approach. Easy implementation, transparency of rental income and simple calculation of investors yield are arguments that favor this approach in Germany (McParland et al., 2002). A general problem of any property valuation method is that share prices are quoted once a day but the property valuations take place only once a year. Thus, share prices of OEREFs contain up to 12 months old property prices which leads to the fact that NAVs are lagged to movements and changes in the real estate market. The share values of OEREFs are typically contrary to booms and busts in the real estate markets. If the market booms, share values are low, and in times of economic
downturns share values are still overvalued. The daily calculated NAVs often don’t reflect the “true value” of the properties in a portfolio which creates a smoothing effect (Sebastian & Strohsal, 2012).

3.4.1.3 Liquidity crisis

Real estate assets are illiquid assets and considered as long-term investment vehicles but the open-end structure of real estate funds enables investors to redeem shares at any time and without notice. The daily redemption right cannot be combined with the long-term structure of real estate investments and this disequilibrium bears the risk of unexpected massive withdrawals of shares. For example in case of a weak economic environment or a financial crisis, property values are supposed to decrease (Maurer et al., 2012). Due to the lagged NAVs, the redemption values of the shares only adjust slowly to changing market prices of the properties and investors try to sell their shares before the NAV will reflect the low market prices (Just, 2012). In order to regain liquidity, open-end real estate funds can raise cash by selling their properties at fire sale prices which result in substantial losses for the fund company (Maurer et al., 2012).

As mentioned before, if liquidity is too short to meet investors demand open-end real estate funds are allowed to suspend redeeming shares for a certain period of time (Sebastian & Strohsal, 2012). This situation arose two times in German history. The first liquidity crisis happened during 2005/2006. The cause was the uncertainty about the correctness of the property valuation in fund portfolios. In December 2005, Deutsche Bank announced suspended redemptions for its largest open-end real estate fund, Grundbesitz-Invest, until March 2006 in order to revalue all properties in the portfolio. At this time investors were able to withdraw shares at daily basis and numerous investors used this right extensively by withdrawing more than 300 million € in the three days before the suspension (Schweizer & Haß, 2013). These enormous share redemptions also provoked massive withdrawals of shares of other open-end real estate funds and in January 2006 redemption was no longer possible for investors of two further open-real estate funds (Maurer et al., 2012). Real estate portfolios are often structured in the same way and investors fear that their shares might also be affected and the demand for withdrawing their money increases. This episode let investors question the credibility of the open-end real estate fund system. But considerable damage of the OEREFs sector could be prevented by the announcement of many depositary banks to support the fund companies in case of liquidity shortages (Bannier et al., 2007).
Until April 2006 all frozen open-end real estate funds were able to re-open (Maurer et al., 2012).

Real estate markets are no isolated markets but they are influenced by the overall development of the economy (Voigtländer, 2012). Therefore the second liquidity crisis occurred in the turmoil of the global financial crisis in 2008 which forced a lot of open-end property funds to freeze redemptions. Despite a freeze on redemptions, since September 2010, 16 funds were not able to meet investors demand for liquidity and had to announce liquidation. During the process of liquidation every fund tries to sell its whole portfolio of real estate assets at the highest price possible under the current market environment. In order to achieve this goal every fund is given a certain time window until their mandate will expire. Every property in the fund’s portfolio which cannot be sold within this time frame will be transferred to the possession of the depository bank which will complete the selling process. The funds are also allowed to speed up the liquidation process in order to benefit from given market conditions which help to optimize the sales prices for the properties in the portfolio. Due to the pressure imposed by the liquidation dates, some GOEREFs were forced to sell their assets with great discount to book value. In European comparison, it was only in the UK, where assets of GOEREFs were sold at premium to book value in 2013. All other fund assets were sold at discount to book value. The discounts of sold assets in 2013 ranged from 8% in Germany to 26% in the Nordics. Figure 5 demonstrates in which countries German real estate funds assets were sold at premium or at discount to book value in 2012 and 2013.

![Figure 5 - Sales price to book value of GOEREFs assets](source: DTZ a, 2014)

Real estate assets of €5.6bn have already been sold since 2012 and until 2017, assets of about €15 bn still have to be sold by remaining 14 GOEREFs in the process of liquidation. This amount corresponds to almost 20% of the total fund volume held by open-end real estate funds. In 2016/2017, three of the largest GOEREFs in terms of total asset value which hold portfolios of €2.8 bn - €4.5 bn each, are going to expire (DTZ a, 2014). Another fund
might be liquidated as well. The *SEB ImmoPortfolio Target Return Fund* with total asset value of €779 million currently has a freeze on redemption and the re-opening decision will be made in June 2014 (BVI c, 2014). The figure below provides an overview of the 14 GOEREFs that are in the process of liquidation and indicates their fund volumes in million €.

![Funds in liquidation](image)

**Figure 6 - GOEREFs in liquidation**
Source: BVI c, 2014.

### 3.4.1.4 New legislative framework

The two aforementioned liquidity crises triggered in 2005 and 2008/2009 which resulted in frequent closures of open-end real estate funds have significantly damaged the reputation of open-end real estate funds in Germany. With the beginning of the global credit crunch in 2008 the public lost its confidence in the capital markets and the mistrust in the investment fund market has started to get stronger (INREV, 2012). *Raettig (2014)* explains that two different cultures clash within the investment universe: the risk-seeking banking industry whose business is to generate return and the risk-averse private investors who wish for high returns. After a long period of massive withdrawals, failed re-openings and liquidations of GOEREFs the German government decided that open-end real estate funds have to be reformed (INREV, 2012). The new regulations that were introduced by the German government in 2013 are explained in detail the following sections.
On 8th April 2011 the government set up the new investment regulation “Investor Protection and Capital Markets Improvement Act” (AnsFuG). Existing open-end real estate funds had to amend their contractual conditions until the 1st January 2013 when the new legislation took effect for all private funds. The new legislation targets two objectives: firstly it is aimed to improve protection of small private investors by offering more possibilities to fund managers for managing the liquidity and secondly to support the character of open-end funds as a medium and long-term investment (DTZ, 2012). In order to achieve the second objective a key transformation for GOEREFs was implemented: investors are no longer allowed to redeem shares at any point of time. From January 2013 onward every new investor is required to hold the fund shares for a minimum period of 24 months. All investors, both new investors and current investors, are allowed to redeem shares with value of up to €30.000 every 6 month, which means that investors can freely dispose of shares with a value of €60.000 within 1 year. All Investors can also withdraw a higher amount of shares, or even all their shares, provided that a 12 months’ notice period is observed (Sebastian & Strohsal, 2012). The main changes of the AnsFuG directive are summarized below:

- **Suspension of redemptions**: Open-end real estate funds are obliged to suspend investors demand for share redemptions in case of a foreseen liquidity shortage.
- **Periodic payout**: Funds are obliged to distribute at least 50% of their income as dividends (DTZ, 2011).
- **Property valuation**: In order to guarantee that the real estate fund shares reflect the market conditions, valuation of properties are allowed to be undertaken every 3 months but have to be at least undertaken every 12 months. So far properties have only been valued on yearly basis.
- **Reduced debt ratio**: Increasing the safety regulations for investors the debt ratio of funds will be limited to 30% (instead of 50%) taking effect at the end of 2014 (DTZ, 2012).
- **Required qualitative standards for consultants**: Consultants and brokers in Germany have to be registered in a non-published database, managed and supervised by the BaFin. In case the bank consultant breaches the provisions, BaFin is allowed to impose fines. As a last resort BaFin can also demand a prohibition of employment for up to 2 years (BaFin b, 2012).
- **Process from closing to liquidation**: In case the period of suspended redemptions lasts for more than 12 months, properties can be sold at a price of 10% under the valuation price so that the fund is able to recreate liquidity. After 24 months, this
percentage is increased to 20%. If after further 6 months the fund is still not able to meet investors demand for liquidity, the investment management company loses the mandate of the fund and the process of liquidation must be initiated (Sebastian & Strohsal, 2012). The following Figure 7 illustrates this process.

![Figure 7 - Steps from closing to liquidation](source: DTZ a, 2010)

### 3.4.1.4.2 KAGB

The expectation that the AnsFuG would regain investor’s confidence into the German open-end real estate fund industry could not be met. On 22\textsuperscript{nd} July 2013 the German government put in effect the German Capital Investment Code (KAGB) which implements the Directive 2011/61/EU on Alternative Investment Fund Managers (AIFM) of the European Parliament and of the Council. Following the mistrust of investors due to the financial crisis, European parliament introduces pan-European legislations with the purpose of investor protection and financial stability in July 2011 (KPMG, 2013). Unlike other European countries Germany not only transposes the AIFM directive but also implements a large number of additional modifications for the entire investment fund industry. The new KAGB contains more than 300 paragraphs and covers the open-end as well as the closed-end funds sector in Germany. In addition it replaces the German Investment Act (InvG) which used to be the regulatory for open-end property funds (DTZ, 2012).

Nowadays the KAGB is the regulatory framework for all types of funds in Germany, applying to both private and institutional investors. According to the KAGB an investment fund is “every undertaking for collective investment” [...] that “collects capital from investors in order to invest it for their benefit according to a defined investment strategy”. Depending on the
type of investment undertaking the KAGB differentiates between Undertakings for Collective Investments in Transferable Securities (UCITS) and Alternative Investment Funds (AIF). UCITS cover all funds that meet the requirements of the pan-European UCITS directive (BaFin a, 2012). Often pension funds and equity funds count as UCITS (BVI b, 2014). All other funds are Alternative Investment Funds and are managed by an investment management company (BaFin a, 2012). Every investment management company has to require a pan-European admission approved by the Federal Financial Supervisory Authority (BaFin) before starting its businesses (KAGB, §17, section 1). The AIF category includes all types of closed-end funds and open-end investment funds which are not regulated by UCITS. These are particularly open-end special funds and open-end real estate funds (BVI b, 2014).

Investment funds are now classified according to their redemption policies in open-end and closed-end funds and according to their investor types in public and Spezialfonds. The difference between public funds and Spezialfonds is the accessibility for investors. Special investment funds are only open for professional and semi-professional investors whereas public fund shares may be held by all investors namely private, professional and semi-professional (KAGB, §1, section 4-6). The term semi-professional investor is introduced as new investor category and refers to every investor who either invests at least €200,000 and additionally is certified by the capital investment company, or everyone who invests at least €10 million (KAGB, §1, section 33). According to the KAGB open-end funds typically invest in financial, liquid assets, open-end real estate funds are the only exception, and closed-end funds invest in illiquid, physical assets (BaFin, 2013). Figure 8 provides an overview of the present investment fund classification in Germany.

Figure 8 - KAGB investment fund classification
Source: Own illustration, modelled after BVI b, 2014.
Concerning open-end real estate funds the former AnsFuG regulations have been transcribed to a large extent and only the redemption policies have been tightened in the KAGB. The AnsFuG regulation that investors may return amounts of up to €30,000 every 6 month was cancelled. Open-end real fund shares that were purchased after 21st July 2013 (implementation of KAGB) may only be redeemed at certain point of times but at least every 12 months (KAG §255, section 29). Open-end real estate fund shares purchased before the implementation of the KAGB are not affected and investors can continue to redeem share values of €30,000 per half-year. But the holding period of 24 months and the 12 month notice period are applicable to both old and new investors (BVI a, 2014). All in all fund managers were able to achieve high net inflows in 2013 which might indicate a successful transformation process of the GOEREF sector. CBRE (2013) claims that German open-end funds “are moving into a new era”, away from the turbulences in the past into a more stabilized and transparent future. Having analyzed German real estate funds in liquidation and their new legal framework the following section focuses on the situation of active open-end real estate funds in Germany.

3.4.1.5 Performance

As mentioned before the total volume of German open-end real estate funds accounts for €122.6 bn. Out of this volume €80.8 bn are hold by 24 active open-end real estate funds that are available for both private and institutional investors. These funds are managed by 15 real estate investment companies. By far the largest two real estate investment fund companies in Germany are Union Investment Group and the Deka Bank Group and together they hold more than 50% of the total fund volume. Also large real estate fund companies used to be the Credit Suisse Group, the KanAm Grund Group and the SEB Asset Management Group. But those three investment companies are in the process of liquidating some of their largest funds which have an accumulated fund volume that is almost as big as the fund volume of their active funds (BVI d, 2014). In total real estate portfolios of about €15,7 bn still have to be liquidated until 2017, which means that the total investment volume will shrink from about €81 bn to €65 bn in the next couple of years (BVI c, 2014). The figure below shows the fund volumes (in million €) of the 15 German investment fund companies which administer 24 active OEREFs.
Spezialfonds or special funds which are exclusively designed for institutional investors hold real estate portfolios of €41, 7 bn. The market leader is the investment company IVG Institutional funds which holds portfolios of €6, 8 bn (BVI d, 2014). With a fund volume that amounted to 5% of the total fund volume of GOEREFs Spezialfonds used to play a minor role until the end of the 1990s. But nowadays Spezialfonds are a popular investment vehicle and their fund volume has increased sixfold (IPD, 2013). Figure 10 provides an overview of the German real estate investment companies that issue Spezialfonds.

Source: Own illustration, modelled after BVI c/ BVI d, 2014.
Concerning the return of GOEREFs, IPD, a world leader organization in performance analysis, quarterly publishes an index of German open-end funds designed for private investors which consists of three different index types:

- German funds: all funds with a minimum investment of 50% in Germany
- European funds: all funds with less than 50% invested in Germany and 75% invested in Europe
- Global funds: all funds with less than 75% investments in Europe (IPD, 2012).

In the first quarter of 2014, public GOEREFs showed a return of 0.0%. The low return ratio of GOEREFs can be explained by the weak performance of those funds that are in the process of liquidation. Active funds clearly show a positive return of 2.2% over the last 12 months. Another important fact is that GOEREFs that have invested outside the domestic market have shown a lower return profile than the ones only investing in Germany (IPD, 2014). 

*Figure 11* summarizes the return levels of GOEREFs in 2014.
3.4.2 German closed-end real estate funds

3.4.2.1 Development

Closed-end real estate funds are a popular investment vehicle among wealthy private investors in Germany. Prior to the implementation of the KAGB, closed-end funds used to be a unregulated investment vehicle and therefore had the reputation as grey capital market (Knepel, 2012). In an investigation about German closed-end real estate funds (GCEREs) in 2012, the German consumer organization Stiftung Warentest confirmed the point of view that investments in GCERFs are quite unsecure. The organization analyzed 58 selected GCERFs in terms of investor protection and came to the result that only 22 funds met the basic demands. 10 GCERFs were rejected from the investigation because their real estate project was not even 100% determined when they had begun to raise capital (Stiftung Warentest, 2012).

The total volume of German closed-end funds in 2013 accounts for €7.1 bn. With 64% real estate funds represent the largest section of the closed-end fund industry in Germany. In comparison to 2012 their total share has increased by 5%. Table 1 provides an overview of the total volume of German closed-end funds and indicates the share of German closed-end real estate funds in 2012 and 2013.

Table 1 - Total volume of German closed-end funds

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total volume of German closed-end funds (in million €)</td>
<td>7380,6</td>
<td>7068,53</td>
</tr>
<tr>
<td>Proportion of GCERFs</td>
<td>59%</td>
<td>64%</td>
</tr>
</tbody>
</table>

Source: Own compilation.
In 2013 the fund volume of closed-end real estate funds composed by equity capital and debt, amounted to approx. €4.5 bn – an increase of about 4% compared to 2012. Funds investing in the domestic market account for the larger proportion of the fund value with about €3 bn (BSI, 2014). Table 2 summarizes the results from 2012 and 2013.

Table 2- GCEREF volume in 2012 and 2013 (in million €)

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>y-o-y change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investments in Germany</td>
<td>3297,1</td>
<td>3086,3</td>
<td>-6%</td>
</tr>
<tr>
<td>International investments</td>
<td>1056,6</td>
<td>1458,1</td>
<td>+38%</td>
</tr>
<tr>
<td>Total volume of GCEREFs</td>
<td>4353,7</td>
<td>4544,4</td>
<td>+4%</td>
</tr>
</tbody>
</table>

Source: Own compilation.

The German closed-end real estate fund industry was also severely affected by the global financial crisis. In 2013 the total accumulated fund volume accounts for about 50% of the values in 2005. The equity commitment has even decreased by 65% during this time. The low point in terms of fund volume was reached in the year right after the financial crisis, with a total fund volume of closed-end real estate funds of €4,3 bn. Since then closed-end real estate funds have slightly gained on volume (VGF, 2012). The development of the total fund volumes of GCEREFs (in million €) between 2003 and 2012 are illustrated in Figure 2.

Figure 12 - Fund volume of GCEREFs between 2003 and 2012

3.4.2.2 Legal framework

Especially for closed-end funds the introduction of the KAGB implies an increased amount of regulations, supervision and documentation. For the first time fund managers of closed-end funds need to invest much time in the re-organization of their business operations in order to comply with the legislations (KAGB §27, section 2). Providing investment management companies enough time for implementing the new regulations KAGB provides a transition period lasting until 21st January 2015, applying for permission as investment company to BaFin at 21st July 2014, at the latest (KAGB §343, section 3). As soon as the investment company is approved by BaFin, the KAGB regulations have to be completely complied with (KAGB § 345, section 2). Until the receipt of the permission application of BaFin, GCEREFs are not supervised by any kind of institution. The only obligation of closed-end funds is the publication of a sale prospectus. The Act on the Prospectus for Securities Offered for Sale (Verkaufsprospektgesetz) prescribes to periodically publish a detailed report about the properties that are offered for sale. This regulation serves several purposes. The sale prospectus not only provides investors with sufficient information about the investment processes but it also ensures investors protection by integrating them into the investment process (Hohler, 2012). The aim of implementing new uniform regulations through the KAGB is to curb the grey capital market by increasing the transparency of the closed-end investment fund vehicle (BVI b, 2014). This aim is supposed to be achieved by the following key regulations:

- **Investment company:** Like open-end funds, closed-end funds will in the future exclusively be managed by capital management companies which are authorized by BaFin (KAGB, §17, section 1).
- **Legal form:** The investment company of closed-ended funds can choose between two legal forms: an investment company limited by shares with fixed capital or a limited liability partnership (KAGB, §139).
- **Debt ratio:** A debt ratio of 60% may not be exceeded (KAGB, §263, section 1).
- **Depositary bank:** For the first time closed-end funds are obliged to choose a depositary bank (KAGB, §80, section 1).
- **Risk management:** Closed-end funds have to start dealing with risk management. Every investment company is required to have a well-functioning liquidity management which monitors liquidity risk and ensures that the liquidity profile of undertaken investments corresponds to the fund's strategy and return requirements (KAGB, §30, section 1).
- **Adequate risk-spreading:** Closed-end real estate funds are considered as diversified if they invest in at least three different asset types (KAGB, §262).
4 Selection criteria for investment opportunities

So far this thesis has explained the construct of German real estate funds, analyzed the triggers and consequences of the liquidity crisis and provided an overview of the changed legal framework for real estate funds in Germany. The following section examines which impact the loss of investors’ confidence and the liquidity crises have on the investment selection criteria of German real estate fund companies.

4.1 Asset allocation

The selection of a property for real estate portfolios is not made randomly but it is part of a multi-phase property portfolio strategy process. The first section of this process is the strategic asset allocation in which the fund management examines and determines preferred geographic areas and property types of the fund. The next step in the process of identifying possible investment opportunities is the tactical asset allocation. Fund managers review real estate markets in terms of possibilities for above-average performances such as an exceeding demand to supply ratio for upcoming years. The third phase, stock selection, identifies the characteristics of properties that are targeted within the previous defined strategic and tactical asset allocation. Based on the identified selection criteria, fund managers create a list of potential properties and determine an expected property price in the last phase of this process. Figure 13 illustrates this process.

![Figure 13 - Property portfolio strategy](source: Own illustration.)
The first two steps of the property portfolio strategy process involve the strategic and tactical asset allocation (Parker, 2011). The purpose of an asset allocation is to provide a first identification and search profile of investment opportunities which the fund focuses taking into account investors’ amount of money, their risk appetite and time limits. Within the asset allocation process fund managers have to define parameters and characteristics of the properties in a fund’s portfolio. Once these characteristics are defined investment fund managers are going to focus on investments that fulfill these selection criteria. The following aspects need to be clarified within the asset allocation process of a fund:

- **Regional preference**: Investment managers have to decide which countries and markets they want to target for their investments, keeping in mind judicial, legal and political conditions.

- **Property usage**: It is important to define the property types in which the fund is going to invest keeping in mind the required management intensity of some property types such as hotels. The fund needs to dispose of the necessary capacities for such a property type.

- **Investment volume of the fund**: Determination of the investment volume of every real estate transaction and the number of different real estate markets that the fund is aiming at. For the choice of investment volume of the single transaction a balanced real estate portfolio should be ensured with no investment having extreme influence (Teufelsdorfer, 2013).

### 4.2 Selection criteria

After the determination of the asset allocation follows the identification of investment criteria that will be the target for future investment opportunities on the real estate market (Parker, 2011). The correct choice of investment opportunities is very important because it is the properties which determine the future success of the fund. Real estate investment fund managers need to be experts in selecting investment opportunities that are in line with the asset allocation of the fund in order to guarantee a successful fund performance (Jackson & Orr, 2011). Some selection criteria derive from the predefined asset allocation strategy and the resulting requirements of the real estate portfolio such as an efficient number of properties in a portfolio according to risk diversification aspects. Other criteria identified in this step are expected return requirements and the acceptable risk level (Parker, 2011).

As part of the overall asset allocation strategy every investor has to decide on which risk/return profile for investments they want to put their focus on (Fischer, 2012). Introducing investment styles by INREV in 2011 helps investors to categorize investments and to
compare risk levels of funds. The INREV style classification is based on extensive research which classifies properties in core, value added and opportunistic (INREV b, 2012).

1. **Core**
   This investment style tracks investment opportunities which are long-term investments and provide high rental cash flows. Typical core properties are office properties, apartments, retail and industrial buildings. These properties are the most noticeable ones in a real estate portfolio.

2. **Value added**
   A value added investment style is focused on specific investments which offer a high level of return by their value appreciation. Properties of this style usually require a small redevelopments or restructurings in order to guarantee an efficient management. Typical properties include hotels and resorts, shopping malls, hospitals and low-income housing.

3. **Opportunistic**
   Opportunistic investments are characterized by a high risk and return profile and most of their return is generated by value appreciation. Opportunistic real estate assets are non-traditional property types which are newly constructed or with large redevelopment requirement (Anson et al., 2011).

*Figure 14* demonstrates the risk/return levels that relate to core, value-added and opportunistic investments.

![Figure 14 - Risk/return profiles](Image)

*Source: Own illustration.*
Although there is no legal definition of the risk/return relations of the three different asset allocation styles, it is possible to define them further by assigning an estimated return on equity requirement and a debt ratio. Core investments are assumed with a return on equity that ranges between 4-8% and have a maximum debt ratio between 40-60%. With increasing risk the return on equity increases as well. Value-added investments usually offer a return of equity between 8-12%. The debt ratio lies between 60-75%. The highest return on equity of at least 15% offer opportunistic investments which are also accompanied by a high level of risk implied by a high amount of debt (at least 65%) (JLL, 2013). The table below summarizes the characteristics of the three investment styles.

**Table 3 - Style composition of real estate funds**

<table>
<thead>
<tr>
<th>Typical properties</th>
<th>Core</th>
<th>Value-added</th>
<th>Opportunistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional property types with long-term leases: offices, apartments, retail buildings</td>
<td>Hotels and resorts, shopping malls with low redevelopment requirement</td>
<td>Non-traditional property types with large redevelopment requirement</td>
<td></td>
</tr>
<tr>
<td>Return on equity</td>
<td>4-8%</td>
<td>8-12%</td>
<td>&gt;15%</td>
</tr>
<tr>
<td>Debt ratio</td>
<td>40-60%</td>
<td>60-75%</td>
<td>&gt;65%</td>
</tr>
</tbody>
</table>

Source: Own compilation.

For the sake of completeness it is to mention that sometimes properties are classified by a fourth investment style, namely core plus investments. This investment style lies between the core and the value-added investments which indicates that core plus assets are a bit riskier than core assets and also offer a slightly higher return (KPMG, 2012). Real estate investment decisions are not only determined by the underlying risk and return of the property but contain a number of different criteria which can contribute enormously to the value of the property (Bone-Winkel, 1994). Other criteria that might be taken into consideration for real estate investment decisions are specific characteristics of the location, the legal framework, the property itself or the tenants.

- **Location**

  The location criteria can be divided into macro and micro location. The macro location comprises the overall geographical area of the property such as its country, region, city etc. It also includes so-called hard location factors like political, economic and legal environment. The micro location includes the district preference and covers the required features of the immediate surroundings and its accessibility by public transport (Fischer, 2013). Location requirements can vary a lot among different asset
types such as office or retail. Offices commonly seek after prime location in the business districts of a city with good access to public transport and by car. In contrast retail properties focus in terms of location on proximity to other retailers or even in special retail zones. They also require good road access and parking possibilities.

- **Legal criteria**

  Investment decisions can also be made by considering legal criteria such as the ownership of the building which can be a leasehold or a freehold. A leasehold ownership only has the right to produce income stream for a certain period of time (until expiration date of leasehold) whereas in freehold ownership there is no restriction regarding an income stream (Parker, 2011). Another legal aspect is the acquisitions of properties through an asset deal or share deal. In an asset deal, the new occupant is placed in the land register which in turn implicates notary and due diligence costs. Acquiring a property via a share deal means that the new owner acquires 100% of ownership fraction of the property company which legally keeps on being the owner of the property.

- **Property criteria**

  The underlying investment type and the associated risk return expectation have large impact on the specific property criteria that are looked at for investments (Teufelsdorfer, 2013). Commonly considered property criteria are the general quality of construction, the need for renovation, the size of the building, the status of the technical equipment which requires a general update and modernization from time to time and the operating and maintenance costs (Parker, 2011). The latter is becoming more and more important as selection criteria for investors. Increasing energy costs and growing demand for controlling the CO2 emissions from buildings are factors that make investors watch out for energy efficient properties with green ratings (Jackson & Orr, 2011) Green buildings are due to the special construction and design energy efficient which means they require minimum energy consumption, often they even produce energy (JLL, 2012). To the leading global green rating systems count BREEAM (Building Research Environmental Assessment Method) from the UK, LEED (Leadership in Energy and environmental design) coming from the US, DGNB (Deutsches Gütesiegel Nachhaltiges Bauen) from Germany and HQE (Haute Qualité Environnementale) from France. Although those rating systems all differ in the number of valued criteria they all consider common aspects such as water and energy management and use of renewable materials (DTZ b, 2010). The year of construction is also considered as selection criteria for investments whereby not the
age of the property itself is important but similar to the technical equipment, the conditions of the physical works. All physical structure needs to be conform with the latest building and safety regulations. (Fischer, 2013)

- **Tenants**

Regarding the tenants of a property it is first of all important to define the general rental structure and decide if single-let objects or multi-let objects are focused for investments. Single-let properties require less administrative management but also bear a high default risk for the investor (Teufelsdorfer, 2013). This risk can be diversified by investing in multi-let properties where the income stream is generated by several tenants and by choosing attractive real estate locations that experience high popularity and demand (Jackson & Orr, 2011). Apart from the rental structure fund managers usually consider the weighted average of lease duration (WALD). This index is comprised by the total rental income per year, the rental income per rental agreement and the duration. The WALD index helps investors to quickly overview the secured income stream (Fischer, 2013).

Fischer (2013) also suggests considering economic ratios in order to select suitable property investments. A highly used ratio is the initial yield rate of an investment which simply puts the current rental income in relation to the transaction price of the property without incidental transaction costs. This method is not only easy to calculate but due to the exclusion of transaction incentives it is also a very objective method to evaluate an investment (Fischer, 2013).

### 4.3 Data analysis and Discussions

After having explained theoretically possible selection criteria for real estate investments the following section analyzes the findings from the survey which was conducted among German real estate investment companies. The aim of the survey is to find out which selection criteria German real estate investment companies consider when evaluating investment opportunities.

#### 4.3.1 Participating investment fund companies

In total 13 responses were collected from different German real estate investment companies. A completed survey has been returned 9 times and 4 real estate investment experts were interviewed via telephone. The respondents mostly are investment or acquisition managers and they all have considerable experience in the field of real estate
investments, between 6 to more than 20 years. Each respondent represents a different investment company for real estate and even if the total number of responses is not very high the feedback from those companies is very important. The participating investment companies for real estate are holding large fractions of the total investment fund volume in Germany: about 70% of the total investment volume for GOEREFs designed for private investors and 30% of the total investment fund volume of GOEREFs which target institutional investors. Cordea Savills, Wealthcap, Catella Real Estate and Valad Europe are participating real estate investment fund companies that issue closed-end real estate funds and their fund volume or market fraction could not be determined. Table 4 demonstrates the participating real estate investment fund companies with their fund volumes and market share.

Table 4 - Participating real estate investment companies

<table>
<thead>
<tr>
<th>Open-end real estate funds</th>
<th>Private investors</th>
<th>Fund volume in million €</th>
<th>Market share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment company</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aachener Grundvermögen</td>
<td>1515,7</td>
<td>1,9%</td>
<td></td>
</tr>
<tr>
<td>Aberdeen Asset Management</td>
<td>1030,1</td>
<td>1,3%</td>
<td></td>
</tr>
<tr>
<td>DEKA Immobilien Investment</td>
<td>15818,8</td>
<td>19,6%</td>
<td></td>
</tr>
<tr>
<td>DEKA WestInvest</td>
<td>6631,6</td>
<td>8,2%</td>
<td></td>
</tr>
<tr>
<td>KanAM Grund Group</td>
<td>3119,3</td>
<td>3,9%</td>
<td></td>
</tr>
<tr>
<td>SEB Group</td>
<td>5117,3</td>
<td>6,3%</td>
<td></td>
</tr>
<tr>
<td>Union Investment Group</td>
<td>23189,5</td>
<td>28,7%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Institutional investors</th>
<th>Fund volume in million €</th>
<th>Market share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment company</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aachener Grundvermögen</td>
<td>2760,4</td>
<td>6,6%</td>
</tr>
<tr>
<td>Aberdeen Asset Management</td>
<td>1589,9</td>
<td>3,8%</td>
</tr>
<tr>
<td>AIK-Immobilien</td>
<td>1679,5</td>
<td>4,0%</td>
</tr>
<tr>
<td>DEKA Immobilien Investment</td>
<td>1369,2</td>
<td>3,3%</td>
</tr>
<tr>
<td>DEKA WestInvest</td>
<td>618,2</td>
<td>1,5%</td>
</tr>
<tr>
<td>Hansainvest</td>
<td>2500,7</td>
<td>6,0%</td>
</tr>
<tr>
<td>Union Investment Group</td>
<td>2052,4</td>
<td>4,9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Closed-end real estate funds</th>
<th>Fund volume in million €</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment company</td>
<td></td>
</tr>
<tr>
<td>Cordea Savills</td>
<td>no info</td>
</tr>
<tr>
<td>Wealthcap</td>
<td>no info</td>
</tr>
<tr>
<td>Catella Real Estate</td>
<td>no info</td>
</tr>
<tr>
<td>Valad Europe</td>
<td>no info</td>
</tr>
</tbody>
</table>

Source: Own compilation.

2 Wealthcap is the 6 largest issuer of GCEREFs in terms of equity capital in 2012 (VGF,2012).
4.3.2 Results

It is noteworthy that the results of the survey and the interviews only describe an ideal investment profile for different property usages. The investment profile gives an impression of how preferred transactions look like and it cannot be considered as general investment profile of German real estate funds. It is only a snapshot of ideal criteria that real estate investment companies prefer at the moment in order to invest in real estate assets. In a couple of years these criteria might have changed due to different market conditions and investors perception.

The first striking finding is that all 13 participating real estate investment companies prefer core investments, with low risk and return profiles. The reason for that is that fund initiators in Germany have to play safe by making long-term investments into standard properties which offer stable but low returns. The aim is to regain investors' confidence and therefore value-added or even opportunistic investments are not profitable because they would prevent many potential investors from investing. Figure 15 illustrates this result.

![Figure 15 - Preferred style composition](image)

Due to the fact that most of the participating investment companies primarily focus on office and retail properties for investments and only very few companies consider investments into hotel and/or residential properties, those two categories are neglected for the analysis.

1) Investment specifications

A clear majority of real estate investment companies prefers established real estate markets like the UK, as most preferred choice, followed by France and Benelux for both office and retail investments. The reason for those market choices are the same as for the preference of the core investment style. Real estate investment companies have to invest in stable, well-established markets which are not exposure to high risk. 7 out of 13 respondents indicate that the preferred investment volume for retail assets
lies between 10 and 50 million €. For offices 8 respondents prefer the same investment volume level and the second choice are investments into properties between 50-150 million €.

2) Property
For both office and retail usages the ideal property size is of at least 10,000 sq m and the ideal building age is not more than 10 years. The latter criteria can be considered as KO criterion because no real estate investment company indicated real estate assets that are older than 10 years as preferred investment which means every property older than 10 years is discarded from the selection process and won’t be considered as investment opportunity. The preferred building age is demonstrated in Figure 16.

Office buildings are expected to be in excellent condition with no requirement for renovation works. Retail properties are also considered when they are in good condition or some minor renovations need to be done. Regarding sustainable building certificates real estate experts explained during the telephone interviews that they are considered as big plus for a property but not essentially necessary. More than half of the respondents preferred the BREEAM certification for office properties. For retail properties sustainable building certificates only play a minor role.

3) Location
In terms of location investment companies for real estate clearly prefer top locations in major cities, often country capitals, for office and retail property investments. For the office sector almost half of the respondents also takes into consideration
properties that are located close to CBD, in a B-location. Here again, the focus is put on popular investment areas and safe locations, with the high rental demand which most probably guarantee stable rental income streams. All properties, no matter if for retail or office usage, which are not located directly in or at least close by the CBD are not taken into consideration for acquisitions. The district criterion is also an exclusion criterion. The figure below demonstrates the preferred district choices.

![Figure 17 - Preferred district](image-url)

Concerning accessibility direct access to public transport means and excellent accessibility to motorways and train stations are the most preferred investment criteria. More than half of the respondents also indicated that for both office and retail properties an adequate number of parking spaces is an important investment criterion.

4) Tenants

The last category in the survey deals with tenant characteristics and reveals several preferences for real estate investments. First of all, real estate investors require creditworthy tenants with a highly solvent investment grade. If properties are occupied by tenants who don’t fulfill this criterion, the property will not be taken into consideration. The number of tenants is also an exclusion criterion for real estate investments. In order to diversify the risk, only multi let properties are interesting for investments. Moreover properties that have an occupancy rate of less than 75% don’t fit into the acquisition profile of any real estate investment fund. Preferably real estate assets with WALDs between 8-10 years and with initial yield rates between 4-6% are acquired.
Summarizing the responses from participating real estate investment experts’ one broad trend can be identified: Due to the changes triggered by the financial crisis German real estate investment companies had to restructure their fund concepts and adapt their investment vehicles to the risk aversion of investors. The only possibility to gain investors’ interest for real estate fund products is to issue real estate funds that focus on core properties with low risk profile. All participating real estate investment companies prefer this type of investment. Taking into consideration the risk aversion of investors’ German real estate funds head for safe havens when it comes to the investment specifications, the location choice, the tenant requirements and the property characteristics. It is important to emphasize that the findings from the survey and the interviews cannot be used as general acquisition profile for German Real estate investment fund companies. But the findings are useful because they provide orientation and give an idea to which criteria German funds attach importance and which criteria exclude their interest for investment opportunities.

4.4 Case study: Trophy asset in Luxembourg

In the following section the findings from the survey and the interviews are applied to a real case, a trophy asset in the City of Luxembourg in order to find out if this property is an interesting asset for German real estate investment companies.

4.4.1 Background

Since the disposal of the property is still an ongoing process the name of the company and the exact location of the property are not revealed for confidentiality reasons. The property is located in the heart of the City of Luxembourg, close to the CBD, and it is an absolute unique trophy asset in terms of size, location and architectural design. It was constructed in the
1920s and offers more than 15,000 sq. m gross leasable area. The building itself is characterized by a special architecture with ornaments of classicism, baroque and renaissance. The property disposes of 6 floors, 4 upper floors and 2 underground floors and mainly consists of offices and conference rooms. The property with full vacant possession is a redevelopment opportunity which used to be the headquarter office of a multinational company. Even if the building has so far been used as office other mixed-usages such as retail/office, residential/office are also imaginable but they all require a high amount of redevelopment costs. Apart from the redevelopment costs every kind of usage requires technical and electrical update (DTZ b, 2014).

Every sale of an investment property commonly starts with contacting potential investors with a teaser, accompanied by a non-disclosure agreement (NDA). The teaser is an information leaflet which summarizes the key highlights of the property and provides investors a first impression of the investment opportunity. By signing the NDA the possible investor will receive detailed information about the market, the location, additional photos and building plans in the information memorandum. With the teaser document real estate fund managers can already make a first evaluation of the property and see if a certain property fulfills the funds acquisition criteria (Fischer, 2013). The teaser of the trophy asset was sent out to more than 300 potential investors at the end of March 2014 and contained the following information about the Luxembourg market, the accessibility of the property, general property description and highlights of the property.

The Luxembourg market can be characterized by the following facts:

- The property is located in the Grand Duchy of Luxembourg
- European capitals like Brussels, Frankfurt and Paris can be reached within 2 to 3 hours by car
- The capital Luxembourg counts approx. 103,000 habitants
- Several European institutions have based their headquarters in the City of Luxembourg
- Together with Frankfurt, London, Zurich, Hong Kong and Singapore, the city of Luxembourg is one of the most important financial centers in the world
- This market is the world's second largest competence center for investment funds and it ranks just behind the United States
- Luxembourg is Europe’s leading location for captive reinsurance and the largest private banking center of the Eurozone
- This financial sector is the most important pillar of Luxembourg’s economy.
### Table 5 - Accessibility

| International airports | • Luxembourg: 15min  
|                        | • Brussels: 2 hours by car  
|                        | • Frankfurt: 2.5 hours by car |
| Train station          | • Walking distance  
|                        | • Regional and international trains: TGV to Paris within 2 hours |
| Interstates            | • A1 (5min) Direction Germany  
|                        | • A3 (4min) Direction France  
|                        | • A6 (5min) Direction Belgium |
| City center            | Walking distance |
| Bus and tram           | • Bus stop directly in front of the building  
|                        | • Planned tram line connection |

Source: DTZ b, 2014.

### Table 6 - Property details

<table>
<thead>
<tr>
<th>Asset type</th>
<th>Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floors</td>
<td>6</td>
</tr>
<tr>
<td>Possible Usage</td>
<td>Office, Hotel, High-end residential, Retail, Mixed</td>
</tr>
<tr>
<td>Construction year</td>
<td>1920s</td>
</tr>
<tr>
<td>Gross Area</td>
<td>+15,000 sq m</td>
</tr>
<tr>
<td>Possible Extension</td>
<td>approx. 4,000 sq m</td>
</tr>
<tr>
<td>Parking</td>
<td>+150 parking spaces</td>
</tr>
</tbody>
</table>

Source: DTZ b, 2014.

The highlights of the property include:

- High level of luxury and privacy
- Excellent visibility & accessibility
- Panoramic views of the city center
- Imposing building
- Lot of nearby restaurants and amenities (DTZ b, 2014).
### 4.4.2 Evaluation of trophy asset as investment opportunity for German funds

In order to evaluate if the trophy asset might be an interesting investment opportunity for German funds the preferred investment criteria that have been identified through the survey and the interviews are ranked. *Table 7* shows the top five investment selection criteria for offices and retail properties that have been selected from most of the respondents.

#### Table 7 - Preferred investment selection criteria

<table>
<thead>
<tr>
<th>Rank</th>
<th>Office</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Core properties</td>
<td>Core properties</td>
</tr>
<tr>
<td>2</td>
<td>Major cities</td>
<td>Major cities</td>
</tr>
<tr>
<td>3</td>
<td>CBD (A-location)</td>
<td>CBD (A-location)</td>
</tr>
<tr>
<td>4</td>
<td>Perfect quality (no renovation required)</td>
<td>Investment volume of 10-50 million €</td>
</tr>
<tr>
<td>5</td>
<td>Investment volume of 10-50 million €</td>
<td>Property size of +10.000 sq m</td>
</tr>
</tbody>
</table>

The top five investment criteria for office properties from the point of view of German investment fund companies are the core investment style, the location in major cities and preferably in CBD, no renovation requirements and an investment volume that ranges between 10-50 million €. The only argument that favors an acquisition of the property from the point of view of German real estate investment companies is that the building is located in the City of Luxembourg, a major city. However all other preferred criteria are not met by the trophy asset. German investors avoid all investments that are connected with high level of risk and only acquire core assets which are in perfect or at least in good conditions and promise stable cash flows. The sample property however is an opportunistic asset with high exposure to risk because it requires large technical renovations and is sold fully vacant, with no tenants. Furthermore the sample property is not located in the preferred central business district but only close to the CBD, in a B-location. Those two criteria are exclusion criteria for every German investment fund company and they are not interest to invest in office properties which are value-added or opportunistic assets and which are not located in the CBD. The preferred investment volume of 10-50 million € is another criterion that cannot be met by the trophy asset. It certainly requires investments of more than €50 million to acquire this property due to its specific architecture and the uniqueness in the real estate market.

In terms of retail usage the first three most preferred investment criteria of German investment fund companies correspond to the ones for office properties. The investment criteria that are ranked as 4th and 5th most preferred criteria are the investment volume between 10-50 million € and the property size of at least 10.000sq m. As mentioned before the investment volume criteria cannot be met by the trophy asset because it requires a higher investment amount. But with more than 15.000sq m gross leasable area the property
meets the latter criteria of the property size. The evaluation of the trophy asset as investment opportunity for German funds is summarized in the table below.

**Table 8 - Evaluation of trophy asset as investment opportunity**

<table>
<thead>
<tr>
<th>Offices</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Core properties</td>
<td>(-)</td>
</tr>
<tr>
<td>2 Major cities</td>
<td>(+)</td>
</tr>
<tr>
<td>3 CBD (A-location)</td>
<td>(-)</td>
</tr>
<tr>
<td>4 Perfect quality (no renovation required)</td>
<td>(-)</td>
</tr>
<tr>
<td>5 10-50 million €</td>
<td>(-)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Retail</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Core properties</td>
<td>(-)</td>
</tr>
<tr>
<td>2 Major cities</td>
<td>(+)</td>
</tr>
<tr>
<td>3 CBD (A-location)</td>
<td>(-)</td>
</tr>
<tr>
<td>4 Investment volume of 10-50 million €</td>
<td>(-)</td>
</tr>
<tr>
<td>5 Property size +10,000 sq m</td>
<td>(+)</td>
</tr>
</tbody>
</table>

(+) trophy asset meets the investment selection criteria  
(-) trophy asset does not meet the investment selection criteria  
(--) trophy asset does not meet the investment selection criteria and the criterion is an exclusion criterion for every real estate investment fund company

All in all the negative aspects for an investment into the trophy asset from the perspective of German investment fund companies clearly outweigh the positive aspects for both office and retail usage. According to the findings from the survey and the interviews German real estate investment fund companies are likely to reject an investment into the trophy asset. But does this result also match with the result of the practice? What was the reaction, of the 20 German investment companies that have been contacted with the information teaser during the disposition process by the end of March 2014? The answer is that the findings from the survey and the interviews correspond to the result in practice. No German real estate investment company has shown further interest to acquire the property and some of them even explained that this investment opportunity is not consistent with their investment criteria. The findings from the survey and the interviews provide an explanation of why the property does not fit in the selection criteria of German investment fund companies and why they have a lack of interest to enter in the disposition process.
5 Conclusion

The global financial crisis in 2008 had tremendous impact on German open-end real estate investment funds because it triggered a severe liquidity crisis. Investors lost their confidence in real estate investment fund vehicles and made use of their right of daily share redemption. The demand of investors to withdraw their money exceeded by far the liquidity reserves of German open-ended real estate funds and resulted after a period of suspended redemptions in the first liquidations of open-end real estate funds in German history. The damage for the open-end real estate fund industry was fatal and enormous sums of real estate portfolios had to be sold in order to liquidate the identified funds. About €5 bn assets have already been sold since 2012 and remaining portfolios of over €20 bn have to be liquidated within the next three years.

In 2013 the German government decided to tackle the problem by implementing a new legal framework for all types of open-end and closed-end funds. The new statutory basis brings about a lot of changes for real estate funds in Germany. First of all it is supposed to increase the transparency of real estate investment fund vehicles, protect investors and to regain investor’s confidence. In order to support the long term nature of open-end real estate funds holding periods, redemption limitations and cancellation periods must be observed by every new investor in future. The key characteristic of daily share redemption is herewith no longer possible. Regarding closed-end real estate funds the legal basis is also a double-edged sword. On the one hand CEREFs benefit from the new regulations because for the first time they are officially regulated, transactions are transparent and the reputation as grey investment market rapidly disappears. On the other hand fund managers have to consider a high amount of regulations and provide investors with details about new projects. Their scope of work is much higher which means a higher amount of costs which will be transmitted to the investors by lowering investors return. It remains to be seen to what extent the regulatory changes will be able to restore investors’ confidence and to increase the desire to invest in real estate portfolios.

But the liquidity crisis did not only bring along externally changes like the implementation of the new regulatory basis. It has also initiated internal changes within the investment fund companies for real estate, namely changes of the investment selection criteria. In order to make investors investing into the fund, real estate investment companies have to adapt their transactions to the needs of investors. After the financial crisis investors’ preference for secure investment with stable returns made real estate funds concentrate on core investments in well-established real estate markets. The findings from the survey and the telephone interviews confirm that currently all investment fund companies only make core
investments in order to attract investors. Other findings from the survey like the preference for highly demanded A-locations and for properties with no maintenance backlog also indicate that German investment fund companies avoid taking any risks at the moment. If the real estate fund industry is able to regain investors’ confidence and if investors risk aversion diminishes the preferred investment criteria of German real estate funds would be different ones.

Since the KAGB as new legal framework for German funds has been implemented in summer 2013 effects and consequences have not yet been deeply analysed which gives rise to further research suggestions. So far there is no proof if the KAGB could meet the expectation of regaining investors’ confidence in real estate funds. Further research will be needed in order to analyze investors’ reaction towards the newly implemented legal basis, to evaluate if the reputation of German real estate funds has improved and if investors’ confidence could be regained. Moreover it would be interesting to investigate the selection criteria of German investment fund companies at a later stage in order to see if German real estate funds prefer different investment criteria in the future or still make safe haven investments.
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Glossary

BSI | www.sachwerteverband.de
BSI stands for „Bundesverband Sachwerte und Investmentvermögen e.V.“ and it is an association for all companies that manage real assets and whose businesses are directly linked with the KAGB regulations. Members are numerous capital investment companies and depositary banks. The association also plays a representative role of the real estate asset investment industries in front of political and public entities.

BVI | www.bvi.de
BVI is a German investment fund association with 79 members who currently handle around €2 trillion of public funds, specialfonds and mandates. BVI regularly sends its members updates with the latest regulatory development and changes in legislations and serves as central contact for politics and media on all issues of capital investment regulation.

DTZ | www.dtz.com
DTZ is a global leader in property services that is located in over 200 offices in 52 countries around the world; with headquarter in Chicago, USA. Almost 50.000 employees create property solutions and integrated operations to occupiers, developers, property owners and investors throughout Europe, the Middle East, Asia and the Americas. DTZ creates solutions for many of the world’s greatest companies. The core services of DTZ include agency leasing, capital markets which advice on the sale, acquisition and funding of commercial property, general consulting, energy and sustainability services, facilities management and corporate services which create real estate strategy solutions tailored to fit the client’s business goals.

EFAMA | www.efama.org
EFAMA is the representative association for the European investment management industry with 27 member associations, 65 corporate members and 25 associate members. It was founded in 1974 and represents about EUR15 trillion in assets under management. EFAMA regularly provides background information about the European investment fund industry and is considered to be the primary source for statistical data.

INREV | www.inrev.org
The European Association for Investors in Non-Listed Real Estate Vehicles is Europe’s leading platform for the sharing of knowledge on the non-listed real estate industry. They are located in two offices in Brussels and Amsterdam and provide research and industry data, develop guidelines; deliver leadership and educational programs to their currently 350 corporate members.

IPD | www.ipd.com
IPD is a world leader in performance analysis for owners, investors, managers and occupiers of real estate. IPD publishes financial performance indexes on the real estate market around the world, provides research to clients and sponsors and offers guides and standards to the real estate industry.

VGF | www.vgf-online.de
The „Verband Geschlossene Fonds e.V.“ is the association of closed-end funds in Germany with 58 members of which 35 are closed-end funds and 23 sponsoring members. The VGF was transformed in 2013 to bsi, the real Assset Investment Association that acts as interest group for all companies that manage real assets.
Appendix

Campaign with link to the online survey

Dear ,

DTZ Luxembourg kindly invites you to participate in an online survey about the investment selection criteria of German real estate funds.

With your input we get to know the criteria that you consider for real estate investments. This enables us in future to inform you about interesting investment opportunities which fit into your acquisition profile.

Survey details:

- The online survey only takes a few clicks to complete (less than 5 minutes).
- Out of 18 predefined selection criteria you only have to click on those criteria that describe your acquisition profile.
- All data that you provide will be treated confidentially and will not be handed out to third parties.

After the survey will have been closed we will provide you a summary report. Herewith you can see in what way your investment criteria differ from those of other German real estate funds.

I am looking forward to receiving your feedback until the 13th May 2014 by the close of business.

Thank you very much for taking the time to fill out this survey.

Esther Himbert
Capital Markets Department Assistant

Contact us

Esther Himbert
esther.himbert@dtz.com
Online survey

Investment selection criteria
German real estate funds

Background information
Mandatory

What is the name of the investment fund company?

Which position do you have in the investment fund company?
- Acquisition Manager
- Analyst
- Investment Manager
- Managing director
- Portfolio Manager
- Other (please specify)

How many years of experience do you have in real estate investments?
- 3-5 years
- 6-10 years
- 11-20 years
- +20 years
- Other (please specify)

What kind of real estate funds does the company issue?
- Open-end
- Closed-end
- Other (please specify)

What type of investors do you address?
- Private
- Institutional
- Other (please specify)

What is the preferred style composition for real estate funds?
- Core
- Value added
- Opportunistic

Please indicate the approximate value of the total real estate portfolio.

Proceed to the next page by clicking the "NEXT" button below
Next
### Selection criteria

This page contains 18 possible selection criteria for real estate investment opportunities which are divided into 4 categories (investment specifications, properties, location and tenants). Please click only on those criteria that describe your acquisition profile.

Please indicate first which property type(s) you focus on.

#### Preferred property type(s) for investments?
- [ ] Office
- [ ] Retail
- [ ] Hotel
- [ ] Residential
- [ ] Other (please specify) [ ]

#### Investment specifications

<table>
<thead>
<tr>
<th>Preferred countries for investments?</th>
<th>Office</th>
<th>Retail</th>
<th>Hotel</th>
<th>Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only Germany</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Benelux</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southern Europe</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEE countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baltic countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Investment volume per property?</th>
<th>Office</th>
<th>Retail</th>
<th>Hotel</th>
<th>Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-10 million €</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-50 million €</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-100 million €</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100-150 million €</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+150 million €</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Properties

<table>
<thead>
<tr>
<th>Property size (gross leasable area)?</th>
<th>Office</th>
<th>Retail</th>
<th>Hotel</th>
<th>Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>500-2,500 sq m</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2,500-5,000 sq m</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5,000-10,000 sq m</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+10,000 sq m</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Building age?</th>
<th>Office</th>
<th>Retail</th>
<th>Hotel</th>
<th>Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of construction and techniques?</td>
<td>Office</td>
<td>Retail</td>
<td>Hotel</td>
<td>Residential</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>--------</td>
<td>--------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>Perfect quality (no renovation required)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good quality (minor renovations required)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete renovation foreseen</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Green building certification?</th>
<th>Office</th>
<th>Retail</th>
<th>Hotel</th>
<th>Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>BREEAM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEED</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DGNB</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Future usage?</th>
<th>Office</th>
<th>Retail</th>
<th>Hotel</th>
<th>Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexible in terms of future usages</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Possible extension areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specific building requirements?</th>
<th>Office</th>
<th>Retail</th>
<th>Hotel</th>
<th>Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Declaration of historic preservation status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property of national importance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objects of significant regional interest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location</th>
<th>Office</th>
<th>Retail</th>
<th>Hotel</th>
<th>Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cities?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major cities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small cities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suburban / out of the cities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Districts?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CBD (A-location)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Close to CBD (B-location)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Periphery (C-location)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Public transportation?</th>
<th>Office</th>
<th>Retail</th>
<th>Hotel</th>
<th>Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct access</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good accessibility to...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feature</td>
<td>Office</td>
<td>Retail</td>
<td>Hotel</td>
<td>Residential</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>--------</td>
<td>--------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>In close proximity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small distances</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No access</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorways</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airports</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surroundings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adequate number of parkings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leisure facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational facilities (schools, universities, etc)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iconic buildings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Park and recreational area</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shopping center/retail area</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Tenants**

**Tenant profile?**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Office</th>
<th>Retail</th>
<th>Hotel</th>
<th>Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly solvent investment grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listed in European stock-exchange</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creditworthy tenants</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Number of tenants?**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Office</th>
<th>Retail</th>
<th>Hotel</th>
<th>Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unoccupied buildings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-let</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-let: 2-5 tenants</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-let: 6-10 tenants</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Tenant occupancy rate?**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Office</th>
<th>Retail</th>
<th>Hotel</th>
<th>Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;50% occupied</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-75% occupied</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;75% occupied</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100% occupied</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**WALD?**

*Weighted average lease term*
| 1.3 years |  |  |  |  |
| 4.7 years |  |  |  |  |
| 8.10 years |  |  |  |  |

Initial yield rate?

| 4-6% |  |  |  |  |
| 7-8% |  |  |  |  |
| 9-10% |  |  |  |  |
| +10% |  |  |  |  |

Are there any other acquisition criteria that you consider?

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**Investment selection criteria**

German real estate funds

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Thank you very much for participating!

With best regards,

Esther Himbert  
DTZ Luxembourg