PATRIZIA

INSIGHT

EUROPEAN RESIDENTIAL MARKETS 2018/2019
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Dear readers,

This is the 10th edition of our analysis of the European residential markets. And we are proud to say that 1 in 5 Euros of real estate transactions in Europe in the last 12 months, have been in the residential sector, an increase of more than 50% over the last 10 years. The change in the sector has also been substantial. Residential investments today are truly Pan-European. The well known megatrends of aging and urbanisation, combined with the widespread search for stable income streams, should make residential even more attractive.

Nevertheless, the lack of availability of institutional quality product remains the biggest challenge for any Pan-European investor. But this can be overcome with a good sourcing network, a local presence and a proven experience of successful execution of business plans. This is particularly true in today’s market, where investment opportunities have gone beyond traditional Core, and now include higher risk developments, privatisations and other, alternative forms of residential.

With this 10th edition of our PATRIZIA Insight on the European Residential Markets, we hope to give you a thought-provoking view of current trends as well as how the European residential landscape is changing.

Enjoy the issue!

Yours,

Wolfgang Egger
Executive summary

- **Growth supports residential market outlook:** A healthy economic expansion is translating into solid employment growth across Europe. Whilst there is still spare capacity in the Eurozone as a whole, unemployment rates have trended downwards. Some countries are even suffering some degree of labour shortage. With household incomes up, unemployment trending down and credit starting to rise, European residential markets are having a good run. The house price cycle continued its positive momentum with average real price growth around 4% in 2017, well above inflation.

- **Regional investment focus is crucial:** Between 2017 and 2025 only a third of European regions will witness growth in their working age population. The remaining two thirds should see their labour force shrink. In the long run urbanisation will therefore create “winning” as well as “losing” cities, and it looks as if the number of winners will be smaller than the number of losers. Investment strategies should take this into account.

- **Demand supply imbalances are here to stay:** While construction activity is growing by over 10% (yoy) in many European countries over the past several years, people are starting to worry about a construction-led property bubble. A closer look at the numbers helps put these figures into perspective. The current level of construction at 0.7% of stock, is probably more about stabilizing stock than expanding it. Gross additions significantly over 1% can only be seen in Nordics, Poland and Austria. And even in these countries, significant net additions over a longer period of time rarely take place.

- **Residential investments become diverse:** The enlarged residential universe, incorporating student housing, senior housing and other related subsectors offers institutional investors a wide range of investment opportunities. Given these opportunities, the residential universe is increasing its share of today’s transaction volume. Nearly every 5th Euro in Europe is invested in the residential universe. The well known megatrends of aging and urbanisation combined with investors looking for stable income streams are creating a situation that will increase the attractiveness of the residential universe even further.
Overvaluation not a risk for institutional investors: With the unwinding of QE by the ECB and the potential of rising interest rates on the horizon, many investors are worried that residential might be overvalued. Given that we are in a period of generally high asset prices, in turn driven by low interest rates and QE, residential is no exception to this. As urbanisation is here to stay, demand should continue to exercise upward pressure on rental income, supporting capital values. Therefore a widespread risk of overvaluation in Europe is hard to identify, despite strong price increases and selective pending issues regarding affordability in the owner occupier market. There are very few exceptions to this.

Solid return expectations support diversification benefits: Given high demand and low supply, housing development is an attractive option across Europe, particularly for IRR driven investors. Even in former crisis countries like Ireland and Spain, housing shortages can be identified in major cities such as Dublin and Madrid. For European buy-and-hold multi-family housing strategies we should expect total returns in the range of 5 – 7% p.a. over the next five years, of which 2 – 3% is expected to be Capital growth.
Economic environment

The global economy strengthened in 2017 with growth of 3.8% and a notable rebound in global trade. The outlook is generally favourable for the major global economies including those in Europe. Global growth is expected to be even higher in 2018 compared with 2017, supported by strong momentum, favourable market sentiment and financial conditions that are still very accommodative.

The expansion in Europe is broad-based. Investment growth has been outpacing GDP growth rate in most countries – even in Italy. We finally have a true expansionary cycle. Conditions also remain favourable with buoyant confidence, tight capacity utilisation and growth in bank lending to corporates. Moreover, austerity has ceased to be a drag on growth and the relatively competitive exchange rate is supporting exports. Despite a recent softening, confidence indicators suggest further healthy performance for the year. Credit growth is also showing signs of recovery with outstanding loans to non-financial-corporations again increasing in the Euro Zone. However, a growth rate of about 1% between last year in May and June 2018 reflects the still cautious lending behaviour compared to pre-GFC levels. The consensus forecast for the Euro Zone is growth of ca. 2.2% in 2018 and only slightly less in 2019. Despite the rise in capital expenditure and credit, private debt levels (households and non-financial corporations) remain broadly under

Economic trend in Europe

Real GDP in local currency at constant prices

GDP growth across Europe

Growth in capital expenditure

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control. Overall, both public and private debt are generally falling or at least stabilizing and some countries have achieved meaningful deleveraging, e.g. debt of non-financial corporations in Spain fell below 130% of GDP, down from 175% in 2010. In addition, Euro Zone-level fiscal deficit fell below 1% of GDP in 2017, suggesting improved resilience and leeway in response to a future economic shock.

This healthy economic expansion is particularly translating into solid employment growth across Europe. Whilst there is still spare capacity in the Euro Zone as a whole, unemployment rates have trended downwards. Some countries are even suffering some degree of labour shortage. In Germany for example, the economy is virtually at full employment. Unsurprisingly, most of the economic growth is happening in cities. High value added employment is being generated in places like Berlin, Paris and Stockholm, where innovation is taking place and migrants are looking to locate.

With better growth and higher employment, inflationary pressures tend to increase. The ECB is reacting accordingly, with QE expected to end in December 2018. The cycle is more advanced in the US and the FED is increasing rates, which will put upward pressure on European bond yields. Pressure, however, will be limited. The ECB does not expect to start selling bonds
anytime soon. In addition, lower deficits mean less need for new bond issuance, and wage inflation is not yet fully niching up. Estimates suggest that the impact on yields at the end of QE in Europe will be fairly mild.

Despite strong aggregate figures and buoyant market sentiment, current momentum is not assured. This positive outlook is not exempt from risks. The trade dispute between the US and China is chief amongst them. Germany and its hinterland, both highly exposed to exports, could be heavily impacted should things go beyond mere symbolic measures.

**GDP growth and change in unemployment rates across major European cities**

Major European cities are defined by Oxford Economics as centres of economic growth providing opportunities for study, innovation and employment on a NUTS3 level. Sample includes 79 areas.

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<th>Unemployment</th>
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<td>-3%</td>
<td>-2%</td>
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<td>-160 BP</td>
<td>-120 BP</td>
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The second downside risk carries with it political uncertainty. It can be seen in various forms across the continent, driven by anti-establishment forces and authoritarian tendencies. Italy is a clear example with the newly formed ruling coalition. A more confrontational stance towards the EU may create some market volatility as we saw during formation of the government.

In addition, there are also some political developments that give ground for optimism. The reform agenda for the Euro Zone is advancing led by a renewed Franco-German cooperation in a number of areas. All in all conditions for the residential market are favourable. Strong economic growth, moderate inflation, very moderate upward pressure on interest rates and rising migration to cities are all conditions that support a further positive trend on the residential markets.
European residential markets

How has this economic headwind translated into European residential market performance? With household incomes up, unemployment trending down and credit starting to rise, European residential markets are definitely set to have a good run.

Loans to households for housing purchases have indeed broadly recovered. Amid record low mortgage interest rates and households’ improving income position, loan demand was only partially met by the banking sector. Credit standards are still well above levels seen before the crisis and loan growth is not anywhere near the levels seen between 2003 and 2006.

The house price cycle continued its positive momentum with average real price growth around 4% in 2017, well above inflation. This was mainly driven by the recovery from plummeting house prices in several countries in the years 2008 to 2014. These countries include Ireland, most CEE countries, Portugal and the Netherlands followed by Germany and Sweden, two countries with strong real house price growth that has led to public fears of a housing bubble. Italy however, with a growth of -2.1% is dragging down the average.

Europe’s historically low rate of new housing supply in absolute terms continues, contributing to the
European real house price cycle

House prices as yoy growth deflated by country HICP. Values represent the mean, the 75% and the 25% quantiles.

European real house price growth – country breakdown Q1 2018 2YTD

House prices as yoy growth deflated by countries’ HICP.
housing shortage witnessed across conurbations on the continent. This is mainly the case as, following a period of relatively strong supply growth, the market is showing signs of moderation in a number of countries, especially in the last year. Completions are therefore coming in well below the level needed to soften market tightness. Construction has moderated in Germany, the Netherlands, Sweden and the UK as well as some central European countries. The causes of this slowdown include high capacity utilisation in the construction industry, high commodity and raw material prices and possible economic policy risks such as Brexit. A few exceptions include Poland, which has seen strong construction activity over the past two years. Construction in France has also picked up, although to a much lesser extent. Overall supply still remains far behind housing demand in Europe despite double-digit growth rates in some European countries. For a more detailed analysis by country see the box below (page 21).

There are structural factors at work today that will affect the demand side for all types of residential investments and therefore ultimately be critical in determining asset and market performance over the next decades. One of these factors is urbanisation. Cities, especially the bigger ones, are gaining in population. This population growth is driven by migration – domestic as well as international – that is linked to job creation and availability inside the cities as well as societal wealth. This poses challenges to cities as the availability of land for increasing housing supply is limited. It also puts upward pressure on construction costs.

European housing construction activity in Europe
Rebased values to 100 in Q1 2005 from Eurostat and national statistical offices. Methodological break in Eurostat database as of 2018
Working age population trend 2017 – 2025 and distribution

Values on NUTS3 level. Forecasted values from Oxford Economics from main global scenario

Distribution of growth rates

-18% -3%  -3% -0  0% -3%  3% -5%  5% -14%
costs and house prices. At the same time this trend creates investment opportunities for institutional investors in areas like repositioning, conversion of existing assets or forward funding of developments. The latter can increasingly be seen in suburban locations and former industrial areas within city limits.

Looking at the demographic projections for Europe, the impact of ongoing urbanisation on the shape of cities is much more serious than expected. Between 2017 and 2025 only a third of the European regions (NUTS 3 regions) will witness growth in their working population. The remaining two thirds will see their working age population shrink. This will further enhance the already substantial concentration of people around few economic centres with abundant jobs and amenities such as Greater London, Munich, Dublin and the Randstad area in the Netherlands. In the long run urbanisation will therefore create winning as well as losing cities, and it looks as if the number of winners will be smaller than the number of losers. Investment strategies should take this into account.

However, concentration of population in cities brings with it other challenges as well. Gentrification often accelerates and, as a result, segregation within cities is increasing. Consequently public opinion is more often against these developments, with local governments intervening with regulatory measures to stop or at least slow down the process. But these measures will only retard the gentrification process in places like Kreuzberg and Neukölln in Berlin, Peckham in London and De Pijp in Amsterdam, and will not be able to stop, not to mention reverse, the gentrification process in the long run.
A closer look at construction activity – or why we should not be worried about a rise in completions

In a world of low interest rates, good economic growth and strong house price growth, construction activity is growing well. Unsurprisingly housing construction rose (yoy) by over 10% in many European countries over the past several years and 8 countries saw cumulative growth of between 25% and 100% in the past 3 years. Many remember Spain and Ireland in 2005 – 2007 and are starting to worry about a construction-led property bubble. Should we?

A closer look at the numbers helps put these figures into perspective. First of all, growth rates tell us nothing about the actual level of construction. Other indicators are needed. Taking a look at completions relative to population gives a much better understanding of supply side risks. Based on this we immediately see that completions are nowhere near the levels of 10 to 15 completions per 1,000 inhabitants seen around the time of the financial crisis. Furthermore, variation around the European average is very limited, indicating no excessive developments in any European country.

These findings are consistent with construction activity in relation to the existing housing stock. If we assume that the current housing stock has a lifetime of between 100 and 200 years (arguably a conservative assumption), this will require replacement construction of between 0.5% (200 years) and 1.0% (100 years) annually. Looking at the relative level of construction at

Completions per 1,000 inhabitants in Europe over time

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0.7% of stock, it becomes obvious that current building activity is more about stabilizing stock than expanding it. Net additions, which tell us if stock is increasing, will most likely be negative at the current rate of completion. To expand the housing stock in Europe significantly, gross additions (i.e. housing construction excluding demolition) would need to be above 1% annually for some time. So, no oversupply, at least at a Pan-European level.

Going into more detail at country level, gross additions significantly over 1% in 2017 are only apparent in the Nordic countries (Sweden, Norway, Finland), Poland and Austria. And even in these countries, significant net additions over a longer period of time rarely take place.

The positive relationship between growth in completions and gross additions over the last years, which could have fuelled a construction-led property bubble if continuing, will turn negative in the future, indicating a cautious approach by developers. Overall we can therefore conclude that, with the growth in completions, the market is following household needs and adapting to changing requirements, as some stock is outdated. Ongoing urbanisation and a constantly declining average household size require additional supply in cities.
Country level relationship between completions and stock

Past Future

Cumulative rise in completions 2015 to 2017

Cumulative rise in completions 2018 to 2020

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Market performance

Residential investments remain high on the agenda of institutional investors. Not only economic but also demographic developments create a near perfect fundamental background for residential investments in Europe. At the end of Q2 2018 institutional investment in residential property reached €45.37bn on a rolling annual base, the third highest level since the financial crisis and well above the long term average. There are no winners or losers in a regional comparison as residential properties are popular investment products whenever they become available.

Why do institutional investors continue to invest in residential even though prices have risen strongly in recent years, sending yields to record low levels? One reason is the perception that, in the long term,
Residential transaction on country level

fundamentals support residential investments. Urbanisation, migration patterns and construction activity are all supportive for a long-term strategy targeting residential. Furthermore residential is benefitting from the general trend in the overall asset allocation of institutional investors. Given the current low rate environment, target allocations for traditional fixed income are decreasing while allocations for alternative investment, of which real estate is a major part, are continuously increasing. Another aspect is the fact that residential is much less influenced by technology than the retail sector, whose entire structure is challenged by online shopping. At the same time the office sector is experiencing major changes with the fast rise of flexible office space providers like WeWork. Perceived risks in residential are therefore much lower, attracting a significant number of long-term investors with stable cash-flow requirements. Nevertheless, these long-term trends should not make us forget that there are also cycles that impact year on year performance.
So what are the preferred destinations of these capital flows in Europe? The number one destination remains Germany. With its traditionally high share of renters, Germany is one of the few countries in Europe where institutional investors are able to buy standing investments as single assets as well as in (large) portfolios. With an average share of nearly 40% of European institutional residential transactions in the last 3 years, Germany plays a much more prominent role in this sector than its economic weight might suggest.

The UK and some of the former crisis countries, namely Ireland and Spain, are also high on the agenda, as these are countries in which the traditional form of tenure has been owner occupation. For that reason the main form of residential investment in these countries is to forward fund developments. Standing investments are virtually non-existent.

The Netherlands is an example of how regulatory change can drive the attractiveness of a country as an investment destination. After regulatory changes were announced and introduced in 2014, institutional capital began to see the Netherlands as one of the residential investment markets in Europe.

France, despite the “Macron effect” and its economic size, is still only seeing limited investment activity. However, this could possibly change in coming years given the current political activities by the Macron government. At the same time Italy, the third largest economy in the Euro Zone, has not yet become a destination for residential investors due to its overall economic situation and challenging market transparency. Looking at cross-border investment activity in more detail, it becomes apparent that US investors have been the driving force. Their main target countries have

Cross-border and overseas investments in residential markets Q3 2017 – Q2 2018

Aggregated data from RCA, overall investment volume 22.0 bn €
been Spain and the UK and to a lesser extent Germany, as the return achievable in Germany generally does not meet their return requirements. Most European cross-border investments target Germany and Spain, followed by the Netherlands, the UK and Austria.

The third largest group are the Canadians. To date their focus has mainly been the UK, but the first investments in the Netherlands and Germany indicate that there is appetite for more Continental European investments in the near future. With high investor interest in residential properties comes shrinking supply of institutional quality assets available for purchase, leading to increased competition for assets, especially existing ones, and rising prices. Forward funding activities are therefore increasing. However, delivery times are becoming increasingly longer, deterring investors who seek immediate cash flows. Overall, availability of institutional quality product remains the most challenging issue for any Pan-European investor. In order to overcome this hurdle, it is necessary to have a good sourcing network and a local presence to execute business plans.

The residential universe has become larger as well. Today’s investment opportunities not only revolve around traditional core buy-to-hold or higher risk development activities; there are a lot of possibilities in between. One example is the rising appetite for student housing in the last few years given the professionalisation of the sector and growing numbers of international students in Europe. Other examples include serviced apartments and nursing homes, whose attractiveness has been increasing due to ongoing urbanization and Europe’s aging population.
In terms of pricing, we estimate that prime yields for existing investments in Germany’s Big 7 cities are currently in the region of 2.5%. This is a yield level similar to the one seen in Sweden and Austria, two countries that have traditionally enjoyed lively transaction activity and high supply of institutional quality residential assets. Obviously these numbers hide a wide variation within countries, but they do set the scene for the general pricing picture.

Is this fair pricing for institutional residential investments? With the unwinding of QE by the ECB and rising interest rates on the horizon, many investors are questioning whether residential might be overvalued. There is increasing talk about overvaluation when it comes to house prices of owner-occupied homes. Even though these pricing questions are at first glance simple, there are no straightforward answers. We believe that we are in a period of generally high asset prices, driven by low interest rates and QE. Residential is no exception, but with a yield gap of at least 200 basis points for most developed and some emerging residential investment markets over fixed income, we find that residential is still fairly priced.

However, investors should also look at trends in the owner-occupier market when assessing the situation and the pricing of institutional residential investments. As we have shown in earlier editions of our INSIGHT, pricing in the owner-occupier market filters through to capital growth in the institutional market, although not one-to-one. Consequently, any risk of overvaluation in the owner-occupier market poses a serious issue for the institutional market. Looking at the development of
house prices relative to income (a rough measure for affordability) over the past several years and in relation to their long-term average, only a few markets can be identified in which an investor should act with caution when investing in multi-family housing. Housing in Sweden, for example, is currently significantly less affordable compared with 2010 and the long-term average. But Sweden is not the only country in which an investor should act with caution. Austria is another country in which affordability can become an issue. Nevertheless, generally speaking none of the countries appears heavily overvalued given the current low rate environment.

This assessment is also supported by the fact that we are currently not heading towards a debt-induced house price crisis. We have not seen high growth in household debt over a short period of time during the past several years, a typical trigger of a debt-induced house price crash, as we saw in the US, Spain and Ireland prior to the global financial crisis. The growth rate of outstanding loans-to-households for house purchases is nowhere near bubble territory.
The residential universe revisited

For institutional investors residential investments today are much more than traditional multi-family housing or PRS as it is often called. The residential universe now includes all types of accommodation used throughout an individual’s lifecycle (see PATRIZIA INSIGHT European Residential Markets 2016/2017). The progression starts with day care as a toddler and moves onto student housing during the university years, a micro apartment or serviced apartment as a young professional, other PRS options as a couple or family, and senior living in the last stages of life. Oddly enough, current long-term trends favor all of these residential formats. People moving into cities tend to prefer traditional rentals. Increased financial regulation requires coming up with a bigger mortgage down payment, making smaller forms of property, like micro apartments, more attractive. Millennials are “asset poor”, the perfect fit for micro living. Finally, an aging population and asset-rich baby-boomers support senior living.

Overall this enlarged residential universe offers institutional investors a wide range of investment opportunities with differing risk-return profiles. Traditional buy-to-hold multi-family investments generally offer the lowest returns within the universe. This is partly due to the regulatory side of the market, which in many countries often limits rental growth. However, buy-to-hold also supports the cash-flow stability feature of PRS. As a result sitting tenants will try to avoid moving as long as possible, because, if they do, they might have to pay higher rent. Vacancy risk is thus limited. This generally creates a stable and not very cyclical return stream.

Urbanisation, owner occupancy rate and aging in Europe

![Graph showing urbanisation, owner occupancy rate, and population ages 65 and above in Europe over time.](image-url)
Outside these classical multi-family investments the residential universe also offers significant growth opportunities resulting in attractive total return profiles for IRR driven strategies. Regulation is less limiting when it comes to increasing rents, partly because lease length is shorter, often less than a year. Furthermore, as these subsectors become more institutional and "mainstream", they will also become more liquid and therefore less risky. Assuming all other factors remain constant, they should therefore command lower yields. Nevertheless, investors should keep in mind that the development and structure of the national residential markets in Europe differ significantly and, consequently, not all investment options are available in each national market at the same time. But again, this should be seen more as an opportunity to create a diversified European residential portfolio than as a risk for niche investments across Europe. Driven by these developments, the residential universe is increasing its share of today’s transaction volume. Nearly every 5th Euro invested in Europe is invested in the residential universe, an increase of more than 50% during the last 10 years. And the megatrends mentioned above combined with investors looking for stable income streams are creating a situation that will increase the attractiveness of the residential universe even further. Overall this will generate additional growth in transaction volume and the residential universe will continue to claim increasingly more market share of property transactions in Europe. But there are also risks. Some segments of the residential universe may not go mainstream with the repricing this brings. The value of traditional residential investments is almost entirely based on location. However, a nursing home, for example, can often be replicated 200 metres away and the quality of the operation is a key driver of its value. That makes this type of asset closer to a private equity investment than to a pure real estate investment. And, unlike traditional residential investments, some segments of the residential universe are subject to supply risk. All in all, however, the different risk-return characteristics across the residential universe provide a well-balanced, loosely correlated portfolio.
Outlook

Whilst people are moving to cities, construction activity is not keeping up. A chronic undersupply of housing is the consequence. This remains the case even if we take rising construction activity in coming years into account.

Given high demand and low supply, housing development should be a winning sector across Europe, particularly for IRR driven investors. Even in former crisis countries like Ireland and Spain housing shortages can be seen in major cities like Dublin and Madrid.

Consequently many people are talking about overvaluation and a resulting price correction, but we generally disagree. Urbanisation is the fundamental driver of demand for residential investments and it is here to stay. Demand should continue to exercise upward pressure on rental income, supporting capital values. Therefore we currently cannot identify a widespread risk of overvaluation in Europe, despite strong price increases and selective pending issues regarding affordability in the owner occupier market.

However, the world is not without risks. One of these is risk from rising interest rates, which, however, affects all property sectors. In the case of residential we expect the rise in the numerator (rents) to mitigate any possible

Completions and existing stock

*as % of existing stock p. a.
yield decompression. A second risk is regulatory change, as discussions about (rental) affordability surface across Europe. Yet we believe that potential impacts can be dealt with, provided there is adequate local knowledge.

This will generally result in total returns for European buy-and-hold multi-family housing strategies in the range of 5% – 7% p.a. in the next five years. Capital growth will contribute between 2.0% and 3.0% p.a. to this, accounting for up to 50% of expected total returns in some countries in a single year. Income return can be expected at somewhere between 2.5% and 3.5% p.a., a bit lower compared with historical 5- and 10-year averages.
Country abbreviations: AT = Austria, BE = Belgium, CA = Canada, CH = Switzerland, CZ = Czech Republic, DE = Germany, DK = Denmark, ES = Spain, FI = Finland, FR = France, GR = Greece, HU = Hungary, IE = Ireland, IT = Italy, JP = Japan, LU = Luxembourg, NL = Netherlands, NO = Norway, PL = Poland, PT = Portugal, SE = Sweden, UK = Great Britain, US = United States


In essence the following sources have been used for the report: AFME, ArcGIS, BBSR, BIS, CECODHAS, CIA, Commercial Mortgage Alert, EIU, empirica, Euroconstruct, European Mortgage Federation, Eurostat, ECB, INREV, IPD, IMF, JLL, KTI, National statistical agencies, OECD, Oxford Economics, RCA, Reuters, UN, various Real Estate Agents, vdp

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