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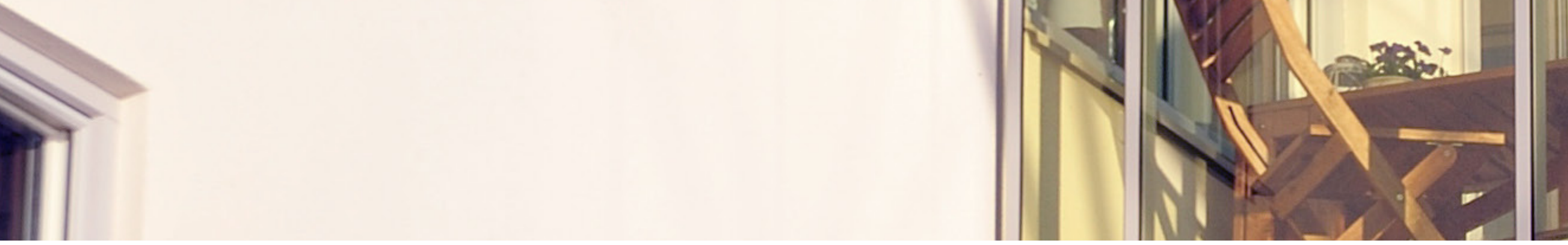
IPD / Catella
Pan-European Residential Report 2014/2015

Prepared by IPD in association with Catella



Sponsor introduction

The rationale for the common research study is now justified based on significant investment flows into European residential markets in the last years, as well as on expectations for strong future flows. Flows into global real estate increased dramatically after the Lehman shock, with new source of capital from the Middle East and Asia, but the question remains: has transparency in these markets improved in the same proportion?

One of the most quoted statements in the real estate industry is: "If you can´t measure you can´t manage. "Catella´s research philosophy is driven by a clear market view based on the macro and microeconomic conditions, as well as on the drivers for future market development. Along with IPD, we see in this combination a perfect approach in understanding, explaining and forecasting the markets. Looking back to explain the future – the common study is an essential part to increase transparency in our industry in order to achieve reasonable investments decisions.

CATELLA

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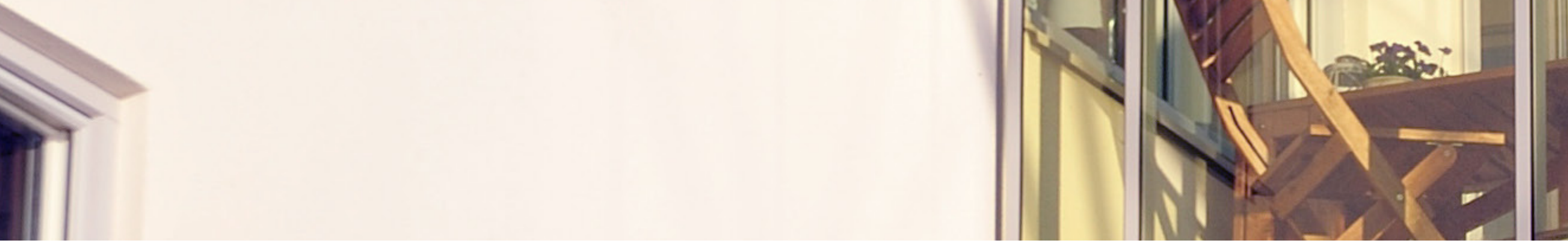


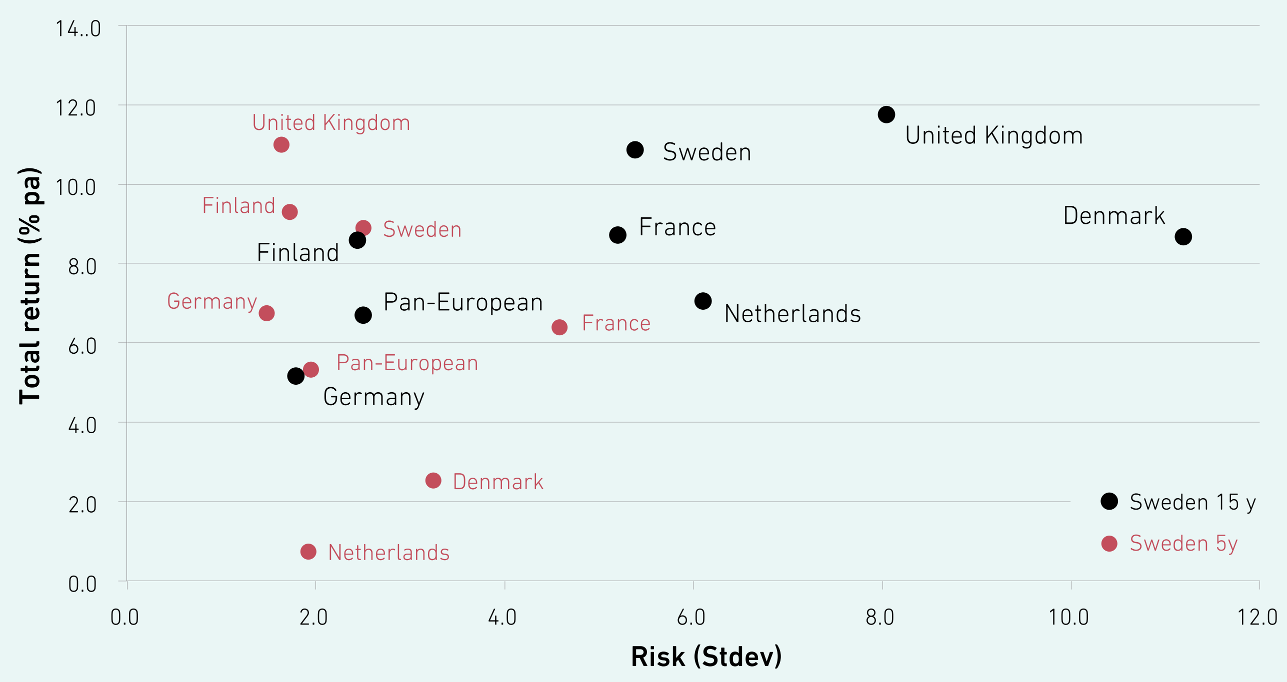
Executive summary

Europe's residential markets have become its strongest performing real estate sectors over the last decade, even though there have been significant differences in return and the drivers of performance between countries and local markets over this period. In summary, the residential sector recorded an annualized total return of 6.6% p.a. made up of a relatively low income return of 4.1% p.a., but strong capital growth of 2.4% p.a. over the last 10 years. On a pan-European basis, residential was the only sector to avoid negative overall performance throughout this period.

As residential real estate has been in strong demanded by investors in recent years, leading to substantial capital flows and rising price levels, Catella Research has commissioned IPD to analyze the current state of the residential markets and identify a number of features that may suggest future trends. The survey centers on the markets of Denmark, Finland, France, Germany, the Netherlands, Sweden, and the United Kingdom over the period 1999-2013.

For a long-term perspective of 15 years, it makes sense to separate those countries characterized by high but volatile total returns, such as the UK and Sweden, from those that have achieved steady returns, like Germany and Finland.

Risk return profile by country, 1999-2013



Source: IPD

In the medium term, (2009-2013), a different pattern emerges as markets recovered at varying rates after their downturn or proved to be less affected by economic and financial turmoil:

- Performance in **France**, **Sweden** and the **United Kingdom** slumped in 2008/2009, but recovered substantially afterwards. However, over the medium term these markets have not achieved the returns seen in the previous boom period.
- The **German** and **Finnish** markets were little affected by the downturn, achieving stronger capital growth and total returns than before.
- **Denmark** and the **Netherlands** have continued to record low overall total returns.

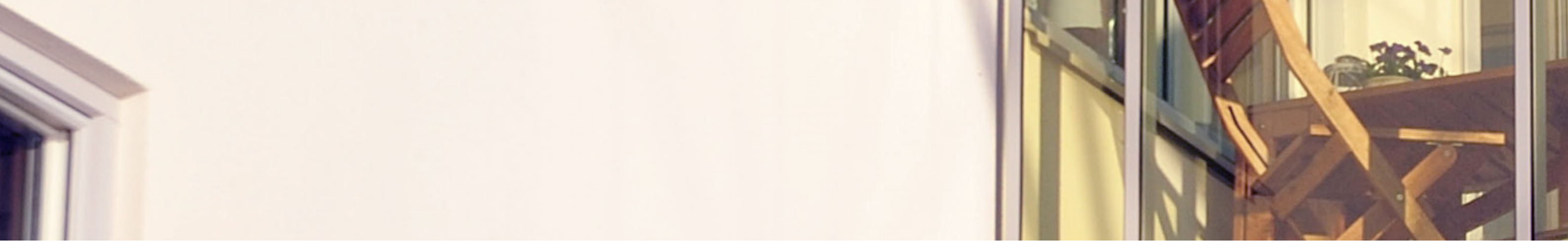
The long and medium term results demonstrate the variety of experience across national residential markets and the **significant diversification potential** they have given for international investors, due to their **relatively low correlations**.

We have analyzed the current state of the market by comparing income return and capital growth figures for 2013 to those for previous years, to understand whether they are likely to be overheating.

In terms of income returns, the UK and French markets stand out as reaching long-term lows in 2013, suggesting high levels of capital value. In contrast, the German market achieved the highest income return in its IPD history, showing that there is no consistent picture for European markets overall. However, for all markets, a comparison of yields on residential real estate and 10 year government bonds shows a **significant positive spread** in favor of property at present.

In most residential markets, capital values are now significantly higher than before the financial crisis started in 2007. Values for the UK, Sweden and Finland are now 20% higher than in 2007, while those for Denmark and the Netherlands are still substantially lower.

The results show the importance of reviewing and analyzing each market individually, given that they have reached different stages in terms of their current position and market trends. At the end of this report, we therefore investigate trends in detail for each residential market across Europe.



Introduction

European economies and real estate markets were affected differently by the financial crisis depending on the timing and strength of the downturn and subsequent recovery. The real estate investment market recovery since then has been characterized by increasing transaction volumes, rising purchase prices, and yield compression. In this context both commercial and increasingly residential property have grown in importance for institutional investors across Europe. The currently strong flows of money into the residential sector are fueled both by national and international investors, leading to a growth in cross-border investment. Residential property promises to be a relatively stable investment due to a consistent level of demand from a large number of households.

Recent residential market trends and the ongoing uncertainty for Europe's economy in fragile capital market conditions, make it important to assess and analyze current market performance for the overall European residential market as well as for single countries.

The survey analyzes past performance trends and compares current market conditions to provide some food for thought about future prospects. IPD does not publish forecasts but provides performance data which can help in evaluating current market conditions. This is mainly based on a comparison of the latest return, rent and yield figures with their medium and long-term averages, suggesting potential risks and opportunities for investors.

This study is based on IPD's historic annual performance data for the period 1999-2013, focussing on those European countries with substantial institutional residential investment markets: Denmark, Finland, Sweden, the Netherlands, France, Germany, and the United Kingdom.

The total return is IPD's most important performance measure, and aggregates the income and capital growth elements of investment performance. The returns reported in this survey only relate to standing investments, excluding transactions and developments, and are expressed in local currency terms to exclude the impact of exchange rates. Precise definitons of IPD's core measures are summarized in the Appendix. Beyond that, forecasts being made for 2014/2015 are from Catella Research.

The survey is divided into two main parts. Firstly, the pan-European overview illustrates general market trends and compares individual countries from a broad perspective. Key elements of this part of the study measure relative performance in terms of income return and capital growth together with their drivers, such as rental income, operating costs and yields.

Secondly, the individual country profiles show country-specific market conditions and trends. These contain a national performance overview together with a deeper look at regional markets. A comparison of national performance figures with the IPD Pan-European index provides an international yardstick for each market. In explaining market trends and features, both real estate and macro-economic parameters are taken into account.

Both parts highlight the present investment market position, comparing current performance figures to the relevant medium and long-term trends.

European markets overview

Residential and commercial property in comparison

The strong demand for residential property in recent years has been based on its outperformance together with a well-balanced risk-return profile compared to the commercial sectors such as office and retail, which form the major part of the portfolios of most institutional investors.

For the 10-year period 2004-2013 which is covered by the IPD Pan-European Index, residential property achieved an average annual total return of 6.6% per year. The same level of return was achieved by the retail sector, but at significantly higher volatility. Chart 1 shows the returns to the major sectors and the relative stability of residential performance in the downturn following the financial crisis in 2008-2009. On a pan-European basis, residential was the only sector to avoid negative overall performance throughout this period.

Chart 1 Pan-European Index – total return by sector 2004-2013

Source: IPD

Residential's moderate market fluctuation compared to the other sectors is illustrated by the performance measures in Chart 2. This is borne out not just by the volatility level but also by the risk return ratio, which is calculated by dividing the total return by its standard deviation. The ratio of 2.31 for the residential sector was roughly twice as high as for all property as well as for each of the individual commercial sectors: office, retail and industrial.

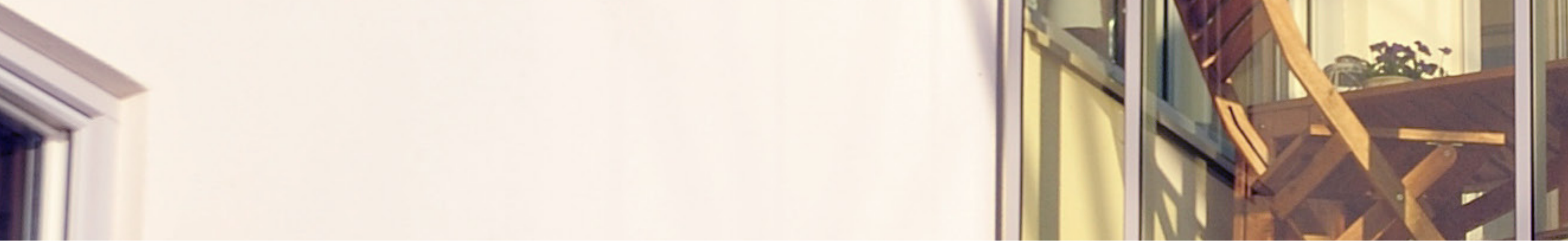


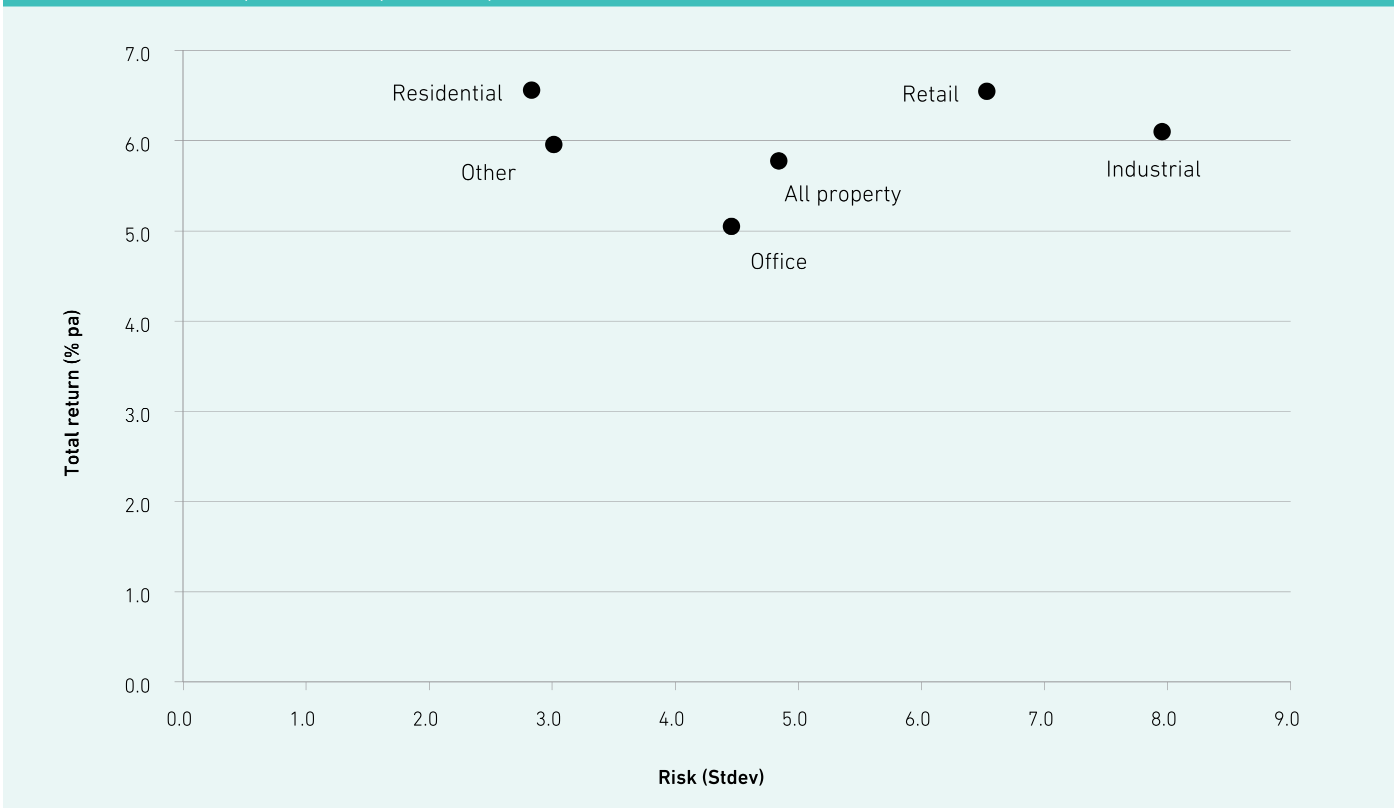
Chart 2 Pan-European Index – total return by sector, 2004-2013

	Total return 2013	Total return 5-yr ave	Total return 10-yr ave	Volatility 10-yr	Return-risk-ratio 10-yr
All property	5.9	5.1	5.8	4.8	1.2
Office	5.4	4.5	5.0	4.5	1.1
Retail	6.1	5.8	6.5	6.5	1.0
Industrial	8.6	4.7	6.1	8.0	0.8
Residential	5.6	5.3	6.6	2.8	2.3
Other	6.1	6.0	6.0	3.0	2.0

Source: IPD

Chart 3, which shows risk and return for the different sectors across Europe, confirms that residential investments have been characterized by high returns and low risk compared to the other sectors.

Chart 3 Risk return profile at a pan-European level 2004-2013



Source: IPD

This initial comparison underlines the historic attractiveness of the residential sector, and suggests additional questions for analysis:

- Are there significant differences between the European countries, and if so, why?
- What are the major performance drivers for residential real estate as a whole, as well as in specific countries

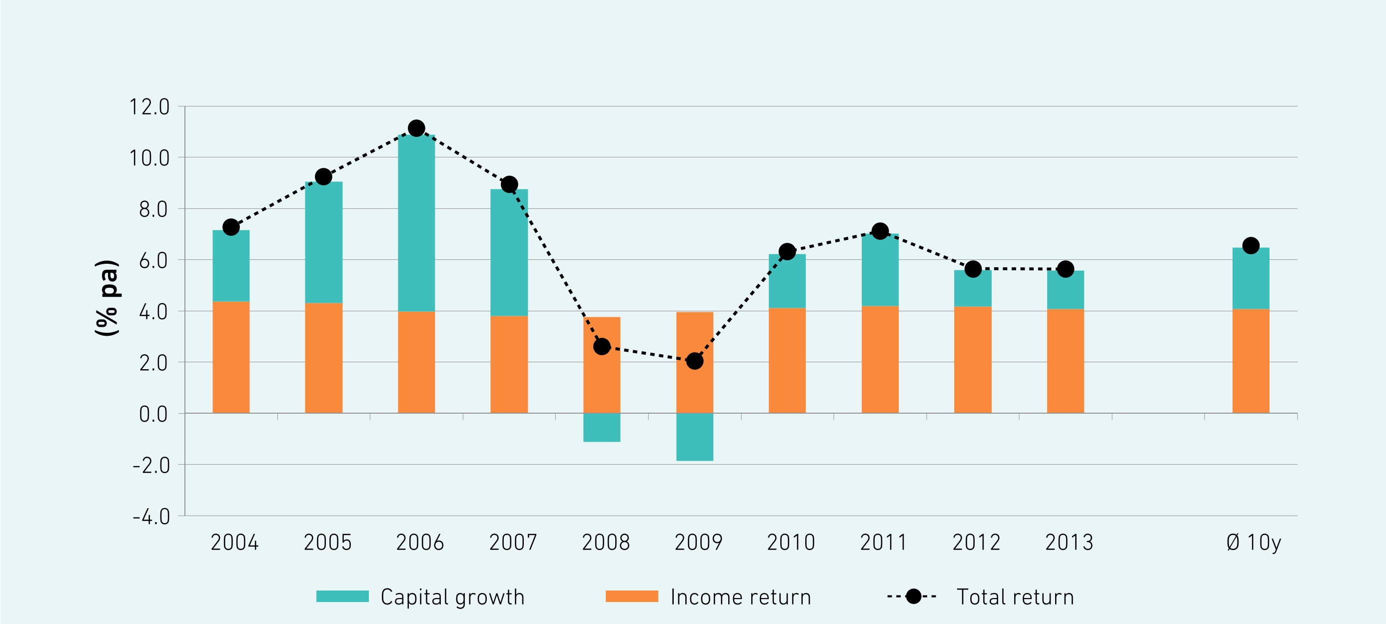
Momentum of the pan-European residential market

This analysis of residential markets starts with a broad overview at the pan-European level to give a first indication of the sector's main characteristics as well as its regional differences.

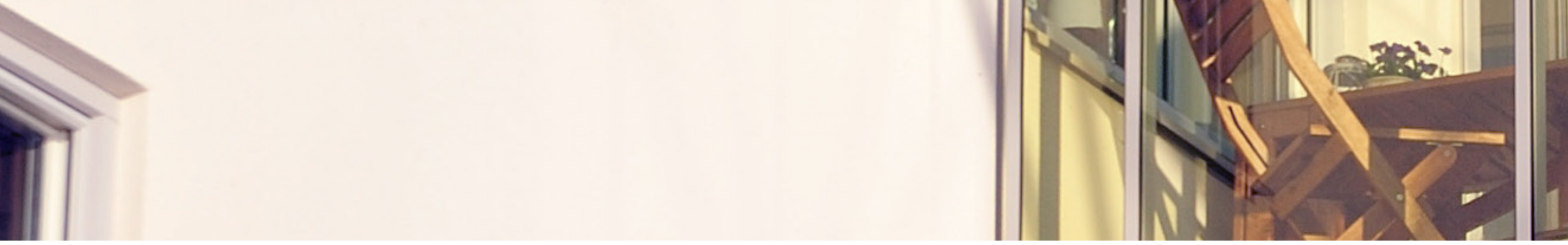
The overall European residential performance shown in Chart 4 shows the market cycle through the last 10 years, incorporating the financial crisis. It can be seen that the residential sector achieved positive total returns in all years. In addition, 2008 and 2009 were the only years in the period when the sector suffered negative capital growth. The earlier years in particular were characterized by strong capital growth, but the period after the crisis also saw significant growth. Furthermore, residential income return was not affected by any dramatic shifts – for the whole 10-year period remaining within a narrow range between 3.8% and 4.4% p.a., and with a volatility of just 0.2%.

In summary, the residential sector recorded an annualized total return of 6.6% p.a. made up of a relatively low income return (compared to the other sectors) of 4.1% p.a., but strong capital growth of 2.4% p.a. over the last 10 years.

Chart 4 Pan-European residential performance



Source: IPD



For the European residential markets where IPD has performance figures for at least three years, there are however significant differences in total return as well as its capital and income components.

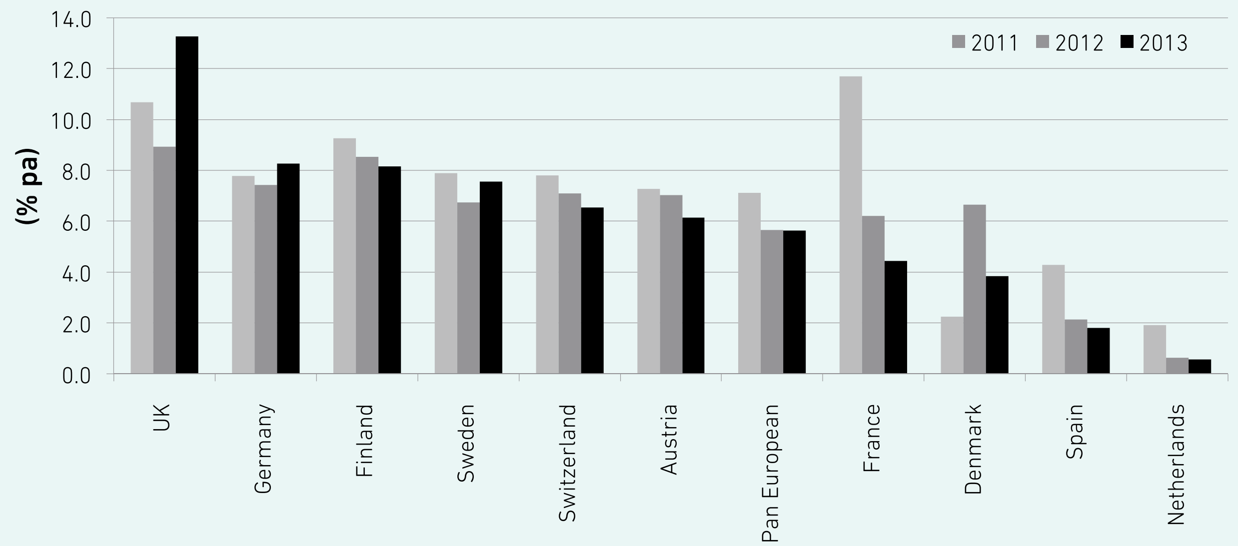
In 2013, the United Kingdom was leading the European residential market, with an overall performance of 13.3%. At the other end of the scale, the residential market in the Netherlands achieved a return of just 0.6% (Chart 5). The major driver of performance differences across markets was capital growth, but income return also varied significantly, for instance between Finland and the United Kingdom.

Chart 5 Performance in the residential sector in 2013, by country

Source: IPD

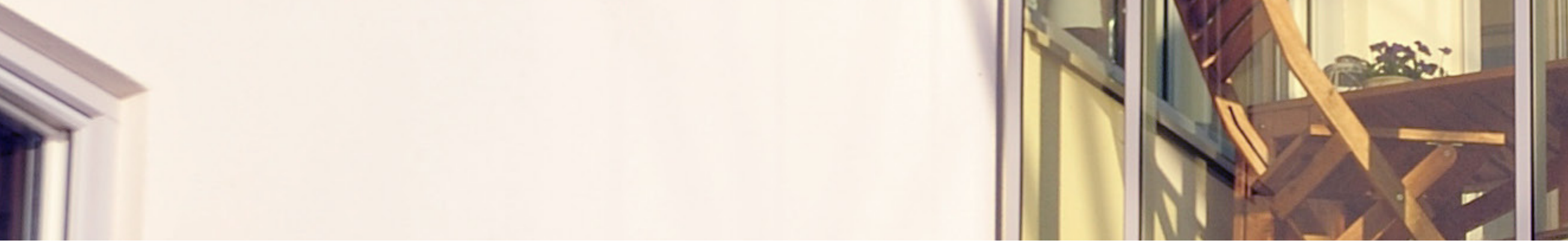
An examination of the 3-year period 2011-2013 gives an indication of market momentum in the different countries: for the majority of markets total return has decreased between 2011 and 2013, even though returns have generally been positive. France, Spain and the Netherlands in particular have been characterized by substantial declines, with Spain and the Netherlands coming to see low though still positive returns. In contrast, the residential markets in the United Kingdom, Germany and Sweden reached higher levels of return in 2013 than in 2012.

Chart 6 Short term momentum - single country total returns, 2011-2013



Source: IPD

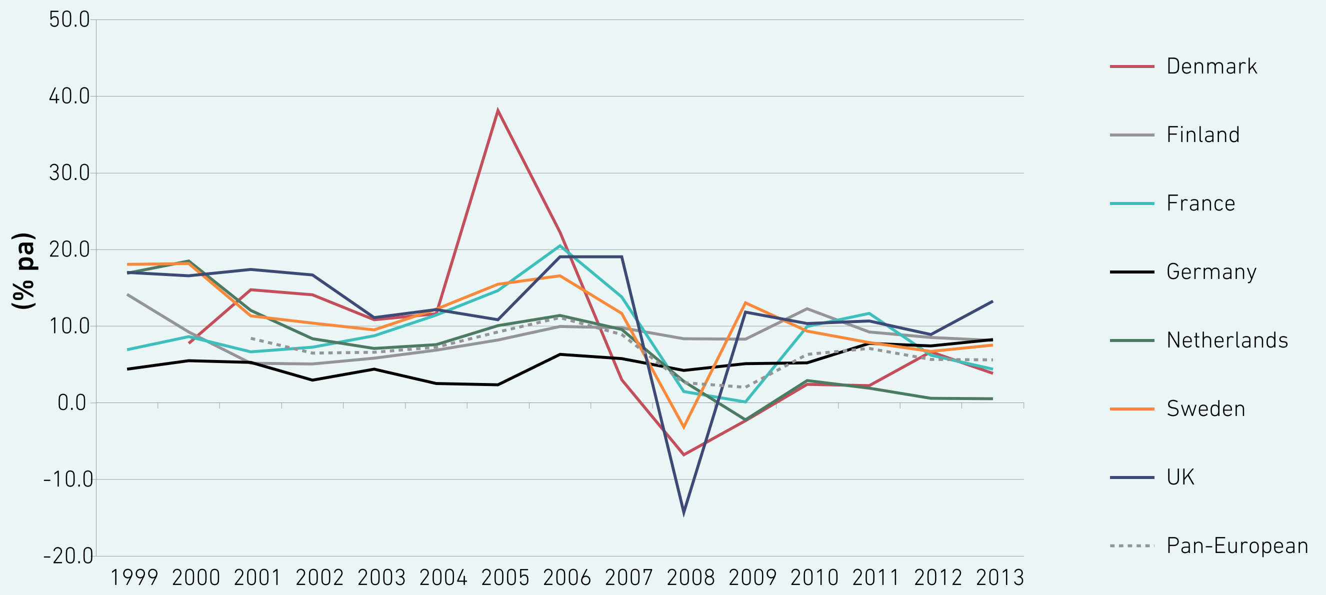
Although investment in residential real estate has grown in recent years, only a limited number of countries in Europe have sizeable institutional investment markets for the sector. Those markets of significant size are confirmed by the existence of IPD residential samples as well as the weight of residential property in each overall national index: in contrast a number of countries have a weight of zero or just above. In total there are nine countries with sizeable institutional investment in residential: the Netherlands (IPD index weight 46% in 2013), Switzerland (46%), Austria (23%), Finland (20%), Sweden (18%) France (14%), Denmark (9%), Germany (8%), and the United Kingdom (5%). The figures reflect the share of rented residential property in Europe, with the exception of most countries to the South of the continent.



The European core markets

Given the difficulties for foreign investors entering markets dominated by national institutions such as Switzerland, this report focuses on Catella's core markets, analysing the Nordic countries of Sweden, Finland and Denmark, as well as Germany, France, the Netherlands and the United Kingdom, in terms of their performance over the last 15 years (1999-2013).

Chart 7 Total return by country, 1999-2013



Source: IPD

Chart 7 shows the overall pattern of market movement through the last 15 years, together with the high level of deviation by individual countries. The strong trend in residential market performance, as shown by the overall Pan-European index, was broken by the 2008/2009 downturn in the aftermath of the financial crisis. However, it should be noted that the German and Finnish markets hardly suffered during these years, in contrast to the markets of the UK, Sweden and Denmark.

Looking at overall performance from the perspective of a long-term investor, Sweden and the United Kingdom stand out with returns averaging over 10% p.a. for the last 15 years, whereas most other countries returned between 7% and 9% p.a. over this period (Chart 8). Over the whole period, the German residential market has been the laggard (5.2% p.a.), but it has improved strongly in recent years as the figures for 2013 (8.3%) and the 5-year period 2009-2013 (6.8% p.a.) indicate.

Chart 8 Residential total return and corresponding risk by country, 1999-2013

	Total return 2013	Total return 5-yr ave	Total return 10-yr ave	Total return 15-yr ave	Volatility 15-yr	Return-risk-ratio 15-yr
Denmark *	3.8	2.5	7.4	8.7	11.2	0.8
Finland	8.2	9.3	9.0	8.6	2.4	3.5
France	4.4	6.4	9.3	8.7	5.2	1.7
Germany	8.3	6.8	5.5	5.2	1.8	2.9
Netherlands	0.6	0.7	4.4	7.1	6.1	1.2
Sweden	7.5	8.9	9.6	10.9	5.4	2.0
United Kingdom	13.3	11.0	9.8	11.7	8.0	1.5
Pan-European *	5.6	5.3	6.6	6.7	2.5	2.7

Source: IPD
* Pan-European figures based on a 13-year period (2001-2013), those for Denmark for the period 2000-2013

Chart 7 shows that nominal total returns to residential investments in Finland, France and Germany have not been negative at any time during the past 15 years. For the Netherlands, Sweden and the United Kingdom, negative returns were only registered for one year, while Denmark saw negative performance in 2008 and 2009. This followed a very high return in 2005 (38%), leading to a high volatility measure for the Danish market. Fluctuations in market performance are reflected in the volatility figures in Chart 8: the German and Finnish markets have shown low volatility and a relatively high risk-return ratio, whereas France, Sweden, the Netherlands, and the United Kingdom have proved to be more volatile markets. The Danish figures are not strictly comparable as they cover a slightly shorter time period.

For a better understanding of these varying market trends, it is helpful to examine total return's capital and income components together with their underlying drivers, in those markets where the data are available and comparable across Europe.

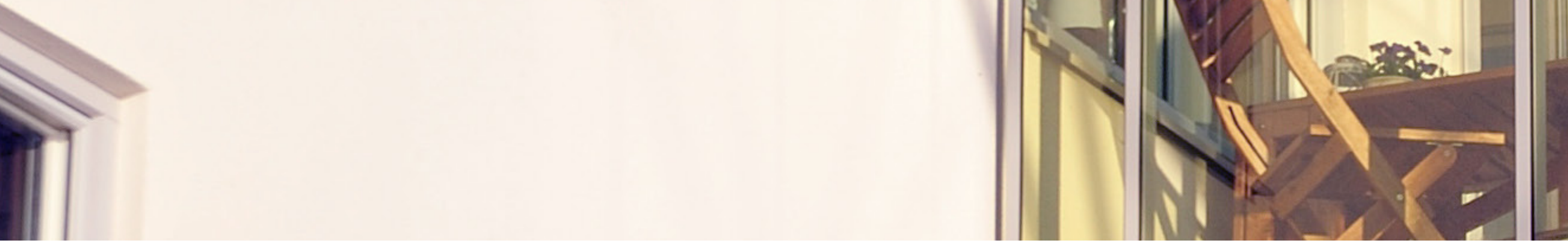
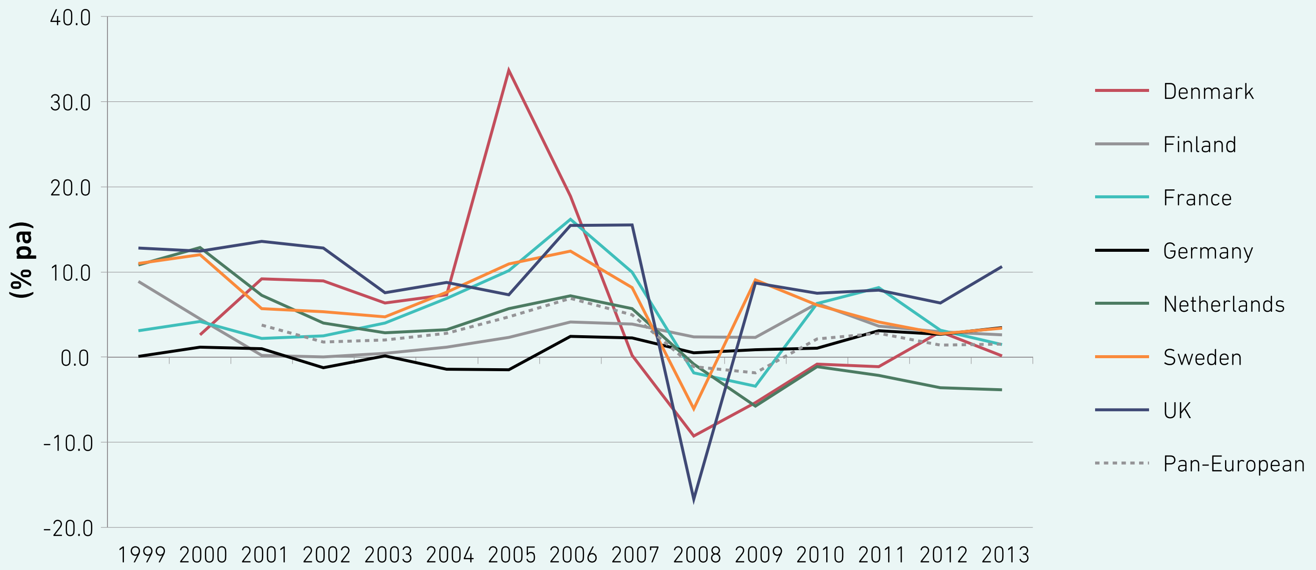


Chart 9 Capital growth by country, 1999-2013



Source: IPD

As already noted at a Pan-European level, capital growth is the major driver of variations in market return. Chart 9 shows similar trends to those shown for total return in Chart 7.

In all European markets, except for a few years in Germany, capital growth was positive in the period before the financial crisis, but then turned down to varying extents in 2008/2009. In the years after the crisis the UK market recovered quickly with significantly rising capital values, whereas the Dutch market languished with continuously negative capital growth.

In contrast to the more volatile markets, Germany and Finland have seen very stable capital growth over the last 15 years, as shown in Chart 10. Most notably, capital growth remained positive here right through the years of the financial crisis.

Chart 10 Income return and capital growth from a risk-return perspective

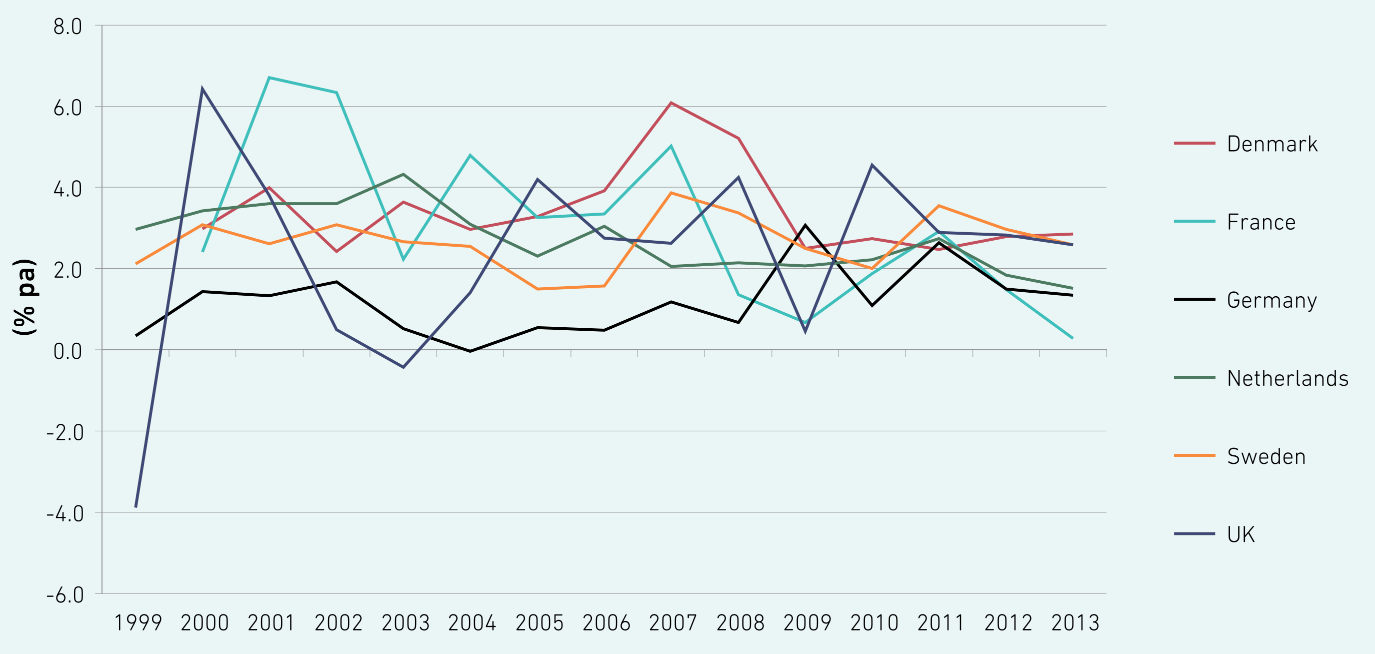
	Income return 15-yr		Capital growth 15-yr	
	Return	Risk	Return	Risk
Denmark *	3.7	0.8	4.8	10.7
Finland	5.4	0.4	3.0	2.4
France	3.8	0.6	4.8	5.0
Germany	4.2	0.3	1.0	1.6
Netherlands	4.3	0.5	2.7	5.6
Sweden	4.2	1.0	6.4	4.7
United Kingdom	3.1	0.4	8.4	7.7
Pan-European *	3.9	0.3	2.3	2.4

Source: IPD

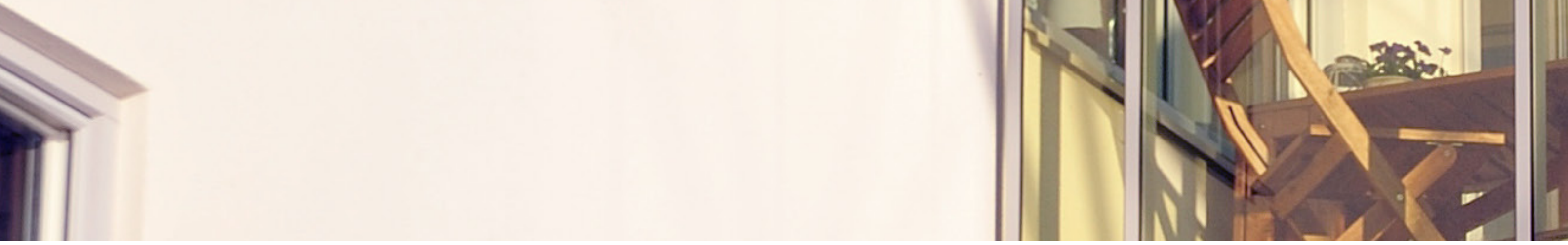
* Pan-European figures based on a 13-year period (2001-2013), those for Denmark on the period 2000-2013

Rental value growth, which measures the change in market rent as applied by the asset valuer, is shown in Chart 11. Rental value trends explain some but not all of the changes in capital growth. For example, in the United Kingdom market rents continued to rise during the financial crisis, while capital growth slowed significantly.

Chart 11 Rental value growth by country 1999-2013



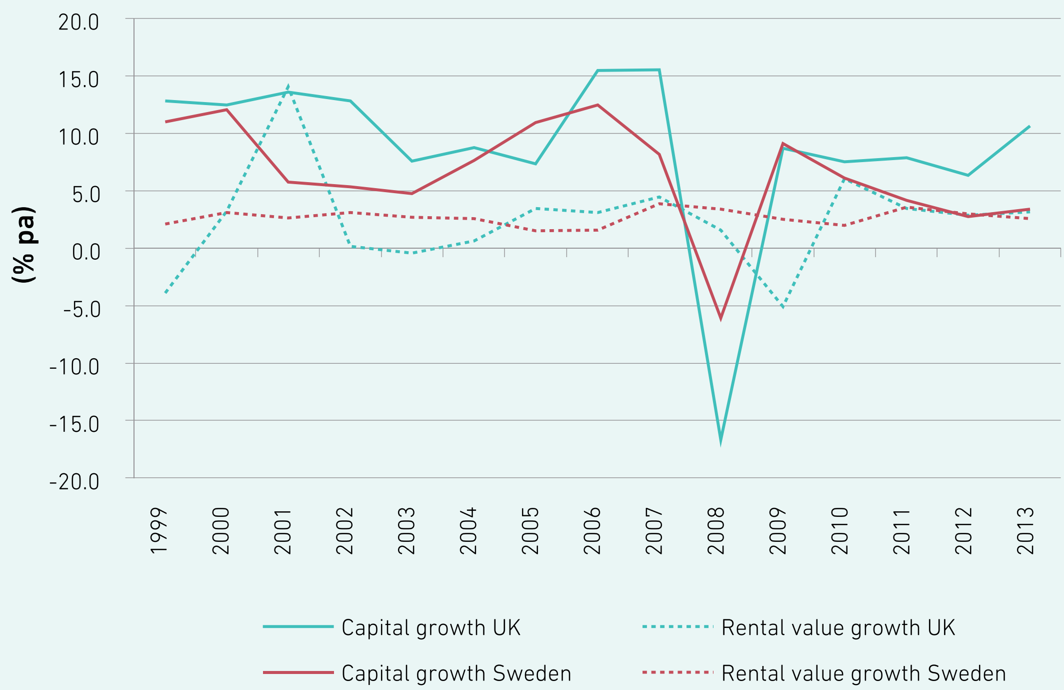
Source: IPD



Remarkably, rental value growth has been positive for all countries (except for the UK in a few years) during the period under review, including the years of the financial crisis.

A positive correlation between capital growth and rental value growth was however seen for the United Kingdom over the whole period. In contrast, Chart 12 shows Sweden to have witnessed a negative correlation of -0.49, as against 0.13 for the United Kingdom.

Chart 12 Correlation of capital growth and rental value growth in Sweden and the United Kingdom



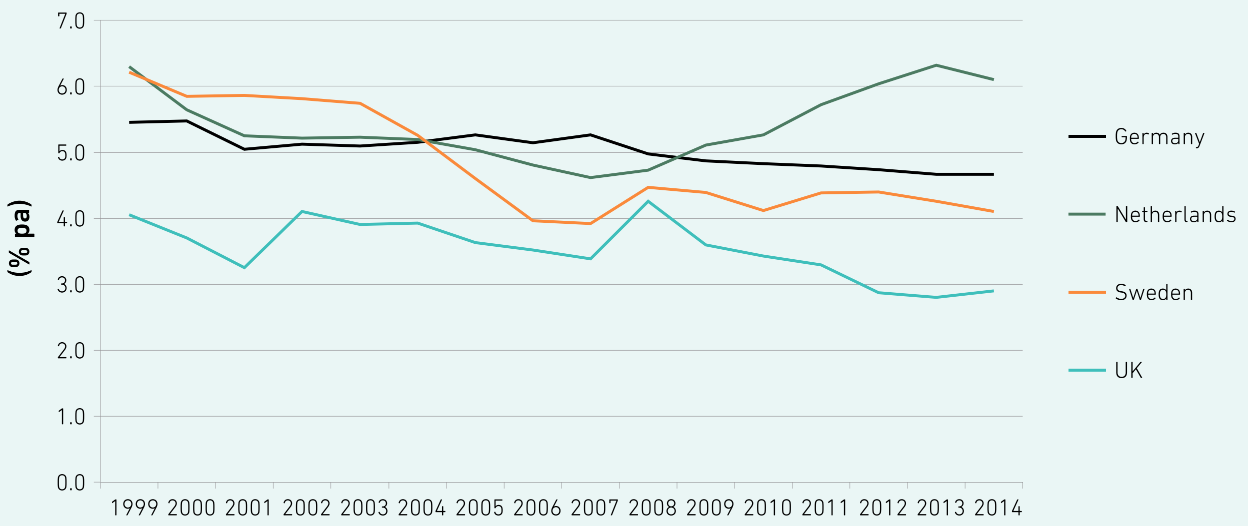
Source: IPD

The other key element for explaining capital growth is the market yield, which reflects investors' appetite for real estate in the market.

The example markets shown in Chart 13 illustrate the effect of yield movements on capital values in the years since the financial crisis. The positive market sentiment in the United Kingdom and Germany in recent years is reflected in the market yields shown in the chart.

In the UK yields rose dramatically in 2008 in the aftermath of the financial crisis, and then fell when the market recovered. In Germany, the reduction in market yields reflects the continuing boom in residential investment. In contrast, Dutch market yields have lengthened in recent years as a consequence of market weakness.

Chart 13 Market yield for selected European countries, 1999-2014



Source: IPD, Catella Research (2014 figures)

Definition of market yields
United Kingdom: net initial yield
Netherlands: reversionary yield
Sweden: valuation yield
Germany: market net yield

The second major component of the total return, income return, derives from actual gross rental income and running costs over the reporting year.

Chart 14 indicates that residential property delivers steady positive income streams, although there are significant differences between countries as well as periodic changes over the last 15 years. However, for the overall European market the chart shows a relatively stable income return of 3.9% p.a. At the same time, average national market returns vary considerably, from 3.1% p.a. for the United Kingdom to 5.2% p.a. for Finland. The Finnish market is a significant outlier, outperforming the other markets by more than 100 basis points on average (see Chart 10). In contrast, the UK records Europe's lowest residential income return, and one which has decreased steadily during the period under review. The other markets achieved income returns in a narrow range between 3.7% and 4.3% p.a.

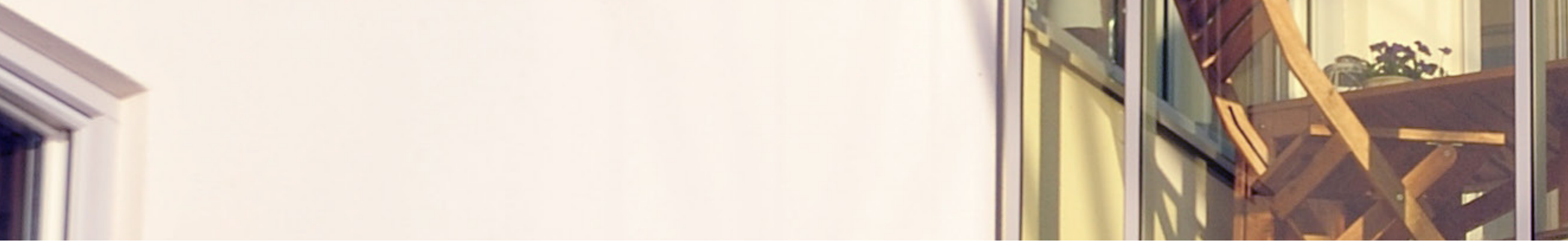
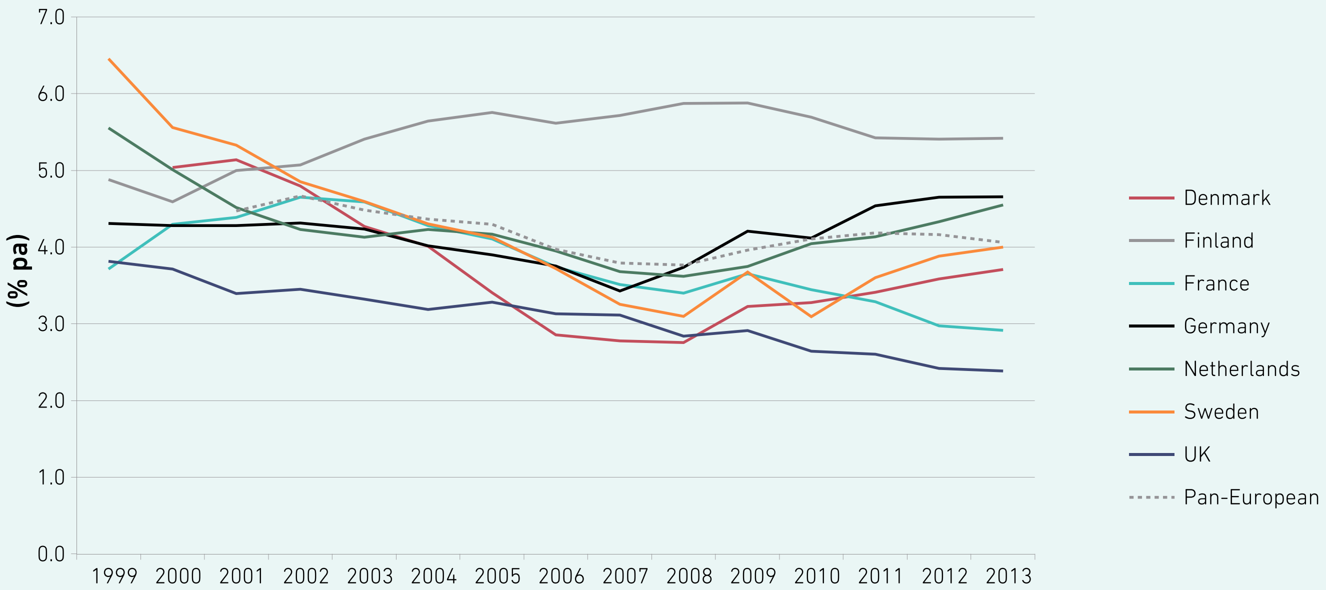


Chart 14 Income return in Europe's core residential markets, 1999-2013



Source: IPD

Significant differences are evident between income return by country, although with the exception of Finland all countries saw decreasing levels of income return in the years before the financial crisis in parallel with robust performance, as the capital value base expanded.

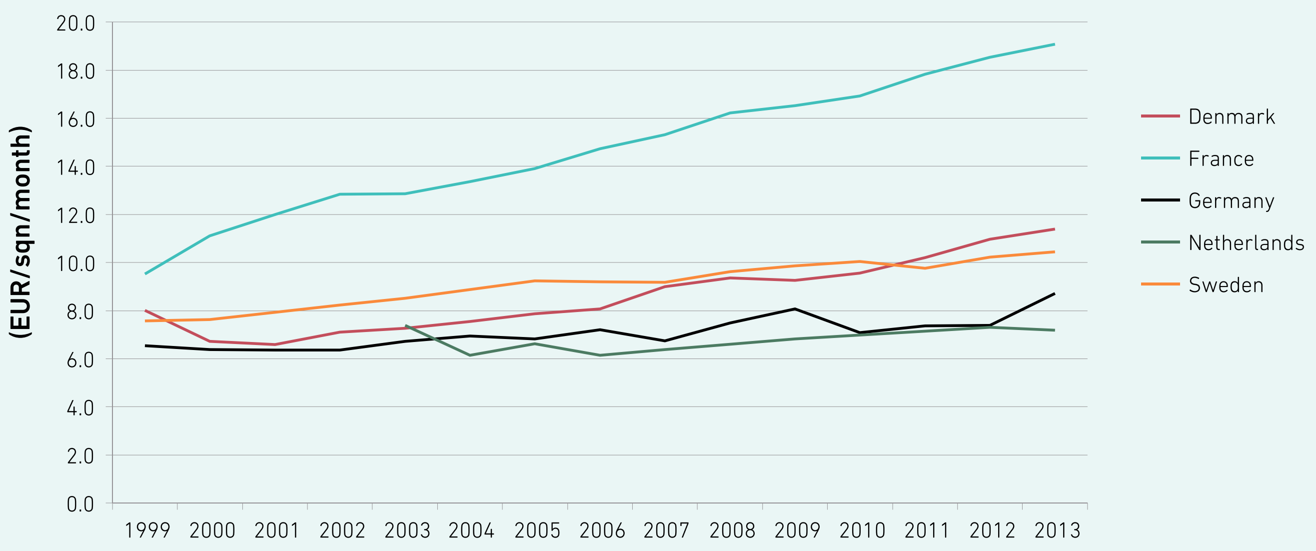
After the crisis, European market income returns started to diverge: the UK market saw a continuous decrease in income return, as was also the case for France. In contrast, the Swedish and German markets saw income returns rise despite positive capital growth. A similar trend was seen in the Dutch residential market, but in this case income returns rose due to weak overall market conditions and capital depreciation.

Income return is driven by gross income and total operating costs. In the cases of Germany and Sweden, rising income returns indicated that landlords were able to generate increasing net income to the extent that net income growth was able to compensate for the underlying capital growth in the market. Against this background, we analyze growth rates for rental income and costs, across the markets of France, Germany and the Netherlands, for which the appropriate data are available*.

* IPD does not hold the same level of rental income and cost data for all markets.

Starting with the overall level of rental income by European country, Chart 15 illustrates the trend of gross income per square meter per month denominated in Euro. The differences between countries partly depend on differences in typical rental levels, but also reflect sample differences, for example in terms of property locations. However, over the 15-year period a notable level of increase was seen in France, while the trends in Germany and the Netherlands were relatively subdued.

Chart 15 Gross income in nominal amounts (EUR/sqm/month)



Source: IPD

Significant differences between the countries are similarly apparent for total operating costs (Chart 16). Net operating costs represent the part of overall operating costs that an investor is unable to pass on to tenants. Net costs have remained stable in the Netherlands over the last 10 years, whereas in Germany they tended to rise towards the middle of last decade, though they have since fallen back. In contrast, operating costs in France have escalated over the last 15 years, dampening the increase in net rental income compared to the gross rental level, as indicated in Chart 15.

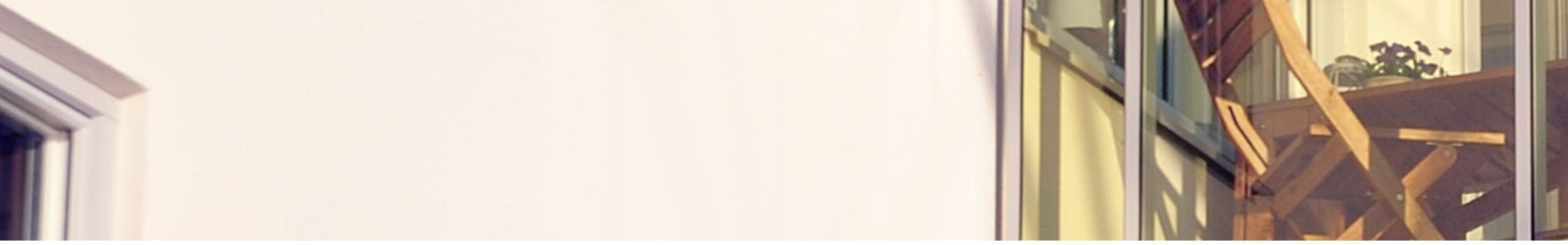
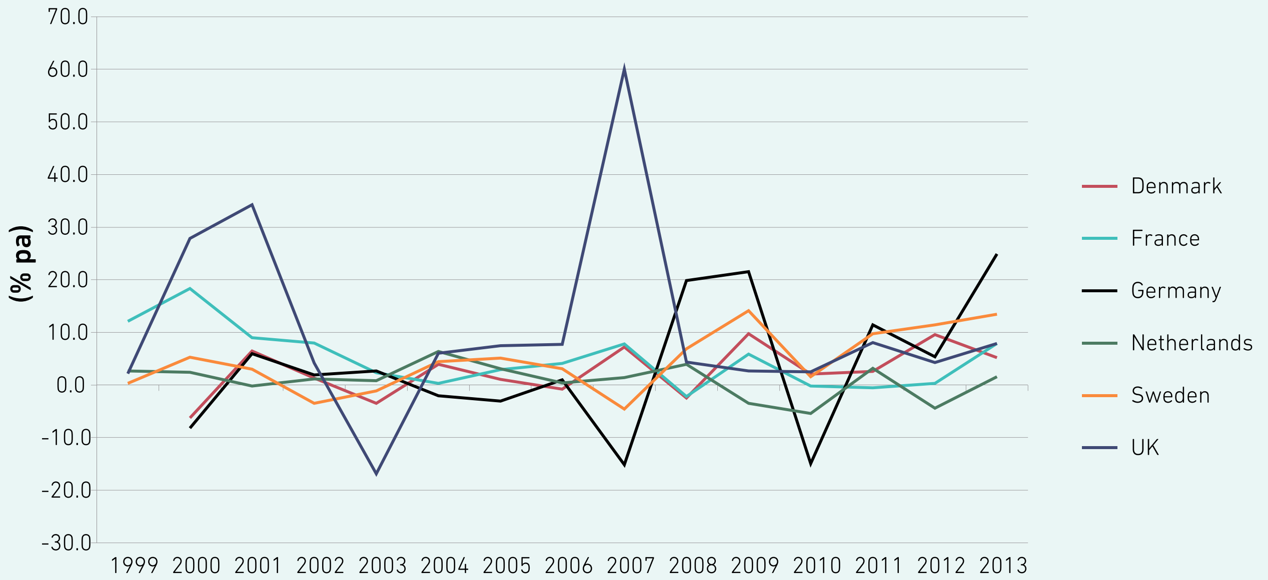


Chart 16 Net operating costs by country (EUR/sqm/month)

Source: IPD

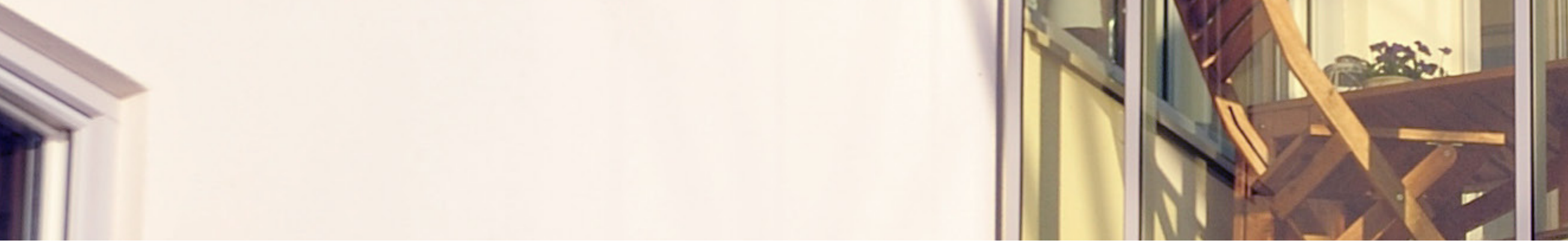
It is notable that income return has risen in countries like Sweden and Germany in recent years, despite the fact that capital values have also been increasing. Chart 17 helps to explain this by showing that landlords were able to increase net rental income more than the growth in capital values. Capital growth has averaged about 5% p.a. for these countries in recent years compared to double digit growth in net rental income.

Chart 17 Net income receivable growth by country (% pa)



Source: IPD

Chart 16 shows another significant driver of income return in the German residential market. Net operating costs have declined significantly for Germany in the last few years, whereas they have remained stable in the Netherlands and increased in France.



Current position of the European residential markets

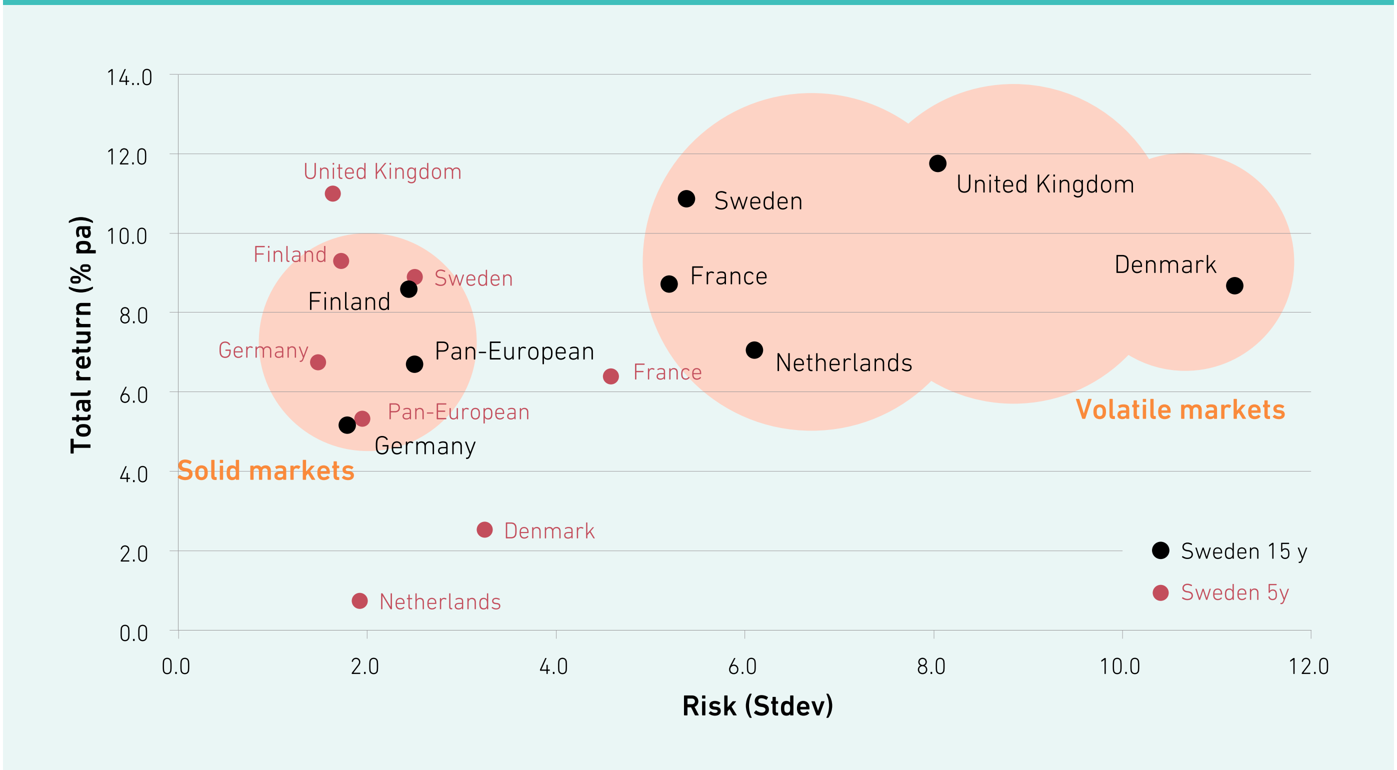
The specific trends affecting each European market are analysed in more detail in the individual country sections. However, the market trends outlined above lead on to the question of the current attractiveness of residential real estate as an investment.

This may be considered in terms of:

- the investment market cycle as indicated by total returns, capital values and yields
- a comparison to other asset classes, most importantly bonds as an alternative income generating asset

In addition, depending on whether the investors' strategy is to focus on a single country or to invest multinationally, questions arise about the current position of countries in their market cycle and the opportunities for diversification across European markets.

Chart 18 Risk return profile by country on long- and medium-term perspective



Source: IPD

Chart 18 shows annualized total returns and volatilities for European countries over the long-term (15 years, black dots) and medium-term (5 years, red dots). Taking the UK as an example the comparison of returns illustrates strong performance in long- and medium-term but subdued volatility in recent years representing just the pickup in the years 2009 to 2013.

As already pointed out in Chapter 2, there are big differences between countries over the long term – on the one hand a group of high returning but volatile markets - Denmark, the UK and Sweden - and on the other quite stable markets such as Germany and Finland. In this context it is interesting to compare the long and medium term positioning of each market.

Overall, the medium term picture suggests that the recovery has so far been quite restrained, with annualized returns in places slightly lower and elsewhere significantly lower than over the long run.

The Dutch and Danish markets have performed poorly in the recent past as these markets not yet have started to catch up on the capital values after the financial crisis. The UK, Sweden and France while recovering have failed to match long-term performance levels. For these markets, which have been characterized by distinct market cycles in the past, it remains uncertain how long total returns will improve.

A different pattern has been seen for Germany and Finland, where returns have been above average in the period 2009-2013.

The diverse performance attributes of European residential markets suggest that there should be opportunities for regional diversification that would benefit multinational investors.

Chart 19 shows the correlation of total returns by country for the period 1999-2013 and illustrates the relatively strong correlation of the Danish, Dutch, French, Swedish and UK markets.

Against these countries however, the correlations of the German and Finnish markets are low or even negative. Finnish residential has a slightly positive correlation with all other markets, whereas the German market has a negative correlation with most others.

Overall, these correlations suggest that investors in European residential property should be able to reduce risk by geographical diversification.

Chart 19 Correlation of the European markets by total return, 1999-2013

	Den	Fin	Fra	Ger	Ne	Swe	UK
Denmark	1						
Finland	-0.23	1					
France	0.64	0.17	1				
Germany	-0.42	0.22	-0.06	1			
Netherlands	0.53	0.17	0.42	-0.35	1		
Sweden	0.60	0.27	0.47	-0.19	0.67	1	
United Kingdom	0.42	0.06	0.47	0.11	0.47	0.82	1

Source: IPD

Further analysis of current market conditions and risks is possible based on the components of total return.

Income return can be viewed as a measure of risk when placed in the context of its historic trend.

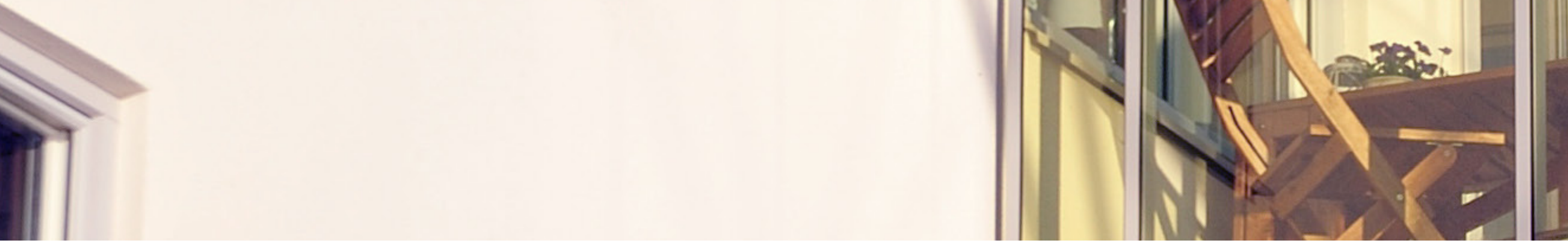
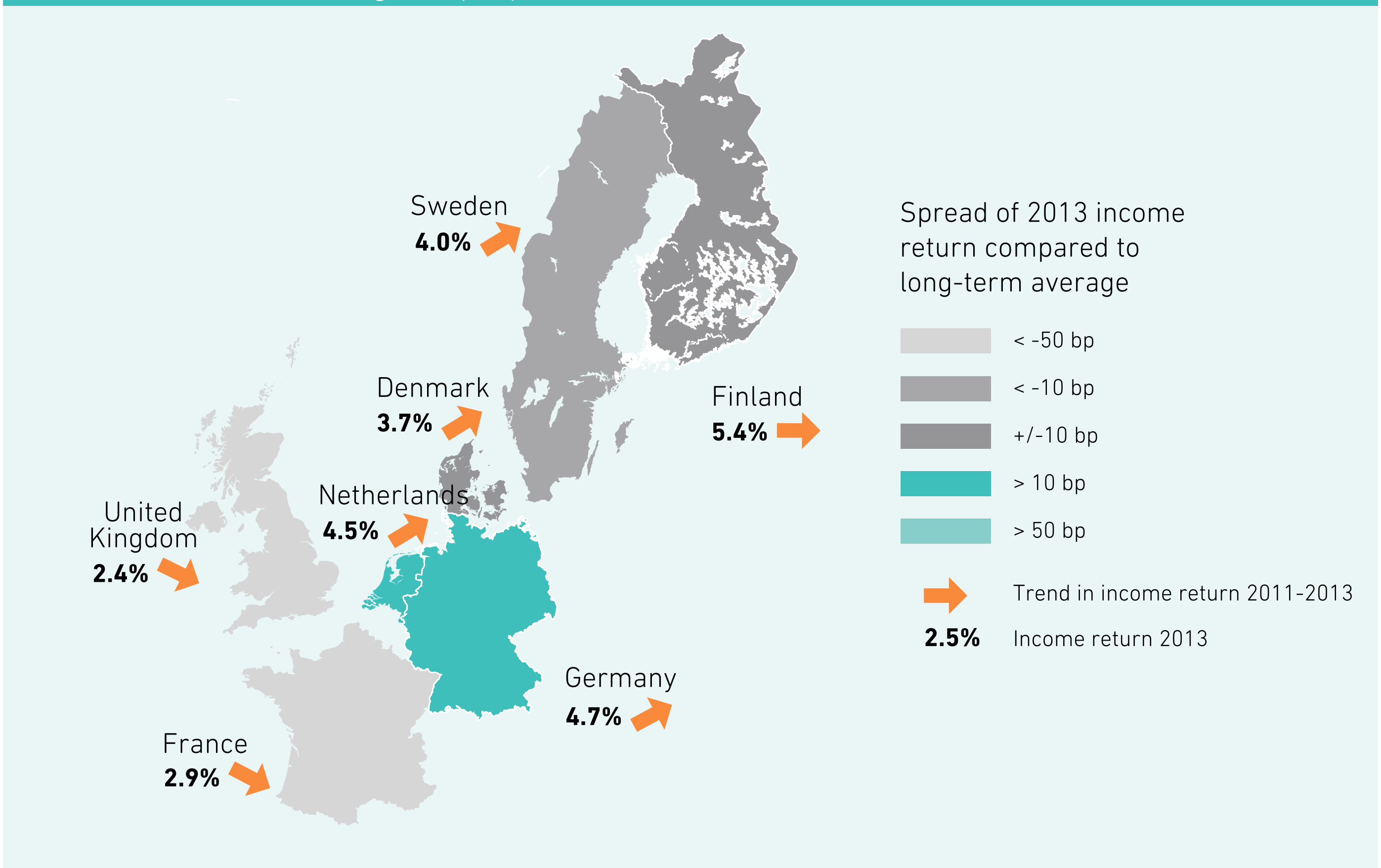


Chart 20 Income return on long-term perspective

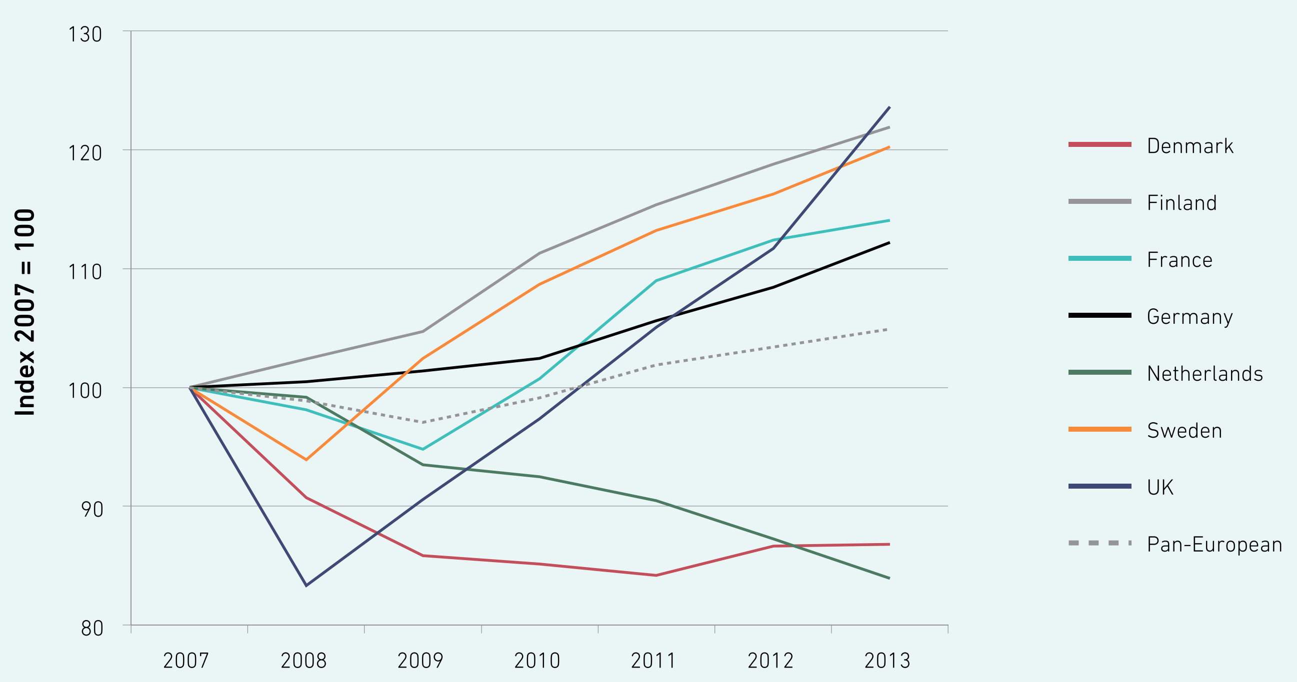


Source: IPD

On the basis that investments become more risky if income returns decline, or have reached low levels, the markets may be classified by the deviation of income return in 2013 compared to the long-term average (1999-2013) as summarized in Chart 20. This shows that residential markets in the United Kingdom and France showed negative spreads of more than 50 basis points compared to the long-term trend, indicating an ongoing downward trend in income return. Furthermore, these markets are characterized by low nominal levels of income return (below 3%). On the other hand, Germany and the Netherlands showed a positive spread on income return in 2013, reflecting rising returns since 2011. However, the Finnish market, though showing a stable level of income return over the last three years, is exceptional for its high absolute level of 5.4%, which sets it apart from France and the United Kingdom.

Capital growth has been the major driver of performance and volatility from a long-term perspective. One way of judging the current position of the market is to compare current capital values to their level before the financial crisis.

Chart 21 Capital growth trends since the beginning of the financial crisis



Source: IPD

Chart 21 shows the significant differences in capital growth by country. Only in Denmark and the Netherlands are values still below their 2007 levels, whereas the majority of markets reached all-time highs in 2013. However, cyclical markets like France, Sweden, and the UK slumped in 2008/09, but recovered significantly in successive years. In contrast, the German and Finnish residential markets were not affected by any downturn and maintained positive capital growth.

Historical performance suggests that capital growth has depended more on yield movements and investment demand than rental value growth. However, in the long run and over a full market cycle, increasing capital values must also be dependent on rising investment income.

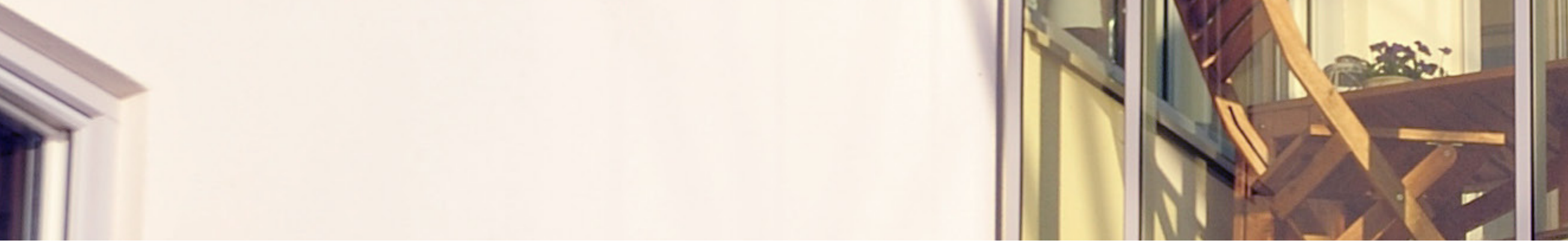
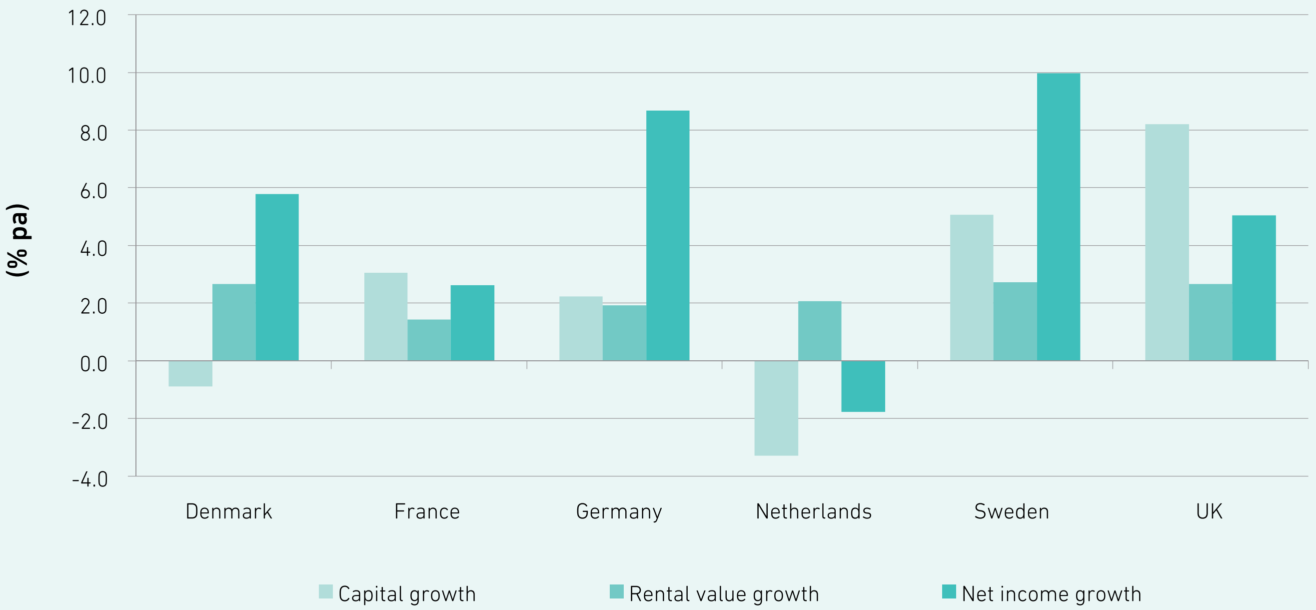


Chart 22 Capital growth and net income growth in the medium term, 2009-2013 annualized

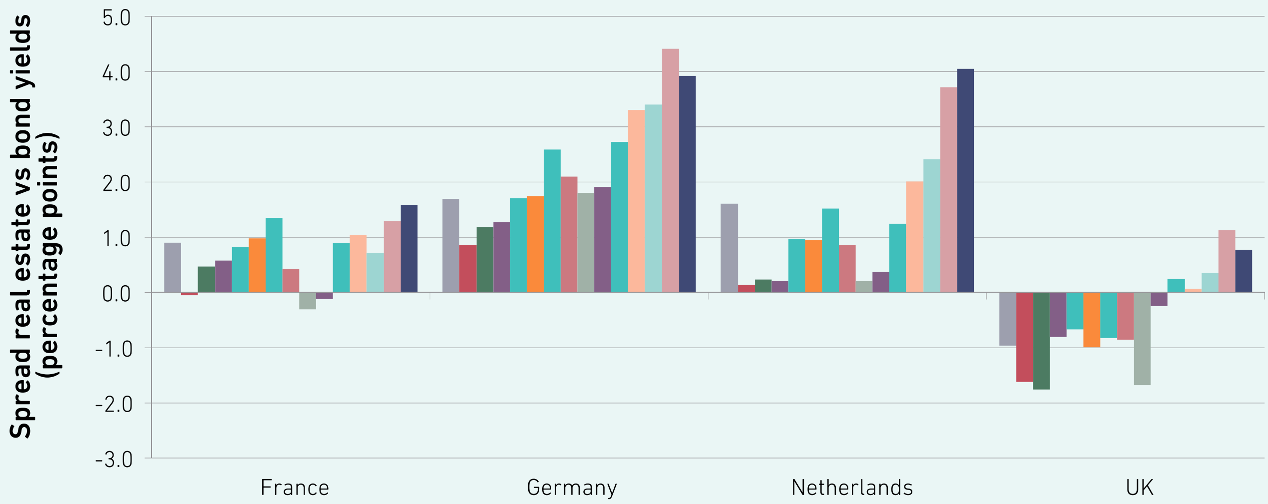


Source: IPD

Comparing recent capital growth and net income growth can therefore indicate the risk of overvaluation of the market. Chart 22 shows this relationship in terms of average growth rates over the last five years, indicating that capital growth has run alongside net income growth in all countries except Denmark. Not surprisingly, those markets characterized by rising income returns in recent years (Germany, Sweden) have generated stronger net income growth than capital growth. In contrast, those markets with low income returns in 2013 and in the recent past, France and the United Kingdom, have shown lower net income growth than capital growth.

Those weighing up the possibility of investing in real estate or other asset classes producing a relatively long income streams, bonds in particular, will be concerned about their relative levels of initial yield.

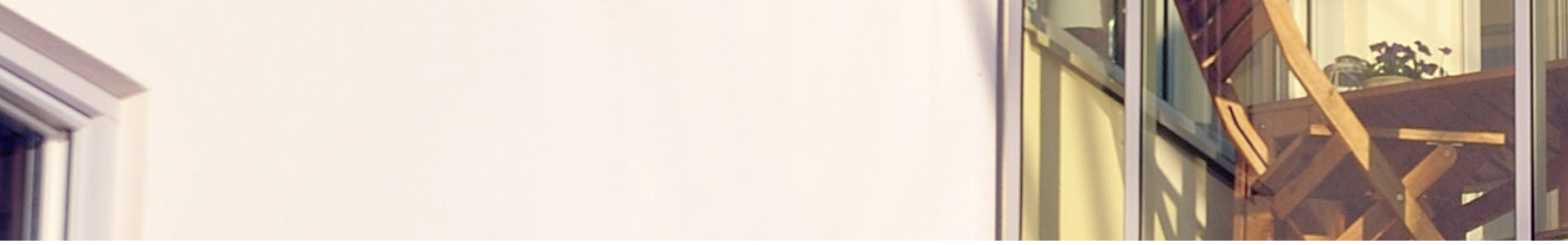
Chart 23 Spread between initial yields in the residential sector and bond yields, 1999-2013



Source: IPD, Eurostat

Definition of initial yields
France: gross
Germany: gross
Netherlands: net
United Kingdom: net

The yields IPD reports follow local market conventions and are thus not entirely consistent. However, a comparison of residential initial yields and those for 10-year government bonds (Chart 23) shows that spreads in favor of residential investments have increased significantly in recent years. But there are notable differences between the individual countries: in Germany and the Netherlands initial yields remained relatively high in 2013 at 5.5% and 6.0% respectively while bond yields were low, resulting in wide spreads. In contrast, the United Kingdom has seen low initial yields over the whole period; spreads were negative in the last decade when bonds yields exceeded 4% as residential yields went below this level. But overall, yields achieved for real estate currently appear attractive compared to government bonds.



Country profiles

Introduction

Each residential market has its own specific market structures and fundamentals as well as historic trends. On the one hand there are common conditions affecting the whole of Europe, especially in the Eurozone, such as the ECB policy on key interest rates. On the other hand specific factors drive economic fundamentals in each country and thus its residential markets.

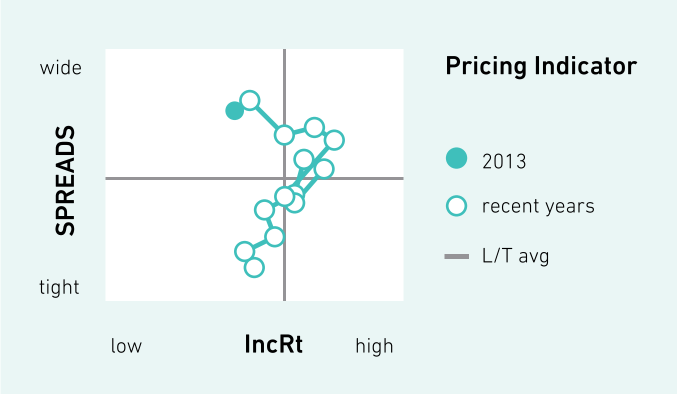
To give the reader a consolidated overview of the main countries already covered in Chapter 2, this introduction prefaces the two-page sections for each country.

The overview covers the overall performance of residential investments and assesses the current situation in the light of economic and demographic conditions.

IPD has created an "IPD Pricing Indicator" for each country. Firstly this compares the income return from real estate investments with the distribution yield of 10-year bonds. Chart 24 shows the spreads on the vertical axis. In the example there has been a significant positive spread for real estate in recent years. Secondly, the indicator rates the trend of the real estate income return, comparing each year's figures with the long term average (in this case over the last 15 years). In this example the figure for 2013 shows a historically low income return.

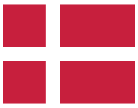
IPD uses income return as a risk measure, since low income returns are often based on high prices/valuations, indicating a booming market. Therefore, the IPD Pricing Indicator shows the average across all markets and can indicate more aggressive market pricing through the comparison of net income return with 10-year bond yields.

Chart 24 The IPD Pricing Indicator – a notional example



Source: IPD

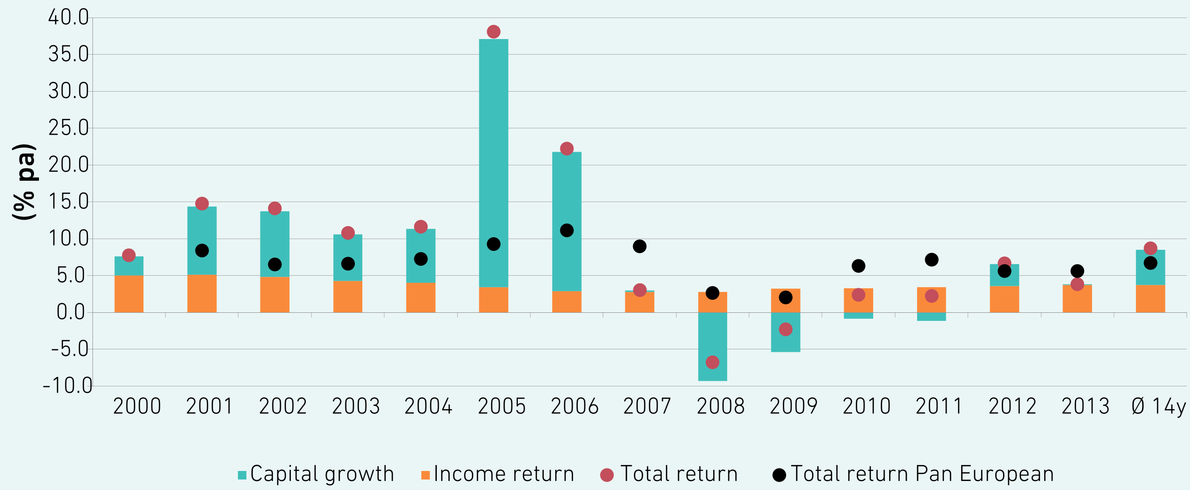
Furthermore, an additional chart shows the trend in capital growth since the financial crisis began in 2008. Taking the 2007 figure as a starting point, each chart illustrates the market trend in the period up to 2013, to show whether the market has recovered or remained weak in the recent past. In addition, a comparison with Pan-European figures allows a better assessment of each residential market.



Denmark

Residential real estate has outperformed the other sectors in Denmark in the long run, though it has weakened in recent years. The market has slowed significantly since 2007, in contrast to the boom in the first half of last decade; it has also underperformed compared to the Pan European average. In 2012 the market recovered with total return reaching 6.7%, but it fell back to 3.8% in 2013.

Residential total return at a glance



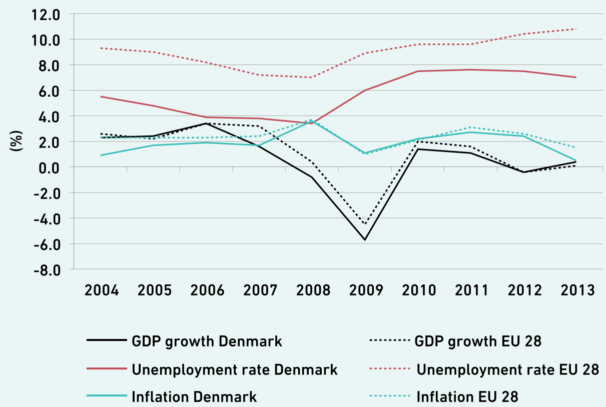
Source: IPD

The Danish residential market is still adjusting to the boom that took place up to the middle of the last decade. In 2005 and 2006 house prices rose by 20% causing a strong increase in capital values. At the same time income return fell significantly to reach 2.8% in 2007 – compared to about 5% at the beginning of the decade. A reaction started in 2007 as capital growth turned negative, with house prices decreasing significantly across the whole country, but particularly in the Copenhagen area. In this period residential market performance fell behind that of commercial real estate.

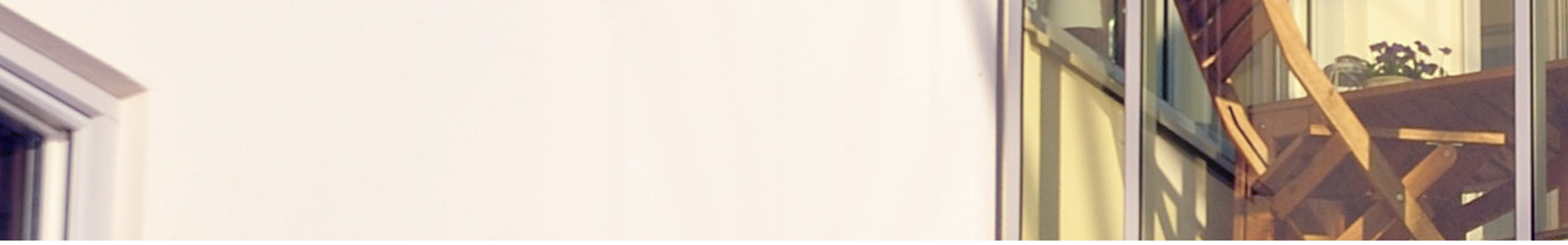
Reflecting the decline of the residential market, vacancies started to rise, although market rental value growth remained positive, averaging 2.7% p.a. over the last five years. Negative capital growth was mainly driven by the yield impact. Yield levels have changed significantly over recent years, increasing from 2.9% in 2006 to 4.6% in 2013.

The slowdown of the residential sector mirrored the difficult economic situation in Denmark, though it should be emphasized that the end of the housing boom in 2007 itself precipitated the recession by bankrupting a number of regional lenders.

Economic fundamentals



Source: Eurostat



- The economy was severely affected by the financial crisis as GDP fell by 5.7% in 2009 and failed to bounce back in subsequent years. Growth rates have remained subdued, averaging 0.6% for the period 2010-2013.
- Unemployment increased substantially from 3.4% in 2008 to 7.6% in 2011. There has been little improvement since then.
- Employee incomes have fallen in real terms, limiting private consumption and the ability to pay higher rents.
- The outlook for the Danish economy is now brightening. According to European Commission's "Autumn Forecast 2014" GDP is expected to grow by 0.8% in 2014 and 1.7% in 2015, implying moderate employment growth and rising real wages.

Regional performance in long-term perspective

	Total return			Income return			Capital growth		
	2013	5-yr ave	14-yr ave	2013	5-yr ave	14-yr ave	2013	5-yr ave	14-yr ave
Copenhagen	4.3	2.3	9.6	3.6	3.2	3.5	0.6	-0.9	5.9
Odense, Aarhus, Aalborg, Triangle Area*	-0.3	2.5	7.3	3.8	4.0	4.2	-3.9	-1.4	3.0
Rest of Denmark	4.7	3.4	6.7	4.8	4.7	4.6	-0.1	-1.3	2.0
Denmark	3.8	2.5	8.7	3.7	3.4	3.7	0.1	-0.9	4.8

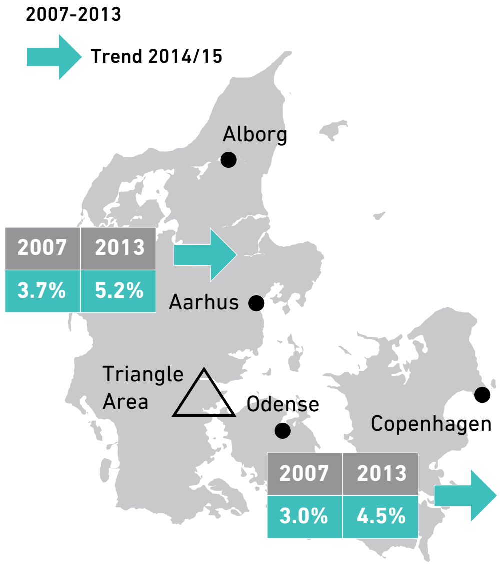
Source: IPD

*Note: The Triangle Area is a grouping of six municipalities on Jutland and Funen: Billund, Fredericia, Vejle, Kolding, Middelfart and Vejen.

Large differences in performance and yield levels have emerged between Copenhagen and the secondary cities. Copenhagen has outperformed other areas of the country significantly in the long run, its total return of 9.6% p.a. in the period 2000-2013 comparing to 7.3% p.a. for the secondary cities. Capital growth was the main performance driver for Copenhagen, while income return remained low (3.5% pa). However, in the last five years the Copenhagen market has declined, underperforming most other areas of the country. Yields have increased significantly over this period, not only in Copenhagen but also in the secondary cities.

The current position in the investment market cycle is demonstrated by rating 2013 performance figures in a historic context. Firstly, by looking at the trend in capital growth since the financial crisis began in 2008, and comparing the national and European trend. Secondly, by the "IPD Pricing Indicator" in terms of income return. On the one hand this indicator rates the 2013 income return relative to the long-term average. On the other hand it compares the income return of real estate investments and the distribution yield of 10-year bonds to show the attractiveness of real estate compared to other asset classes.

Shift in valuation yield



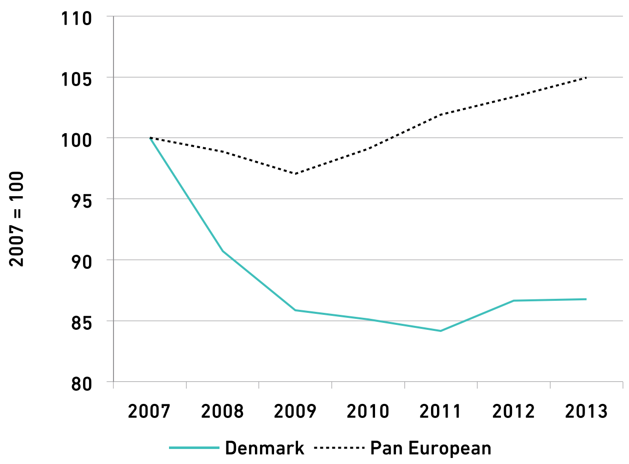
Source: IPD (historic values), Catella Research (forecast)

The Danish market has been characterized by rising income returns in recent years as capital values have declined. In 2013, income return matched the long-term average of 3.7%.

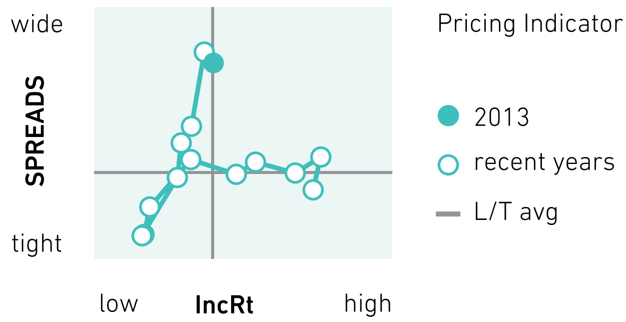
The income yield from residential real estate compares very favorably with that of 10-year government bonds, reflected by a substantial spread of nearly 200 basis points in 2013, as bond yields fell to 1.7% through the year. In the course of the year 2014 they have decreased even further, to 1%.

Capital values for Danish residential property are still languishing, having decreased by more than 15% in the period 2007-2011 but recovering slightly afterwards. Together with the Netherlands, Denmark remains the weakest residential real estate market in Europe.

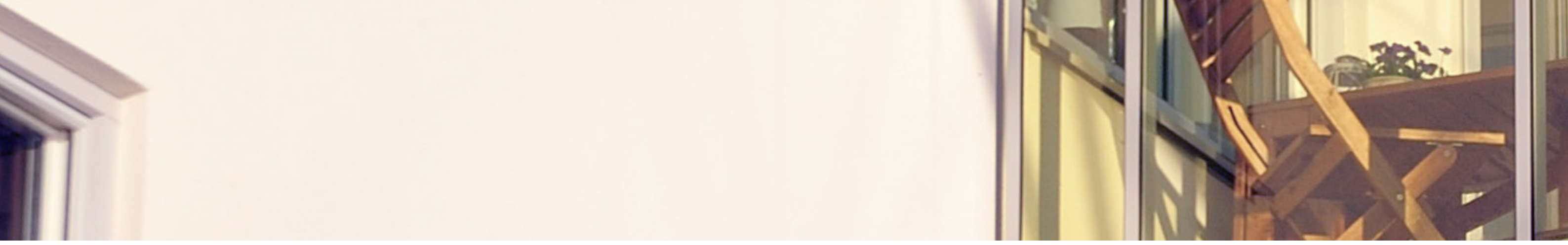
Capital value in the current cycle



Income return linked to bond yield



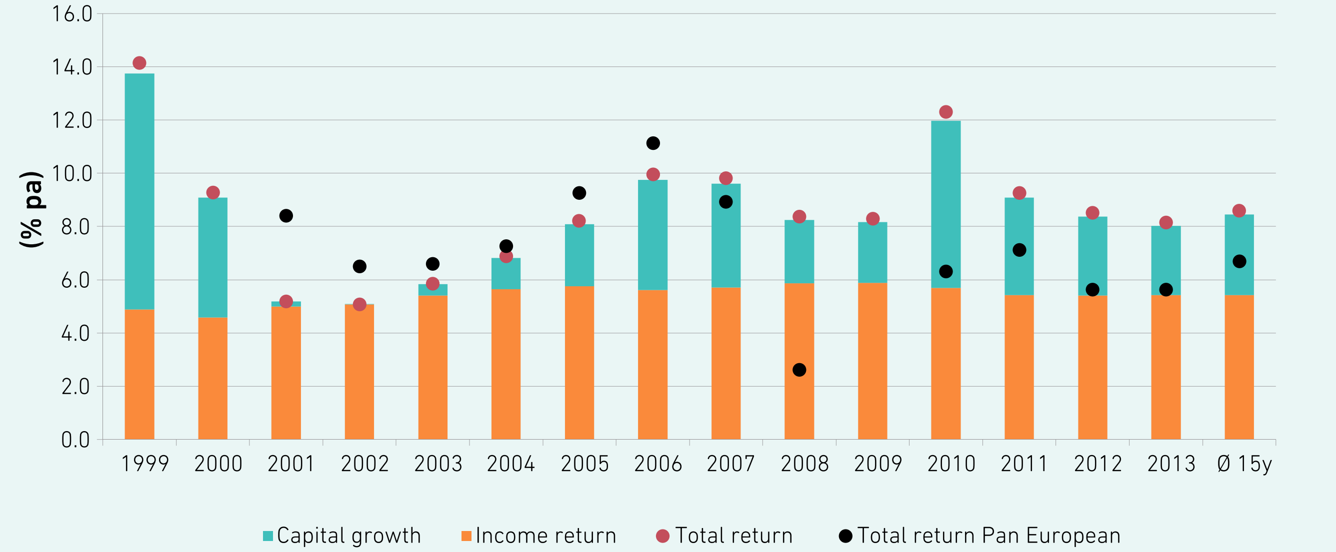
Source: IPD



Finland

The Finnish residential market is characterized by a remarkable risk-return profile compared to other European markets. Over the 15-year period 1999-2013 the market went through different stages of the cycle, but total return never fell short of 5% in any year as capital growth remained consistently positive. Against this background residential investments in Finland have achieved a performance of 8.6% p.a. over 15 years; combined with low volatility, this has produced the most attractive risk-return ratio in Europe.

Residential performance at a glance



Source: IPD

The most notable feature of Finnish residential performance over the last 10 years was the lack of impact of global financial turmoil. In 2008 and 2009 when other European markets declined, capital growth remained positive, resulting in a total return of more than 8%. The Finnish market has outperformed the Pan-European market in each year since 2007. Finland's residential market weakened at the beginning of last decade, with the dotcom crash having a bigger impact on the real estate market than the financial crisis. However, even then returns to residential real estate remained positive.

Finland's residential market has benefitted from a continuously high income return, averaging 5.4% p.a. over the last 15 years. Despite decreasing from 5.9% in 2009 to 5.4% in 2013, the income return is still about 130 basis points higher than the European average. As capital values have continued to grow, this indicates that investors' rental incomes have also increased steadily.

Economic fundamentals

Source: Eurostat

The residential market is driven by strong demand for apartments, mainly in the major cities, and subdued construction activity. The Finnish economy has however weakened in recent years:

- The economy collapsed in 2009 as GDP fell by 8.5%, though this was followed by a short-term recovery. However, in 2012 and 2013 the economy went back into recession and the current European Commission's forecast for 2014 is for continuing recession (-0.4%), while it is subdued for 2015 (0.6%).
- In 2013 the unemployment rate rose to 8.2%. Labor market forecasts for 2014 remain subdued.
- As inflation remains above the European level, employees' real incomes have fallen in the recent past, restricting consumer spending and rent increases.

The Helsinki area is the main investment location for both national and international investors, with roughly fourth quarter of dwellings located in this region.

Yields are at low level in the Helsinki area, especially in the City of Helsinki where they stood at 3.9% in 2013 illustrating a further downturn trend compared to 2007 (4.1%).

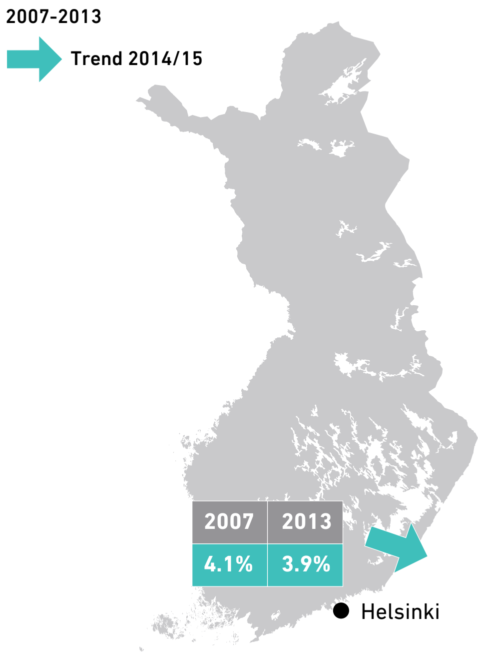
The current position in the investment market cycle is demonstrated by rating 2013 performance figures in a historic context. Firstly, by looking at the trend in capital growth since the financial crisis began in 2008, and comparing the national and European trend. Secondly, by the "IPD Pricing Indicator" in terms of income return. On the one hand this indicator rates the 2013 income return relative to the long-term average. On the other hand it compares income return of real estate investments and the distribution yield of 10-year bonds to show the attractiveness of real estate relative to other asset classes.

Capital values for Finnish residential property have risen continuously in recent years, reaching a long-term high in 2013 – the financial crisis had no effect on capital value growth. Since 2007 capital values have risen on average by more than 20%, outperforming the European market as a whole by about 17 percentage points.

Income return for the Finnish market matched its long-term average in 2013 (5.4%) indicating stable market conditions in the recent past.

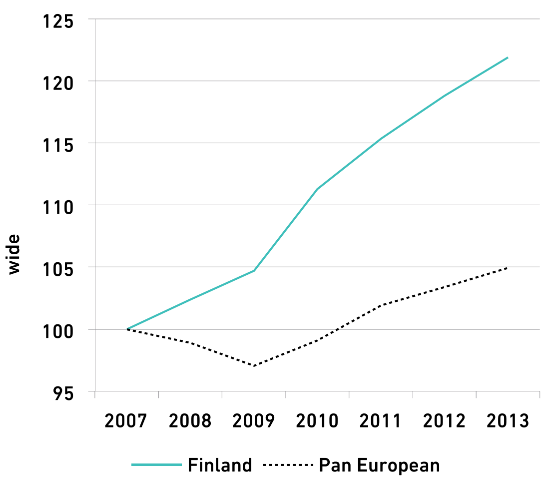
In 2013 the income yield of Finnish residential real estate compared favorably with 10-year government bonds, showing a large spread of 350 basis points. This spread has been consistently high over the last 10 years due to the high income return from residential property.

Shift in valuation yield

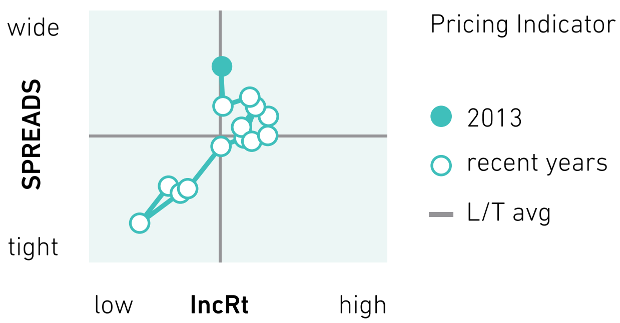


Source: Catella Research

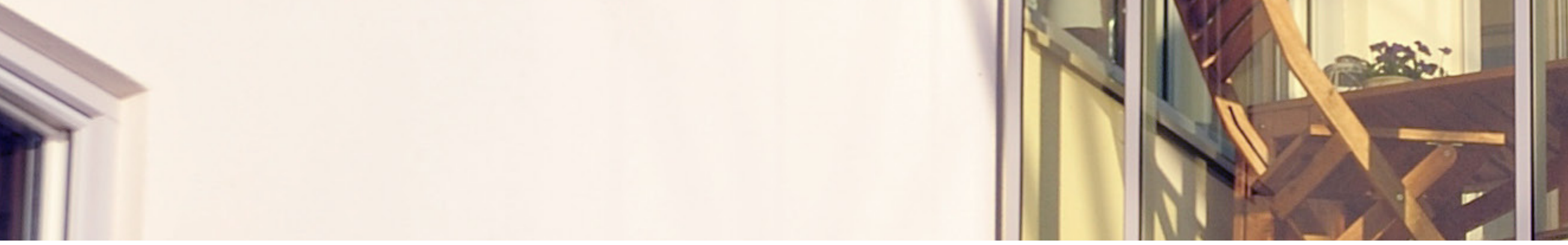
Capital value in the current cycle

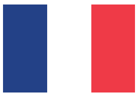


Income return linked to bond yield



Source: IPD





France

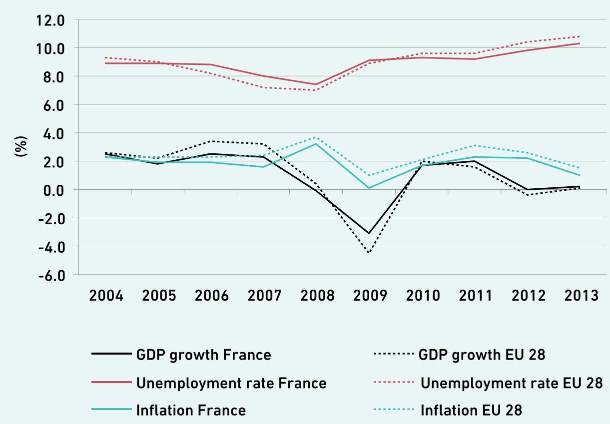
Over the last 15 years, the French residential market has witnessed a performance roller-coaster, moving from double digit total returns in the middle of the last decade to returns of zero in 2009. However, in contrast to other cyclical markets like Sweden and the UK, capital depreciation remained moderate during the crisis, with only slight underperformance of the Pan-European market in 2008 and 2009. The subsequent recovery had decelerated by 2013 to give a total return of 4.4%, despite slight positive capital growth.

Residential performance at a glance

Source: IPD

A key characteristic of the market has been the continuous decline in income return observed over the period under review. Apart from a slight increase in 2009, the return decreased from 4.7% in 2002 to a low of 2.9% in 2013. Considering capital growth as main driver of total returns in France, it is clear that growth in market rents supported it for many years, has but lost momentum in the recent past: rental value growth averaged 4.3% p.a. between 2000 and 2007, but decreased to 1.4% p.a. in 2008 and successive years. Yield compression became more important, with the initial yield declining by 160 basis points in the period 2002 to 2013, reaching a level of 3.8% for the whole market.

Economic fundamentals



Source: Eurostat

The slowdown in the real estate market over the last two years is in line with that of the overall economy:

- GDP growth fell to zero in 2012 and 2013. The forecast for 2014 published by the European Commission in November 2014 stands at 0.3%. Currently approaching a crisis, the country needs structural reforms, especially in the employment market, to resume recovery.
- The unemployment rate rose significantly as a result of the financial crisis, in contrast to the other major European economies of Germany and the United Kingdom. Moreover, the outlook remains negative, so that private consumption expenditures remain subdued as household incomes are negatively affected.
- The inflation rate fell below the European average to 1% in 2013, stimulating consumer spending power and the ability to pay higher rents, but stoking fears about deflation.
- As in other Eurozone countries the low key interest rates of the European Central Bank are leading financial resources to be invested in real estate and other real assets.

Regional performance on long-term perspective

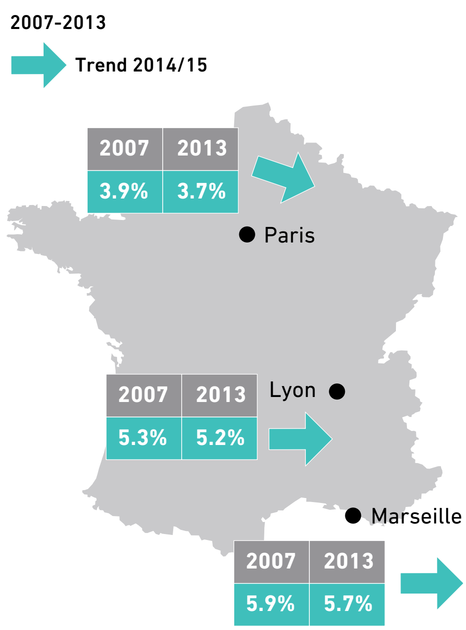
	Total return			Income return			Capital growth		
	2013	5-yr ave	15-yr ave	2013	5-yr ave	15-yr ave	2013	5-yr ave	15-yr ave
Paris	4.4	6.8	8.9	2.9	3.2	3.8	1.5	3.4	5.0
Rest of Ile de France	4.5	6.1	8.3	2.9	3.3	3.9	1.6	2.7	4.3
Lyon	3.2	7.3	9.1	3.0	3.6	4.1	0.2	3.6	4.8
Marseille	2.5	3.5	7.3	2.8	3.3	4.1	-0.3	0.1	3.1
France	4.4	6.4	8.7	2.9	3.3	3.8	1.5	3.1	4.8

Source: IPD

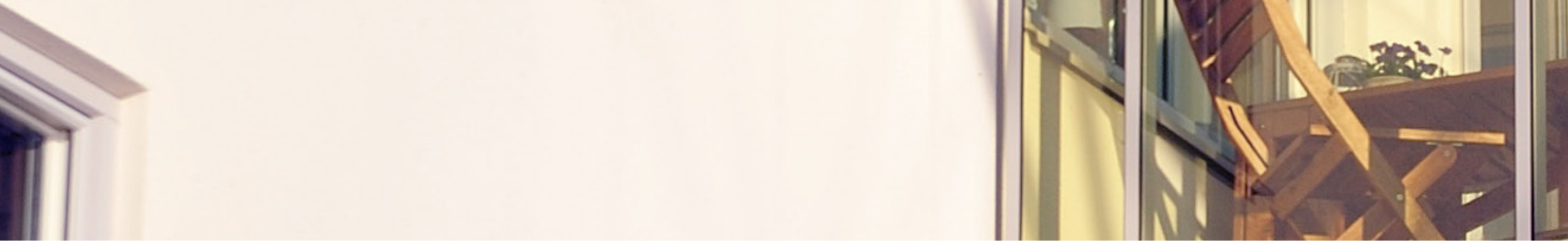
Residential investment by institutional investors is concentrated in the Ile de France region, mainly Paris, so that the performance for France in total deviates only slightly from the Paris results. But looking at other areas in the country shows significant differences. A detailed look at secondary cities, with Lyon and Marseille as examples, shows notable disparities in the rest of France. Whereas Lyon has outperformed the entire market as well as Paris over the last 15 years, residential investments in Marseille have substantially underperformed in the short and medium term. In 2013 it was notable that income returns went below 3% in Paris and the second tier cities.

The current position in the investment market cycle is demonstrated by rating 2013 performance figures in a historic context. Firstly, by looking at the trend in capital growth since the financial crisis began in 2008, and comparing the national and European trend. Secondly, by the "IPD Pricing Indicator" in terms of income return. On the one hand this indicator rates the 2013 income return relative to the long-term average. On the other hand it compares the income return of real estate investments and the distribution yield of 10-year bonds to show the attractiveness of real estate relative to other asset classes.

Shift in valuation yield



Source: Catella Research, IPD (historic values for Paris)

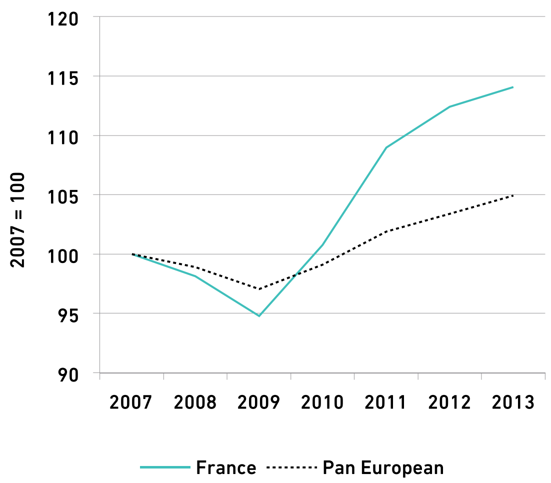


In terms of capital growth, the French residential market experienced a moderate slump in 2008 and 2009, but has recovered in recent years. In 2013 capital values exceeded their 2007 level by 14%. Overall, the French market recovered much more strongly than the Pan-European indicator.

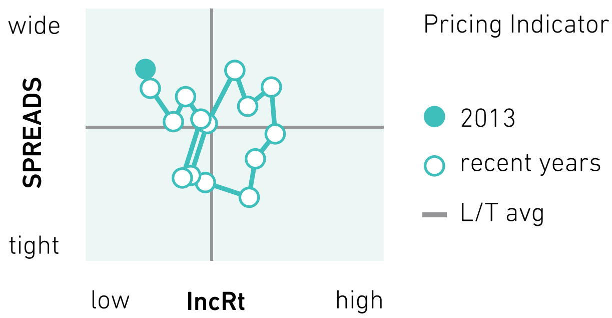
On the other hand, income returns have decreased over recent years, reaching an all-time low of 2.9% in 2013 – 90 basis points below the average for the last 15 years.

Compared to other European countries, the relatively low income returns result in a moderate spread in the yields from real estate and bonds. Although returns for 10-year government bonds have fallen to 2.2% in 2013 (monthly average), the income yield of just 2.9% for residential real estate results in a small spread of 70 basis points. In contrast, German residential investors achieved a spread of 300 basis points in 2013.

Capital value in the current cycle



Income return linked to bond yield



Source: IPD

Germany

Residential real estate has evolved as the strongest performing sector in Germany, not only in the medium but also the long term. In 2013, the total return reached the highest level measured by IPD in the last 15 years. The return of 8.3% was the second best in Europe – and was only outperformed by the UK market. Since the beginning of financial crisis and the end of housing market booms in many European countries, the German residential market has outperformed the Pan-European market.

Residential performance at a glance

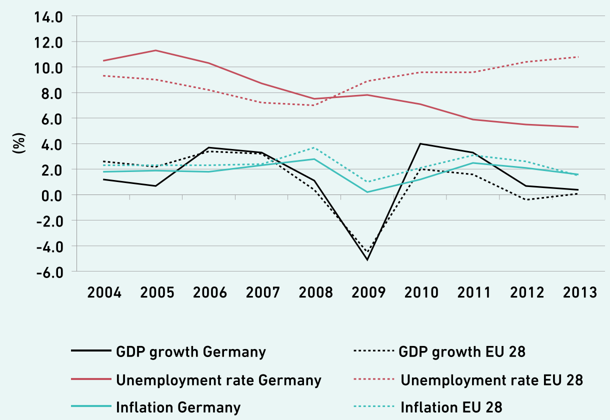
Source: IPD

Over the last 15 years the German residential market has been very stable compared to other European countries. In the period before the financial crisis, Germany underperformed the rest of Europe significantly, but it was not affected by decline in 2008 or 2009. This was followed by rising returns as capital values grew by 2.2% p.a. 2009-2013, driven by rental value growth of 1.9% p.a.

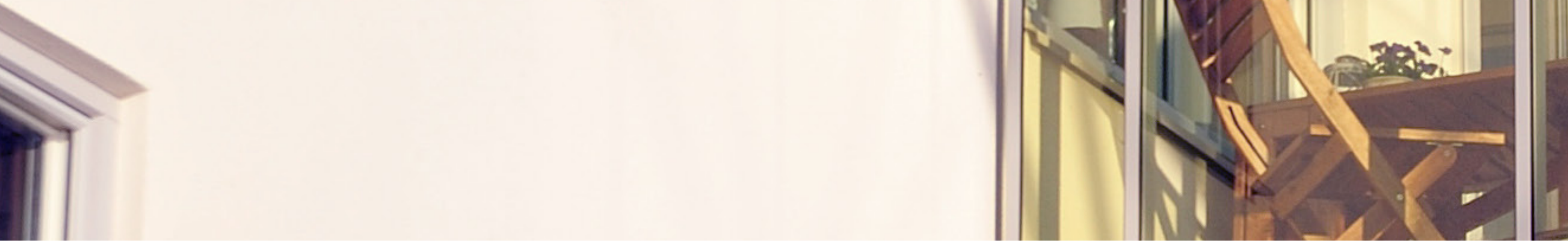
The strength of the German market has not only been based on a healthy economy but on the overall capital market situation.

- The German economy recovered considerably after the downturn in 2009. GDP growth ceased after the boom in 2010 and 2011 but remained above the European average until 2013. Healthy employment growth significantly pushed up the real remuneration of employees and boosted purchasing power.
- In contrast to the majority of European markets, rents and house prices were stable or even decreased in Germany in the past (especially at the beginning of last decade) so that investors anticipated the potential for future rental as well as capital value growth leading to rising demand when markets in some other European countries collapsed.

Economic fundamentals



Source: Eurostat



- Low key interest rates caused high levels of investment driving capital growth in the real estate sector and elsewhere.
- A rising number of smaller households, immigration and internal migration to the strongest economic areas have driven demand for residential space, mainly in the key centers (whereas most rural areas have not benefited).

In 2014, the economy did not pick up as expected at the beginning of the year due to a number of political and economic risks in Europe and abroad. Forecasts for GDP growth, e.g. 1.3% for 2014 in the European Commission's current "Autumn Forecast 2014", are consistently being downgraded, but the labor market has remained strong and therefore private consumption expenditure should continue to support the residential market.

Regional performance on long-term perspective

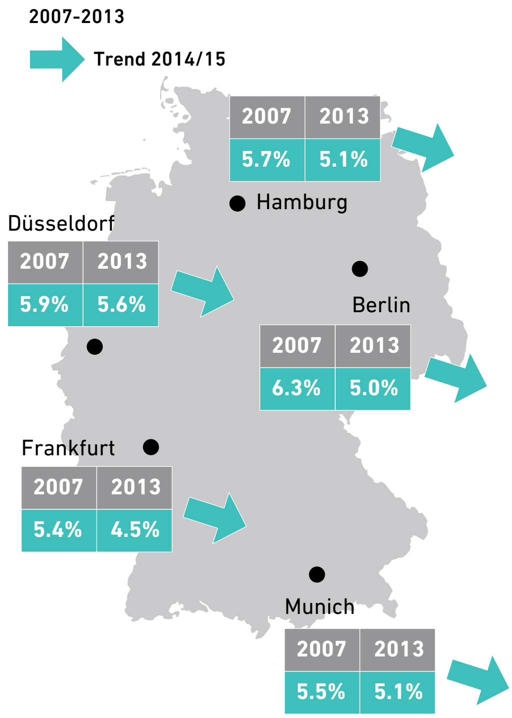
	Total return			Income return			Capital growth		
	2013	5-yr ave	15-yr ave	2013	5-yr ave	15-yr ave	2013	5-yr ave	15-yr ave
Berlin	6.5	7.0	4.4	4.6	5.2	4.2	1.8	1.8	0.2
Dusseldorf	5.2	4.4	4.7	4.5	4.3	3.9	0.7	0.1	0.8
Frankfurt	5.6	6.1	5.7	4.3	4.3	4.3	1.3	1.8	1.4
Hamburg	7.2	5.5	4.5	3.9	3.7	3.8	3.1	1.8	0.7
Munich	10.1	8.3	6.6	4.5	4.1	3.9	5.4	4.1	2.7
B/C locations	8.3	6.0	4.2	5.3	4.8	4.4	2.8	1.2	-0.2
Germany	8.3	6.8	5.2	4.7	4.4	4.2	3.5	2.2	1.0

Source: IPD

From a regional perspective, demand from institutional investors is not only concentrated on the Top5 key cities, but also includes smaller cities. A comparison of the 5 major cities illustrates the strength of Munich (like other parts of Southern Germany) and Berlin, driven by a backlog of demand as rents and purchasing prices are still comparatively low from a national and international perspective. In both cities, total returns were above 7% p.a. over the last 5 years. All major cities have seen significant yield compression in recent years, particularly Berlin.

It is notable that residential property outside the top locations has seen improving performance over the 15-year period. Having underperformed the overall market in the long and medium term, B and C locations achieved a total return of 8.3% in 2013 – the same level as the German market as a whole. However, these areas are characterized by notably higher income return but lower capital growth than the larger metropolitan areas.

Shift in valuation yield



Source: IPD (historic values), Catella Research (forecast)

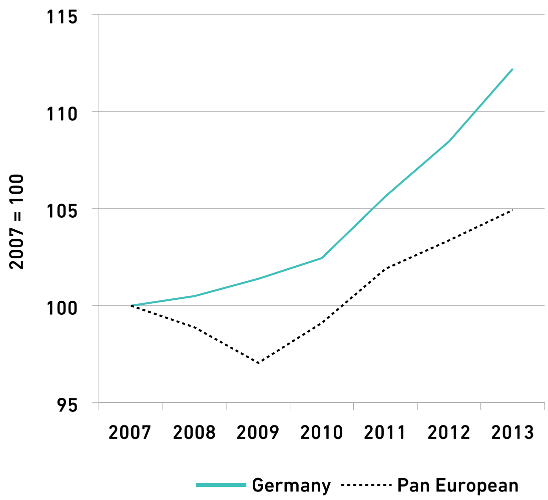
The current position in the investment market cycle is demonstrated by rating 2013 performance figures in a historic context. Firstly, by looking at the trend in capital growth since the financial crisis began in 2008, and comparing the national and European trend. Secondly, by the "IPD Pricing Indicator" in terms of income return. On the one hand this indicator rates the 2013 income return relative to the long-term average. On the other hand it compares the income return of real estate investments and the distribution yield of 10-year bonds to show the attractiveness of real estate compared to other asset classes.

In terms of capital growth, the German residential market was not affected by any capital depreciation in the course of the financial crisis. Then in 2011 capital growth started to escalate, reaching levels of roughly 3% p.a., the highest level in the period under observation and outperforming the overall European market.

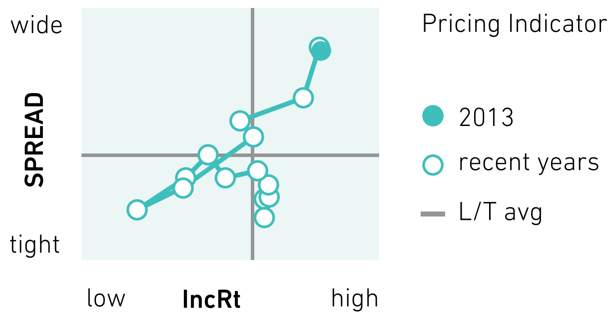
In terms of income return, the German market has been characterized by rising returns in recent years despite positive capital growth, indicating that net rental income has risen in this period. In 2013, the income return reached the highest level measured over the last 15 years.

A comparison of income distribution from real estate and 10-year government bonds illustrates the historically large spread in favor of real estate at present. In the course of the year 2013, bond yields declined to 1.2% and fell to below 1% in summer 2014.

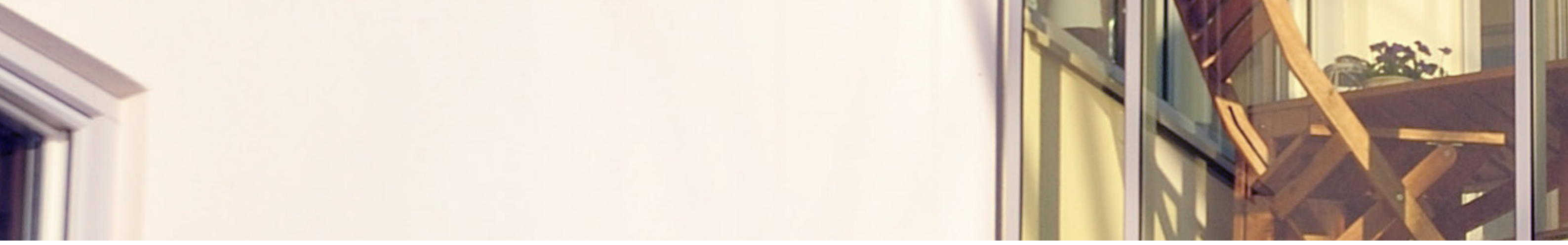
Capital value in the current cycle



Income return linked to bond yield



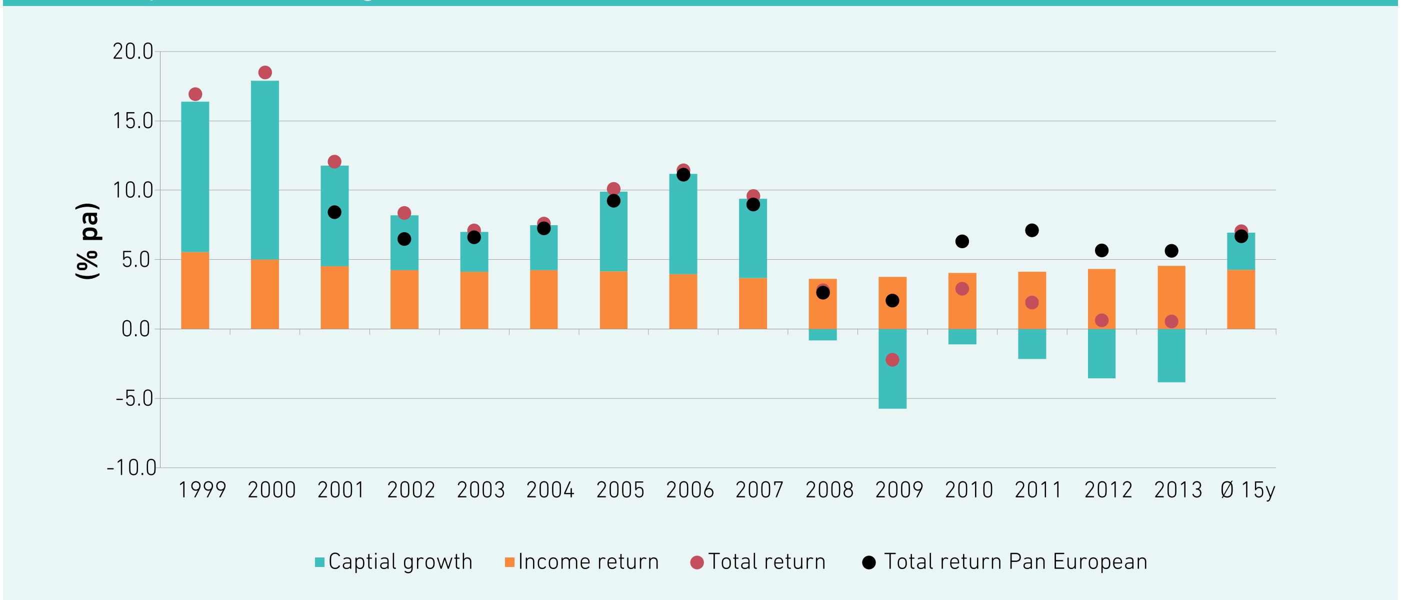
Source: IPD



The Netherlands

The Dutch residential investment market was severely affected by the financial crisis. In the period 2009-2013 the market has underperformed the overall European market by 4.6% pa. However, over the long-term the Dutch market return has matched the Pan-European level. In 2013, the Dutch market recorded the weakest total return of all European markets covered by IPD (0.6%).

Residential performance at a glance



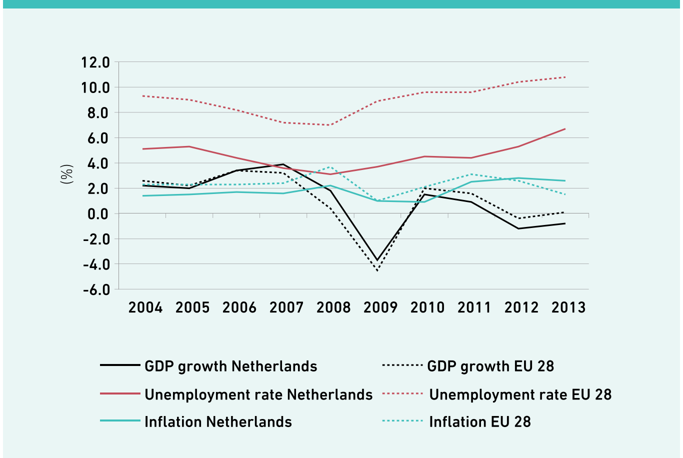
Source: IPD

In contrast to the trend in many other European residential markets, the Dutch market has registered continuous negative capital growth since 2008. Moreover, in 2012 and 2013 the weakest returns of the last 15 years were recorded. Income returns bolstered overall performance in this period, increasing slightly as capital values declined.

The poor performance of the Dutch market resulted from the slowdown of the economy as well as spillover effects from the housing market boom and downturn which have led to decreasing price levels.

- The Dutch economy slowed significantly as a consequence of the financial crisis and has remained weak for longer than other European countries. In contrast to Europe's major economies, the Netherlands fell back into recession in 2012 and 2013.
- The unemployment rate rose significantly from 2008 to 2013, affecting the earnings of households and their ability to buy or rent residential space.
- Inflation has been moderate in recent years, stabilizing the purchasing power of Dutch households. However, despite the recession inflation has reached comparatively high levels in a European context.

Economic fundamentals



Source: Eurostat

- Before the crisis the supply of new dwellings fell behind the growth in the number of households, boosting the owner-occupied and rental market. Although there was no oversupply at the beginning of the crisis the reduction in demand has brought about a significant decline in the supply of new dwellings, putting a floor under prices.

Today the economy and residential real estate are showing improving signs. The European Commission's current "Autumn Forecast 2014" expects GDP growth of 0.9% for 2014 and 1.4% for 2015. In addition, a positive trend has been reported for the labor market in the last 12 months.

IPD quarterly performance figures for the Netherlands show signs of a recovery since the middle of 2013, with capital depreciation receding. But the upswing remains weak as market rents have not risen so far and vacancies have only decreased gradually.

Regional performance for the Big4 on long-term perspective

	Total return			Income return			Capital growth		
	2013	5-yr ave	15-yr ave	2013	5-yr ave	15-yr ave	2013	5-yr ave	15-yr ave
Amsterdam	0.4	0.7	6.8	4.3	3.9	4.0	-3.7	-3.1	2.8
Rotterdam	0.5	0.1	7.1	4.3	4.1	4.3	-3.6	-3.9	2.7
The Hague	0.9	0.5	6.6	4.6	4.2	4.3	-3.6	-3.6	2.2
Utrecht	1.0	1.6	7.2	4.6	4.3	4.4	-3.5	-2.6	2.7
Netherlands	0.6	0.7	7.1	4.5	4.2	4.3	-3.8	-3.3	2.7

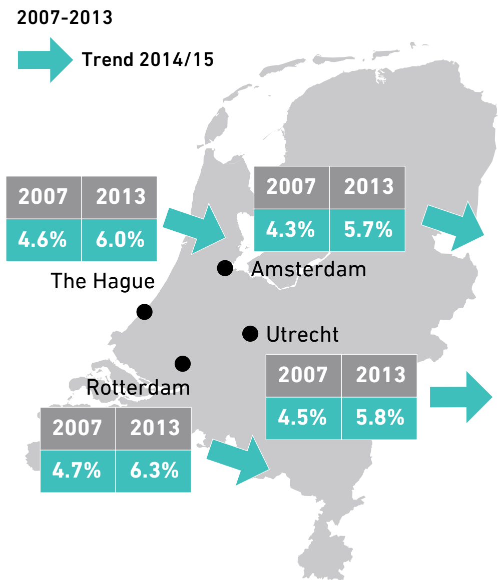
Source: IPD

The major cities in the Netherlands show small differences in long run performance but more notable variations in return over the last few years. In the period 2009-2013 the Rotterdam residential market saw negative capital growth of nearly 4%, leading to a zero total return, whereas Utrecht produced a 1.6% overall return for this period. The market downturn has been reflected by a significant increase in initial yields – rising from 4.5% in 2007 to 6.0% in 2013 for the market as a whole, a trend seen across all regional markets.

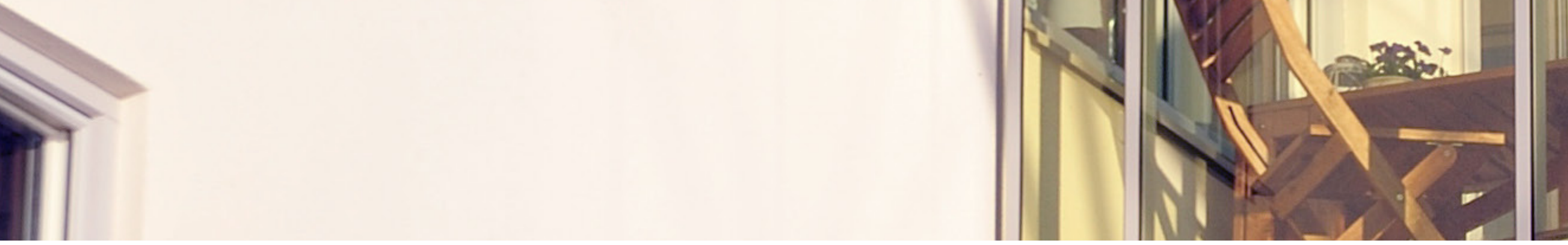
Quarterly IPD results show low positive returns for all regions in 2013, trending upwards trend in the first half of 2014. This indication facilitates expectations of capital growth after the massive liberalization of the Dutch housing market which was strongly regulated in former times.

The current position in the investment market cycle is demonstrated by rating 2013 performance figures in a historic context. Firstly, by looking at the trend in capital growth since the financial crisis began in 2008, and comparing the national and European trend. Secondly, by the "IPD Pricing Indicator" in terms of income return. On the one hand this indicator rates the 2013 income return relative to the long-term average. On the other hand it compares the income return of real estate investments and the distribution yield of 10-year bonds to show the attractiveness of real estate relative to other asset classes.

Shift in valuation yield



Source: IPD (historic values), Catella Research (forecast)

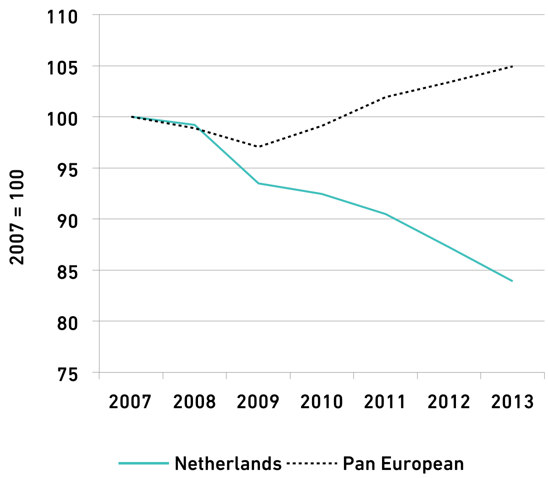


The Dutch residential market is the only European market to have been affected by continuous negative capital growth since 2007. By 2013 capital values had fallen back to 84% of their peak value. Capital growth improved in the first two quarters 2014 but remained negative.

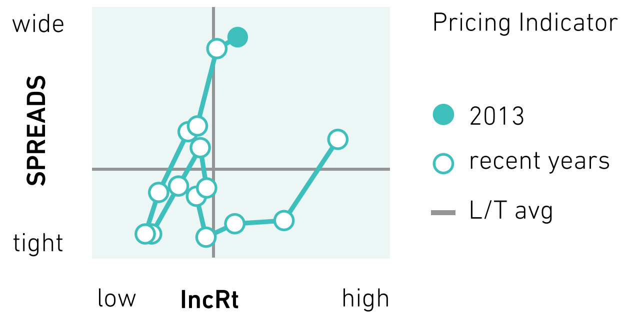
Due to continuing negative capital growth, income return has been increasing since its low-point of 3.6% in 2008. The income return of 4.5% in 2013 represented a jump above the 15 year average of 4.3%, increasing the sector's attractiveness to investors requiring long-term income streams.

Dutch residential real estate thus now shows a strong positive spread (260 basis points) over 10-year government bonds.

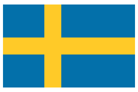
Capital value in the current cycle



Income return linked to bond yield



Source: IPD



Sweden

The residential sector has proved to be the strongest performing sector in Sweden over the short and long term. Over the last 30 years, the sector has achieved an annualized total return of 12.5% p.a., so that the 15-year figure of 10.9% p.a. implies something of a slowdown. From a European perspective, only the UK has outperformed Sweden in the period 1999-2013, by a small margin of some 90 basis points. The Swedish market was affected by the financial crisis, but performance only turned negative in 2008, and this was followed by strong double digit growth in 2009.

Residential performance at a glance

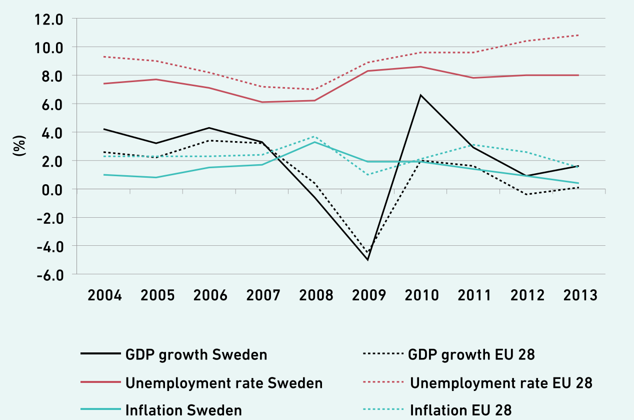
Source: IPD

In 2013, the residential total return of 7.5% was below the long-term trend, but it remained the best performing sector in the country. Nevertheless, over recent years there have been some fundamental changes compared to the period before the financial crisis. Capital growth, though positive, has declined, whereas income return has started to rise: starting from a low of 3.1% in 2008 it has risen substantially to 4.0% as landlords have been able to increase net rental income. In contrast to earlier years, yield shifts have had little impact. After an increase between 2007 and 2008 (3.9% to 4.5%), yields remained more or less stable.

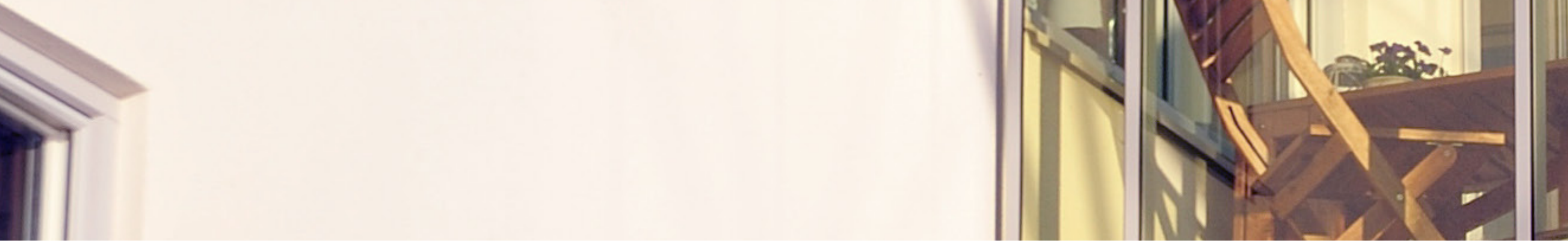
The residential market of recent years should be viewed in the light of overall economic conditions:

- The economy, based on a competitive export business, recovered strongly in 2009 but slowed down afterwards because of reduced export volumes – though growth still exceeded the European average.

Economic fundamentals



Source: Eurostat



- Despite rising total employment, the jobless rate has remained at a comparatively high level of roughly 8% in the last few years.
- Consumer prices have decreased significantly since 2008 to reach 0.4% in 2013. Accordingly the Swedish central bank reduced the key interest rate to 0% in October 2014.
- The residential market benefits from a shortage of housing supply and continuing population growth, especially in the major cities, driven by immigration.

Regional performance for the Big4 on long-term perspective

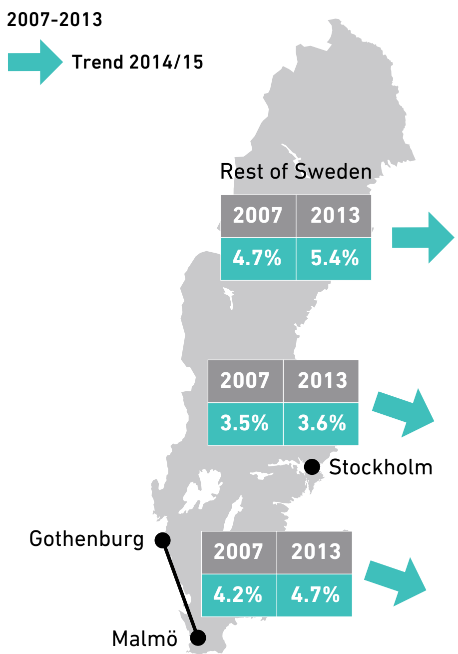
	Total return			Income return			Capital growth		
	2013	5-yr ave	15-yr ave	2013	5-yr ave	15-yr ave	2013	5-yr ave	15-yr ave
Stockholm	6.6	8.7	10.8	3.1	2.9	3.6	3.4	5.7	7.0
Gothenburg & Malmö	9.2	9.4	11.5	4.3	3.9	4.5	4.7	5.3	6.7
Rest of Sweden	8.0	9.0	10.3	4.9	4.9	5.3	3.0	3.9	4.8
Sweden	7.5	8.9	10.9	4.0	3.7	4.2	3.4	5.1	6.4

Source: IPD

There has been little difference in total return between the major cities and other regions of Sweden over recent years. Residential investments in Stockholm, Gothenburg and Malmo as well as many other areas of the country reached roughly 9% p.a. in the period 2009-2013. However, there are major differences in the sources of performance: capital growth has been the major performance driver in the big cities, which are characterized by subdued income return; this is especially the case for Stockholm. In contrast, income return of around 5% drives performance in the rest of Sweden. In addition, yields vary widely between the regions. Yields have risen since 2007 in all parts of the country, but 2013 figures show remarkable variations in yield levels between the capital and the other regions.

The current position in the investment market cycle is demonstrated by rating 2013 performance figures in a historic context. Firstly, by looking at the trend in capital growth since the financial crisis began in 2008, and comparing the national and European trend. Secondly, by the "IPD Pricing Indicator" in terms of income return. On the one hand this indicator rates the 2013 income return relative to the long-term average. On the other hand it compares the income return of real estate investments and the distribution yield of 10-year bonds to show out the attractiveness of real estate compared to other asset classes.

Shift in valuation yield



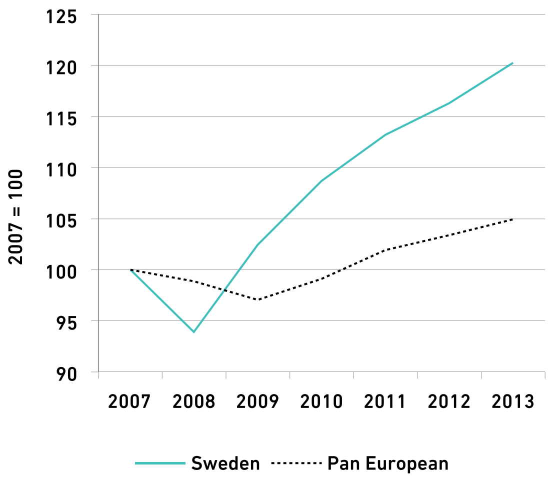
Source: IPD (historic values), Catella Research (forecast)

In terms of capital value growth, the Swedish residential market suffered in 2008 in the aftermath of the financial crisis, but recovered immediately in the years that followed. In 2013, capital values were on average 20% higher than in 2007, a growth rate well above the Pan-European average.

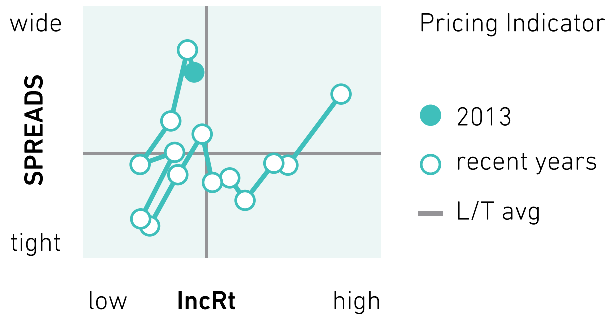
The Swedish market has been characterized by rising income returns in recent years, as positive capital growth has been outweighed by rising rental income. However, in 2013 income return remained slightly below the long-term average of 4.2%.

Swedish residential real estate enjoyed a significant spread over 10-year government bonds in 2012 and 2013. In the course of the year 2014 bond yields have fallen to 1.5%.

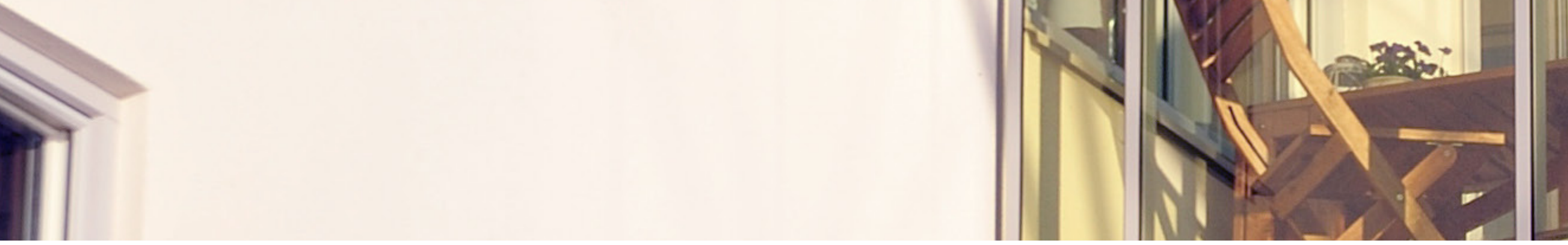
Capital value in the current cycle



Income return linked to bond yield



Source: IPD



United Kingdom

The United Kingdom has been the best-performing residential market in Europe as well as the strongest sector in the UK overall. The cyclicality of the UK market has historically been reflected in significant downturns, for example after the financial crisis in 2008 and at the beginning of the 1990s. But the market has always recovered rapidly in subsequent years, resulting in strong performance over the long and medium term.

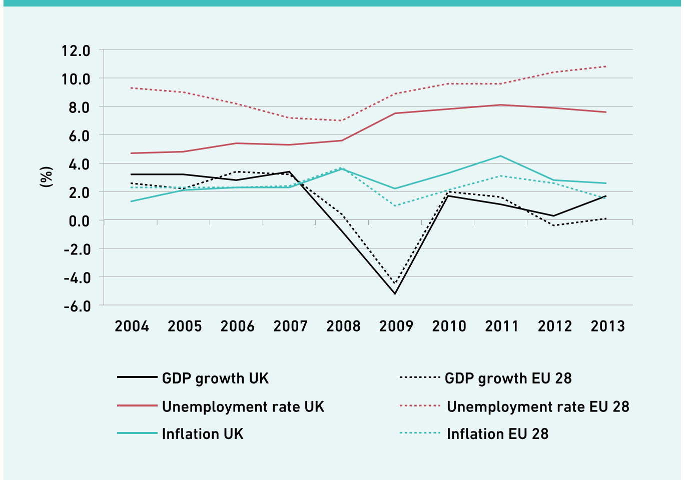
Residential total return at a glance

Source: IPD

Over the period 1999-2013 the UK residential market achieved a total return of 11.8% p.a., posting double digit returns in most years. However, the market was severely affected by the financial crisis, leading to a total return of -14.3% in 2008. But since then the recovery has been robust, with returns averaging about 11% p.a. over the last five years. Capital growth is the predominant driver of performance, over the last 15 years contributing roughly 70% of the overall return (8.4% pa). Rising values have been driven both by robust rental growth and continuous yield compression. In contrast, UK income return has for many years been the lowest of any European market, and has continued to fall over the period covered by this report. From a starting point of 3.8% in 1999, income return has declined continuously to reach 2.4% in 2013.

Strong UK residential market performance has rested partly on positive economic conditions, but also on substantial migration and the consequent demand for apartments in the London region. Low interest rates have promoted the affordability of owner occupation resulting in rising purchase prices and capital growth.

Economic fundamentals



Source: Eurostat

The economic fundamentals of the United Kingdom weakened in the years after the financial crisis:

- The recovery after the 2009 downturn remained sub-dued and GDP growth decreased in subsequent years. However, in 2013 the economy recovered significantly, with GDP growth reaching 1.7%, far above the European average. The European Commission's economic forecast Autumn 2014 expects continuing growth of about 3% in 2014 and 2015.
- In line with the strong GDP growth, employment started to increase in 2013 after declining in the period since 2008. A significant rise in employment is forecast for 2014 and 2015.
- Despite subdued economic growth the UK has been affected by high price inflation compared to the European norm, reaching 4% in 2011 and holding back consumer spending and the ability to pay for rents or mortgages.

In the course of 2014 the total return for residential property has declined, mainly due to capital growth turning slightly negative in the third quarter - the first time this has happened since 2009. However, total return up to the end of September still exceeded the 2013 performance.

Regional performance in long-term perspective

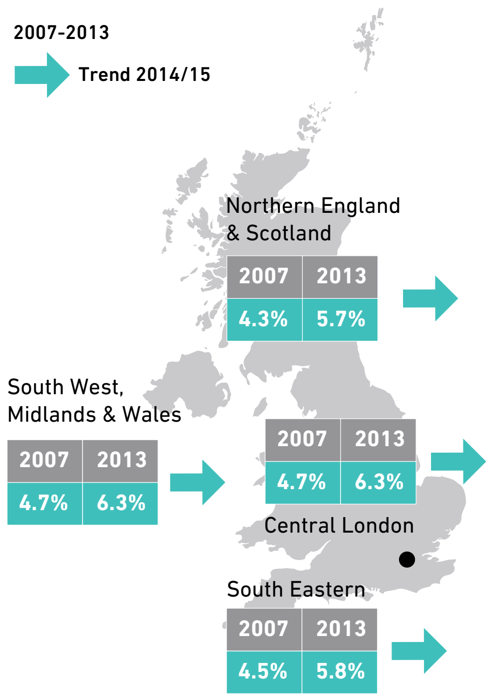
	Total return			Income return			Capital growth		
	2013	5-yr ave	13-yr ave	2013	5-yr ave	13-yr ave	2013	5-yr ave	13-yr ave
Central London	14.7	13.0	10.4	2.2	2.2	2.7	12.4	10.5	7.5
Inner London	17.5	12.3	10.7	3.5	3.6	3.8	13.6	8.5	6.7
Outer London	17.0	11.3	9.9	4.0	4.1	4.1	12.5	7.0	5.6
South Eastern	9.3	5.7	7.9	4.6	4.4	4.6	4.5	1.3	3.2
South West, Midlands & Wales	4.6	4.5	8.5	6.6	5.1	4.6	-1.9	-0.6	3.7
Northern England & Scotland	-1.4	-3.2	6.1	3.9	3.9	4.4	-5.1	-6.9	1.7
United Kingdom	13.3	11.0	11.0	2.4	2.6	3.0	10.7	8.2	7.8

Source: IPD

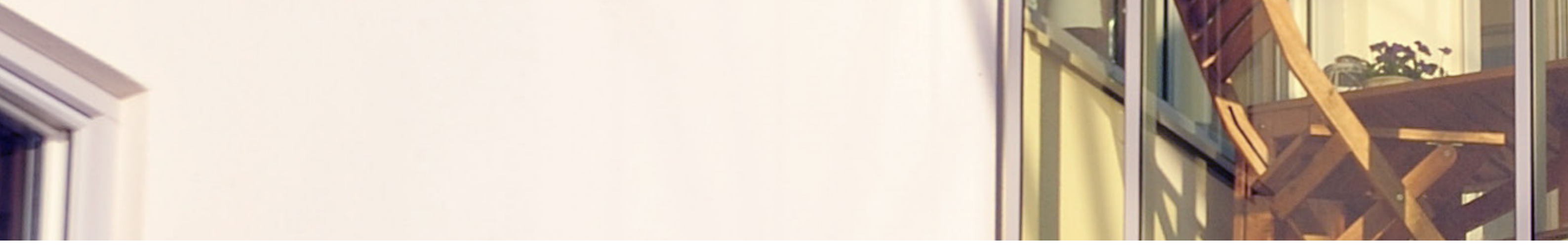
The residential market for institutional investors in the UK is concentrated in the Greater London area. The London region has far outperformed other areas over the medium and long term, with Central and Inner London eclipsing Outer London. Capital growth is the performance driver in these areas – especially in Central London where income return fell to 2.2% by 2013. Indicating strong investment demand in Central London, net initial yields dropped to 3.0% in 2013, roughly 100 basis points lower than the figures reported for 2007. In contrast, yields for areas outside London increased significantly over this period. The regions have posted significantly lower total returns in the long run; though this was mainly due to performance after 2009. Most severely hit was the North of the UK, which returned -3.2% p.a. for the period 2009-2013.

The current position in the investment market cycle is demonstrated by rating 2013 performance figures in a historic context. Firstly, by looking at the trend in capital growth since the financial crisis began in 2008, and comparing the national and European trend. Secondly, by the "IPD Pricing Indicator" in terms of income return. On the one hand this indicator rates the 2013 income return relative to the long-term average. On the other hand it compares the income return of real estate investments and the distribution yield of 10-year bonds to show the attractiveness of real estate compared to other asset classes.

Shift in valuation yield



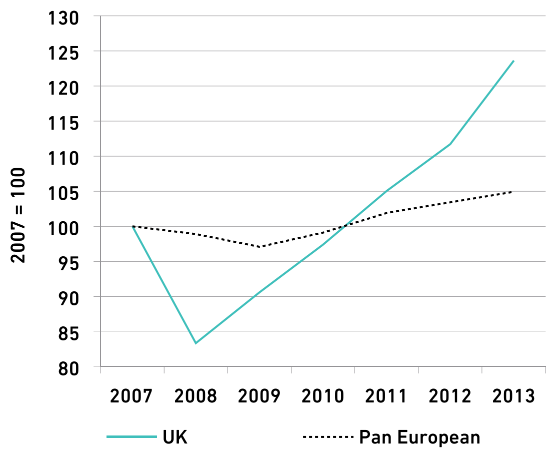
Source: IPD (historic values), Catella Research (forecast)



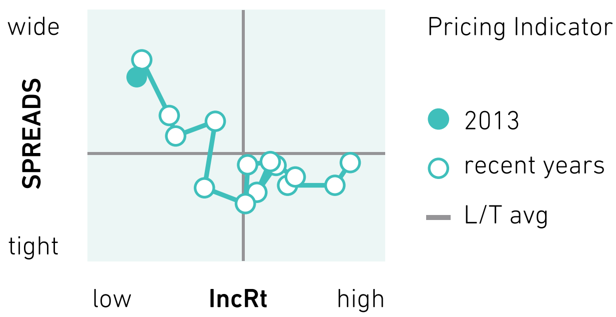
Capital values in the UK residential market were strongly affected by the downturn in 2008 but recovered immediately and by 2013 were more than 20% above their previous peak. UK values recovered strongly after the crisis compared to the overall European trend.

UK residential income returns are currently at a historically low level, measuring 2.4% in 2013. However this implies a positive spread of 36 basis points against 10-year government bonds. But over the long-term the spread has generally been negative – a situation unique in Europe - due to the low level of income return in the UK.

Capital value in the current cycle



Income return linked to bond yield



Source: IPD

Appendix

Definitions and calculation of returns

Total Return

The annual compounded rate of monthly capital appreciation, net of capital expenditure, plus monthly net income received expressed as a percentage of monthly capital employed. Note that annual capital growth plus annual income return may not sum perfectly to annual total return due to the cross product that occurs when capital and income returns are combined within compounded total returns.

With respect to a single month, total return is defined as:

$$TR_t = \frac{(CV_t - CV_{(t-1)} - CExp_t + CRpt_t + NI_t)}{CV_{(t-1)} + CExp_t)} \times 100$$

Where:

TR_t is the total return in month t;

CV_t is the capital value at the end of month t;

$CExp_t$ is the total capital expenditure (includes purchases and developments in month t;

$CRpt_t$ is the total capital receipts (includes sales) in month t;

NI_t is the day-rated rent receivable during month t, net of property management costs, ground rent and other irrecoverable expenditure.

Income Return

The annual compounded rate of net income receivable per month expressed as a percentage of the capital employed over the month.

$$INCR_t = \frac{NI_t}{CV_{(t-1)} + CExp_t)} \times 100$$

$INCR_t$ is the total return in month t;

CV_t is the capital value at the end of month t;

$CExp_t$ is the total capital expenditure (includes purchases and developments in month t;

NI_t is the day-rated rent receivable during month t, net of property management costs, ground rent and other irrecoverable expenditure.

Capital Growth

The annual compounded increase in monthly values, net of capital expenditure, expressed as a percentage of the capital employed each month.

$$CVG_t = \frac{(CV_t - CV_{(t-1)} - CExp_t + CRpt_t)}{CV_{(t-1)} + CExp_t)} \times 100$$

CVG_t is the capital growth in month t;

CV_t is the capital value at the end of month t;

$CExp_t$ is the total capital expenditure (includes purchases and developments in month t;

$CRpt_t$ is the total capital receipts (includes sales) in month t;

Net Income Receivable

The sum of rent receivable plus other revenue receipts, net of property specific operating costs, ground rents and other irrecoverable revenue expenditure.

Rental Value Growth

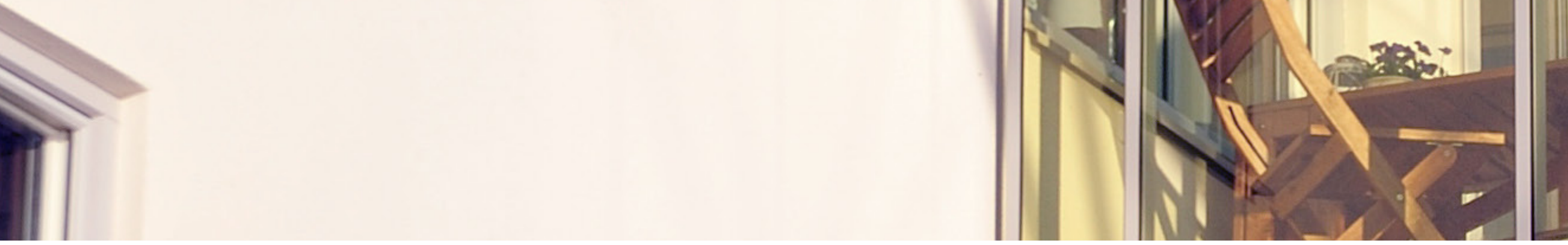
The annual compounded increase in monthly estimated rental values expressed as a percentage of the rental value at the beginning of each month.

Yield

Yields shown follow local market conventions and practice and thus are not comparable. The following definitions are used:

Denmark - Valuation Yield

The assumed yield used in the valuation to estimate the exit value at the end of the year.



France - Gross Initial Yield

Annual rent passing as a percentage of the gross capital value at the same date.

Germany - Gross Initial Yield

Annual rent passing as a percentage of the gross capital value at the same date.

Germany - Weighted Market Net Yield (Liegenschaftszins)

The average interest rate which is applied to the property, based on market interest rates. The market net yield is weighted to the capital value to calculate a weighted measure for a sample of properties.

Netherlands - Net, Gross Initial Yield

The rent passing (net of ground rent) as a percentage of the gross capital value at the same date.

Netherlands - Reversionary Yield

The gross sustainable rental value, net of ground rent, as a percentage of the capital value at the same date.

Sweden - Valuation Yield

The assumed yield used in the valuation to estimate the exit value at the end of the year.

UK - Initial Yield

The rent passing (net of ground rent) as a percentage of the capital value at the same date.

Notes

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IPD is a leading provider of real estate performance and risk analysis, providing critical business intelligence to real estate owners, managers, brokers, lenders and occupiers worldwide. Our unique database holds searchable information on 79,000 properties, valued at approximately USD 1.7trillion, which are located in 33 countries, with a long performance history (25+ years) and which are mostly appraised quarterly.

IPD is well known for its sophisticated research capability and provides fundamental analysis that can be applied across all types of real estate: direct property, listed and unlisted vehicles, joint ventures, separate accounts and debt. IPD's clients are global industry leaders and we have a symbiotic relationship with them. This includes nine of the top ten global fund managers* and nine of the largest ten European REITs**.

IPD does not participate in real estate investment markets and does not offer consultancy advice on investment decisions.

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* INREV/ANREV Fund Manager Survey 2012
** MSCI 2013

About Catella

Catella is a financial advisor and asset manager specialised in property, fixed income and equities. We have a leading position in the property sector and a strong local presence in Europe, with approximately 500 employees in twelve countries. Catella's property advisory services comprise three service areas: Sales and Acquisitions, Debt and Equity, and Research and Valuation. In the last twelve months we have advised in transactions valued at some EUR 5.6 billion.Catella has EUR 12.2 billion under management and the collective asset management competence Catella possesses enables a strong product offering within fund and wealth management. Read more at catella.com.

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