



Catella Market Indicator

RESIDENTIAL | EUROPE

AUTUMN/WINTER 2017/2018

Contents

MARKET OUTLOOK

- 1 Foreword
- 2 A comparison of European residential property markets
 - 2 – The macroeconomic environment
 - 5 – A comparison of European residential property markets
 - 7 – Portfolio selection – Strategies for diversification on the European residential property market
- 10 Living in Europe

REGIONAL MARKETS

- 13 BeNeLux
 - Belgium
 - Luxembourg
 - Netherlands
- 16 CEE
 - Austria
 - Czech Republic
 - Hungary
 - Poland
- 21 Northern Europe
 - Denmark
 - Finland
 - Norway
 - Sweden
- 25 Southern Europe
 - Italy
 - Portugal
 - Spain
- 28 Western Europe
 - France
 - Germany
 - Ireland
 - United Kingdom

OTHER

- 32 Contacts



Definitions

Gross yield

Rental income plus management costs, excl. incidental acquisition costs

Rent

Average rent per month for apartments regardless of year of construction, located in the city centre.
Size of apartments varies between 75 sqm and 90 sqm.

European residential property with high potential for appreciation

DEAR READERS,

If you are looking for current 'attractive asset classes' from a global investment perspective, you inevitably look at the segment of residential markets. This is certainly not surprising. However, not so long ago in Europe, investment in this asset class used to be stigmatised by the epithets of 'regional', 'boring', 'too unspecific' and 'too granular'. Their potential for appreciation, too, was described as 'limited'. Rent control, socio-political demands on investors and shock at the formation of real estate bubbles in Ireland and Spain, which had barely been overcome at that point – 'look at everything that can go wrong' – was the standard argument against residential property in portfolios.

These times are over, to put it mildly.

Europe is booming. Not only Europe's economies, but especially its residential property markets, provided they are located in metropolises or other central locations. The driving forces are urbanisation, availability of capital, migration and demography. By now, it is generally presumed that the evaluation of the long-term advantages of Europe as an investment location and its relevant criteria of economy, demography, regulation, property market and finances are viewed more positively. Overall, this line of reasoning seems conclusive. However, it is more important than ever to compare the long and mid-term positioning of the individual markets. We also need to identify the specific factors of appreciation in favour of an investment in the different phases of their particular cycle. Particularly to counteract the apparent impression of 'boom everywhere', national factors must not be ignored.

Countries possessing a dominant 'real estate hub' – like the UK does with London or France with the Ile de France – historically tend to be much more volatile in the development of their markets than for example Germany with its 'polycentric' market structure. Moreover, the groups of potential buyers in locations with an international character are significantly more diverse. The fact that Asian investors are active on the continental European market for the first time ever in 2016, several private equity funds in Spain as well as retirement funds in the UK, Germany and the Netherlands are investing internationally, and 40% of Berlin's residential property trade is being done with French, Scandinavian or Finnish buyers shows that investments in pan-European residential property have long been accelerating.

In 2016, residential property worth approximately 37 billion euro was traded in the institutional segment of the countries examined. This is the highest value recorded in the last ten years. For 2017 we expect the trade volume to reach 39 billion euro.

The dynamic and level analysis of 75 European cities by Catella Research showed that the Dutch cities of Amsterdam, Utrecht and Rotterdam are the leaders on the 'Metropolis' level. They are followed by Helsinki, Copenhagen, London and Manchester. Malmö, Stockholm and Vienna show high level rankings, too. Manchester, Oslo, Stockholm, London and Helsinki, among others, are classified as 'stars' by Catella Research, since not only their level values are high in this evaluation, but also their dynamic values.

Cities such as Rome, Porto and Zaragoza display rather low levels. However, they are shaped by high dynamics and can thus be classified as the 'new kids on the block' when it comes to investing in residential property. The German cities are dispersed throughout the mid-section in both the level and dynamics rankings.

You will find a detailed analysis and comparison of the countries for investment on the following pages.

Thomas Beyerle

Catella Head of Group Research



Catella – Providing high-end market analysis

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. Our property advisory services comprise three service areas: Sales and Acquisitions, Debt and Equity, and Research and Valuation.

Catella provides high-end market analysis products and services for the property market. We use our perspectives from the financial markets and experience from investment banking to create truly forward-looking research.

Read more at catella.com

A comparison of European residential property markets

The macroeconomic environment

Europe is booming. Not just the national economies but specifically the markets for residential property – as long as they are situated in the metropolises. Driving forces are the criteria of urbanisation, availability of capital, migration and demography. Nevertheless, looking at European property markets, institutional investors are increasingly pondering the question of ‘Quo vadis, Europa?’ Below, we wish to portray the essential **economic, demographic, regulatory, financial and residential property market** criteria for evaluating the long-term advantages of Europe as an investment location.

Economy

You always need to take into account that, at property level, investment into residential property always originates in local supply and demand mechanisms; especially since appreciation prospects can be deduced from it. Therefore, investment in residential property primarily means investing in macro and micro locations and only to a lesser extent into a country. Still, the economic framework itself is defined by countries. With a few isolated exceptions, European markets have weathered the financial crisis and its aftermath very well by now and most national economies have returned to long-term growth.

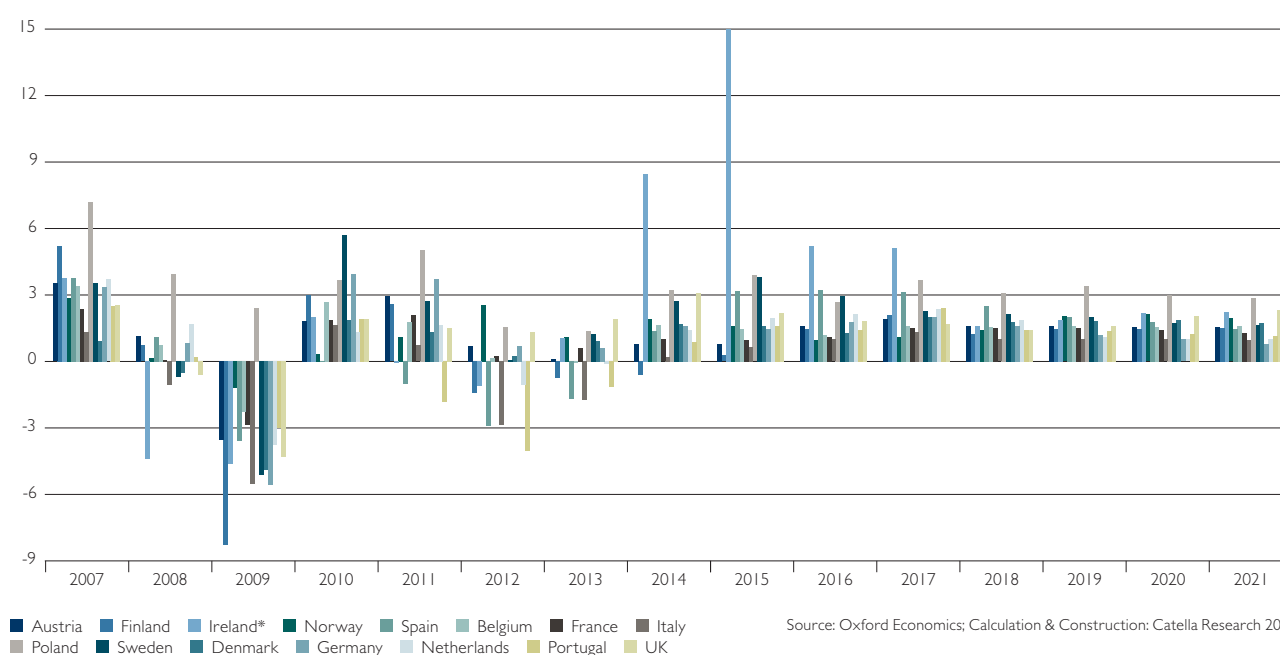
For the current calendar year, we expect strong economic growth especially in the former so-called ‘euro crisis

countries’, Ireland (5.1%), Spain (3.1%) and Portugal (2.4%). Spain was able to realise a growth rate of 3.0% over the past two years.

On an already high level, Germany will presumably grow by 2.0%. Due to Brexit, economic growth in the UK will presumably decrease by 15 basis points to 1.7% compared to last year.

Looking at our ‘universe’ of 15 European countries, average economic growth of 1.6% per year is expected by 2025. Growth in Ireland, Norway, Spain, Sweden, Denmark and particularly Poland will clearly be above average. Especially the Polish national economy will presumably grow by 2.75% on average. Poland’s positive growth is to be attributed to the country’s two biggest economic sectors.

COMPARISON OF GDP DEVELOPMENT IN EUROPE 2007–2021
%



Source: Oxford Economics; Calculation & Construction: Catella Research 2017

* for 2015: 26.3% of GDP growth

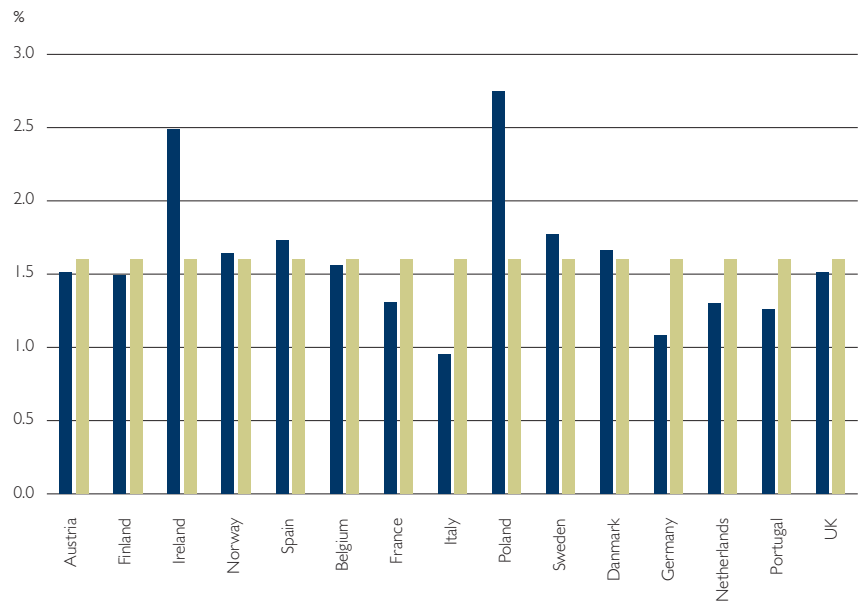
In contrast to the record of new orders and planning permissions, the development of the unemployment rate is considered a lagging economic indicator. Therefore, the development of a national economy is only reflected on the labour market with a certain time difference. There are a multitude of definitions for the calculation of this rate. For the present analysis, Catella Research makes use of the data framework provided by the ILO (International Labour Organisation), since it facilitates comparison beyond national arguments.

When observing our ‘universe of countries’, Germany emerges as its frontrunner with an unemployment rate of 4.15% for the year 2016. However, it needs to be noted that economic potential – and therefore the level of unemployment – is very different in the individual German federal states. For example, unemployment in the federal states of Bavaria (2.5%) and Baden-Württemberg (2.7%) is rather low, while in Berlin (8.4%) and Brandenburg (5.8%) the rate is above the national average. Germany is followed by Austria (6.02%) and the Netherlands (6.03%). Due to economic cycle, the unemployment rate in Spain is declining as well, although still at a very high level for Europe, at 19.6%. While unemployment rates in Poland, Ireland and Portugal have declined significantly over recent years, the unemployment rate in Italy is stagnating.

Demography

Together with economic conditions, population structure and its development are of particular interest for the demand for residential property. Within the context of a retrospective observation (1989 to 2000), Poland (0.32%), followed by Germany (0.29%) and Austria (0.28%), showed the highest annual change in population. After the millennium (2000 to 2016), this has materially changed. Particularly the UK

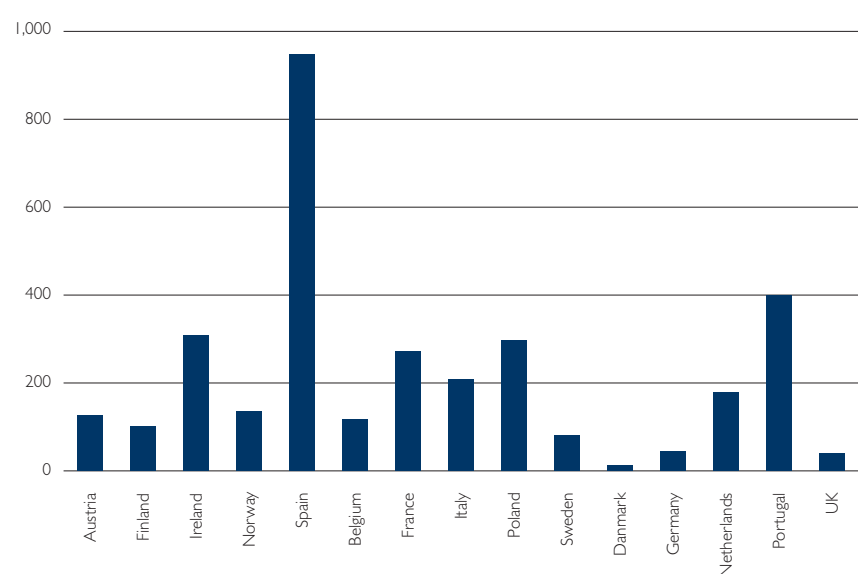
AVERAGE EXPECTED REAL GROWTH IN GDP BY 2025



■ Average

Source: Oxford Economics; Calculation & Construction: Catella Research 2017

REDUCTION OF UNEMPLOYMENT RATE
in basis points (2016 – 2030)



Source: Oxford Economics; Calculation & Construction: Catella Research 2017

and Sweden gained in attractiveness and realised high growth rates. In Germany and Poland, the increasing aging of the population is becoming noticeable in the way that alteration rates for the period

were merely marginally positive, if not negative. For Poland, this trend will probably become manifest in years to come. It can be assumed that Spain and Portugal in particular will show rather

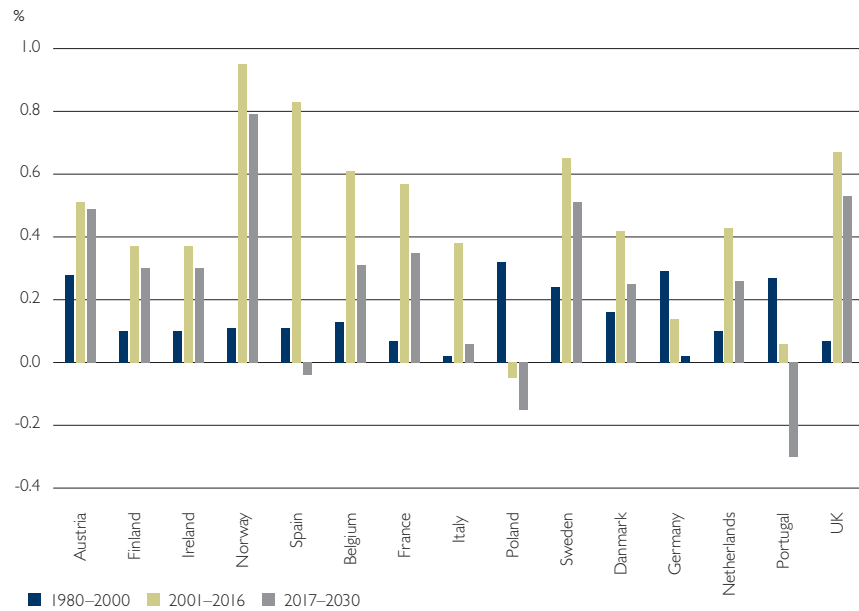
negative population growth rates in future. Although increased economic activity can be determined in these countries again, this development is obviously not yet able to counteract unemployment, and particularly not youth unemployment, in a sufficient manner, nor to prevent the tendency to emigrate resulting from this.

Financial market

Despite first tender interest rate activities towards a more restrictive monetary policy by the Fed, the U.S. American Federal Reserve System, the ECB has kept its main refinancing rate, commonly known as the 'key interest rate', around zero and continues to resort to unconventional monetary political instruments in its fight against low inflation and the economic weaknesses of some of its member states. With the acquisition of billions of euros worth of government bonds ('quantitative easing'), the Central Bank has been keeping its 'monetary floodgates' wide open since August 2015. This procedure will be continued until the end of 2017 at least. Therefore, there is no sign of an end of the era of low interest rates in the short to medium term.

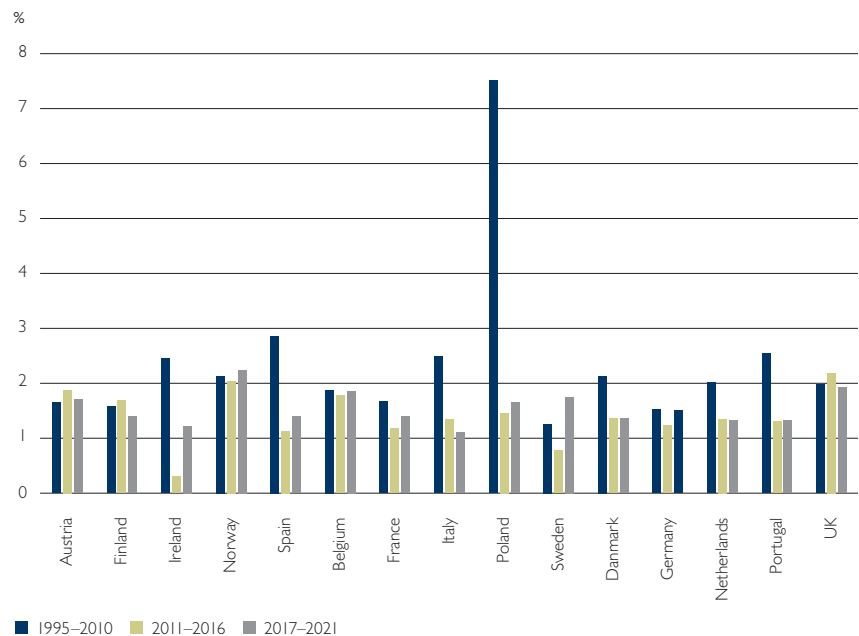
Currently, the inflation rate in Europe is marginally below 1.6% and thus still below the ECB's target inflation rate of 2.0%. Moreover, the core inflation rate, which is virtually 1.0% in Germany and the eurozone, and indicates the price change of consumer goods without the volatile components of comestibles and energy, needs to be taken into account as well. A strong wage growth constitutes the basis for a more dynamic core inflation rate.

COMPARISON OF POPULATION DEVELOPMENT IN EUROPEAN COUNTRIES (ANNUAL AVERAGE CHANGES)



Source: Oxford Economics; Calculation & Construction: Catella Research 2017

INFLATION DEVELOPMENT IN EUROPEAN COUNTRIES (ANNUAL AVERAGE CHANGES)



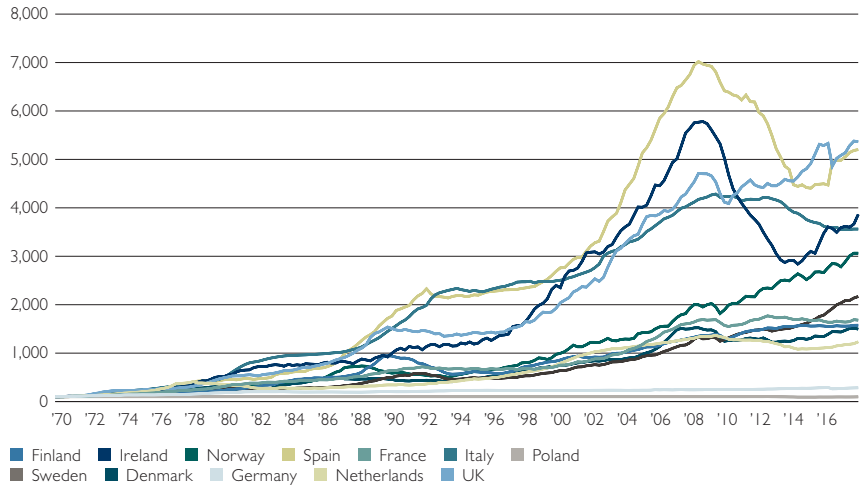
Source: Property Market Analysis (PMA); Calculation & Construction: Catella Research 2017

A comparison of European residential property markets

The real developments of national residential property markets have taken very different paths over time. Development in Germany has even been slightly negative over the last 30 years. It is only in the last three years that the German market has displayed any signs of recovery, with real growth of almost 2.5%. Clearly, international investor's strong interest in the country is mirrored by this motive, among others.

At the beginning of the millennium, the markets were generally displaying considerable increases until the financial crisis. France, the UK, Denmark and Sweden all saw growth of at least 50% in this six-year period. House prices in Ireland even increased by 120%. This upturn proved particularly unsustainable in Ireland, Spain, Italy and the Netherlands though, with the period of

COMPARISON OF EUROPEAN RESIDENTIAL PROPERTY MARKETS
Index 1970 = 100



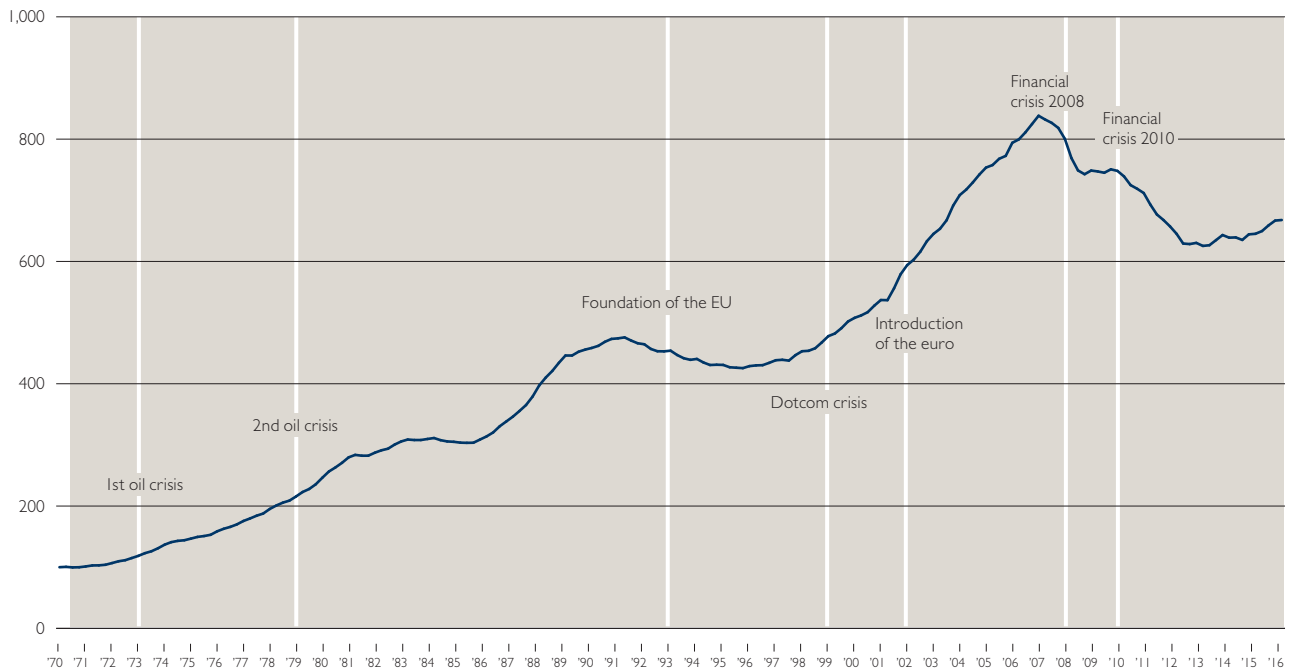
Source: Bank for International Settlements (BIS); Calculation & Construction: Catella Research 2017

growth finishing out with major price corrections in many countries. However, many European economies are once more on a growth path at the moment.

On the basis of the development of the property market in twelve European countries, Catella has constructed a pan-European index.

EUROPEAN HOUSING MARKETS (LONG-TERM REAL INDEX DEVELOPMENT)

Index 1970 = 100



Source: Bank for International Settlements (BIS); Calculation & Construction: Catella Research 2017

Overall, the index increased by almost 100% between 1970 and 1980. This corresponds to an average growth rate of 8.9% annually. In the five years following this, growth decreased to an average annual level of 4.8%. Until 1991, annual growth was at 7.9% again. From 1991 to 1997, the European residential property market stagnated again and the index of the country allocation examined decreased by an annual 0.7%. After the turn of the millennium, the market showed a price rally lasting seven years. During this time, the index increased by 6.9% annually.

In the six years from 2008 to 2013, negative economic growth was witnessed as an accompanying factor of the global financial and economic crisis. During this period, the index dropped by almost 30%, corresponding to an annual rate of change of -4.7%. However, in 2014, growth of 2.2% was seen. The fact that the European market for residential property is currently growing at a stable

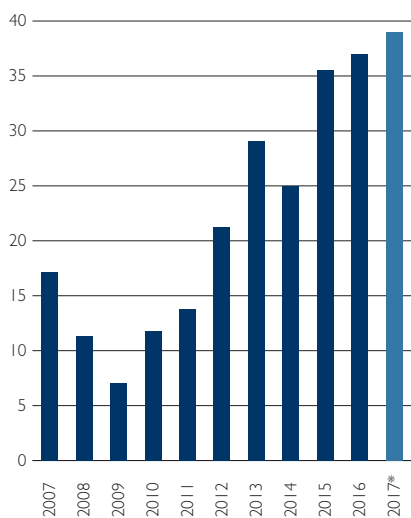
level can be seen from the two years following 2014. While growth in 2015 amounted to above 1.0%, the market was able to grow by just under 3.5% in 2016.

Generally, it can be said that the frequency of cyclical periods on the European residential market has increased markedly. In particular, this can be traced back to the institutional buyers being increasingly inclined towards the asset of 'residential property'. In 2016, transactions worth approximately €37 billion of residential property were traded in the institutional segment of the countries under observation. This constitutes a local maximum compared to the values of the last ten years. In the year 2015, €35.5 billion of residential property was transacted. In 2014, the transaction volume was a mere €25 billion.

Within the context of a European investment strategy, cyclical developments of the separate locations need to be included in the analysis to realise the proper timing for the market.

With 14.1%, Denmark recorded the highest market growth in 2016. Followers-up are Ireland (7.8%), Norway (6.3%), the Netherlands (6.2%) and Germany (5.2%). In particular, the results for the Netherlands and Germany are considerable, since both countries showed negative price rates in the years from 2012 to 2015 (Netherlands: -2.6%, Germany: -0.1%). Development in Spain is definitely respectable, too. House prices dropped more than 2.7% on average between 2015 and 2016. In 2016, a definite plus in growth of 4.6% was realised for the first time again. Poland is regarded as a sort of insider tip when it comes to institutional investment. The institutional market for residential property in Poland is still in its infancy, but development is continuously progressing. Accordingly, a growing number of players are active, albeit at a low level. Market growth in 2016 was at a strong plus of 3.1%.

RESIDENTIAL TRANSACTIONS
in bn EUR

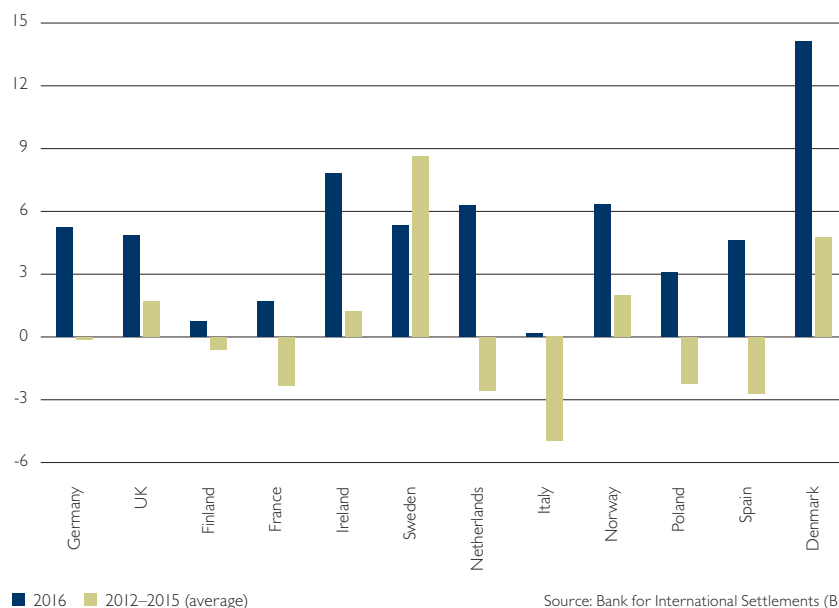


* Prognosis

Source: Real Capital Analytics (RCA)

Calculation, Construction and Prognosis: Catella Research 2017

PRICE DEVELOPMENT OF NATIONAL HOUSING MARKETS
annual changes in %



■ 2016 ■ 2012-2015 (average)

Source: Bank for International Settlements (BIS)
Calculation & Construction: Catella Research 2017

Moreover, the extremely pronounced amplitude of cyclical development of the total market needs to be taken into consideration. This is particularly owed to the fact that the asset of 'residential property' is not only subject to market-based conditions, but also often is the target for regulatory measures by national institutions. This third-party interference usually shows in the development of price inefficiencies and the fact that they are only discovered with a delay. Thus, prices may abruptly change.

For a successful investment strategy, an investment manager has not only to be acquainted with the particular local supply and demand parameters in their specific national market, but they also need an accurate understanding of local socio-political considerations. Since these considerations are often discussed on a very local level, a local office is one decisive factor for success.

Portfolio selection – Strategies for diversification on the European residential property market

The most common theoretical basis for compiling a portfolio is the portfolio theory by Harry M. Markowitz, the U.S. economist Markowitz postulates a μ - σ dominance criterion as the fundamental rule. This means that given two portfolios that offer the same expected return μ , investors will prefer the less risky one (σ signifying the volatility of the investment). Based on this premise, risk-efficient portfolios can be created. However, it needs to be pointed out that Markowitz's proposition must not necessarily be the decisive principle for an investment decision. The reason for this is that the premise for the practicability of the μ - σ principle is a normal distribution of returns.

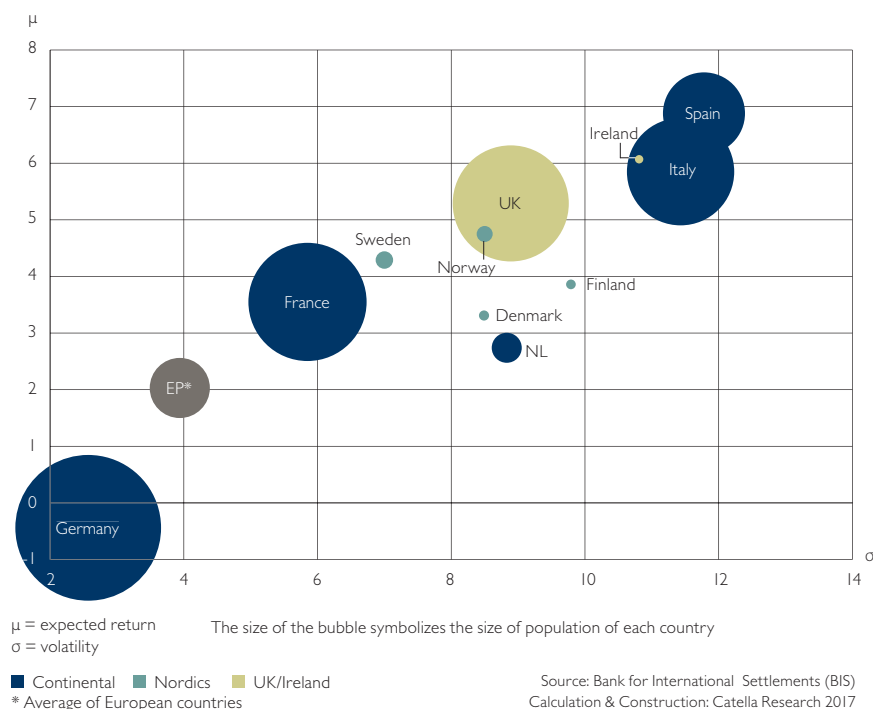
The fact that returns on the real estate investment market (unlike corporate equity) don't necessarily follow a normal curve of distribution has already been discussed quantitatively by Catella Research in its market tracker 'analysing risks for European commercial real estate' (November 2016). Nevertheless, the μ - σ dominance criterion allows preliminary assessment of the advantages of an investment and of the validation of investment strategies.

In the context of a long investment period, Germany emerges as an investment location displaying the lowest volatility and thus the lowest risk. However, Germany also displays the lowest return in a long-term context. The fact that return μ and risk σ are actually two sides of the same coin is perfectly depicted by the correlation coefficient. This correlation coefficient amounts to 0.9 for the countries under consideration. Therefore, there is a high positive linear correlation between return and risk.

Despite low returns, the German residential property market is efficient due to its low risks and for this reason an essential component of any property portfolio. Additional reasons for an investment in this market are discussed below. The highest average historic rate of change is displayed by the Spanish market with almost 6.9%. However, even within the observation, the highest volatility is also attached to this market. However, there isn't a higher μ for a comparable σ and this is why the Spanish residential property market is compulsory for any institutional property portfolio, and if only in a low percentage. Other efficient markets to be mentioned are France, the UK, Ireland and Sweden.

In contrast, the Netherlands, Finland and Denmark are non-dominant (non-efficient) markets. Investment into these markets is only advised in the context of alpha strategies. On the basis of the above explanations, it becomes apparent that the Netherlands particularly are an

RISK RETURN PROFILE OF EUROPEAN HOUSING MARKETS (1973–2016)



attractive location for the implementation of an alpha strategy.

Interestingly, bigger markets have a tendency to be more efficient than smaller ones. The bubble size in the graphic thus indicates the actual size of the market, not the significance of the portfolio to be realised. Moreover, individual significance of the portfolio is to be realised on basis of the investor's specific risk model.

Further reasons to invest are to be deduced from risk theory. A simple method of risk limitation is the diversi-

fication of investment assets to achieve a spreading of risk.

This term masks – true to portfolio theory – the separation of non-systematic and systematic risks. Non-systematic risk can be avoided completely by the clever organisation of a portfolio. Systematic risk, on the other hand, remains for all portfolios. Investors tend to use European property investments to avoid non-systematic risk. In this, they often dispense with quantitative correlations. For this reason, latent non-systematic risks remain within this 'naive diversification'. Moreover, eliminating every

non-systematic risk is not sensible.

Rather, it is imperative to take conscious risks to be able to realise returns above the market (alpha strategy). For this, however, quantitative correlations are vital. The risk of individual investment compared to market risk is determined by the beta coefficient (β).

The potential linked to the pursuit of a diversification strategy in the markets has already been substantiated by a correlation matrix in Catella Research's previous studies. This matrix often displays slightly positive and even negative correlations between the markets.

CORRELATION COEFFICIENTS OF EUROPEAN HOUSING INVESTMENTS (2000–2016)

	Germany	France	Netherlands	Poland	United Kingdom	Ireland	Italy	Spain	Finland	Sweden	Norway	Denmark	European market
Germany	1.00	-0.13	-0.09	0.02	0.07	0.00	-0.24	-0.32	-0.11	-0.28	0.02	0.02	-0.15
France	-0.13	1.00	0.52	0.49	0.57	0.58	0.83	0.74	0.77	0.30	0.45	0.59	0.88
Netherlands	-0.09	0.52	1.00	0.79	0.47	0.67	0.63	0.70	0.17	0.43	0.25	0.51	0.66
Poland	0.02	0.49	0.79	1.00	0.47	0.80	0.58	0.82	0.28	0.51	0.17	0.67	0.67
United Kingdom	0.07	0.57	0.47	0.47	1.00	0.60	0.58	0.63	0.52	0.44	0.31	0.31	0.82
Ireland	0.00	0.58	0.67	0.80	0.60	1.00	0.54	0.80	0.43	0.49	0.12	0.68	0.77
Italy	-0.24	0.83	0.63	0.58	0.58	0.54	1.00	0.82	0.59	0.23	0.27	0.39	0.85
Spain	-0.32	0.74	0.70	0.63	0.63	0.80	0.82	1.00	0.54	0.54	0.20	0.62	0.89
Finland	-0.11	0.77	0.17	0.52	0.52	0.43	0.59	0.54	1.00	0.33	0.34	0.47	0.68
Sweden	-0.28	0.30	0.43	0.44	0.44	0.49	0.23	0.54	0.33	1.00	0.53	0.65	0.51
Norway	0.02	0.45	0.25	0.31	0.31	0.12	0.27	0.20	0.34	0.53	1.00	0.47	0.37
Denmark	0.02	0.59	0.51	0.31	0.31	0.68	0.39	0.62	0.47	0.65	0.47	1.00	0.57
European market	-0.15	0.88	0.66	0.82	0.82	0.77	0.85	0.89	0.68	0.51	0.37	0.57	1.00

Source: Bank for International Settlements (BIS)
Calculation & Construction: Catella Research 2017



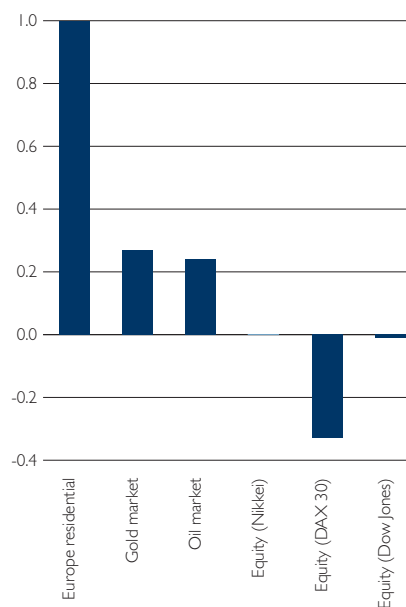
COMPARISON OF BETAS (2000–2016)

	Beta Risk Factor
Germany	-0,09
France	1,34
Netherlands	0,92
Poland	0,46
United Kingdom	1,65
Ireland	2,34
Italy	0,90
Spain	2,12
Finland	0,60
Sweden	0,69
Norway	0,46
Denmark	1,33
Europe	1,00

Source: Catella Research 2017

In practice, yield risk modelling tends to be of particular interest to major institutional investors as they can use it to determine certain equity, bond, commodity and real estate exposure rates. Moreover, a favourable correlation can necessitate lower capital backing in the context of Basel III and Solvency II.

DIVERSIFICATION POTENTIAL OF DIFFERENT ASSET CLASSES (2000–2016)



Source: Bank for International Settlements (BIS)
Calculation & Construction: Catella Research 2017

Especially investors in the German stock market (DAX 30) can tap into a great diversification potential by investing in the European residential property market (correlation efficient $\rho = -0.33$). Correlation with the American ($\rho = -0.01$) and Japanese stock markets ($\rho = 0.0$) is only low and returns are not correlated. In contrast, the European residential property market has a marginally positive correlation with the global gold market ($\rho = 0.27$) and the global oil market ($\rho = 0.24$).

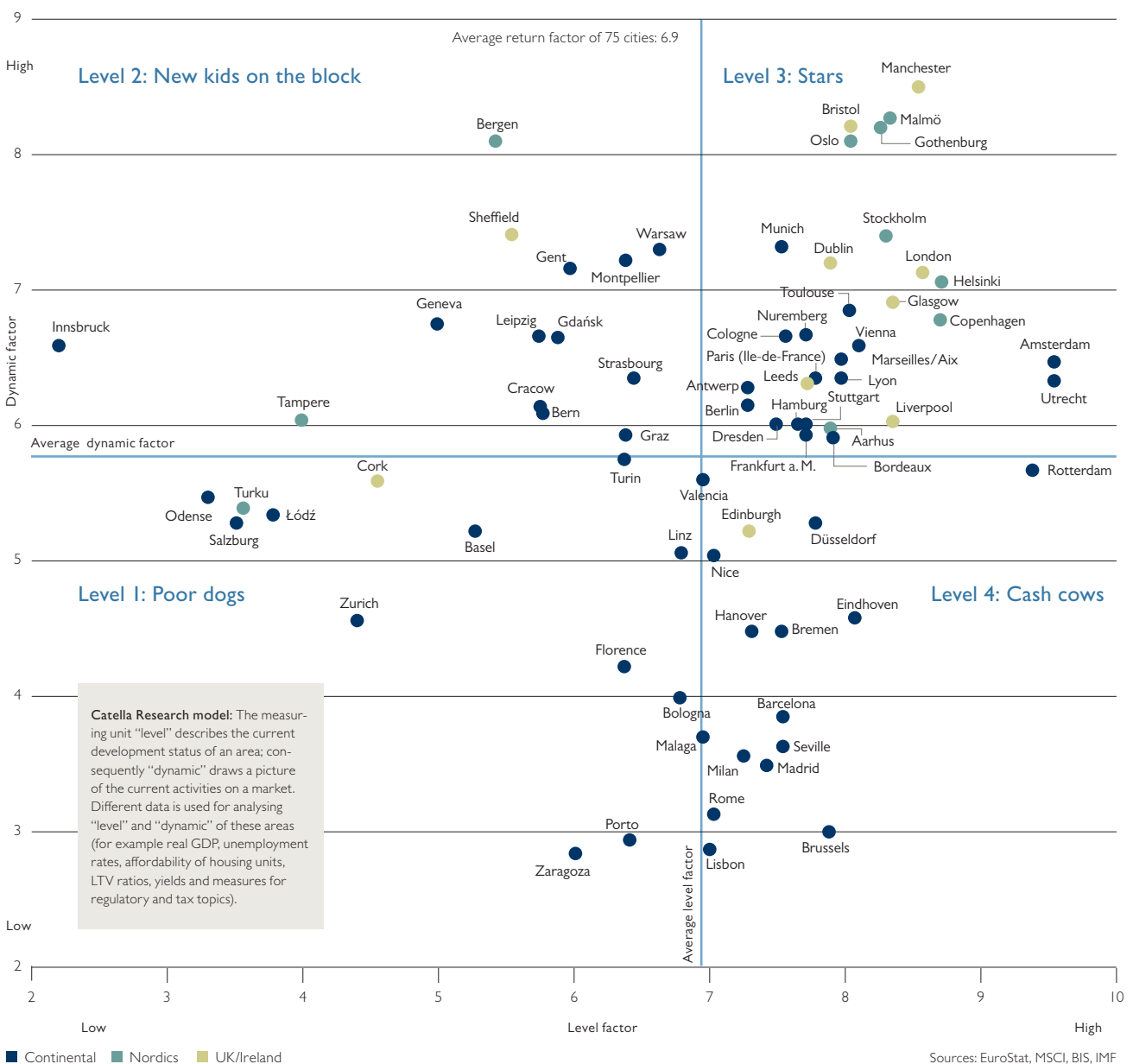
Living in Europe

The development of residential prices in the different regions of the individual countries shows structural differences. Generally, price development needs to be viewed within the context of national economic development and prevailing national and regional regulatory paradigms.

Looking at European housing market indices leads us to conclude that cycles are becoming ever shorter with the frequency of ups and downs increasing. This makes in-depth, country-specific research more important than ever in European investment strategies in order to get the market timing right.

Ultimately, however, property investors do not buy countries, they buy properties in regions. The various regions within a single country can exhibit characteristics that vary so greatly that there is no way around analysing the major metropolitan regions.

MARKET ANALYSIS/RATING OF EUROPEAN METROPOLITAN AREAS 2017





Catella Research employs two ratings to evaluate the quality of an investment location: level and dynamic.

Cities like London, Paris, the Swiss metropolitan regions and German cities such as Munich, Hamburg and Stuttgart are very popular with those looking to move, resulting in a high correlation with rental prices. However, the growth in rental prices is struggling to compensate for the increase in purchase prices, resulting in yield compression and confining rental yields to between 2.5% and 3.5%. This is pushing some of Germany's category B and C towns with rental yields of up to 6% into the limelight.

If you wish to turn your back on the European metropolitan regions to consider smaller European locations, further analysis of location is compulsory. Whether the location will remain a winning location or is only enjoying temporary popularity should be the central issue in any such analysis.

The dynamic and level analysis of 75 European cities by Catella Research showed that the Dutch cities of Amsterdam, Utrecht and Rotterdam are the leaders on the 'Metropolis' level.

These three are followed by Helsinki, Copenhagen, London and Manchester. Malmö, Stockholm and Vienna show high level rankings, too.

Manchester, Oslo, Stockholm, London and Helsinki, among others, are classified as 'stars' by Catella Research, since not only their level values are high in this evaluation, but also their dynamic values.

Cities such as Rome, Porto and Zaragoza display rather low levels. However, they are shaped by high dynamics and can thus be classified as the 'new kids on the block' when it comes to investing in residential property.

The German cities are dispersed throughout the mid-section in both the level and dynamics rankings.



Belgium's housing market showing healthy fundamentals

ECONOMIC GROWTH IS EXPECTED TO STRENGTHEN in 2017 (1.5%) and 2018 (1.7%), increasing from 1.2% in 2016, due to an improved labour market and investment climate. Overall, external conditions, including monetary policy and the pick-up in world trade, should support steady growth and lower unemployment (below 7.5% in 2018). The latter is likely due in part to structural reforms to increase labour market flexibility and reduce unit labour costs in recent years, encouraging companies to take on more workers. Inflation peaked at 3.0%

in Q1/2017 and is expected to average 2.3% in 2017 and 1.5% in 2018. Business and investment climate is expected to remain supportive throughout 2017 and this trend should continue into 2018. The positive external environment is expected to remain stable, including a supportive monetary policy characterised by low interest rates and non-standard policy measures. Risks to the outlook are mainly external and include the impact of the uncertainty related to the UK leaving the EU.

Belgian residential property prices have increased by approximately 27% in nominal terms in the last 10 years, but growth has slowed down significantly in 2009 and 2012. This was caused by the economic crisis and continued in 2013. Despite this difficult context, Belgian residential property has fared well in recent years. Nationwide, Belgian property prices increased by 2.6% (nominal) in 2016 compared to the previous year. Despite less generous tax treatment of mortgages, residential property prices were able to recover. The market has experienced stability in terms of income. Moreover, Belgians' purchasing power has been maintained, thanks to the indexation of salaries.

The population is growing in Belgium and more specifically in the Brussels Region, where growth of over 12% by 2020 has been forecast. There is also a very high demand for smaller homes. Among other factors, this is linked to the ageing of the population. Moreover, the market is supported by small investors and the scarcity of land. Overall, there is no record of oversupply and the financial position of households remains altogether robust with the debt-to-assets ratio for Belgium still below the average within the eurozone. Historic low interest rates may also lead to rising prices on the housing market, causing an increased demand for mortgages. However, the amount of mortgages does not increase in time with the property prices increasing, which is particularly due to a more restrictive loan policy applied by banks.

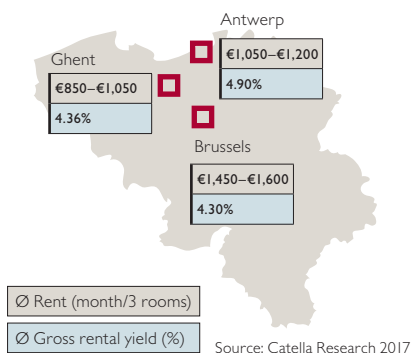
The main mid-term risks for the property market remain a raise in interest rates and changes in property taxation. In the three regions – Brussels Capital Region, Flanders and Wallonia – fiscal changes have been introduced or announced in 2014 and 2015, disrupting the attempt of the regional authorities to make housing more affordable.

AT A GLANCE

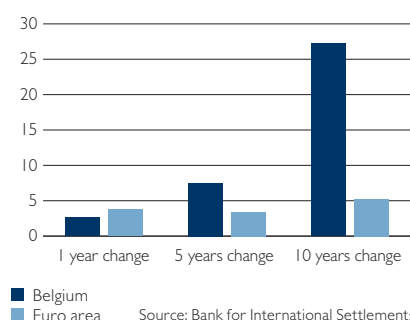
Population	11.41m
Housing stock	4.80m
Stamp duty	10.0%–12.5%
Notary cost	0.3%–1.0%
Brokerage	2.0%–3.0%
Value added tax	21.0%
2017 Forecast	
Unemployment rate	7.6%
Inflation rate	2.3%
GDP growth	1.5%
Top Cities	
Brussels	1,800,000
Antwerp	1,832,000
Ghent	550,000
Mons	259,000
Bruges	282,000

Source: Eurostat, IMF, PMA

RENTS AND YIELDS IN CITY CENTRES



PERCENTAGE PRICE CHANGE OF NOMINAL INDEX
change in % refers to 2016



RESIDENTIAL PROPERTY PRICES
New vs. existing property; 2015 = 100



Increasing population contra lagging supply

IN THE LAST QUARTER OF 2016, economic activity continued to show strong momentum supported by a steady improvement in net exports of services, in particular in the financial area, and a recovery of domestic demand. In 2017, all indicators suggest the strong momentum to continue. In particular, a rebound in domestic demand is projected to kick in and contribute to a more balanced growth. Private consumption is projected to surge in line with the significant improvement in households' disposable income. While employment prospects remain positive, households

are expected to consume a large share of this additional income. Data continue to suggest strong economic momentum, with consumer and business sentiment showing healthy results through Q2. The unemployment rate is steady at a five-year low in May and is forecast to gradually decrease to 6.1% in 2017. Luxembourg's economy is expected to grow above 4% in 2017 and 2018. The recovery of oil prices along with additional domestic factors is expected to keep inflation close to 2%.

Housing prices in Luxembourg have increased by 7.7% (nominal) in Q4/2016 over a one-year period, after slower year-on-year growth in the first two quarters. The average price per square metre for an apartment is now reaching almost €6,000. In recent years, newly-built homes have seen the strongest price increases. However, at the end of last year (Q4), the cost of existing properties was up by 8.6% compared with 6.3% for newly-built properties.

According to the Housing Observatory, the strong population growth of recent years, around 10,000 new inhabitants per year over the last decade, coupled with stable economic growth, low interest rates and favourable credit conditions are the main reasons for this steady rise in prices. The supply of housing being unable to satisfy demand also 'inflates' the county's housing prices.

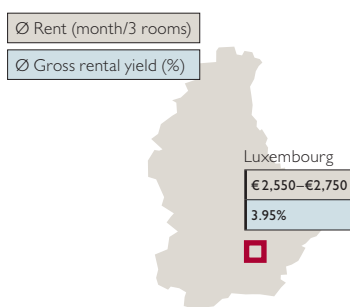
One of the problems faced by the sector is the difficulty of gaining land to build houses and apartments. According to the Observatory, there are about 2,719 hectares of land 'theoretically' available for construction. About 92% of this area belongs to private owners. According to the Housing Observatory, Luxembourg needs between 7,500 and 8,000 new homes annually to solve the problems the country is facing in the housing market. The total number of dwelling permits rose by 6.3% year-on-year to approximately 4,850 units in 2016. Most of the increase came from apartments, with permits surging around 24.5% to 3,440 units. Permits for houses were also up by 11.2% to 1,265 units in 2016.

The rental market is mainly concentrating on Luxembourg City and the neighbouring areas, with a focus on apartment letting. Residential property is mostly owned by private investors. Due to a VAT increase to 17% in 2015 (construction and repair costs for non-owner occupied properties), investors are going to increase rents.

AT A GLANCE

Population	575,000
Housing stock	0.23m
Stamp duty	9.0%–12.0%
Notary cost	0.5%–0.65%
Brokerage	1.0%–2.0%
Value added tax (VAT)	17.0%
2017 Forecast	
Unemployment rate	6.1%
Inflation rate	2.4%
GDP growth	2.1%
Top Cities	
Luxembourg City	Population 107,000

RENTS AND YIELDS IN CITY CENTRE



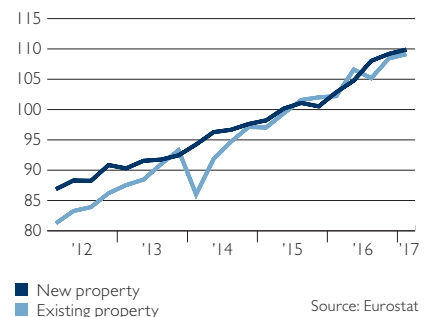
Source: Catella Research 2017

PERCENTAGE PRICE CHANGE OF NOMINAL INDEX change in % refers to 2016



RESIDENTIAL PROPERTY PRICES

New vs. existing property; 2015 = 100



Housing prices going forward and regional differences widening

THE DUTCH ECONOMY SHOWED A ROBUST ECONOMIC performance in 2016 with annual growth reaching 2.2%. In 2017, the expansion is set to continue at an almost similar speed, after which economic growth is expected to slow down to 1.8% in 2018. Over the forecast horizon, private consumption is expected to be the main contributor to GDP growth, supported by household real disposable income growth driven by steady increases in wages and employment. Private consumption growth is

also temporarily supported by a substantial tax stimulus, which improves households' income position. The strong overall performance of the labour market means that unemployment is expected to continue to fall to 4.4% in 2018. In 2018, inflation is projected to decline to 1.3%, as energy base effects fade away.

Housing prices have been accelerating in the Netherlands since 2014, mainly due to strong demand coupled with the lack of adequate housing supply on the market. House prices rose by 6.2% in 2016 (nominal) compared to 2015. Alongside the robust growth in sales, the house price index for existing properties rose in the first quarter of 2017 by no less than 6.8% compared to the previous year. Compared to the last quarter of 2016 (Q4) the rise is approximately 2%. These price rises can partly be explained by the catch-up effect. The fall from the peak in the third quarter of 2008 to the deepest point in the second quarter of 2013 (-20.6%) was followed by a sharp price rise (+16.4%). Even so, prices are still on average 8.6% lower than before the crisis.

Prices in the rental market are also picking up. Figures show that prices in the private rented sector rose by almost 19% between 2013 and the first quarter of 2017. At a national level, the owner-occupied housing sector and the private rented sector are both moving in the same direction; however, price rises

in the private rented sector are slightly higher. In the rental sector, this is also mainly due to increased demand and lagging supply. House prices in urban housing markets and less urban and rural housing markets develop completely different. In Amsterdam, Rotterdam, The Hague and Utrecht, house prices have risen much faster than in the Netherlands as a whole. These differences can be largely explained by a growing demand among private households for owner-occupied homes, while the number of homes available for sale lags behind. At the same time, we are seeing increasing activity in the same markets among buy-to-let investors, which serves to intensify competition for the already scarce properties for sale.

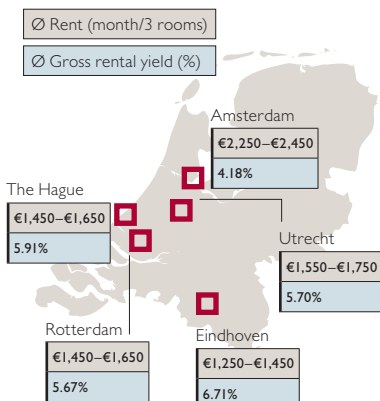
Throughout 2016 as a whole, some 51,000 apartments were approved, which is 5% less than in 2015. Considering the time from obtaining planning permission to putting a new house on the market, it would thus appear that these new homes will not reduce the pressure on the housing market this year. Given the forecast for the increase in households in the Netherlands by an average of 62,500 households per year until 2020, the pressure on the housing market will continue to intensify. Due to around 10,000 homes being demolished every year, an excess of 70,000 homes needs to be constructed to merely prevent the housing shortage from increasing.

AT A GLANCE

Population	16.91m
Housing stock	7.62m
Stamp duty	6.0%
Notary cost	0.2%–0.4%
Brokerage	1.0%–1.25%
Value added tax (VAT)	21.0%
2017 Forecast	
Unemployment rate	4.9%
Inflation rate	1.6%
GDP growth	2.1%
Top Cities	
Amsterdam	1,336,000
Rotterdam	1,220,000
The Hague	1,050,000
Utrecht	655,000
Eindhoven	420,000

Source: Eurostat, IMF, PMA

RENTS AND YIELDS IN CITY CENTRES



Source: Catella Research 2017

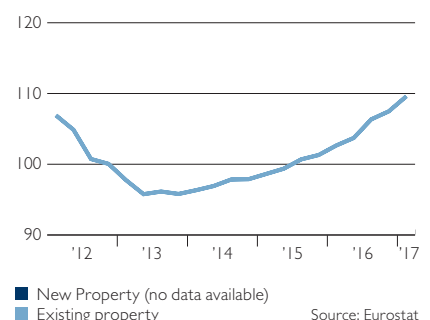
PERCENTAGE PRICE CHANGE OF NOMINAL INDEX change in % refers to 2016



Source: Bank for International Settlements

RESIDENTIAL PROPERTY PRICES

New vs. existing property; 2015 = 100



Source: Eurostat

Growing undersupply and price imbalance

WITH REAL GDP GROWTH OF 1.5% IN 2016, AUSTRIA has reached a turning point, leaving behind a period of subdued growth. The success of last year's tax reform was reflected by the significant pick-up of equipment investment and private consumption, both of which became the main growth drivers of the economy. Employment has expanded due to strong immigration and the employment of more women. In line with the pick-up in economic activity, unemployment has started to decline. After having peaked at 6.0% in 2016, the unemployment rate is expected to stabilise at 5.9% in 2017 and 2018, partly because of fewer refugees entering the

AT A GLANCE

Population	8.64m
Housing stock	3.86m
Stamp duty	3.5%
Notary cost	€5,000–€15,000
Brokerage	1.0%–3.0%
Value added tax (VAT)	20.0%

2017 Forecast

Unemployment rate	5.5%
Inflation rate	1.7%
GDP growth	1.5%

Top cities

Top cities	Population
Vienna	1,820,000
Graz	286,600
Linz	197,400
Salzburg	148,400
Innsbruck	133,000

Source: Eurostat, IMF, PMA

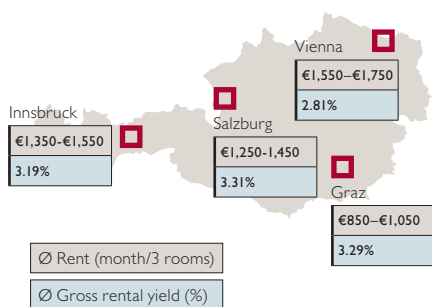
labour market. Exports are projected to increase strongly as world trade strengthens, turning the contribution of foreign trade to GDP growth positive. Positive business and consumer sentiment indicators point to a continued strong growth in the first half of 2017. GDP growth is expected to climb to 1.7% this year and to continue at this level in 2018.

Austrian housing prices continue to rise in line with economic growth. In Q4/2016, the price index for residential property in Austria was up by 4.6% (nominal) year-on-year. On a quarterly basis, property prices only increased by 0.4% (nominal) in Q4/2016. Price development stabilised in the second half of the year after strong growth in the first half-year. The Austrian housing market, particularly more expensive, privately-financed property, has remained stable for some time, despite strong shifts in individual segments of the market. For example, the price for houses in Vienna has been rising consistently since 2004. During the housing boom (2003–2013), property prices in the capital soared by nearly 100% (nominal). On the other hand, property prices in the rest of Austria have risen by only 37% (nominal) from 2003 to 2013. New homes are most expensive in the capital, where a 120sqm apartment or house costs approximately €471,000 – an increase of 22% on 2010. The value of older properties also rose

by an average 35%. Much lower prices for older properties can be found in Burgenland, Carinthia and Styria – with the average price for a house amounting to from €230,000 to €290,000. In Vorarlberg and Salzburg you can expect to pay double or triple that, with the average price ranging from €515,000 to €560,000.

These substantial increases are a clear sign of a growing undersupply of the market. Austria's housing market has changed in recent years, particularly in major urban centres. This is a result of the sharp rise in population. Strong demand on the housing market is expected to intensify over the next few years. There is a shortage of properties which will also aggravate the problem. Over the next few years, around 300,000 people are expected to move to Vienna. Vienna's city government is planning a 30% boost in housing construction, starting 2017 and, implying to build about 13,000 new homes in Vienna per year – an increase from currently 10,000 homes being built. In the past decade, an average of approximately 30,000 new households has been established in Austria each year. In 2014 and 2015, this number exceeded 44,000. Close to 37,000 new households are expected every year until 2022. At that point in time, the increase is expected to plateau for the long-term. Increased demand for new apartments in Austria is primarily driven by the above-average rise in immigration.

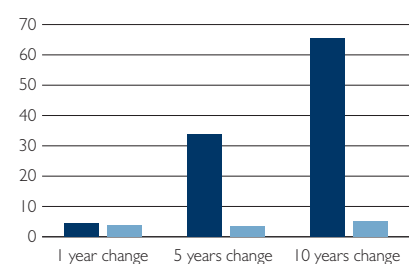
RENTS AND YIELDS IN CITY CENTRES



Source: Catella Research 2017

PERCENTAGE PRICE CHANGE OF NOMINAL INDEX

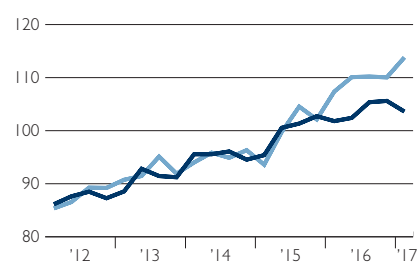
change in % refers to 2016



■ Austria
■ Euro area
Source: Bank for International Settlements

RESIDENTIAL PROPERTY PRICES

New vs. existing property; 2015 = 100



■ New property
■ Existing property
Source: Eurostat

Planning permissions slow down supply

THE ECONOMY OF THE CZECH REPUBLIC IS FORECAST TO GROW by 2.6% in 2017, slightly above the 2.4% rate in 2016 and somewhat above its estimated long-term potential. In 2017, the main contribution to GDP growth is expected to stem from domestic demand. While rising inflation will dent real incomes, the impact on spending is expected to be partly counteracted by a drop in the household savings rate. Employment growth is forecast to slow down to 0.3% in 2017 and eventually 0% in 2018. The slowdown from 1.8% in 2016 is driven by demographic constraints, as the population in the working-age-bracket is expected to shrink slightly.

AT A GLANCE

Population	10.65m
Housing stock	4.75m
Stamp duty	4.0%
Notary cost	-
Brokerage	0.5%–1.0%
Value added tax (VAT)	21.0%
2017 Forecast	
Unemployment rate	3.5%
Inflation rate	2.3%
GDP growth	2.6%
Top cities	
	Population
Prague	1,269,000
Brno	377,400
Ostrava	294,200
Pilsen	169,700
Liberec	101,100

Source: Eurostat, IMF, PMA

Risks to the outlook are mainly linked to the uncertainty surrounding public investment projects and the timing of EU funds absorption.

High demand, substantially lower supply in all residential real estate segments, investment appetite and low long-term interest rates for mortgages are the key-drivers for the good performance of the Czech residential market. In fact, prices for residential apartments in 2016 and the first quarter of 2017 exceeded their previous historical maximums of 2007 and 2008. The average price of apartments in the Czech Republic increased by 11% (nominal) during the year until Q4/2016, the country's eleventh consecutive quarter of strong price hikes. Even on a quarterly basis, house prices increased by 4.7% in the fourth quarter of 2016 compared to Q3/2016. The average price of new dwellings rose by 4.3% (nominal) in the first quarter of 2017 (quarter-on-quarter basis). This was even higher than the average price peak of 2008, indicating that the primary housing market has fully recovered from the crisis. The average price of existing dwellings also exceeded the all-time high of 2008 and performed very well in the first quarter of 2017, with a quarter-on-quarter growth of 2.7%.

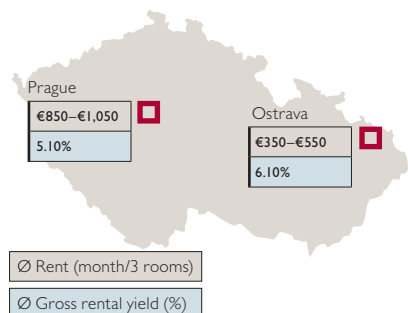
Thanks to favourable mortgage rates and general lending conditions, demand for new housing is high, while supply,

due to current administrative processes, is going to be smaller. The Czech Republic is among the countries with the longest planning permission approval procedures.

Due to the absence of new supply, the available housing stock (especially concerning new construction) is constantly sold out. With regard to price development, the average transaction price for residential property located in Prague or regional cities saw a year-on-year increase of more than 15%.

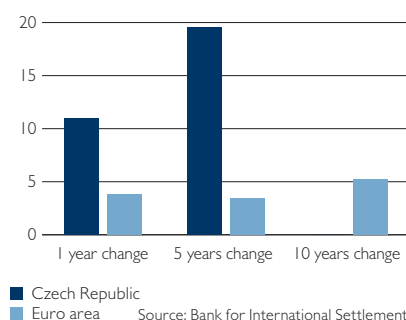
In 2016, dwelling completions were up by 5% from the previous year, following annual declines in the years 2015 and 2014. By the end of 2016, Prague dwelling completions reached the highest figure since the 2009 real estate crisis, with around 6,500 units. Nevertheless, the supply of new apartments in Prague in 2016 could not satisfy demand. This affected the price increase of all residential types. Despite an increase in construction, the number of available units for sale fell due to the slow issuance of planning permissions in cities such as Prague and Brno. In view of the current situation, a major change in development can hardly be anticipated in 2017. The significant deficit in new construction is so enormous it can only be eliminated by the above-average construction of new apartments.

RENTS AND YIELDS IN CITY CENTRES



Source: Catella Research 2017

PERCENTAGE PRICE CHANGE OF NOMINAL INDEX
change in % refers to 2016



Source: Bank for International Settlements

RESIDENTIAL PROPERTY PRICES

New vs. existing property; 2015 = 100



Source: Eurostat

Cheap financing conditions driving demand

ECONOMIC GROWTH SLOWED IN 2016 but is forecast to pick up again, driven by private consumption and rebounding investment. In 2016, real GDP growth slowed to 2.0%, from 3.1% in 2015. The decline was due to the lower absorption of EU funds. 2017 is shaping up to be a spectacular year for the Hungarian economy as it is being supported by ambitious pro-cyclical policies and a resumption of EU investment funding. All evidence suggests that growth in Q2 will remain robust. Real GDP growth is projected to rise to 3.6% in 2017 and 3.5% in 2018. Investment is expected to pick up sharply as EU-funded and public investments into infrastructure increase. In addition, the manufactur-

ing sector is expected to benefit from capacity upgrades. The labour market is becoming increasingly tight and price pressure is expected to increase over the forecast horizon. Employment reached a historically high level in 2016, partly supported by the public work scheme. Private sector job creation has also been strong.

Improving incomes, labour market prospects and households' improving net financial wealth all contributed to boosting housing market demand. The low interest rate environment also has a boosting effect through the pick-up in mortgages for house purchases and the increasing demand for investment. The house price index rose by 10.7% in 2016 (nominal) in year-on-year terms. The upturn on the housing market shows a heterogeneous picture. On the one hand, market expansion concentrates on existing houses, with supply frictions making a significant contribution to this. In 2016, prices for houses already built increased by 10.1% compared to the previous year, while at the same time the index for newly built houses rose by 8.9%.

The housing market also exhibits strong heterogeneity in geographic terms. The prices for residential real estate in Budapest increased by approximately 20% in 2016. In other cities the average increase was 13%. Meanwhile, a 9% rise was measured with regard to

rural dwellings. There are only a few other cities in Hungary which show an almost similar price development as the capital and these are located at Lake Balaton. Housing prices in the Balaton region show greater stability over the long-term; even after the crisis they lost value to a lesser degree compared to the national average.

The supply side of the housing market has also started to adjust, with the number of planning permissions issued doubled compared to 2015. New developments, of which the majority will be completed in 2017, are mainly concentrated in the capital and its vicinity; thus, price pressure on the Budapest housing market may decline due to a continuous rise in supply.

Investors are also present on the market and currently - as well as over the last few years - focused on existing residential buildings. Over the next few years, investors will profit from the forthcoming supply of newly built apartments, thus demand is currently dominating the market. Overall, the Hungarian residential market is on track to respond with an increased amount of planning permissions to the increased demand for housing. Regarding current macroeconomic fundamentals and the rise in construction costs, the price increase is forecast to stabilise in short to medium-term.

AT A GLANCE

Population	9.83m
Housing stock	4.40m
Stamp duty	4.0%
Notary cost	0.5%–1.0%
Brokerage	0.5%–2.0%
Value added tax (VAT)	27.0%

2017 Forecast

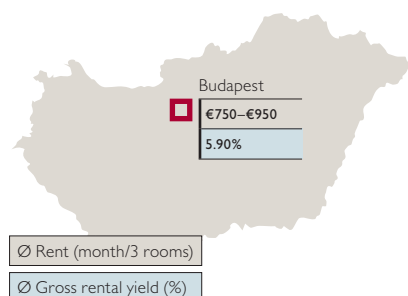
Unemployment rate	4.1%
Inflation rate	2.5%
GDP growth	3.6%

Top Cities

City	Population
Budapest	1,764,000
Debrecen	204,120
Miskolc	172,630
Szeged	164,880

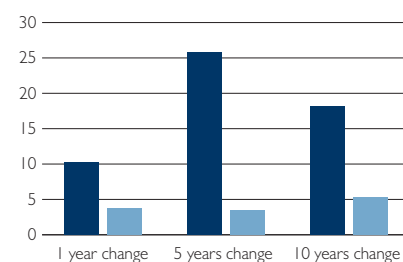
Source: Eurostat, IMF, PMA

RENTS AND YIELDS IN CITY CENTRE



Source: Catella Research 2017

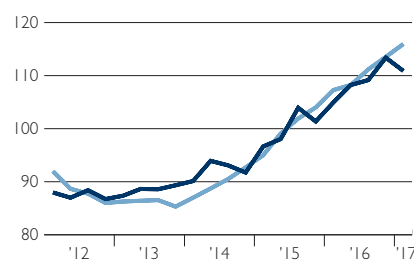
PERCENTAGE PRICE CHANGE OF NOMINAL INDEX change in % refers to 2016



■ Hungary
■ Euro area
Source: Bank for International Settlements

RESIDENTIAL PROPERTY PRICES

New vs. existing property; 2015 = 100



■ New property
■ Existing property
Source: Eurostat

Strong investment market with relatively stable prices

ALTHOUGH IT REMAINS TO BE SEEN how recent political turmoil will affect investor confidence, economic growth is expected to remain strong this year on the back of a rebound in fixed investment as greater EU funding is absorbed. GDP growth in Poland is expected to rebound to 3.5% in 2017, before slowing slightly to 3.2% in 2018, with domestic demand remaining the key driver of the economy. Specifically, private consumption is forecast to increase strongly in 2017. Solid domestic demand and exports along with low interest rates are

AT A GLANCE

Population	38.5m
Housing stock	14.10m
Stamp duty	1.0%–2.0%
Notary cost	min. 25€, max. 3,650€
Brokerage	0.5%–1.5%
Value added tax (VAT)	23.0%

2017 Forecast

Unemployment rate	5.2%
Inflation rate	1.8%
GDP growth	3.5%

Top Cities	Population
Warsaw	1,743,000
Cracow	755,000
Łódź	697,000
Wroclaw	628,000
Poznań	541,000

Source: Eurostat, IMF, PMA

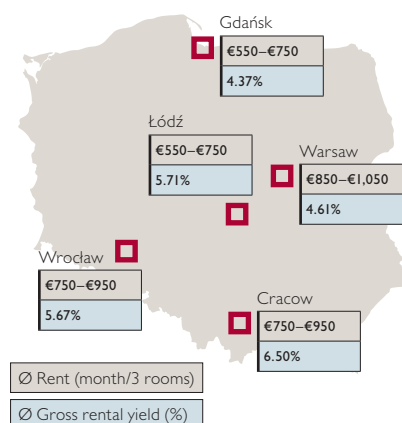
all expected to support investment. The labour market has performed well so far but is expected to tighten with labour supply negatively affected by a lowering of the statutory retirement age. Headline and structural fiscal deficits are set to increase, reflecting higher public investment and higher social expenditures.

With record-low interest rates, constrained supply and a new housing subsidy programme, housing demand in Poland continues to rise strongly. Residential development for sale noted record levels in both sales and new listings, while increases in property prices have been minimal, with a tendency to growth in specific segments and locations. The average price of existing properties in Poland even decreased slightly by 0.1% in Q1/2017 compared to last quarter of 2016. Nevertheless, on annual change basis, prices for existing property rose by 4.7% compared to the first quarter of 2016. Regarding property prices for new dwellings, there is an increase of only 1.9% in Q1/2017 in year-on-year basis. This apparent stability in the average price level is due to structural changes of the supply. The market for the cheapest units has proven to be the one with the highest demand. In other words: the number of low-end units has increased significantly while the average prices in the lower market segment increase, too. This is balanced out by a decreasing number of higher-priced

units. The demand in the high-end segment is mainly limited to demand by the more affluent households for their own living purposes. Due to the consequent reduction of supply in this segment over the recent years, price increases for new supply in the segment are not likely.

In recent years, the Polish residential property market has struggled to attract profit-seeking investors, mainly due to a lack of existing stock and the fact that a proper rental market did not exist. Today, residential assets in Poland can deliver stable cash flows and higher returns than traditional investment assets like office properties or stock. 2016 was a good year for the residential sector. The market visibly starts its process of transformation from an owners' market to a rental-market. The growing scale of the rental segment attracts more and more investors. Investments mainly took place in the Polish Top 5 markets, with a visible focus on Warsaw in total investment volume. This significant increase was partly due to binding reservations by buyers, who wanted to apply for the MDM ("Mieszkanie Dla Młodych" – "An Apartment for Young People") programme. MDM is a housing subsidy programme introduced by the government in early 2014, aimed at helping young people aged up to 35 to buy their first new flat. In June 2016, the Polish government introduced a new national housing programme called "Mieszkanie plus" ("Apartment plus"), focusing on a built-to-rent concept targeting affordable rental homes. The national housing fund will act as a state banking mechanism and acquire land for these residential projects.

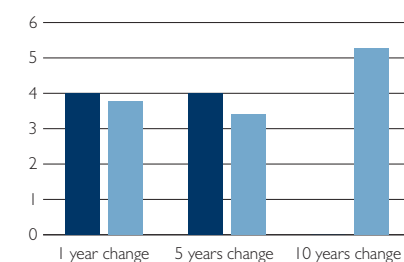
RENTS AND YIELDS IN CITY CENTRES



Source: Catella Research 2017

PERCENTAGE PRICE CHANGE OF NOMINAL INDEX

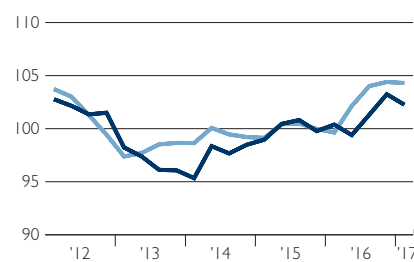
change in % refers to 2016



Legend:
 ■ Poland
 ■ Euro area
 Source: Bank for International Settlements

RESIDENTIAL PROPERTY PRICES

New vs. existing property; 2015 = 100



Legend:
 ■ New property
 ■ Existing property
 Source: Eurostat



Demographic development and urbanisation are key drivers

THE DANISH ECONOMY IS EXPECTED TO ACCELERATE due to improvements in the external sector and solid private consumption this year. Real GDP expanded by 1.3% in 2016 and is expected to expand by 2.3% in 2017 and 1.8% in 2018. Domestic demand is forecast to remain the driver of economic growth, underpinned by robust private consumption and business investment. Private consumption expanded at a rate of 2.1% in 2016 and is projected to grow

at a similar pace over the forecast horizon. This development is supported by strong employment growth, steadily rising disposable incomes and low interest rates. Employment growth was strong in 2016, expanding at a rate of 1.7%. However, due to the growing labour force, the unemployment rate remained at a stable 6.3%. Risks are primarily related to external factors such as a downturn in the European Union's overall economy in the wake of Brexit and eurozone banking problems.

owner-occupied housing; in consequence, 50% of all residential units are occupied by the owner. In the aftermath of the financial crisis, the Copenhagen residential market has experienced growing confidence and a very positive trend in prices and transaction volumes. The rental market has also proven strong and resilient with increasing rent levels and virtually no vacancies. Since 2006, Copenhagen has experienced net immigration of approx. 119,000 new residents, a growth of 18.4%. According to Statistics Denmark this trend is expected to continue, corresponding to 10,000 new residents a year. This will result in an increasing demand for approximately 5,000 housing units a year until 2027, totaling 59,500 new units.

AT A GLANCE

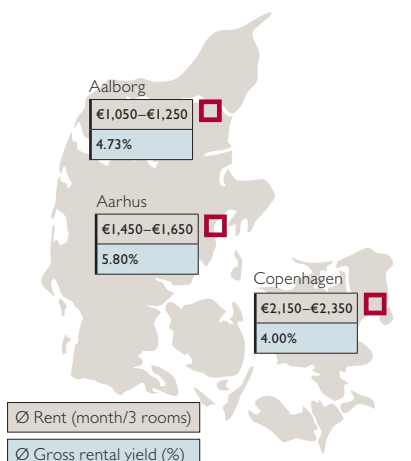
Population	5.75m
Housing stock	2.5m
Stamp duty	0.6%–1.5%
Notary cost	–
Brokerage	1.0%–2.5%
Value added tax (VAT)	25%
2017 Forecast	
Unemployment rate	6.3%
Inflation rate	1.7%
GDP growth	2.3%
Top Cities	
Copenhagen	1,307,000
Aarhus	336,000
Aalborg	212,000
Odense	201,000

Source: Eurostat, IMF, PMA

One of the leading drivers of the housing market is the Danish demographic development. Overall, the Danish population has grown by 3.0% over the past 5 years, double the EU average of 1.5%. This trend is expected to continue and by 2026 the Danish population is projected to have grown by 6.9%. Overall, house prices increased by 5.3% in 2016. Prices for both family homes and owner-occupied apartments have increased by 17% and 44% respectively since 2012. The residential market has proven strong and has experienced price normalisation in the turmoil of the financial crisis. There are virtually no vacancies on the residential market, especially not in the larger cities. Prices are currently 5.9% (corrected for inflation) higher than before the crisis and rely on sound fundamentals. The Danish tend to prefer

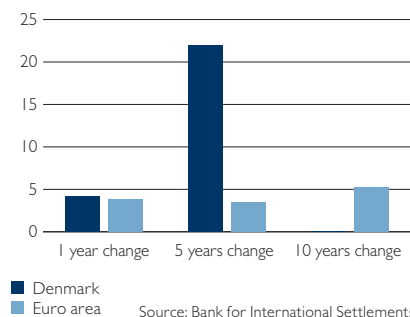
Ultimately, the low vacancy rate of residential properties in Copenhagen and the demand surplus in relation to construction activities create an imbalance in the residential market. Generally, prices in the Copenhagen area have rebounded faster than the nationwide average. Copenhagen provides the perfect setting for residential lettings with minimal re-letting risks and stable and growing rental incomes for new as well as older properties.

RENTS AND YIELDS IN CITY CENTRES



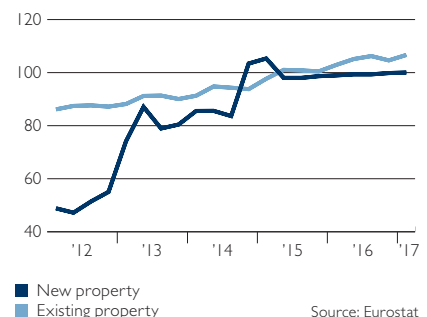
Source: Catella Research 2017

PERCENTAGE PRICE CHANGE OF NOMINAL INDEX
change in % refers to 2016



Source: Bank for International Settlements

RESIDENTIAL PROPERTY PRICES
New vs. existing property; 2015 = 100



Source: Eurostat

Between urbanisation and changing household structure

REAL GDP GROWTH ACCELERATED TO 1.4% IN 2016 after just 0.3% in 2015, driven mainly by private consumption and construction investment. Residential investment has bounced back amid brightening economic prospects and record low interest rates. Exports have shown signs of revival as foreign demand recovered and competitiveness improved. The increase in labour-intensive activities, notably construction, combined with a stagnant labour force due to an ageing

population has reduced unemployment. The economy is expected to continue to grow at a similar pace in 2017 (1.3%) and 2018 (1.7%). Although domestic demand will be held back by slow income growth, brightening employment prospects, improved consumer confidence and low interest rates will support consumption and residential investment. Risks in the downside are the overall uncertainty related to the external environment and the outcome of the upcoming sectorial wage negotiations, which could weigh on the growth of export.

There are some 2.6 million dwellings in Finland. Of these, approx. 40% are single-family homes. More than 44% of these are situated in apartment buildings. Approximately two thirds of Finland's housing stock consists of owner-occupied homes. Home ownership is widespread in all forms of housing, from apartments to detached and terraced houses. In total, there are some 840,000 rental apartments in Finland. Demand for rental housing remains strong, especially for small apartments in the major cities. During the past decade, nominal rents in the Helsinki metropolitan area have increased by approx. 3.8% annually on average. In other major cities, the increase has been slightly slower while the annual increase in rent has varied between 2.5–3.5% on average. In 2016, market rents increased by 1.4% in the Helsinki metropolitan area and 1.3% in other major cities.

AT A GLANCE

Population	5.51m
Housing stock	2.65m
Stamp duty	4.0%
Notary cost	€112 plus travel cost (fixed)
Brokerage	0.75%–4.0%
Value added tax (VAT)	24.0%

2017 Forecast

Unemployment rate	8.6%
Inflation rate	1.2%
GDP growth	1.3%

Top Cities	Population
Helsinki	635,600
Espoo	274,500
Tampere	228,200
Vantaa	219,200
Turku	187,600

Source: Eurostat, IMF, PMA

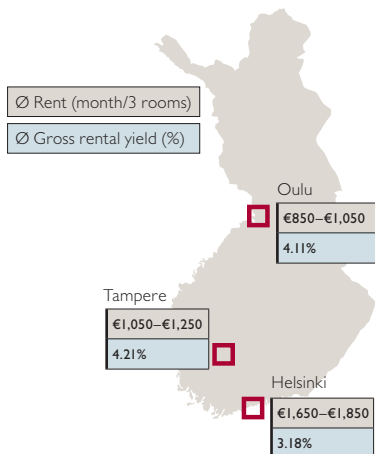
After the beginning of the financial crisis, apartment prices in the Helsinki metropolitan area have been growing faster than in other parts of Finland. At the same time, apartment prices have increased strongest in the large cities, where population has been growing fastest, too.

Housing prices went down by 0.1% in Greater Helsinki and by 0.5% in the rest of Finland. Compared to the previous quarter, housing prices for older apartments thus fell by 0.3% overall.

However, compared to the corresponding period of 2016, prices rose by 0.4% in the whole country, with prices in Greater Helsinki, going up by 2.5% and going down by 1.4% in the rest of the country. In Q1/2017 the average price for an old apartment was €3,686 in Greater Helsinki and €1,688 elsewhere in the country.

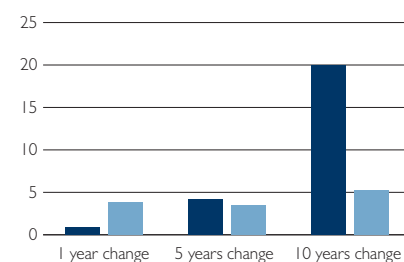
Urbanisation in Finland has been advancing a bit faster than in Sweden since the turn of the millennium and is expected to increase at the same pace it has been increasing over the last 20 years in Finland. Urbanisation is estimated to have its largest effect in the Greater Helsinki, Turku, Tampere, Jyväskylä and Oulu regions. The increase of one and two person households is another remarkable trend in the Finnish housing market.

RENTS AND YIELDS IN CITY CENTRES



Source: Catella Research 2017

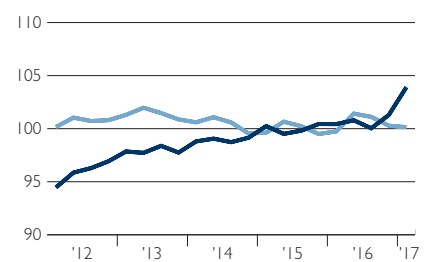
PERCENTAGE PRICE CHANGE OF NOMINAL INDEX
change in % refers to 2016



Source: Bank for International Settlements

RESIDENTIAL PROPERTY PRICES

New vs. existing property; 2015 = 100



Source: Eurostat

Housing market is cooling down

THE DOMESTIC ECONOMY REMAINS STRONG and the unemployment rate has consistently been declining in recent months. However, in June, the combination of low oil prices and strong dynamics in the mainland economy led to the country's first trade deficit in nearly 20 years. The economy is projected to strengthen gradually, thanks to stronger growth of private consumption and both petroleum and non-oil investment. Employment growth will pick up and increasing activity will lift consumer

price inflation from its current low level. Improving the business environment, stronger competition, and better skills and education are key to raising growth potential and maintaining inclusiveness. Total GDP is expected to expand by 1.3% in 2017, unchanged from last month's forecast, and by 1.5% in 2018. Consumer price inflation will continue falling in the near-term as currency-depreciation effects wane but increase gradually again, as spare capacity diminishes. As always, uncertainty about the global oil price remains a key source of upside and downside risks. Risks for non-oil export demand remain heightened by political and economic uncertainty.

There was a 10.1% rise in the nationwide house price index at the end of Q4/2016, the strongest rise since Q1/2010. During the whole year of 2016, housing prices increased by 7.1%. The strong growth is mainly due to low interest rates, high population growth and several years of strong income growth. Nevertheless, the Norwegian government has now tightened mortgage regulations in an attempt to rein in the housing market, forcing banks to become more selective. This predicts nominal housing prices to slightly decline in the short to medium term. Looking at monthly data, price corrections are already visible: Norwegian housing prices fell by 0.7% between April and May as the market was cooling off from

a rapid rise in recent years. Norwegian housing prices are going to flatten in Q3 and Q4/2017, with the balance between supply and demand evening out in most parts of Norway.

Prices for existing dwellings decreased in many regions in the second quarter of 2017. The largest fall was seen in the Oslo region and in the Southern parts of Norway. Housing prices experienced their strongest decrease in Oslo, Bærum, Agder and Rogaland excluding Stavanger by 1.5% and 1.4% respectively. In the other cities, housing prices increased. With 1.3%, Stavanger had the strongest price growth, while Bergen and Trondheim saw an increase of 0.5% and 0.1% respectively compared to the first quarter of 2017. Following record high annual growth in Oslo by over 20%, the price increase for existing dwellings was 13.0% in the second quarter of 2017. The weakest price growth compared to the second quarter of 2016 was in Agder and Rogaland.

Population growth and urbanisation make it necessary to build many new homes in the coming years and especially in and around the major cities. Housing supply is set to rise in 2017. The country is expected to build around 38,000 homes in 2017, up from an estimated earlier amount of 33,000.

AT A GLANCE

Population	5.24m
Housing stock	2.51m
Stamp duty	2.5%
Notary cost	-
Brokerage	0.75%–1.25%
Value added tax (VAT)	25.0%

2017 Forecast

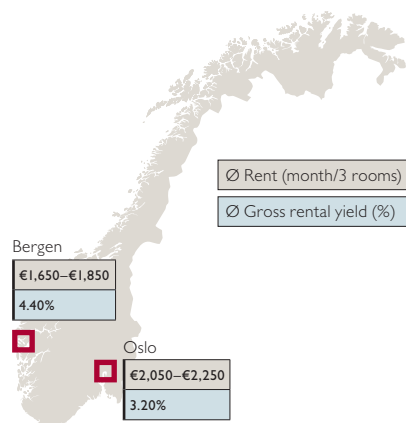
Unemployment rate	4.4%
Inflation rate	1.9%
GDP growth	1.3%

Top Cities

City	Population
Oslo/Akershus	1,257,000
Bergen	278,100
Stavanger	225,800
Trondheim	181,100

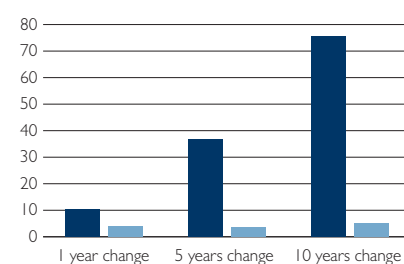
Source: Eurostat, IMF, PMA

RENTS AND YIELDS IN CITY CENTRES



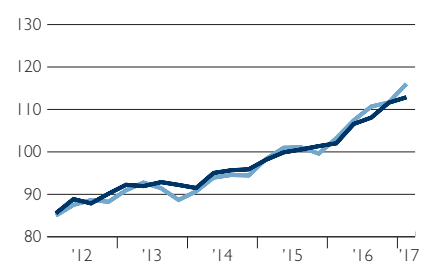
Source: Catella Research 2017

PERCENTAGE PRICE CHANGE OF NOMINAL INDEX
change in % refers to 2016



■ Norway
■ Euro area
Source: Bank for International Settlements

RESIDENTIAL PROPERTY PRICES
New vs. existing property; 2015 = 100



■ New property
■ Existing property
Source: Eurostat

Growing imbalance due to persistent price growth

THE SWEDISH ECONOMY is at the end of an economic cycle with an extraordinary expansive monetary policy and record household debts. Swedish GDP growth has been debt-driven over the last 20 years. Real household debts have been increasing since the mid-1970s and new loans have injected an annual average of almost 4% of GDP into the economy since the mid-1990s. As a result of stronger global growth, net exports are expected to start contributing posi-

tively to Swedish GDP growth in 2017. Although economic growth in Sweden is expected to remain robust and broad-based, it is at the same time expected to flatten slightly to 2.6% in 2017 and 2.2% 2018. Domestic demand, the main growth driver in 2016, is set to slow while net exports are expected to provide some support to growth in 2017. The unemployment rate is forecast to level off at 6.6% in 2017 and 2018. Inflation is set to stay below the Swedish central bank Riksbank's target of 2%.

The nationwide house price index increased by 6.5% (nominal) during the year until the end of Q4/2016, a slight slowdown from an annual rise of 7.1% in Q3/2016. During the year 2016, housing prices rose by 8.7%, a slowdown compared to the significant increase of 2015 with 13.1%. The key drivers of the persistent house price growth are generous tax treatment of home ownership and mortgage debt, accommodative credit conditions and a continual housing supply shortage. The situation has been fuelled by negative interest rates, allowing larger shares of the population to borrow at historically low rates.

The country's population has risen from below 8.5 million in the late 1980s to nearly 10 million as of 2017, with immigration as a contributing factor while housing stock has only increased by about 780,000 dwellings in the same

period. Demand for property has been growing – especially in Stockholm and other large cities – while construction has been slow, which is partly due to delays caused by the Swedish planning laws. Based on total population growth in Greater Stockholm, there is need for around 16,000–19,000 new residences per year in the period from 2017 to 2021.

It is likely that new construction will fall back when the residential market goes from balance to oversupply in 2018/2019. In addition, household savings ratio has been increasing significantly during recent years, creating stability and improving households' ability to bear high debt. It remains unclear, whether the new mortgage amortisation requirement of 2016 will have sufficient impact.

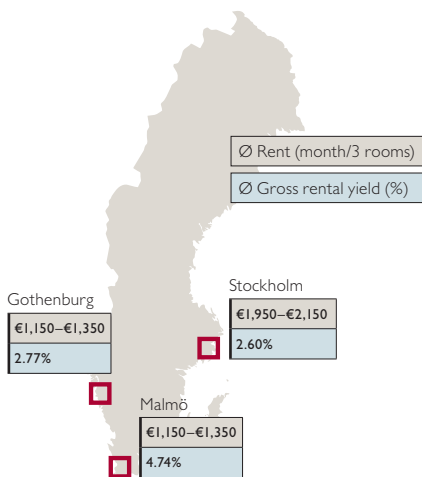
Meanwhile, the shortage of available housing is linked to structural inefficiencies in the housing market, with construction well below the level needed and competition in the construction sector weak. A tightly regulated rental market hinders the efficient use of existing housing. Sweden's rental market is strictly regulated and rents are set far below reasonable return-on-investment. The recent surge in housing prices is partially to be blamed on the country's low rents, which discourage builders from building dwellings for lease. With the latest regulation reform launched in 2014 still being quite new, housing associations are incapable of forbidding owners from renting out their dwellings, there is still a shortage of apartments for rent in Sweden, especially in Stockholm.

AT A GLANCE

Population	9.93m
Housing stock	4.78m
Stamp duty	4.25%
Notary cost	–
Brokerage	0.25%–1.5%
Value added tax (VAT)	25.0%
2017 Forecast	
Unemployment rate	6.6%
Inflation rate	1.5%
GDP growth	2.6%
Top Cities	
Stockholm	2,246,000
Gothenburg	993,460
Malmö	302,710
Uppsala	149,250
Linköping	106,800

Source: Eurostat, IMF, PMA

RENTS AND YIELDS IN CITY CENTRES



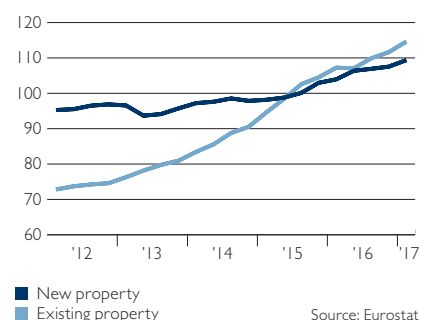
Source: Catella Research 2017

PERCENTAGE PRICE CHANGE OF NOMINAL INDEX
change in % refers to 2016



Source: Bank for International Settlements

RESIDENTIAL PROPERTY PRICES
New vs. existing property; 2015 = 100



Source: Eurostat

Strong growth in residential sales

ITALY'S ECONOMY IS SET TO CONTINUE EXPANDING by about 1% in 2017 and 2018, driven by stronger external demand and the recovery of investment. Rising global demand and the recent depreciation of the euro are supporting exports. Business investment is strengthening but public investment has not yet recovered. Private consumption growth remains robust despite slowing job creation and modest wage gains.

AT A GLANCE

Population	61.02m
Housing stock	25.89m
Stamp duty	4.0%
Notary cost	0.05%–0.2%
Brokerage	0/1.5%
Value added tax (VAT)	22.0%

2017 Forecast

Unemployment rate	11.5%
Inflation rate	1.0%
GDP growth	0.9%

Top Cities	Population
Rome	2,877,200
Milan	1,369,000
Naples	975,300
Turin	886,800
Palermo	668,000

Source: Eurostat, IMF, PMA

Inflationary pressures are subdued due to large spare capacity, although recent energy and food price increases have pushed up consumer prices. After positive performances in 2015 and 2016, when employment was supported by a temporary reduction in social contributions, employment is expected to grow at a pace more consistent with economic developments in 2017 and 2018. Political uncertainty and the slow adjustment in the banking sector represent downside risks to Italy's growth prospect.

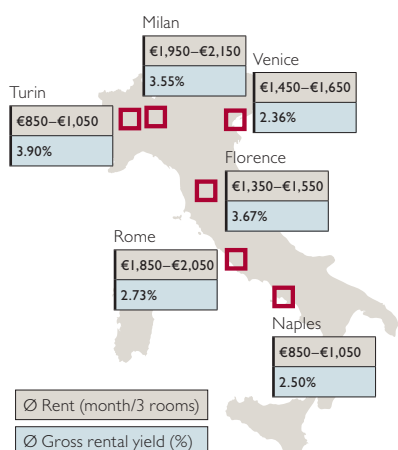
The Italian residential property market continues its slightly recovery ahead of the other property subsectors. The national house price index in Italy registered a slightly increase of 0.1% (nominal) in Q4/2016, compared to the same quarter of the previous year. Nevertheless, regarding full year results of 2016, house prices decreased by -0.67% (nominal) compared to 2015. The biggest decrease was registered in the case of new properties, at -1.3%, compared with +0.2% for existing homes in Q1/2017 on a quarter-on-quarter basis.

Looking at the number of potential buyers and the average discount on initial asking prices, demand conditions show signs of stabilising. House prices in Italy may still be depressed, but things are looking up for the country's housing market in 2017, as the rising trend of residential property sales in the recent

years seems to indicate. Home sales in Italy maintained their strong growth for the third consecutive year and sales increased by 19% in 2016. Sales in all major cities improved in 2016. The highest surge was in Turin, with sales rising by 26% year-on-year in 2016. The following cities also showed improved sales: Bologna (24%), Genoa (23%), Milan (22%), Naples (17%), and Florence (16%). Sales in Rome and Palermo also rose but at a comparatively slower pace, by 11% and 9%, respectively.

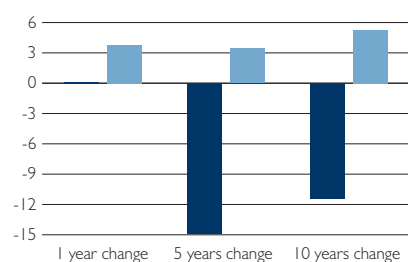
Private rental is unattractive for Italian landlords, with very poor returns on rental properties, caused by rent controls and other restrictions. The standard lease allows free negotiation of initial rent, but forces the landlord to commit to a four-year lease while giving the tenant the option of extending for four more years. Due to these restrictions on rent increases, most landlords prefer long-term leases to take advantage of anticipated future rent increases, inflation and capital value appreciation.

RENTS AND YIELDS IN CITY CENTRE



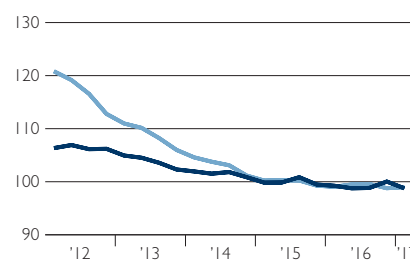
Source: Catella Research 2017

PERCENTAGE PRICE CHANGE OF NOMINAL INDEX change in % refers to 2016



Legend: Italy (dark blue), Euro area (light blue). Source: Bank for International Settlements

RESIDENTIAL PROPERTY PRICES New vs. existing property; 2015 = 100



Legend: New property (dark blue), Existing property (light blue). Source: Eurostat

Growing number of projects

ECONOMIC GROWTH PICKED UP in the second half of 2016 supported by private consumption and exports. Investment also improved towards the end of 2016, mainly helped by an increase in construction. Overall, GDP increased by 1.4% in 2016 and the positive carryover is expected to improve the growth rate to 1.8% in 2017 before slowing to 1.6% in 2018. Exports will continue to support growth, benefitting from the structural reforms of recent years. Nevertheless, domestic demand is not projected to rebound strongly, given the persistently

high rate of indebtedness of the private sector. The labour market is undergoing big improvements, underpinned by sound employment growth and a stabilisation of the labour force. Accordingly, unemployment is forecast to drop from 11.2% in 2016 to 9.9% in 2017 and 9.2% in 2018 while unit labour costs are set to increase modestly. Both headline and core inflation are expected to edge up to around 1.5% in 2018 as energy price increases are assumed to slow down while wage dynamics are likely to push up the price of non-tradable goods and services.

where building plots for new residential property are scarce. Nevertheless, there is also a growing interest for second-tier locations and towns with development areas surrounding the above cities. As in previous years, the residential markets in Lisbon and in Porto have registered very positive levels of demand, mainly supported by the Golden Visa programme, the non-habitual resident tax regime and the short-term rentals market. There is considerable momentum in the sales market, with sales promising to rise at the strongest pace ever recorded. This is matched by a pick-up in both demand and sales expectations. This increase in overall activity is witnessed across every one of the three regions Lisbon, Porto and the Algarve. Over the next 12 months, the strongest price increases will happen in the Algarve. In the next few years, the pace of growth will converge across Lisbon and the Algarve while expectations remain a little weaker in Porto. It is expected that throughout the year 2017 we will see new projects outside the historic centres coming on the market, thus consolidating the growth trend of this sector. Along with this expansion of the area of interest for residential investments, new players (local and international) are coming into the market, putting additional pressure on prices.

Strong demand and a lack of supply continue to push up prices in Portugal as the housing market recovery is well in progress. Residential property prices in Portugal rose by 1.2% (nominal) in the fourth quarter of 2016 compared to the previous quarter. On a year-on-year basis (Q4), the house price index even rose by 7.6% exhibiting one of the strongest price increases ever recorded in Portugal. Also, there is a big difference between the prices for new and existing properties. During 2016, the house price index for new properties increased by 3.3% compared to the previous year. By contrast, prices for existing houses rose by 8.7%. This is mainly due to high dynamics and high demand in the historic centres of the larger cities Portuguese cities like Lisbon and Porto,

AT A GLANCE

Population	10.33m
Housing stock	4.16m
Stamp duty	6.5%
Notary cost	0.3%–1.0%
Brokerage	1.0%–2.5%
Value added tax (VAT)	23.0%

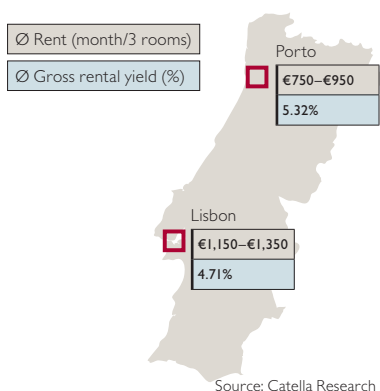
2017 Forecast

Unemployment rate	9.9%
Inflation rate	1.4%
GDP growth	1.8%

Top Cities	Population
Lisbon	2.81m
Porto	238,000
Braga	182,000
Coimbra	134,000
Funchal (Madeira)	105,000

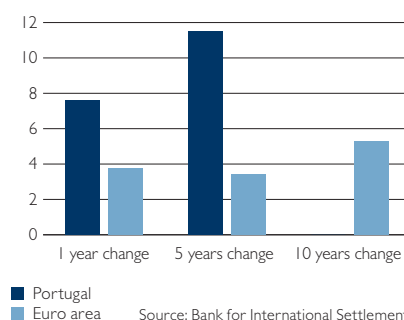
Source: Eurostat, IMF, PMA

RENTS AND YIELDS IN CITY CENTRES



PERCENTAGE PRICE CHANGE OF NOMINAL INDEX

change in % refers to 2016



RESIDENTIAL PROPERTY PRICES

New vs. existing property; 2015 = 100



Demand for rented housing is increasing

ECONOMIC ACTIVITY CONTINUES TO EXCEED EXPECTATIONS underpinned by a more balanced growth pattern than before the crisis. In its fourth year of expansion, Spain continues to grow faster than the average of the euro area with growth still expected to ease over this year and the next, to an annual average of 2.8% in 2017 and 2.4% in 2018. Private consumption is expected to remain the main driver of growth but to slow down over this year and the next as job creation eases. Moreover, other factors supporting household disposable income gains in recent years, such as

the decline in oil prices, gradually abate. Underlying inflation will pick up in 2018, owing to supply constraints, including a decline in working-age population. Although employment growth is set to ease over the forecast period, it is projected to remain strong; allowing for further reductions in the unemployment rate. Unemployment is expected to fall below 16% by 2018, the lowest level since 2009.

The Spanish property market is in a phase of recovery. Housing demand keeps rising, banking is becoming cheaper and the price of land has started to increase. The Spanish house price index increased by 4.4% (nominal) in Q4/2016 compared to Q4/2015. This is the fourth consecutive quarter of year-on-year house price rises. Quarter-on-quarter, house prices just rose slightly by 0.3% during the fourth quarter of 2016 compared to the previous quarter. Spain has suffered a heavy economic crisis, which has further damaged property values, with the result that property prices in many areas are still similar to those of 2004. In fact, house prices have dropped by as much as 35%–50% since the boom and Spain’s housing market now offers exceptional value for money. However, prices vary wildly in the different areas of Spain and the market recovery can certainly not be felt everywhere. During 2016, we were able to witness

a significant rise of residential market prices in the major Spanish cities as well as in some hot spots along the coast. The Balearic Islands, Almeria in Andalusia and Marbella at the Costa del Sol show the biggest year-on-year increases of 2016. Demand is now rising strongly and the total number of residential sales in Spain increased by 14% in 2016 compared with the previous year. This rise in transactions was mainly driven by foreigners buying homes on the coast (like the Costa del Sol) and in cities like Barcelona.

Demand is the key driver at the moment and there is limited access to the residential market, either due to a lack of work or poor wages in addition to a lack of savings. Therefore, the rental market is improving and rental incomes start generating an interesting yield. Rental prices are rising significantly due to demand being higher than supply – especially in the areas with the highest economic and demographic activity and the most tourism. The increasing strength of the rental market is becoming more and more noticeable, especially when it comes to rental prices.

Rents have definitely accelerated in Valencia, Madrid and Barcelona. While Catalonia saw the highest annual increase in rents, Barcelona is still the city with the highest rents of the country.

AT A GLANCE

Population	46.31m
Housing stock	18.65m
Stamp duty	0.75%–2.0%
Notary cost	0.25%–0.5%
Brokerage	1.0%–2.0%
Transfer tax	6.0%–10.0%
Value added tax (VAT)	21.0%

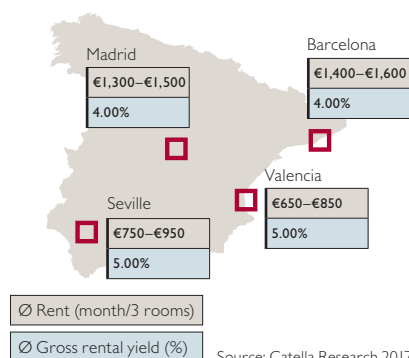
2017 Forecast

Unemployment rate	16.8%
Inflation rate	1.9%
GDP growth	2.8%

Top Cities	Population
Madrid	3,166,000
Barcelona	1,610,000
Valencia	809,000
Seville	690,000
Zaragoza	661,100

Source: Eurostat, IMF, PMA

RENTS AND YIELDS IN CITY CENTRES



PERCENTAGE PRICE CHANGE OF NOMINAL INDEX

change in % refers to 2016



RESIDENTIAL PROPERTY PRICES

New vs. existing property; 2015 = 100



Increase in number of sales and stable prices

ECONOMIC ACTIVITY IN FRANCE is forecast to gently accelerate, as a pick-up in world trade helps strengthen exports after GDP growth eased from 1.3% (2015) to 1.2% in 2016. Economic growth is projected to strengthen to about 1.4% in 2018, boosted by investment and consumption. Increasing domestic demand will be supported by rising confidence as well as cuts in social

contributions, business taxes and continued favourable financing conditions. The labour market will gradually recover and unemployment is set to decline to 9.9% in 2017 and 9.6% in 2018. Inflation will remain low, since pressures on production capacity are limited, and is forecast at 1.4% in 2017 and 1.3% in 2018. The current account deficit is expected to increase slightly, as solid domestic demand will boost imports.

investors and also a number of other rich non-EU investors from Middle Eastern countries, who are willing to buy luxury apartments in Paris. There is the usual demand for French properties by rich buyers from the United States and Scandinavian nations such as Sweden and Norway, but also from Australia and Germany. The number of nationwide transactions increased further by approx. 9.0% in 2016. This dynamic is explained by mortgage interest rates being very attractive, an increase in purchasing power and solvency of French households, the relative stability of prices in large cities and the support plans for new housing, in particular the buy-to-let scheme. There are indications that the upward movement of prices is to continue in 2017 and that interest in French residential property is supposed to remain high. Thus, forecasts predict house prices to rise between 2% and 3% in 2017.

AT A GLANCE

Population	66.86m
Housing stock	35.47m
Stamp duty	5.09% or 5.8%
Notary cost	0.825%
Brokerage	0.1%–3.0%
Value added tax (VAT)	20.0%

2017 Forecast

Unemployment rate	9.9%
Inflation rate	1.4%
GDP growth	1.4%

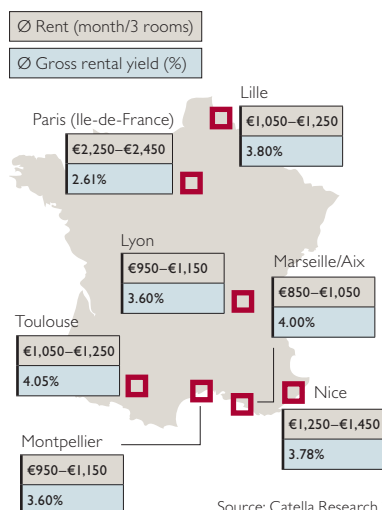
Top Cities	Population
Paris (Ile-de-France)	12,174,800
Lyon	2,220,000
Marseille/Aix	1,875,000
Toulouse	1,310,000
Lille	1,115,000

Source: Eurostat, IMF, PMA

The positive trends on the French housing market continue, with the quantity of property sales up and prices increased by 1.2% (nominal) in 2016 compared to 2015; this looks set to continue in 2017. In a year-on-year comparison of quarters, the house price index even rose by 2.0% in Q4/2016 compared to the same quarter of the previous year. Pricewise, the French markets are historically driven by a major gap between Paris and the regional towns. For example, Bordeaux, Lyon and Nice show average prices per sqm that are still approximately two times lower than in Paris. With 6.0%, Bordeaux, Nantes and Toulouse posted the highest growth in house prices in 2016. Prices are expected to maintain this momentum in future. Paris has had a good year as well, with apartment prices in Paris remain high; rising by approx. 3.5% year-on-year to an average of €8,400/m². There is a lot of interest from wealthy Chinese

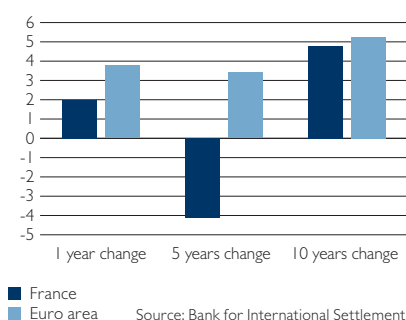
Regarding the construction market, the upward trend started in 2015 continues with 453,000 planning permits authorised in 2016 almost in line with the government's objective of 500,000 units. 2017 should confirm this trend.

RENTS AND YIELDS IN CITY CENTRES



Source: Catella Research 2017

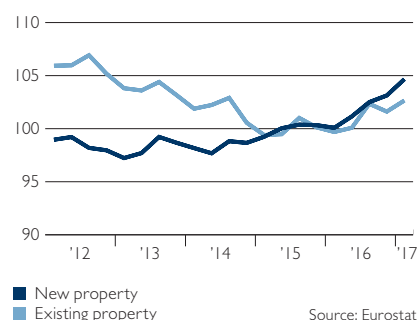
PERCENTAGE PRICE CHANGE OF NOMINAL INDEX
change in % refers to 2016



Source: Bank for International Settlements

RESIDENTIAL PROPERTY PRICES

New vs. existing property; 2015 = 100



Source: Eurostat

Falling yields and rising rents in urban centres

AFTER SOLID GROWTH IN LATE 2016, all available indicators suggest that economic activity will continue to strengthen in the first quarter of 2017 and that higher growth momentum is likely to continue in the coming quarters. Overall, real GDP is expected to increase by 1.6% in 2017, slightly lower than in 2016, but only because of fewer working days, and by 1.9% in 2018. The unemployment rate is predicted to

continue falling. Low unemployment and higher government spending will underpin private consumption. Low interest rates and immigration should sustain residential investment while business investment is set to strengthen only gradually. Exports benefit from strong demand in Asia and the United States but will weaken as the impact of the euro depreciation fades and import growth in China slows. Political uncertainties, including trade policies of major trading partners, represent a downside risk to the growth forecast.

rents to rise more and more. Currently, residential rents at the top locations are increasing by around 3% annually. The Average rents in prime residential areas of the top 7 locations exceeded the €15/m² mark for the first time this year and on a nationwide level, average rents in the prime residential areas are now above €10/m². This development is clear evidence that demand, combined with rising rents, is concentrated primarily in the prime residential areas. Looking at mid-range residential areas, rents have also gone up (by an average of +3.71%), but the increase has been nowhere near as sharp. In recent years, there has been more capital in the market than it has been ultimately possible to invest. This surplus demand has led prices to grow at a faster rate than rents, causing a corresponding hardening in initial yields. With an average top yield of 5.1% in the first quarter of 2017 (2016: 5.5%), the figure is approaching the 5% mark for the first time since 1990, made evident in the extreme interest of investors in category-A locations and prime residential areas. Investors are adopting a balanced risk-yield profile and prioritising sustained cash flows in their investments. Development acquisitions are likely to remain a key pillar of 2017 investment activities since opportunities among the existing building stock remain scarce.

Increasing diversity, falling yields and increasing rents in urban centres are leading to a high level of appeal for investors. Demand continues to outstrip supply; price effects are resulting from shortages, base price increases and the rising expectations of tenants. On average, housing prices rose by 5.2% in 2016 compared to the previous year, a continuous upward trend in property costs witnessed over the past few years. In the last few years, housing markets in large cities have been characterised by substantial rent increases. The main driving force in this has been a sharp rise in the number of inhabitants. Population in Germany's seven top locations has increased by almost 10% since 2000. The high demand for housing and the continuing housing shortage are causing

AT A GLANCE

Population	82.31m
Housing stock	41.71m
Stamp duty	3.5%–6.5%
Notary cost	1.0%–1.5%
Brokerage	2.0%–5.0%
Value added tax (VAT)	7.0% or 19.0%

2017 Forecast

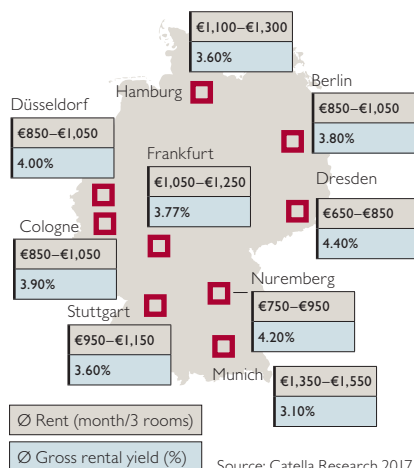
Unemployment rate	4.0%
Inflation rate	1.9%
GDP growth	1.6%

Top Cities

Top Cities	Population
Berlin	3,671,000
Hamburg	1,860,000
Munich	1,540,000
Frankfurt	729,620
Düsseldorf	635,700

Source: Eurostat, IMF, PMA

RENTS AND YIELDS IN CITY CENTRES

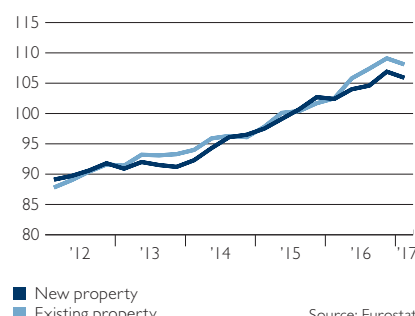


PERCENTAGE PRICE CHANGE OF NOMINAL INDEX
change in % refers to 2016



RESIDENTIAL PROPERTY PRICES

New vs. existing property; 2015 = 100



Constant undersupply, especially in rental sector

IN 2016, REAL GDP GREW BY 5.2% and well above the euro area average. GDP accelerated in the second half of the year despite heightened economic and political uncertainties emerging in the period. Economy is projected to grow at a more sustainable pace in 2017 and 2018, respectively by 4.0% and 3.6%. The good labour market performance combined with a continuing robust wage growth and improving household balance sheets are expected to support consumption in 2017 and 2018. As the labour market

tightens, wage pressure will continue to be strong, which is projected to feed into higher inflation with 1.4% in 2017. Companies are projected to expand at a slower pace than in past years due to the already high labour costs and the big external uncertainties, including the final outcome of Brexit negotiations.

Since rock bottom in 2012, house prices have rebounded substantially. Figures for 2016 and the first quarter of 2017 show that gains in the period increased fastest since 2007, rising by 6.5% (nominal) in 2016 compared to the previous year. On a quarterly basis, the house price index even rose by 7.8% in Q4/2016 year-on-year. The dramatic house price surge is mainly due to the rapid recovery of the Irish economy after the economic downturn between 2008 and 2013. Nationally, the average asking price reached its lowest point in the first quarter of 2013 and has risen by 49% since. However, in Dublin, bottom was reached in the second quarter of 2012 and prices have risen by an average of 60% or €133,000. Today, national house prices are still 31% lower than at their peak in 2007, while Dublin residential property prices are 32% below their 2007 peak.

In 2016, only 13,000 new residential developments were completed, against an estimated need for 21,000. This ongoing lack of supply in housing stock, coupled with significant recent economic growth, has resulted in a considerable inflation of house prices and has put huge pressure on the private rental sector. Ireland's government has initiated a 5-year plan to deliver 20,000-30,000 residential properties in this period. Coupled with an increase in private sector developments, this should result in the Irish residential property market displaying normalised inflation in the years to come.

The most important effect of the undersupply is, of course, a rise in cost. The average rent has risen by 56% since bottoming out in late 2011 and, having exceeded its 2008 peak in 2016, is now approximately 14% above its previous peak, with Dublin leading with a rent increase of currently 18%. The average property in the capital now costs approximately €1,800 a month to rent. This is 55% higher than the current average rent in the rest of the country, which is at €1,160. In the cities of Cork and Galway, rents are 11.0% and 21.0% above the levels recorded nine years ago. Outside the cities, the average rent is 6.0% above its previous peak.

AT A GLANCE

Population	4.71m
Housing stock	2.0m
Stamp duty	2.0%
Notary cost	-
Brokerages	1.23%
Value added tax	23.0%

2017 Forecast

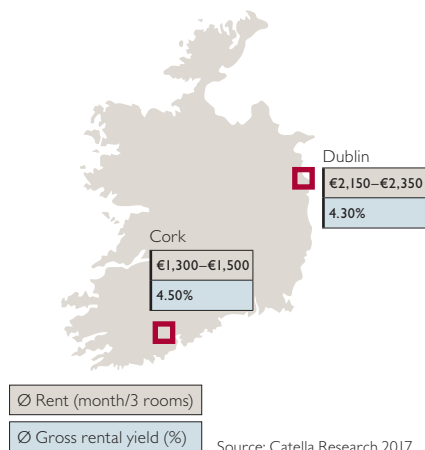
Unemployment rate	6.4%
Inflation rate	1.4%
GDP growth	4.0%

Top Cities

Top Cities	Population
Dublin	1,920,000
Cork	542,000
Galway	258,000
Limerick	195,000
Waterford	116,000

Source: Eurostat, IMF, PMA

RENTS AND YIELDS IN CITY CENTRES



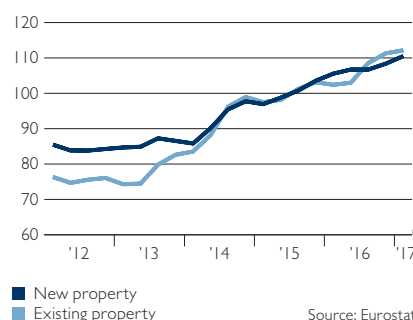
PERCENTAGE PRICE CHANGE OF NOMINAL INDEX

change in % refers to 2016



RESIDENTIAL PROPERTY PRICES

New vs. existing property; 2015 = 100



Political uncertainty dampens British economy

THE ECONOMY IS PROJECTED TO SLOW TO 1.8% IN 2017 and – even more significantly – to 1.3% 2018, owing to uncertainties regarding the outcome of Brexit negotiations. The above projection assumes the UK trading on a ‘most favoured nation’ basis from April 2019 onwards. However, the uncertainty and the assumed outcome are still projected to undermine spending and in particular investment. Growth in real household

disposable income is forecast to fall in 2017 and 2018, with the continued modest growth in nominal wages offset by historically low rates of unemployment and rising inflation. Despite all this, real GDP is expected to slow and the labour market to remain stable.

2016 saw another year of rising prices for residential property in the UK, continuing the trend of recent years. The latest figures show house prices across the UK were up by 7.3% in 2016 compared to 2015. Growth has slowed since and the start of the New Year saw a slight decrease of 0.3% compared to the quarter before. For several months, there has been a continued fall in the number of properties coming on the market, while the number of buyers increased since the referendum and sales were up by approx. 5% by June 2017 compared to the same period of the previous year. London has traditionally seen the fastest growth in house prices across the UK, but there are signs that this is changing, as the prime end of the market begins to cool. There has been a shift in regional house price trends. Growth has been driven by the southeast and east of England in 2016, but there are suggestions that some parts of the north will see stable or stronger growth in the next 12 months. East

Anglia will see higher growth than the UK average, but also the northwest and the West Midlands are areas that will outperform London. With 0.9%, Greater London has had the weakest growth of the regions surrounding Central London in the past 12 months and felt the effects of the Brexit decision most keenly.

The buy-to-let market has been dominated by the change in stamp duty in April 2016. Sales boomed in the run-up to the introduction of the higher rate, with a rise of 77% on the year before. Landlords will face even more changes in the form of tougher affordability checks for buy-to-let mortgages and the start of the discontinuing of tax relief on mortgage interests in 2017. However, due to lack of alternatives, it is unlikely that investors will completely lose their appetite for buy-to-let properties.

The number of homes completed surged by 10% to 168,400 houses in 2016, the highest number since the financial crisis; but the government has called for 300,000 new homes per year in the UK, which is still not enough to either meet demand or to cool down prices.

AT A GLANCE

Population	65.72m
Housing stock	30.0m
Stamp duty	4.0%
Notary cost	–
Brokerage	0.5%–1.0%
Value added tax (VAT)	20.0%

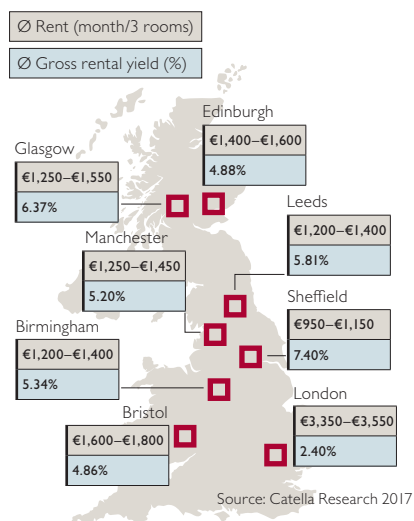
2017 Forecast

Unemployment rate	5.0%
Inflation rate	2.6%
GDP growth	1.8%

Top Cities	Population
London	8,827,000
Manchester	2,776,000
Birmingham	1,121,000
Leeds	780,000
Glasgow	609,300

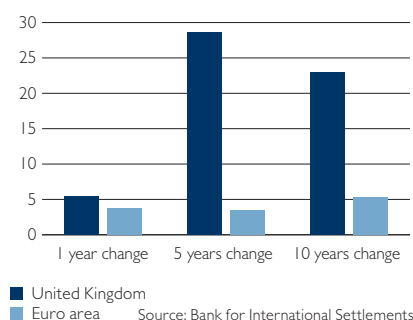
Source: Eurostat, IMF, PMA

RENTS AND YIELDS IN CITY CENTRES



PERCENTAGE PRICE CHANGE OF NOMINAL INDEX

change in % refers to 2016



RESIDENTIAL PROPERTY PRICES

New vs. existing property; 2015 = 100



Contact

CATELLA EUROPE

Dr. Thomas Beyerle

Head of Group Research

+49 69 310 19 30 0

thomas.beyerle@catella.de

GERMANY

Andreas Slupik

+49 211 527 00 0

andreas.slupik@catella.de

Maximilian Radert

+49 89 189 1665-80

maximilian.radert@catella.de

Benjamin Rüter

+49 30 310 19 30

benjamin.ruether@catella.de

BALTICS

Martin Kolga

+37 2 52 58 378

martin.kolga@catella.ee

DENMARK

Bent Bjerring

+45 3393 7593

bent.bjerring@catella.dk

FINLAND

Pinja Raitanen

+358 10 5220 207

Pinja.raitanen@catella.fi

FRANCE

Monique Benisty

+33 1 56 79 79 79

monique.benisty@mbeconseil.com

SPAIN

Álvaro Martín-Simo

+34 91 411 74 96

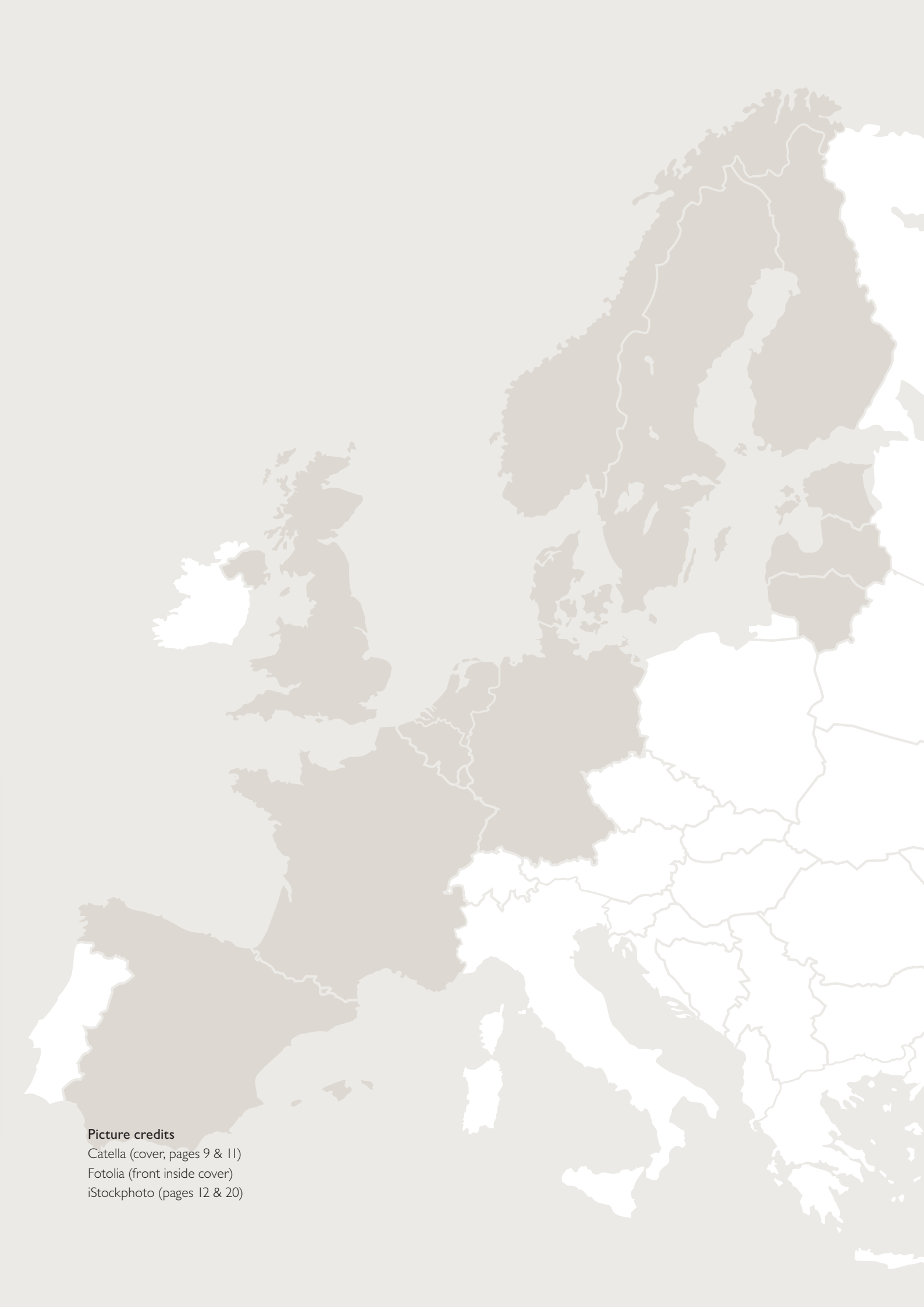
alvaro.martinsimo@catella.es

SWEDEN

Arvid Lindqvist

+46 8 463 33 10

arvid.lindqvist@catella.se



Picture credits

Catella (cover, pages 9 & 11)

Fotolia (front inside cover)

iStockphoto (pages 12 & 20)



Catella

HQ: Birger Jarlsgatan 6, Stockholm, Sweden
info@catella.com

catella.com