GLOBAL
Diversification in real estate:
less risk, more return

Robust home bias with upside potential abroad

Bouwinvest

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A publication by Bouwinvest
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the Netherlands

Bouwinvest Research
Spring 2014

outline

Global diversification in real estate, less risk, more return

This paper discusses the powerful diversification benefits of investing in global real estate. By spreading across real estate markets that are poorly correlated, the risk on portfolio level can be reduced. To some degree, these benefits can be realised by investing in multiple real estate sectors within a single market, although correlations across sectors tend to be relatively high. However, a significant further enhancement of risk-adjusted returns is possible through investing outside the national economy and spreading across global real estate markets.

This paper first briefly discusses the current shifts in the real estate allocation of institutional investors. A step-by-step approach is presented for realising a global real estate allocation. Then, the current real estate allocation of Dutch institutional investors is discussed, as well as the advantages and disadvantages of the various strategies for investing in real estate.

Next, a brief introduction is presented of the global institutional real estate universe, touching on aspects as size and dynamics of the market, as well as availability. The following section is devoted to a description of the characteristics of, and the correlations between, the various real estate investment markets. Adopting a Dutch direct real estate portfolio as a starting point, a theoretical approach is then presented to illustrate the potential benefits of diversifying the portfolio through adding international, indirect real estate.

The paper concludes with a discussion of the actual selection and timing of the real estate investment. Hereby, Bouwinvest introduces the Global Market Monitor, a tool developed for quantifying and comparing the attractiveness of global real estate markets.

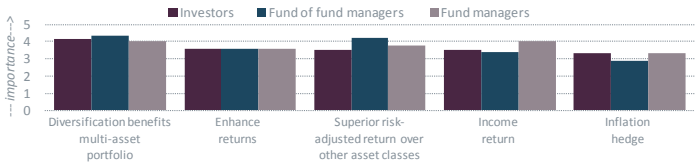
Real estate as a global asset class

Global portfolio rebalancing towards real estate

On a global level, increasing amounts of capital are being invested in real estate. One of the main reasons for this tilt towards real estate is the re-assessment of risk, with investors increasingly focussing on risk reduction through diversification (*Figure 1*). Real estate is known for its low level of correlation with bonds and in particular the stock market. Investors are currently rebalancing their portfolios towards real estate at the expense of stocks and bonds.

Another important reason for the increased interest being shown in real estate is the search for yield. As a result of the historically low interest rates on government bonds and the limited prospects for capital growth, yield has become the dominant driver of investment returns. Initial yields for real estate have a tendency to fluctuate in line with bond yields. However, at present, an increased premium applies, suggesting that investors are being favourably compensated for the additional risk inherent in real estate investments. In addition, real estate is still viewed as at least a partial hedge against inflation.

>> Figure 1: Reasons to invest in real estate

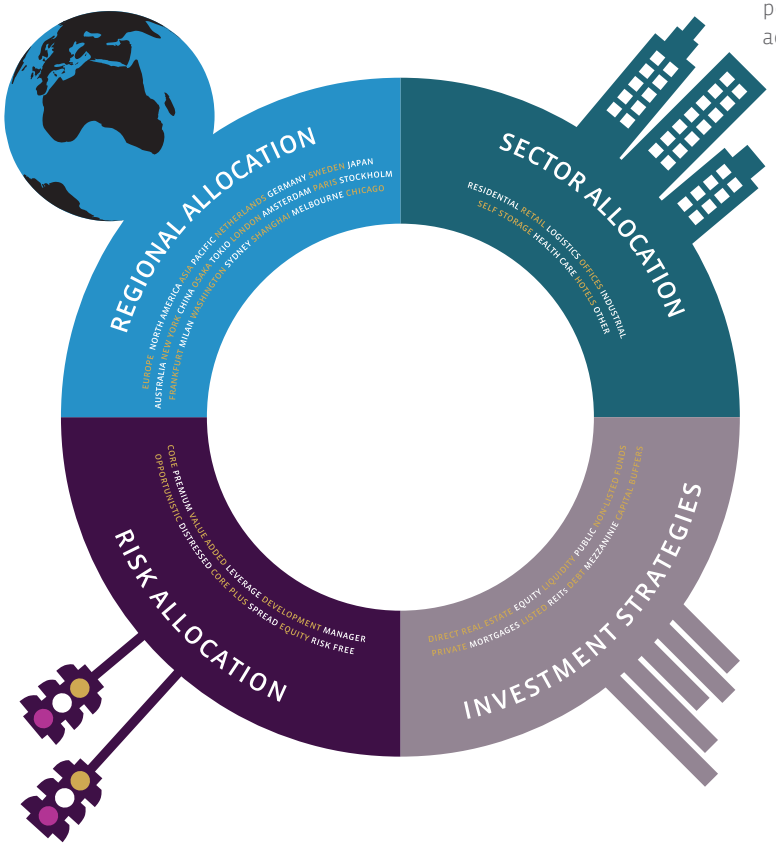


Source: INREV - Investment Intentions Survey 2014

Diversification within the real estate portfolio

Just like investors aim for diversification over various asset classes, they also aim for an optimal diversification within the real estate allocation. In doing so, investors target a maximum return within the limits of a predefined risk tolerance, or equivalently minimize their exposure to risk for a predefined target return. By diversifying over real estate markets that are poorly correlated, the resulting portfolio has collectively lower risk than the individual markets.

Diversification starts with investing over several objects and tenants within a specific market/sector combination. Herewith, the object risk can be limited to the risk inherent in the specific market concerned. Further diversification can then be introduced by investing in different real estate sectors within the home market. However, the potential for diversification in this manner is somewhat limited, as the returns realised in different sectors within the same country often show relatively high correlations. However, a significant further enhancement of risk-adjusted returns is possible through investing outside the national economy and spreading across global real estate markets.



Roadmap towards a global real estate portfolio

Investing effectively in global real estate requires a clear definition of the allocation objectives. In order to fully profit from the powerful benefits of diversification, it is essential to be thoroughly familiar with the characteristics of the various real estate markets and sectors available. By aligning these market characteristics on the one hand, with clearly defined objectives of the investor on the other, it becomes possible to create the optimum target portfolio. *Figure 2* illustrates how the allocation to real estate can be realised adopting a four-step approach.

Step 1 - Analysing the existing portfolio from four perspectives

In the first step, the point of departure is defined clearly; the existing real estate portfolio is analysed from various perspectives:

- Regional allocation : diversification across continents and/or regions, countries and cities;
- Sector allocation: diversification across residential, offices, retail, logistics, hotels, etc.;
- Risk allocation: diversification across risk profiles, e.g. low-, medium- high-risk;
- Allocation across investment strategies: direct real estate and indirect real estate (listed securities and unlisted funds).

Step 2 - Aligning objectives and market characteristics

In step 2, the objectives and preconditions of the investor are defined clearly and explicitly and the characteristics of the various real estate markets are mapped out. The investor's preconditions and objectives can include aspects such as stable returns, liquidity, inflation hedging and diversification. The market characteristics include aspects such as size, availability, liquidity, performance, and risks. By comparing and aligning the objectives with the characteristics, the target portfolio can be determined. This target portfolio can be compared to the existing portfolio, revealing potential gaps in the distribution and composition of the portfolio.

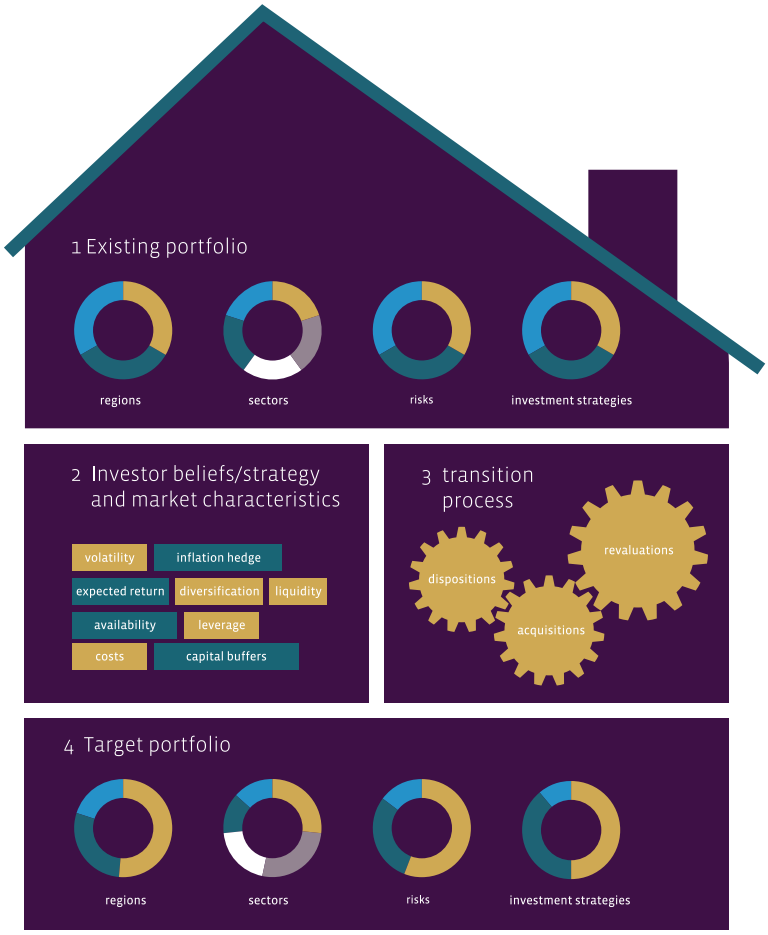
Step 3 - Realistic transition process towards target portfolio

In step 3, a realistic transition process is worked out for moving the existing portfolio in the direction of the target portfolio. Herein, the necessary acquisitions, dispositions, and expected valuation changes are carefully set out within a predetermined planning period. New acquisitions are matched against the available spectrum of real estate supply - including the available supply of direct real estate as well as indirect real estate via real estate funds or shares. Hereby, the timing of the investment deserves special attention as well.

Step 4 - Monitoring progress

In step 4, the progress made in the transition towards the target portfolio is analysed periodically. This analysis is again carried out from the aforementioned perspectives (allocation towards regions, sectors, risks and investment strategies). In this fourth step, adjustments are made if market conditions or other circumstances so require.

›› Figure 2: Roadmap towards a global real estate portfolio



Source: Bouwinvest Research

Real estate allocation of Dutch institutional investors

Contributing to the national economy

Political and social debate have recently called for Dutch pension funds to invest more in the Dutch economy, with a particular focus on the role played by pension funds in making credit available to Dutch businesses and households. To facilitate the debate, De Nederlandsche Bank (DNB) analysed the assets under management of Dutch pension funds. The study revealed a domestic allocation of around 14% of total assets (March 2013).

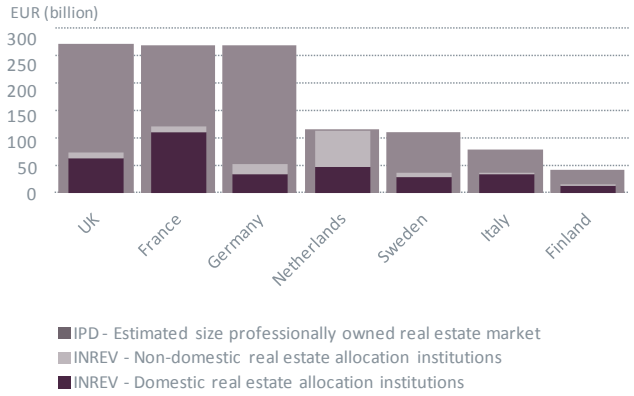
Home sweet home bias

The bias for investing in the Netherlands is more pronounced if one focuses on the allocation of real estate within the overall asset mix. Research carried out by the IVBN (Dutch Association of Institutional Investors in Real Estate) and the INREV (European Association for Investors in Non-listed Real Estate Vehicles) shows that Dutch pension funds and insurance companies invest on average around 40% of their real estate portfolio in the Netherlands. A significant part of their contribution to the national economy takes the form of direct investments in the residential sector.

The Dutch pension and insurance sector is comprehensive. Estimates provided by the INREV and IPD suggest that roughly 45% of Dutch professionally managed real estate is owned by pension funds and insurance companies (*Figure 3*). A country comparison study by INREV revealed that only Italian and French institutions control a similar share of their local real estate markets. In fact, the portfolios of Dutch pension funds and insurance companies are that extensive, that their total global real estate allocation exceeds the size of the Dutch professionally managed real estate investment market.

›› Figure 3: Real estate allocation Dutch pension funds and insurance companies

Domestic and non-domestic institutional allocation versus local market size



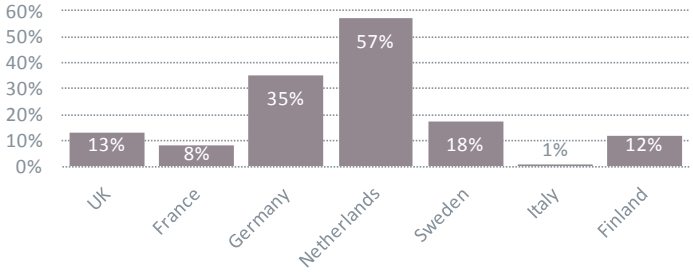
Source: INREV - Institutional Universe Comparison Study, IPD Estimated Market Size, 2010 - 2012

The Flying Dutchman

Amongst others, a lack of sufficient institutional-grade investment product within the Netherlands challenged pension funds in particular to broaden their investment horizon. Moreover, such an approach provides powerful diversification benefits and makes it possible to generate higher risk-adjusted returns. Dutch institutional investors are experienced and progressive when it comes to building a global real estate portfolio. Compared to other European countries, a relatively large share of the real estate portfolio is invested globally (*Figure 4*).

›› Figure 4: Non-domestic real estate allocation

Share of real estate portfolio invested abroad



Source: INREV - Institutional Universe Comparison Study, 2010 - 2012

Source: BlackRock Asia Property Fund III, 2014
Asia Square, Singapore

Exposure to global real estate

Broadly speaking, there are three investment strategies for real estate investing, namely investing directly in real estate properties, investing indirectly in unlisted real estate (i.e. real estate funds), and investing indirectly in non-listed real estate (i.e. real estate equities). The opportunities available for creating market exposure via real estate debt are not dealt with in this paper. Investing in real estate is capital intensive, and it is therefore difficult to realise a global diversified portfolio by investing in direct property alone. Investing indirectly in real estate allows for a much greater level of diversification with the same amount of capital. Investing in real estate is however knowledge-intensive and requires active management at the local level. By selecting the appropriate fund managers and listed real estate companies, the investor also buys into the necessary local management services and expertise.

The different investment strategies each have their own advantages and disadvantages (*Figure 5*). The allocation towards the various strategies is determined by a range of factors including the size of the real estate mandate, preconditions on for instance transparency, sustainability or liquidity, the required buffer capital as well as currency risks, transaction costs, corporate social responsibility, and inflation-hedging qualities.

Real estate funds and equities

Most Dutch institutional investors invest in a combination of non-listed real estate funds and real estate equities for the purpose of their global real estate allocation. Hereby, investors profit optimally from the characteristics of both strategies. Such an approach also gives the investor access to a broader range of global institutional-grade real estate. In practice, for example, a specific type of desired real estate may be available only via real estate funds or in other cases only via real estate equities.

Discussions frequently arise as to whether real estate equities should actually be classified as real estate. Most research argues that the performance of listed investments follows the performance of the underlying real estate in the medium to long term. As such, real estate equities are therefore an excellent addition to other strategies for realising the long-term goals of institutional players. Investing in real estate equities also allows investors with relatively smaller mandates to gain exposure to already well diversified and high quality real estate portfolios.

›› Figure 5: Advantages and disadvantages of different real estate iinvestment strategies

		INDIRECT NON-LISTED		INDIRECT LISTED
route ››	direct real estate	real estate funds	multi manager/fund of funds	real estate equities
advantages ››	• low correlation with equities › diversification potential • specific market-sector plays • inflation hedge • control on strategy • securing income via active asset management • local knowledge advantages • social contribution	• increased diversification over markets/sectors • access to growth markets • potentially more liquidity as opposed to direct • access to expert management • easier implementation compared to direct investing		• liquidity (portfolio rebalancing) • increased portfolio diversification • access to expert management • transparency & reporting • dividend yield • arbitraging strategies • transaction/trading costs
disadvantages ››	• object specific risks • capital & management intensive • limited liquidity • transaction costs	• alignment of interest with fund manager • liquidity, exit sometimes difficult • availability of suitable product • additional transaction costs and fees • increased risks e.g. macro-economic, currency, leverage, regulations		• volatility • short term correlation with equities › limiting diversification benefits • increased risks e.g. macro-economic, currency, leverage, regulations

trade-off

‹‹ high income, control, concentration risk, management intensive, costs

diversification, volatility, liquidity, leverage, divisibility, required capital buffers high ››

Source: Bouwinvest Research, adaption of work by amongst others INREV and UBS Global Asset Management, 2014

Size and dynamics of global playing field

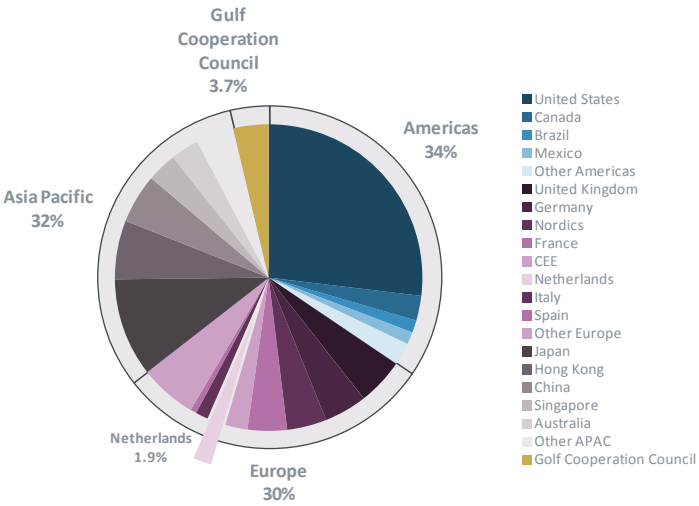
Increasing opportunities for diversification

The institutional real estate universe continues to grow in size due to a further professionalization of the global real estate sector. This offers institutional investors increasing opportunities for diversification. The growth is evident, in particular, in the emerging and more mature Asian markets. Estimates of the present global distribution of institutional owned real estate show that, in terms of size, the Asia-Pacific region is already equivalent to that of the Americas and Europe (*Figure 6*). According to these estimates, the global institutional owned real estate market represents a value of around USD 7,700 billion. The Dutch institutional market represents approximately USD 150 billion (€ 115 billion), or almost 2% of the global playing field.

Investment beliefs determine allocation

In view of the respective sizes of the international real estate markets, most Western institutional investors are still underweight to the continents of America, and in particular to Asia, and Oceania (*Figure 7*). Of course, the home bias plays an important role here. The degree of global diversification within the target portfolio depends on specific investor beliefs or limiting conditions that apply to the allocation, and these can include aspects such as the level of corruption and transparency in a country (*Figure 8*), as well as sustainability and liquidity. On a portfolio level, a significant part of Dutch institutional capital generally targets for a core investment profile (although within portfolios diversification over risk profiles does take place). As yet, many emerging markets in Asia and South America as well as the Middle East and Africa are viewed as being too opaque, encompassing undesired risk profiles.

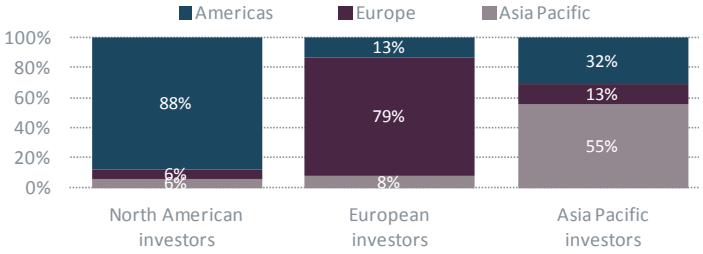
›› Figure 6: Institutional real estate universe by major markets*



**Wherever available, market size estimates by IPD were used. These estimates represent the total value of real estate owned by institutions (public and private) and includes an estimate of the real estate owned by institutional investors that do not participate in the IPD-index. In line with studies by LaSalle Investment Management and Pramerica Real Estate, a GDP-driven methodology is used to estimate the value of institutional real estate for markets not covered by the IPD (see also the paper by Youguo Liang & Willard McIntosh, Global Commercial Real Estate, 1999).*

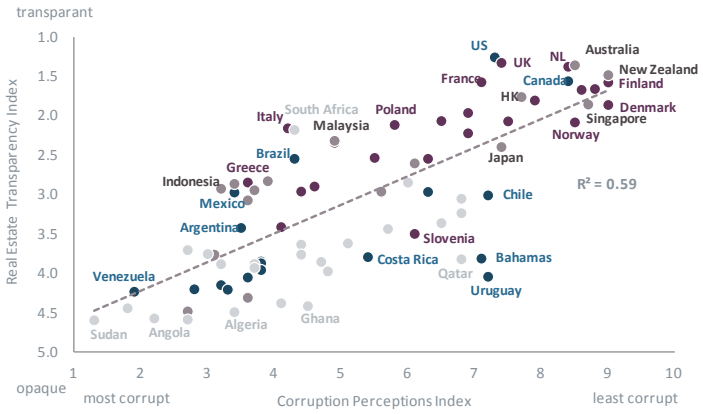
Source: IPD, IMF, Bouwinvest Research, 2012/2013

›› Figure 7: Current regional allocations to real estate by investor domicile



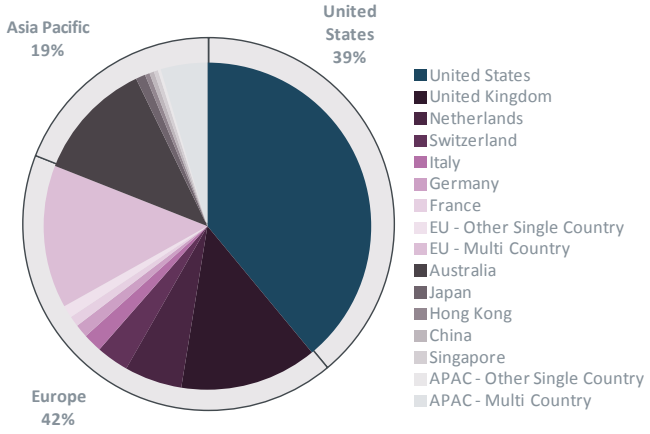
Source: INREV, Investor Intentions Survey, January 2014

›› Figure 8: Real estate transparency and corruption perceptions of countries worldwide



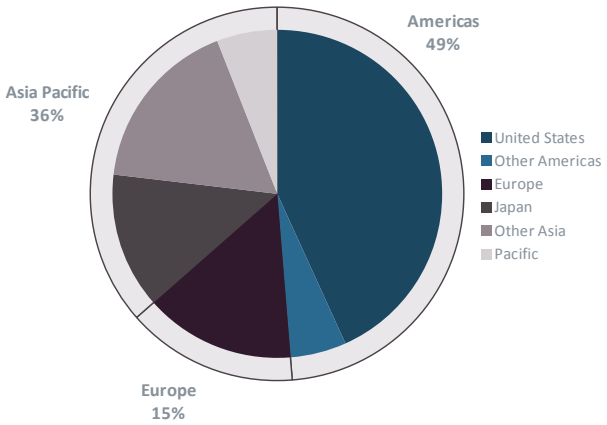
Source: Real Estate Transparency Index - Jones Lang LaSalle / LaSalle IM, Corruption Perception Index - Transparency International

›› Figure 9: Market capitalisation of non-listed real estate funds
Distribution based on net asset value of INREV, ANREV and NCREIF ODCE indices



Source: INREV, ANREV, NCREIF, December 2013

›› Figure 10: Market capitalisation of real estate equities
Distribution based on gross market value of FTSE EPRA/ NAREIT Global ex. MEA index



Source: FTSE EPRA/NAREIT - Global Ex MEA Index, January 2014

Real estate funds traditionally focused on the US and Europe

A significant share of the non-domestic real estate allocation of institutions is invested via non-listed real estate funds and listed real estate companies. Using the non-listed real estate fund indices as a proxy of total market size, a large part of the real estate fund market is still focused on Europe and the US. At the end of 2013, the European and US real estate fund indices each accounted for roughly 40% of the total funds on offer in the global index (*Figure 9*). Real estate funds offered in the Asia-Pacific region accounted for around 20%.

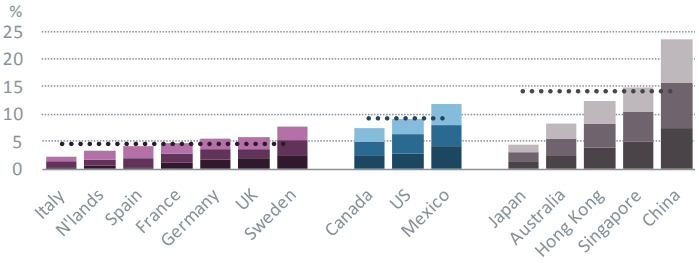
Asian markets on the rise

The economic and demographic outlook differs around the globe. The potential for growth in America and in particular the Asia-Pacific region exceeds that of Europe (*Figure 11*). The importance of the Asia-Pacific region within institutional real estate portfolios is expected to increase, as investors grow more accustomed with the real estate markets in the region.

Economic growth expectations, urbanization, the rise of the middle class, surpluses in savings, the many new building initiatives, and the increasing transparency of the market all suggest an increasing allocation towards the region in the future.

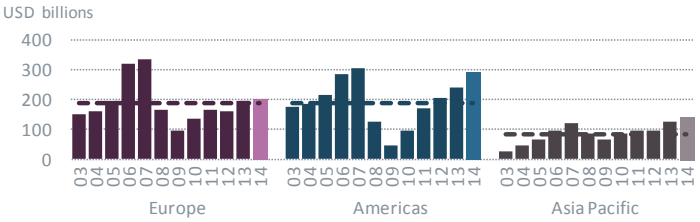
However, for now, the more mature markets in the US and Europe are more liquid, as is evident from the capital flows into commercial real estate over the past decade (*Figure 12*). Moreover, investment activity in the Asian region is heavily dominated by domestic and intraregional capital, as opposed to global capital pouring into the region. In 2013, Asian investors were responsible for roughly 90% of investment dynamics, 80% of which took place within individual countries, and 10% involved intraregional activities. The liquidity in the Asian region is expected to further increase, although again strongly fuelled by an increase in the intraregional activities of institutional investors and high-net-worth individuals.

›› Figure 11: Economic growth outlook for different countries/regions - *Cumulative growth 2014/2016*



Source: Experian Economics, December 2013 forecast

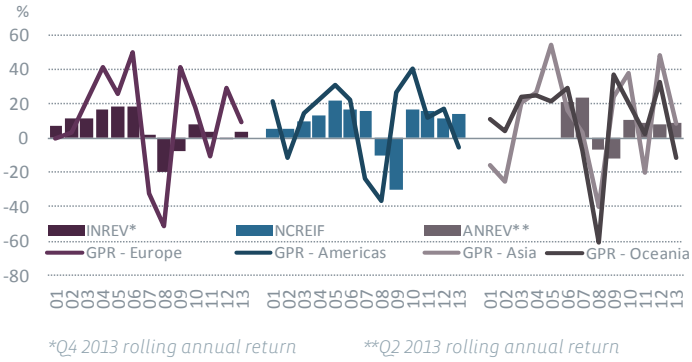
›› Figure 12: Global capital flows in commercial real estate by region
Strong recovery Americas, Europe gathering speed, increasing importance Asia Pacific region



Source: Jones Lang LaSalle, Global Capital Flows, January 2014

Diversification potential of global real estate

›› Figure 13: Total returns by investment strategy and region



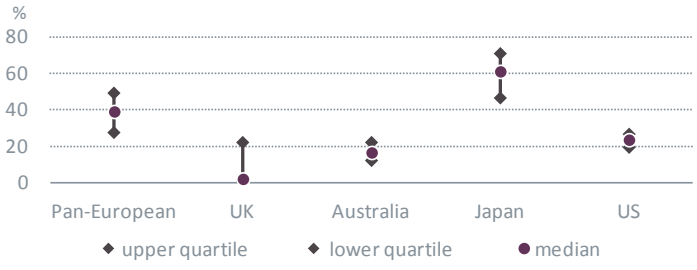
Source: INREV, NCREIF (NFI-ODCE), ANREV, GPR, January 2014

Wide range of investment profiles due to liquidity and leverage

Depending on aspects such as size, growth, and the development stage of the economy, global real estate investment markets reveal different risk-return characteristics. Moreover, the return performance is significantly influenced by differences in liquidity and leverage. Figures 13 & 14 illustrate the performance of direct real estate markets, non-listed real estate funds, and real estate equities globally.

The liquidity of real estate is the extent to which it is tradable. Although property valuations generally take place every quarter, the actual growth in value of an object is realised only upon sale. This applies to both direct real estate and real estate investments in funds and equities. The frequency of the actual trading in properties and equities is translated into the realised volatility, whereby real estate equities are undoubtedly subject to the most volatility. The second variable that has a significant influence on the risk-return profile is the use of leverage. Whereas the IPD property indices are unleveraged, the indices of non-listed real estate funds and real estate equities generally are. For instance, the current average loan-to-value of European real estate funds (INREV) and real estate equities (GPR) both comprise around 40%. However, the amount of leverage differs substantially depending on the region, the investment style, and the investment strategy (*Figure 15*).

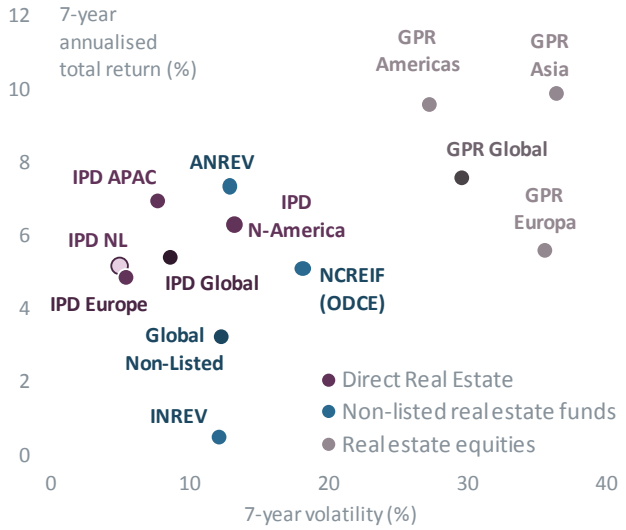
›› Figure 15: Range of leverage used by core style real estate funds



Source: INREV, ANREV, NCREIF, January 2014

›› Figure 14: Risk-return profiles for global real estate

Real estate investment profiles by investment strategy and region



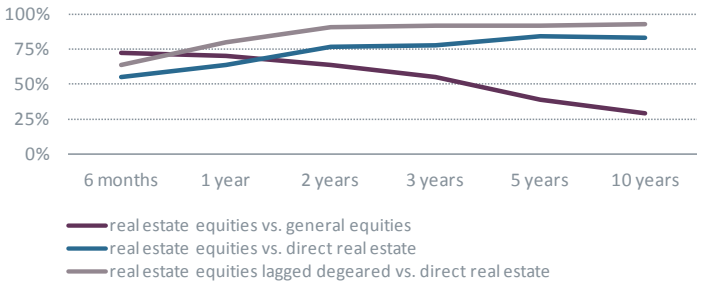
Source: IPD, INREV, ANREV, NCREIF (NFI-ODCE), GPR, Bouwinvest Research

Correlation between listed and non-listed real estate

The returns realised on listed real estate tend to lead the returns on direct real estate and non-listed real estate funds. Various studies by amongst others the EPRA, the European platform for listed real estate, show that on average direct real estate markets are lagging six months behind listed real estate. The difference in the timing of the returns can be used to introduce additional diversification into the overall portfolio. Incorporating listed real estate also injects additional liquidity into the overall portfolio, making it easier to rebalance and optimise the portfolio when necessary. On the downside, the greater liquidity is accompanied by the exposure to the volatility of the equity market. However, in the medium and long term, real estate equities perform more in line with the underlying direct real estate (*Figure 16*). In the long term, the correlation between real estate equities and the overall equity market diminishes as well. Moreover, the short-term volatility of listed real estate also provides opportunities for purchasing under favourable pricing conditions compared to the private market. By making tactical use of these price differences, it is again possible to realise further diversification by introducing an arbitrage strategy.

In addition to diversification over different investment strategies, powerful diversification benefits can be realised by spreading over different regions and markets. The majority of the European direct real estate markets show relatively stable returns, while these returns tend to be lower than those in North America and Asia-Pacific. However, the relatively higher returns in North American and Asian markets are generally accompanied by greater volatility. Moreover, the timing of these returns varies by country and region. This is demonstrated by the modest correlations that exist between a significant number of direct real estate markets across the globe (*Figure 18*).

›› Figure 16: Correlations between real estate equities, equities, and direct real estate



Source: FTSE EPRA/NAREIT, Annual Market Review, December 2013

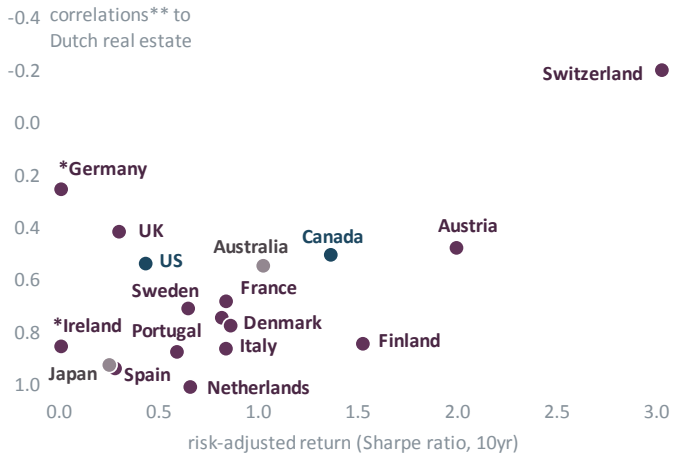
Diversification from a Dutch perspective

Dutch insurance companies and some of the larger Dutch pension funds hold a significant part of their real estate allocation in domestic direct real estate. Markets that have a low or negative correlation with Dutch real estate are therefore especially attractive from a diversification perspective. *Figure 17* shows these correlations and plots them against the Sharpe ratio, which provides a measure of risk-adjusted return.

Within Europe, real estate markets in Switzerland, Germany, Austria, and the United Kingdom could offer interesting diversification opportunities in relation to Dutch real estate. The United Kingdom (London in particular) is a large and liquid market that attracts a significant amount of international capital. It is considered an efficient market which rapidly adjusts to changes in the national and global economy. The differences in currency as well as valuation method used also contribute to the weak correlation with the Dutch market. This difference in valuations also partly explains the relative weak correlation with German real estate. Due to its strong currency and image as a safe haven, Switzerland also has a status of its own, and it has largely escaped the effects of the recent crisis.

›› Figure 17: Risk-adjusted returns and correlation with Dutch real estate

Diversification benefits in theory: the ideal additions to Dutch real estate



** Sharpe Ratio indefinable due to negative excess return*

*** Varying time periods depending on data availability*

Source: IPD Multinational Index (all property, local currency - assumes hedging of currency risk), Bouwinvest Research

A number of European markets reveal however similar trends in the returns realised compared to the Dutch market, resulting in stronger correlations. The benefits of diversification seem less evident here. Outside of Europe, diversification as well as interesting risk-adjusted returns can be realised in the US, Canada, and Australia. As London, many US markets are deep and liquid and therewith efficient, which means that turning points in the real estate cycle tend to become apparent here sooner.

›› Figure 18: Correlations between global direct real estate markets

	Australia	Canada	France	Germany	Japan	Switzerland	UK	US	Netherlands
Australia	1.00								
Canada	0.90	1.00							
France	0.91	0.85	1.00						
Germany	-0.09	-0.02	0.00	1.00					
Japan	0.95	0.89	0.93	-0.21	1.00				
Switzerland	0.05	0.28	0.05	0.82	0.01	1.00			
UK	0.67	0.51	0.54	-0.18	0.41	-0.37	1.00		
US	0.88	0.91	0.80	0.12	0.79	0.15	0.61	1.00	
Netherlands	0.54	0.50	0.67	0.25	0.92	-0.21	0.41	0.53	1.00

Source: IPD Multinational Index, annual returns (all properties, local currency), varying time periods depending on data availability

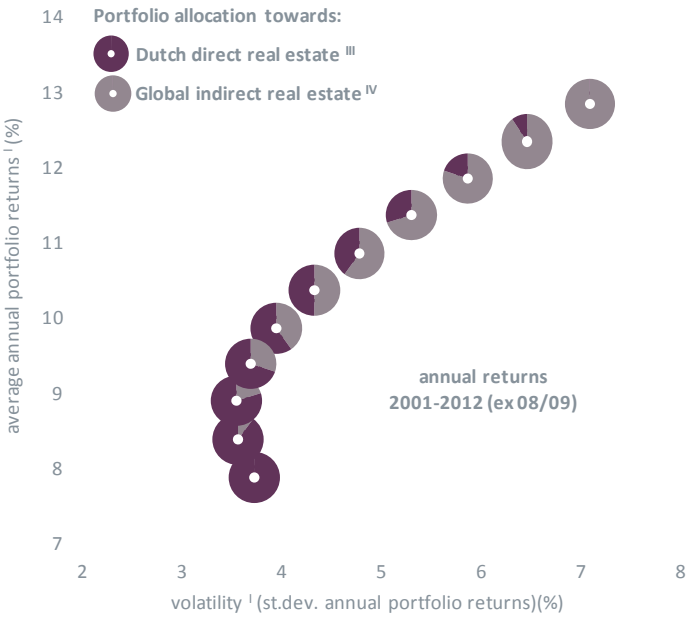
Adding global real estate to a Dutch portfolio

The returns realised on Dutch direct real estate are robust and the volatility of returns is relatively low compared to other real estate markets. By adding global indirect real estate to a home biased direct real estate portfolio, overall portfolio returns can be increased. Higher returns are generally accompanied by increased volatility. However, by efficiently structuring and diversifying the portfolio, higher returns can be achieved while volatility in the overall portfolio results remains the same or even decreases. *Figures 19a* and *19b* illustrate this compromise using historic annual and quarterly returns, plotting the risk-return profile for several constructed global portfolios.

Based on a portfolio composed purely of Dutch direct real estate, the addition of global non-listed and listed real estate will increase the average annual return delivered by the portfolio. Moreover, the addition initially results in a decrease in the volatility of the portfolio returns. Over the long term, the diversification theory illustrated here does hold for real estate. However, in the short term, periods can occur in which the addition of global indirect real estate to a home biased portfolio is less efficient (e.g. during the recent crisis, see text box). For the time periods considered here, the most efficient real estate portfolios, in terms of the highest risk-adjusted return, are those with a global indirect allocation ranging between 30% and 50%.

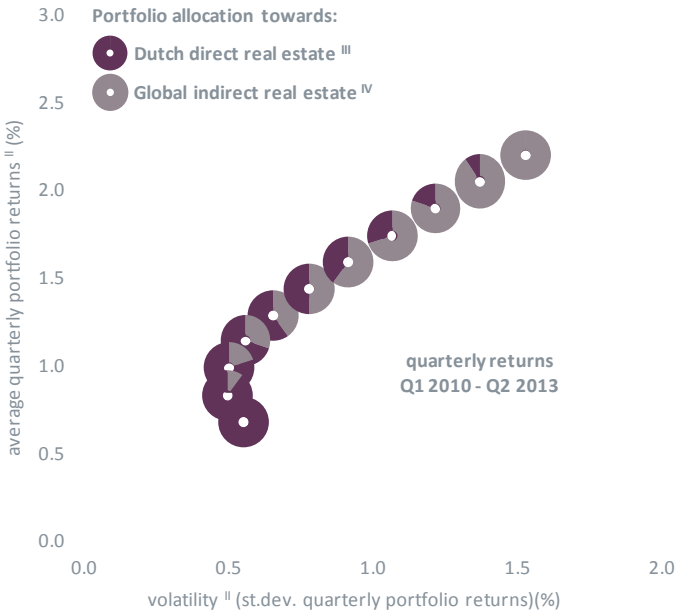
›› Figure 19[a]: Optimisation of risk and return

The effect of adding global indirect real estate to a Dutch direct real estate portfolio



›› Figure 19[b]: Optimisation of risk and return

The effect of adding global indirect real estate to a Dutch direct real estate portfolio



I: Returns and volatility (local currency) calculated over the period 2001-2012, with the exclusion of 2008/2009. Longer time series for non-listed real estate funds are not yet available.

II: Quarterly returns and volatility (local currency) calculated over the period Q1 2010 - Q2 2013. Longer quarterly time series for non-listed real estate funds are not yet available.

III: Dutch portfolio comprises the IPD Netherlands All Property Index.

IV: Global portfolio comprises indirect real estate, namely 75% in non-listed funds (INREV - UK, France, Germany, Italy; ANREV - Australia, Japan; NCREIF-ODCE - US) and 25% in real estate equities (GPR Europe, Americas, Asia/Oceania). The regional distribution assumed here from 2005 onwards is 40% Europe, 40% America and 20% Asia-Pacific, which corresponds to the market capitalisation (December 2013) of the funds registered with INREV/ANREV/NCREIF. Before 2005, the assumed distribution is 60% Europe and 40% America.

The composite portfolio returns are calculated assuming periodically rebalancing.

Source: IPD, INREV, ANREV, NCREIF (NFI-ODCE), GPR

Diversification during the crisis

From the perspective of a Dutch institutional investor with a significant direct allocation towards the domestic market, the benefits of diversifying over global indirect real estate were less obvious during the financial crisis. In 2008 and 2009, the global indirect real estate market performed relatively poor in general, due in part to the use of leverage. In these same years, the Dutch direct real estate sector delivered q relatively robust performance, with only a slight negative total return in 2009.

As a result of the crisis years, the addition of non-domestic indirect real estate to a Dutch portfolio was not an efficient approach considering the overall 2001-2012 period. However, the benefits of diversification remain evident in the long run. Within the relatively short time series available for non-listed real estate funds, the recent downturn has a significant impact. For the purpose of illustrating the potential benefits of diversification, the results over 2008/2009 have therefore been excluded from the example given here.

Fundamentals and timing of the investment

Selecting attractive market-sector combinations

Real estate market characteristics combined with clearly defined objectives by the investor determine the investment strategy and the target portfolio. A detailed knowledge and a thorough understanding of the market-sector combinations available is therefore essential. To that end, Bouwinvest Research uses the Global Market Monitor, an in-house developed instrument that quantifies and compares the attractiveness of global real estate markets and economies (see text box on Global Market Monitor).

In doing so, the monitor considers a wide range of indicators varying from historic and current occupier and investment market conditions grouped under 'Fundamentals', 'Market characteristics' as for instance size and volatility, as well as 'Timing', quantifying the five year occupier and investment outlook.

Timing the investment decision

Investors looking to diversify and/or seeking higher returns than those available on the domestic market can significantly influence their portfolio results by selecting the appropriate market-sector combinations abroad. The benefits of diversification apply in particular over the long term. However, global markets are at different stages of the real estate cycle, allowing for further optimisation over the short to medium term via the right selection and timing of acquisition and divestments. The illiquid character of private real estate does however not always allow for tactically rebalancing between markets and sectors as swiftly as might be necessary.

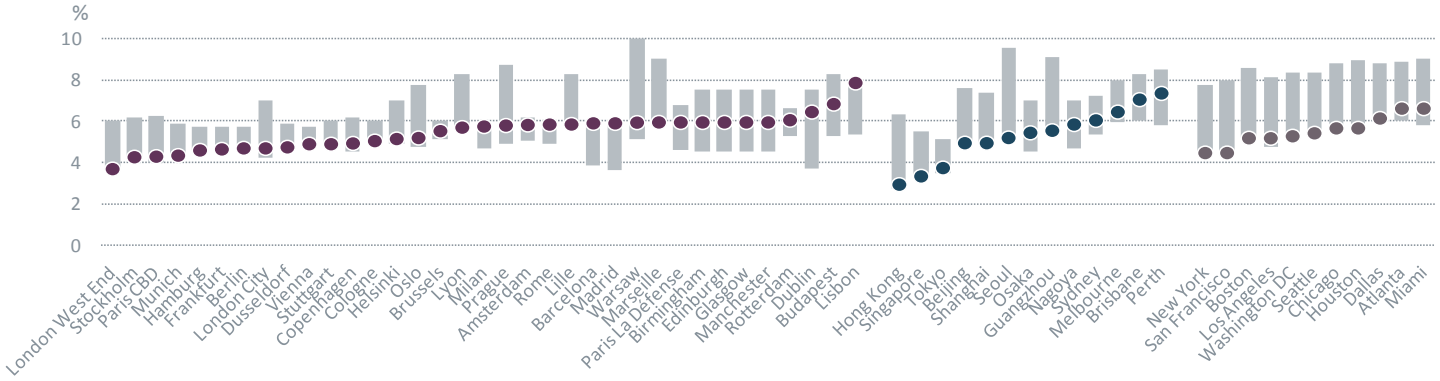
European real estate now attractively priced

Figure 20 shows the net initial yields for the major office markets in Europe, Asia-Pacific and the US as at the end of 2013. The grey bars indicate the range in which the initial yields have moved over the past 15 years. In much of the world, yields are at historic lows. As investors continue to hunt for yield in a low interest rate environment, and in anticipation of a robust occupier market recovery, a significant amount of capital has already been flowing towards the major real estate investment markets. As a result, core office properties in many global markets currently look expensive in a historic context. Some of these markets look vulnerable to normalising interest rates, as real estate premiums become tighter and debt more expensive. On the upside, interest rates will only start to normalise provided a further strengthening economy, suggesting room for capital value growth through improving rents and occupancy levels.

The above seems true for a number of US and Chinese markets as well as Hong Kong and Singapore. Within Europe, investors have been primarily focused on markets that are more liquid and considered more safe such as London, Paris, and the German and Scandinavian cities. Here initial yields have dropped as well. Investors currently seem to broaden their investment horizon, also targeting the more regional European investment markets where premiums on core real estate look relatively attractive. Amongst others, these markets include regional cities in the UK and heavily punished markets such as Dublin, Lisbon, Madrid and Barcelona. Moreover, as yet, the timing seems right for investing in core office product in Amsterdam as well.

›› Figure 20: Net initial yields global office markets

Yields as at the end of 2013 compared to the range of movement in yields over the past 15 years



Source: Property Market Analysis (PMA) - Autumn 2013 Forecast, Bouwinvest Research

Bouwinvest Research Global Market Monitor

Understanding global real estate markets

The Global Market Monitor (GMM) is a tool developed by Bouwinvest Research to quantify and compare the attractiveness of global real estate markets and economies .
The attractiveness is measured on the basis of a vast array of indicators, building on both historic data series as well as forecast series. For each indicator, markets are scored relative to the average across all inputs. By assigning specific weights to each indicator the monitor then compiles overall scorings, resulting in rankings of the most attractive markets for each of the major real estate sectors.

The Global Market Monitor covers the most important global office, retail, industrial, and residential markets and is updated every six months adopting the latest forecasts. Moreover, the monitor produces quarterly rankings of the most attractive countries to invest in across the world. Countries are scored on the basis of historic and forecasted economic and demographic developments as well as indicators more related to investment guidelines such as transparency, corruption, and sustainability.

Investment strategy and beliefs determine attractiveness

The attractiveness of countries and real estate markets is subjective and depends on the investment strategy and beliefs of the investor. The monitor is therefore constructed as an interactive tool. Depending on the shareholder's strategy, the monitor assigns more or less 'importance' to certain indicators and/or groups of indicators. Different sets of weightings can be selected. Therewith, rankings of countries and real estate markets can be configured in accordance with the shareholder's investment style

Additional insights behind the rankings

The attractiveness of countries and real estate markets is measured using a wide range of indicators. These are clustered in three investment themes, each further divided into two subthemes. The main themes comprise the historic and current 'Fundamentals' of the occupier and investment market, the overall 'Market Characteristics' such as size and volatility, and the 'Timing' of the market, analysing the five year occupier and investment outlook.

By grouping similar, cohesive indicators into these investment themes, markets can be relatively compared on different levels, providing additional insight behind the overall scorings and rankings. Therewith, the monitor offers powerful market intelligence and acts as a starting point for the discussion, feeding the debate in search of investment opportunities.

Informed decisions and common sense

As with every quantitative exercise, the results should be interpreted with caution and the underlying assumptions and restrictions should be well understood. The resulting rankings should specifically not be seen as a road map for future investments, but should be seen as another valuable and helpful tool to assist in making well founded and informed investment decisions.

Global Market Monitor - Quick Stats

All major global cities and regions are covered:

Office markets	57
Logistic markets	45
Inner-city retail markets *(Europe and Asia)*	38
National shopping centre markets*	15
Residential markets*	11
Economies	26

*(extended analysis in the USA, covering 10 metropolitan regions)

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About Bouwinvest

Bouwinvest Real Estate Investment Management (REIM) B.V. is a Dutch investment manager specialised in real estate in the service of institutional investors. It manages three Dutch institutional sector property funds and also manages a separate mandate for institutional real estate investments in Europe, North America, and the Asia-Pacific region. The total amount of invested capital is EUR 6,1 billion.

Bouwinvest REIM has a license of the Netherlands Authority for the Financial Markets in Amsterdam within the meaning of Article 2:65 of the Dutch Financial Supervision Act and is supervised by the Authority Financial Markets and the Dutch Central Bank.