



BERLIN MUNICH HAMBURG FRANKFURT COLOGNE DÜSSELDORF STUTTGART LEIPZIG

Ziegert Report

2018/19

An inside look at residential property in Germany





⁷ Sven Henkes (Managing Director) and Nikolaus Ziegert (Owner & Founder)

EDITORIAL

Dear Reader,

for over thirty years we have used our expertise and market insight to set benchmarks for the Berlin property market. We live in eventful times, in a state of constant flux that also sets the tone for the property industry: more complex projects, challenges in terms of financial economics and an increasingly cramped market are nevertheless drivers for us to constantly evolve and grow. In early 2018 we further consolidated our partnership with Knight Frank, one of the world's largest independent real estate services. This collaboration has been growing steadily over two years and we are now joining forces in a cooperative venture wholly unique to this country. This is taking place in Frankfurt, a thriving market offering a wealth of opportunities thanks to its exciting combination of local bedrock and international growth options. This development bolsters our local, national and international reach and demand while also giving us access to a wealth of exciting high-calibre projects around the world.

In addition, we have begun to increase our activities in the Leipzig area this summer, arguably the most promising market in Germany. Our progress in terms of what we do and where we are doing it is reflected in the new Ziegert Report-an inside look at residential property in Germany.

For the first time, we present profiles of the cities in Germany with the greatest volume of sales, with Berlin as a focal point: Munich, Hamburg, Frankfurt am Main, Cologne, Stuttgart, Düsseldorf and Leipzig.

The very first issue examines urban living and lifestyle in Germany's major cities and provides insightful market analysis, infographics and inspiring interviews with industry pioneers such as star architect Daniel Libeskind or Ben van Berkel through to articles by financial expert Dr. Bernd Fahrholz or city planner Julia Erdmann. Sustainable urban planning is also a crucial watchword here, because empathy and a sense of responsibility are vital not only when responding to a client's specific wishes but in fact wherever we bear a social responsibility through our work. This principle is also a feature of our latest collaboration with the project management company ARCADIS: Together we provide an unparalleled service uniting project, sales and communications expertise with a deep understanding of the residents of different neighbourhoods. At the same time a full understanding of our target groups remains our undivided priority. With this strategic collaboration we want to work together to speed up existing projects in order to facilitate more sustainable housing construction in Berlin.

The developments we highlight in our report speak for themselves: even in dynamic times the desire for home ownership is a constant. How do we ensure we meet the needs of our clients, or better yet exceed their expectations? A key factor for achieving this lies in our intimate knowledge of the specific 'spirit' of each location

we operate in. Our fundamental belief is this: only those who are aware of the desires, hopes and needs of all the people they work with and can put these into action can determine the success of a project long before the first stone is laid. Only all-inclusive, customised consultation can guarantee excellent, bespoke integrated products. That's why our client survey is undoubtedly a highlight of this report, providing hard facts and figures on those product features that are most relevant and appealing to our clients.

However, to create trends rather than discover them takes more than a nuanced knowledge of the market. It requires an enterprising spirit and a zest for progress and innovation. Seeing the bigger picture and maintaining a focus on major cities around the world is an important source of inspiration for us, and is just as influential as the collaborations with our partners across the globe. Alongside other contributors to the magazine, this farsightedness is represented most notably by Lord Andrew Hay, who in his introduction ventures a complex assessment of the German market from an outside perspective.

Yet however dynamic the market may be, outstanding quality and all-round expertise will always remain the basis for our work even in times of expansion; just as trust, appreciation and a sense of responsibility are the keystones of any enduring success.

We are certain that our enthusiasm is echoed not only in the Ziegert Report but also in our day-to-day work with our partners, clients and friends.

We hope that reading about our pioneering work will provide plenty of inspiration in these exciting times!

Yours,

Nikolaus Ziegert Owner & Founder

Mose piper de Hulen

Sven Henkes Managing Director

Ziegert Report 2018/19

An inside look at residential property in Germany



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Ziegert Report

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ABOUT THE ZIEGERT GROUP

The Ziegert Group is an owner-managed real estate company based in Berlin and offers a broad portfolio of services for the real estate industry. Ziegert brokers condominiums, advises on the financing of real estate and develops projects together with partners.

The company is managed by founder Nikolaus Ziegert, COO Sven Henkes and CFO Kyrill K. Radev and employs over 200 staff to serve its customers and to support its partners. Over the past 30 years, Ziegert has played a key role in shaping the Berlin market for condominiums. The Ziegert Group considers itself as a responsible corporate citizen. It is committed to promoting sustainable urban development and cultural activities in Berlin.

With its employees, the Ziegert Group stands for the highest level of professionalism, proven expertise and international orientation. By expanding its activities throughout Germany, the Ziegert Group is laying the groundwork for continued growth. Ziegert began a cooperation with Knight Frank—one of the world's largest independent real estate services-in 2017, to further expand its global network. As part of this cooperation, a joint venture was founded in Frankfurt in February 2018. Since September 2018, the Ziegert Group has also been represented in Leipzig, further expanding its presence in Germany.



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THE INTER-NATIONAL PERSPECTIVE

By Lord Andrew Hay

Global Head of Residential at Knight Frank



Of all the real estate trends I have witnessed

during my 35-year career—from the very local to the truly global—I would class just a handful as particularly remarkable. The real estate investment market of Germany undoubtedly falls into this category.

A decade ago, our global clients simply didn't consider investing in German property. Today, it is experiencing serious interest from international investors all over the world, particularly Europe and Asia. So dramatic is the extent of this change that the German market is increasingly being referred to as the safe haven of Europe. Such a title may initially seem surprising but, on further consideration, is understandable. Germany may not have the scale or riches of other countries, but it has a stable environment and strong investment opportunity for both rental and capital growth. Add this to a backdrop of high occupier demand and low supply, as well as relatively good value real estate, and it is easy to see why demand for the German property market continues to grow.

Investors aren't only attracted to Germany's strong economic fundamentals; there is a growing selection of very attractive solid investment opportunities. Upside Berlin in the vibrant east of the city is one such example. Located next to the world-famous East Side Gallery and new East Side Mall, this innovatively designed redevelopment will comprise 22 storeys featuring 179 apartments with panoramic views of the capital and the River Spree. It will be a true taste of cosmopolitan Berlin life for those fortunate enough to live there.

At present, international investors are primarily focussing on Germany's young and vibrant capital. Of the more than 175,000 people who move to Berlin each year, a substantial 75 % are aged under 35 years old, attracted to the city's exciting tech start-up scene, culture and green credentials. However, in the approach to Brexit, this focus is beginning to expand to the likes of Frankfurt, the Eurozone's principal financial centre and, on a lesser scale, Hamburg.

Of course, much of the focus on Germany's top cities rests on future development. It is impossible not to be struck by the huge potential for good quality and well-designed residential development there. The industry is still very much emerging, but the upcoming development FOUR is just one example of the early signs of innovation prevalent in Germany. Located in Frankfurt's CBD, this new residential development will, alongside serviced apartments, comprise offices, condominiums, retail shops, food hall, gym and a car park. Currently, the buildings of Singapore, Hong Kong, London and New York tend to exhibit higher standards of design and execution than in Germany—but I am confident that this will change over the coming decade.

It is important to remember that the German real estate market is still very much in the early part of the cycle. As its cities begin to play catch-up with the rest of the world and the demand for investment continues, this is an area primed for growth. With an economy that provides an unrivalled bedrock to property investors alongside the opportunity for developers to deliver innovative highquality properties, I believe that, for the global and domestic market, the German real estate market is one to watch over the coming years.

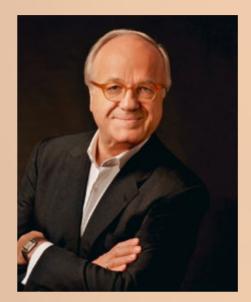
Pure Freude an Wasser



THE OUTLOOK

By Prof. Dr. Bernd Fahrholz

Former Chairman of the Managing Board of Dresdner Bank AG and Member of the Advisory Board of the Ziegert Group



FREEDOM OF CHOICE GROHE ESSENCE

With its extensive range of sizes, colours and finishes, the new Essence series will make you feel completely spoilt for choice. The full range – from faucets to showers and accessories – offers ten colours and finishes to choose from. **grohe.com**

COLOUR & FINISH SELECTION

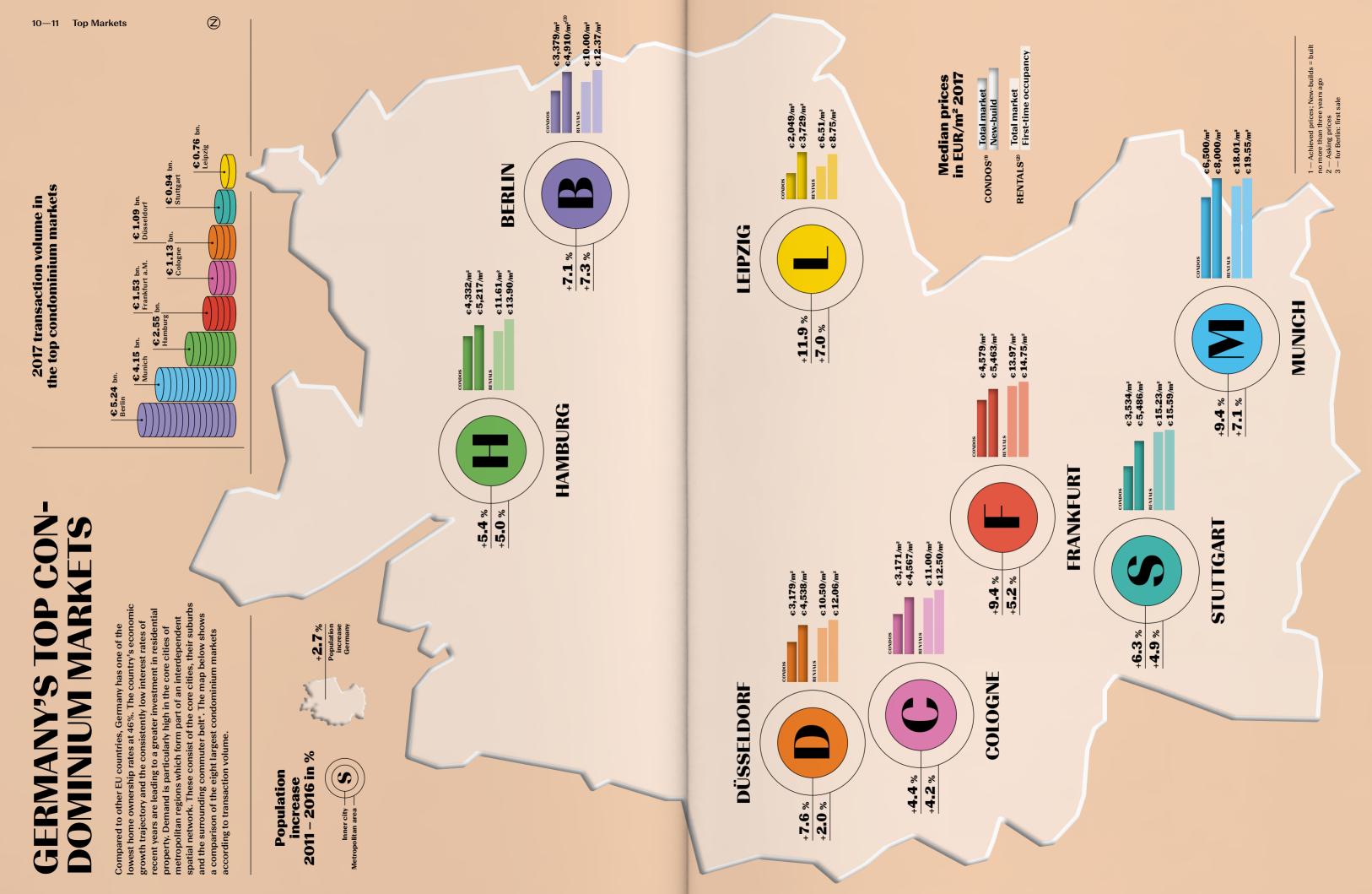
The property market is booming,

with prices in Germany's largest cities continuing to rise appreciably. This may lead some people to wonder whether they waited too long, either to invest in residential or commercial property to let, or to buy "their own four walls" and whether the market has now outrun them.

In the large urban centres, particularly Berlin, the demand for housing continues to rise significantly, in particular for "affordable" apartments. This development continues to gain momentum despite an increasing number of new builds coming on to the market over the last few years. It is also compounded by the fact that building capacity is stretched to the limit and it's almost impossible to find any skilled labour on the jobs market. One also hears laments that planning permission processes remain very protracted. Against this backdrop, it seems likely, not only that the shortage will continue for some time but above all that excess demand will result in an at least a moderate further rise in purchasing and rental prices, something that incidentally also points away from a bubble.

A clear macroeconomic trend is also apparent for the foreseeable future. In Germany, the Federal Government's economic outlook remains good, with GDP growth at two percent for 2019. Consumer culture remains on the rise, bolstered by strong growth in wages for those in full-time employment. The global economy continues its vigorous growth in both developing and emerging countries-as yet largely unaffected by the surprising economic deliberations of the US President. International investors, in particular funds in Asia and the USA, have likewise discovered the German property market on account of the country's economic and social stability, and are propelling it into previously unforeseen dimensions. What's more, the European Central Bank (ECB) wants-for the time being-to maintain its historically very low interest rate, which enables favourable financing for construction even with longer fixed rate terms. With its bold policy on interest rates, the bank has also shown itself to be exploring entirely new avenues in order to obviate, or at least limit economic upheaval.

Against this backdrop, there is much to be said for a continued positive development of the property market in our large cities, at least for the foreseeable future. Regarding the longer term, something that is harder to forecast, we are aided by a look back over preceding decades. Here we see investments in sound property frequently leading to very significant appreciation, even if cyclical economic setbacks would have needed to be weathered in the event of a sale. In conclusion, investing in sound property remains a sound investment.



Snapshot of the German real estate market

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Population trends¹

Once again, the forecasted decline in Germany's population failed to materialise. At the end of **2016**, approximately **82.5** million people lived in Germany, meaning a rise of about 2.7% compared to 2011¹. On the whole, rural areas continue to lose their inhabitants, whereas the large cities and metropolitan regions maintain their expansion course. Of the top 8 condominium markets, the +7.3% exhibited by the Berlin-Potsdam metropolitan region represents the highest level of growth, thereby eclipsing the increase in Berlin's core city. Compared to other large cities, Leipzig chalked up the biggest rise in population growth: +11.9%—a rise of approx. 60,000 inhabitants since 2011.

Population forecast

According to forecasts, the trends outlined above will continue until 2030. Of the top 8 condominium markets, Munich with +17.0%, along with Leipzig with an astonishing +22.3% (both figures from 2017), have the highest forecasted population growth rates

The proportion of the population in Germany's top 8 metropolitan regions was 30.0% in 2016-an upward trend.



1 - Due to methodological changes in the statistics upon which population changes are assessed, the development of the population in the reporting year 2016 can only be compared with the previous year's figures to a limited extent. Limitations regarding the accuracy of the results may be due to the increasing level of immigration and resulting problems when it comes to the registration of refugees with the appropriate authorities.

Economy

Delivering a record-breaking rate of employment and GDP growth of 20.7% (2011 to 2017), the upturn in the German economy continues unabated. In comparison: GDP in the Eurozone (19 countries) rose by 14.0% over the same period.



Germany GDP

Demand for housing

The building completion of approx. 280,000 residential units in Germany in **2016,** coupled with the simultaneous net migration of approx. +500,000 residents (due to the large influx of newcomers), means that even the current increase in housing supply is insufficient to meet demand and compensate for the new-build deficit of recent years.

Sales revenue

Sales revenue in the German condominium segment continued to power ahead in 2016. Of the approx. € 56.1 billion generated—a jump of around **7%** compared to the previous year—the **new-build** sector accounted for approx. 40%. While at the same time, the number of transactions was stagnant.

In recent years, the eight condominium markets with the highest sales revenue in Germany accounted for approx. 30% of turnover. Taken together, Berlin (no. 1) and Munich (no. 2) registered annual sales of just under € 9.5 billion in 2017.



Price development

The relentless price increases in the German condominium market show no sign of stopping: +6.0% in the new-build segment (2015-2016); but the price increases in the top 8 apartment markets far outstrip the national average: Frankfurt +15.8%, Hamburg +12.8% (both figures for 2016-2017).



price increase price increase FRANKFURT HAMBURG

In the new-build segment, the average price in the top 8 condominium markets in 2017 varied between approx. € 3,700/m² in Leipzig and approx. € 8,000/m² in Munich. In the other cities, the average new-build prices ranged between € 4,500/m² and € 5,500/m².

Even when it comes to the highest prices achieved, Munich, with € 28,500/m², just outstripped Hamburg, with € 28,400/m², to take the no. 1 spot in the top 8 comparison. But when it comes to unit prices, Berlin leads the way: the city's most expensive condominium changed hands for € 17.6 million, condominium prices in Germany's top 8 metropolitan regions continue their upward trend, and the same holds for the luxury segment. However, prices are still relatively low on the international level. In the prime segment, for example, the same amount of money gets you about three times as much living space in Berlin as in London.

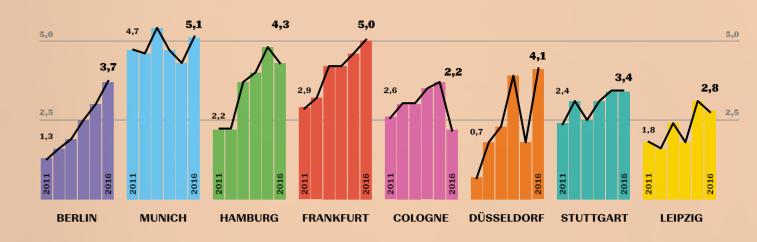
Trends

Along with the classic private home on the city outskirts, condominiums that are well connected in terms of infrastructureeither within the suburban areas* of the core city or the commuter belt* of metropolitan regions-are increasingly becoming an affordable alternative. While at the same time, the urban lifestyle has an everincreasing magnetic appeal.

In several German cities, not only does the skyline reflect the many newly constructed high-rise residential buildings, but there are many others under construction or in the final planning stage. There are 20 of these in Frankfurt alone, including the tallest residential building in Germany which soars to a height of 172 metres.

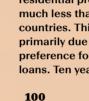
Completed apartments per 1,000 inhabitants

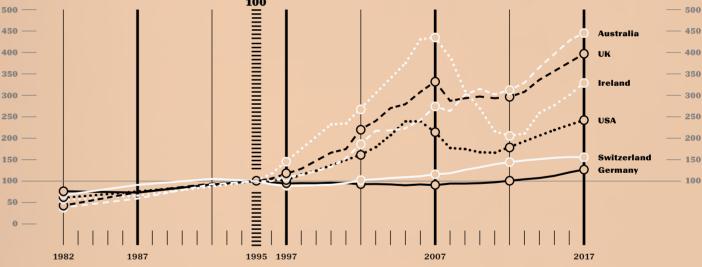
Newly built apartments, including work on existing buildings



Price developmentan international comparison

Residential property index, 1995 = 100; As of: 6 February 2018





80m

81m

88m⁴

89m



Germany's top 8 cities have all recorded a growth in population since 2011, hence the increase in construction. Building activity has been at a high level for a long time in Munich, and Berlin is now reacting to demographic trends.

Over the past two decades, the German residential property market has fluctuated much less than the markets in other countries. This low level of volatility is primarily due to the country's widespread preference for fixed-interest real estate loans. Ten years (or more) of fixed interest

rates are par for the course during times, such as these, of low interest rates. Long maturity terms and restrictive lending practices have a dampening effect on the market, helping to avert abrupt market fluctuations.

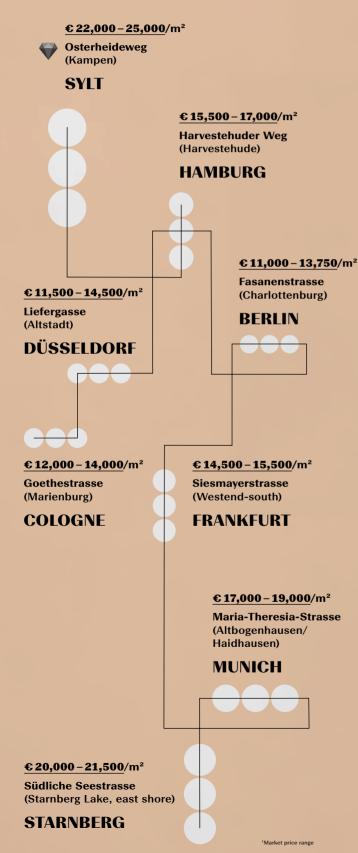
How many square metres can you get for **€400.000?**

In the new-build segment, 2017, total market

111^{m²}

TOP ADDRESSES

The best locations in Germany: an overview of the cost in euros per square metre¹ for condominiums on prestigious roads in eight selected locations (as of: July 2018).



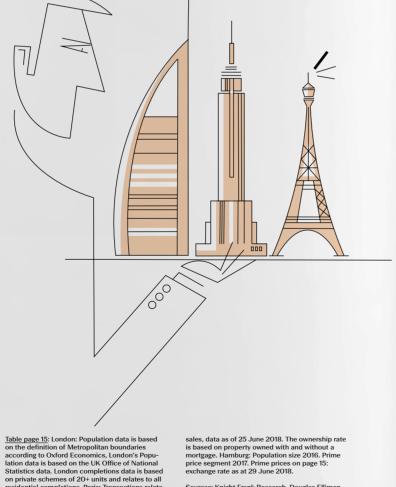
INTERNATIONAL COMPARISON

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Political stability, legal certainty and economic momentum—these three preconditions stimulate international investment, something from which the German capital is most notably profiting.

In the course of Berlin's massive growth in population there has also been a significant rise in the number of completed buildings over the last few years. With 4.2 completions per 1,000 inhabitants, however, Berlin still only finishes mid-table in international comparisons. The sustained boom in Dubai, for example, has resulted in 10.1 completions per 1,000 inhabitants, including a large number of high-rises.

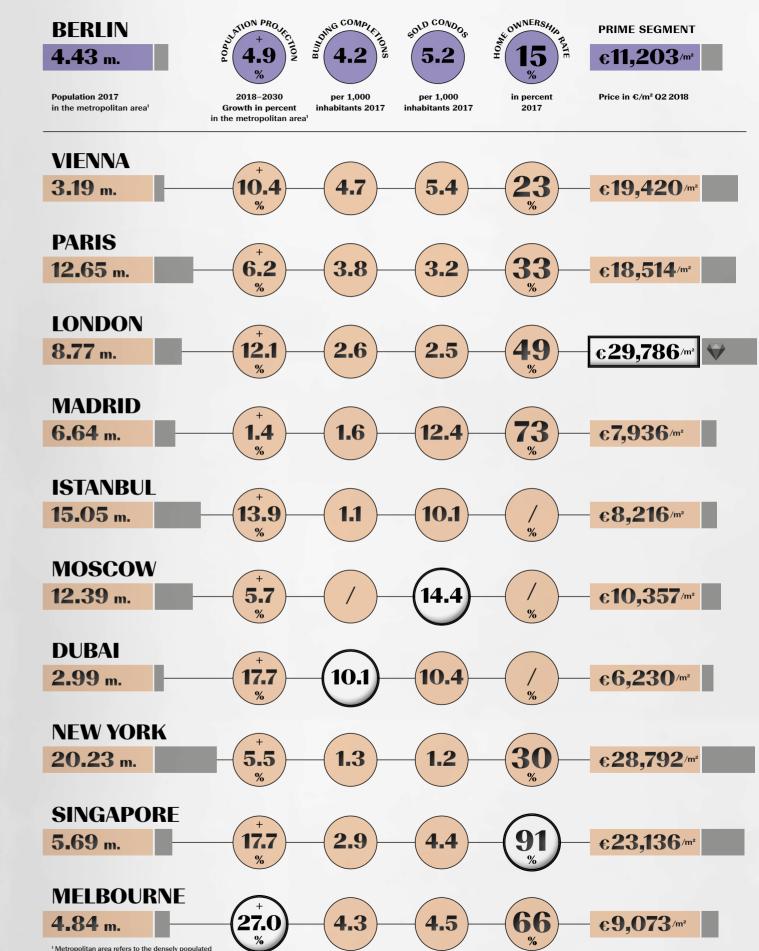
The German housing market is a long-established rental market. Berlin has the lowest rate of home ownership of all Federal States, at 15 percent. This extremely low rate as compared to other major European cities still holds great potential for the condominium market, particularly because a luxury apartment in Berlin remains more affordable than the equivalent in major cities like New York, London or Paris. In the French capital, for instance, you only get around half as much floor space as in Berlin for the same overall purchase price.



on the deminion to interopolitan boundaries according to Oxford Economics, London's Population data is based on the UK Office of National Statistics data. London completions data is based on private schemes of 20+ units and relates to all residential completions. Paris: Transactions relate to resale apartments only. New York: Transaction data relates to co-ops and condominiums. Moscow: Transactions relates to all new and resale properties. Vienna: Transactions relates to sold condominiums only. Melbourne: Construction data is based on new apartments completed in 2017. 'Sold Condos' relates to new and established apartment sales in 2017. Singapore: 'Sold condominiums' includes condominium and apartment

Sources: Knight Frank Research, Douglas Eliman, Oxford Economics, Molior, Experian, INSEE, CGEDD, INE, Spanish Ministry of Development, Property Monitor, City of New York, TurkStat, General Directorate of Land Registry and Cadastre (GDLRC), Singapore Urban Redevelopment Authority (URA) and Singstat, Gutachterauschuss für Grundstückswerte Berlin, Amt für Statistik Berlin-Brandenburg.

10+1 CITIES



¹ Metropolitan area refers to the densely populated conurbation extending beyond a city's boundaries. The infrastructure of the commuter belt is tightly interlinked with that of the inner city. $\bigcirc |$

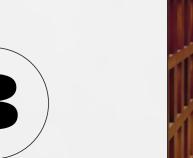
by Sven Henkes

BERLIN Germany's global city

After a series of boom years, Berlin has matured into a major global city. By international standards the capital is secure and remains affordable. Now is the time to develop a differentiated profile to ensure Berlin's long-term appeal to both inhabitants and buyers.



⁷ Upper West at Breitscheidplatz in Charlottenburg Jacob-und-Wilhelm-Grimm-Zentrum, library





It's hard to believe: The post-reunification Berlin we see today, is just 29 years old. What a tremendous transformation the capital has undergone in recent years! Construction work is taking place on virtually every corner. Residential high-rises like UP-SIDE BERLIN are shooting up into the sky. Period buildings threatening to fall into ruin have been completely redeveloped. Visionary neighbourhood developments in City West, for example projects like Am Schlosspark or Mediaspree, are engaging with questions of future urban living. New developments fulfil client requirements that were completely unthinkable in Berlin in years gone by. Regulated living and buying is only just becoming a possibility in some areas. On Chausseestrasse for instance, the renowned architect Daniel Libeskind executed his first residential build ing anywhere in the world, the Sapphirein a location that during the Cold War was

Berlin just keeps on growing. Space is getting even tighter along the Spree. According to a prediction by the German Economic Institute (IW), there'll be four million people living in the capital by 2035. The Pankow district alone recently broke through

still divided by the Berlin Wall.

Siemens are being drawn to the capital for its vast reserves of talent. Recruitment costs are on average 40 percent lower than in other German cities. The city's spirit of innovation injects new impetus, its way of life gives inspiration and relatively easy access to funding enables growth. According to chartered accountants Ernst & Young, Berlin startups received just short of 3 billion euros in total last year-that's almost three times more than the previous year and close to 200 million more than in London. What's more, half of all startup personnel come from abroad. That's true for only one other centre of innovation in the world: Silicon Valley. A wide choice of international schools, the outstanding health

What's more, half of all startup personnel come from abroad. That's true for only one other centre of innovation in the world: Silicon Valley. A wide choice of international schools, the outstanding health system and the fact that English is spoken as a matter of course, all make it easy to move to the city. Berlin is colourful—a place where everyone can find a home. The economic upturn is spreading to the jobs market. In May 2018 the unemployment rate was at around 8 percent—there haven't been so few people out of work since 1991.

The massive growth in population, the stable economic climate and the peak in



⁷ UPSIDE Berlin, Friedrichshair

the 400,000 inhabitants mark and is now bigger than the city of Bochum with around 361,000 inhabitants.

The surrounding areas are shifting closer to the limelight. In particular Potsdam city centre with its waterside location has evolved into a high-end suburb of the capital. The domination of the big city in Berlin-Brandenburg is growing. The boundary between city and outskirts is becoming more blurred.

With its vast influx of artists and creative professionals, Berlin has developed into the creative hub of Europe. Yet the remarkable boom experienced in the Berlin-Brandenburg metropolitan area is just as economic as it is cultural.

Startups and companies from around the world like Google, Samsung, Pfizer and

appreciation in capital. And there is still untapped potential. Knight Frank's investigation of the global real estate market demonstrates how many square metres investors can secure in the foremost cities around the world for a million US dollars. In the central districts of Berlin you can get a high-spec downtown apartment for this amount with a floor area of 77 square metres. In Hong Kong or New York this is barely enough for a micro-apartment with 22 or 25 square metres. New prime locations will take shape in Berlin in years to come, as along the Mediaspree. This is simply because the quality of life in a city is to an enormous degree determined by proximity to water and greenery. Apartments with a view of the water that cannot be obstructed are some of the most sought-after in Berlin. There's hardly any other major city where these sites are even still available, something that is explained by the history of a once divided city. It's logical therefore, that there would be greater demand from international buyers as a consequence.



employment levels have over the last ten years caused justified interest from foreign buyers in Berlin: the world is investing in Berlin. Knight Frank Prime Price Index shows, for example, how a ten-percent increase in the value of prime apartments in the first quarter of 2017 as compared with the previous year granted their owners a significant

The proportion of international clients in the UPSIDE BERLIN project stands at 65 percent (as of: July 2018).

Berlin's appeal for global buyers as capital investment or for their own use continues unabated, precisely because prime segment prices still come up as quite modest by international comparison. Prices will continue to rise but will do so more moderately overall. The best properties in the German capital's prime locations still cost a third of the price of an equivalent property in London. The share held by the resale market is also growing. In short: the global city of Berlin has arrived, in an economic, cultural and political sense. The political situation is stable compared to many other countries. The period of experimentation is coming to an end-Berlin is growing up. Now's the time to develop a nuanced view of the city.

Because a property is not just an investment. It defines the space we all inhabit together. You need to know this space. You need to understand the face-to-face interactions and the cohesion within neighbourhoods that is such a marked feature of Berlin.

This is why we should be promoting development that is not only price-based but also sustainable. An outlook that values the quirks and character of the city. Berlin has many layers, and is as diverse as the property market. London is an example of what happens when the price curve is pushed too high. "When prices are too high you take the power out of the market," explains Lord Andrew Hay, Global Head of Residential at Knight Frank. "Everyone stops moving house and only a handful can afford to buy their own property."

A key to success is to link up closely to the demand for housing, to focus on customer requirements and understand local conditions. The significant shortage of apartments in Berlin is firstly held responsible for the powerful price drive. According to the latest property market report issued by the Berlin Advisory Committee, average property prices for the year 2017 for the "first-time new-build home ownership market" increased by 12.3 percent on the previous year. Secondly, the lack of apartments is attributed to the shortage of land for building. The parameters are however more complex than this.

Urban development in Berlin is complex and time-consuming. Planning and permissions currently take around a year longer than in other German cities. Construction is put on hold. Supply runs artificially short because of unproductive measures such as social environment protection or an excessive social welfare quota, something that should in theory be welcomed. In addition to this, the cost of land is relatively expensive. In 2017 there were 15,600 apartments completed in Berlin. However, according to a demand analysis by the Berlin Senate Department for Urban Development and Housing, around

18-19 City Portrait: Berlin

20,000 apartments need to be built every year by 2021 in order to meet the demand. Project developers and building contractors depend amongst other things on getting construction projects underway quickly in order to still get them built. Because Berlin has no time to lose. Its appeal is drawing huge numbers of people to the metropolitan area and a response is needed—fast.

(Z)

This is why Ziegert has for example joined forces with the design and consultancy firm Arcadis in a strategic collaboration to expedite projects, with the aim of enabling more affordable housing construction and sustainable neighbourhood development in Berlin. The service for developers and building contractors encompasses the entire life cycle of a neighbourhood. Starting with a detailed analysis of the area and identification of all relevant and participating stakeholders and ending with land recycling.

Greater densification please! But with a view to diversity and a mixture of uses. In the city centre the only remaining free

plots of land are those hardly anyone wants to touch. This is because of site contamination, limited access and particularly the need for engagement as well as the tact and diplomacy of intermediaries. With expertise and receptivity to all parties, we can do our bit to create vibrant neighbourhoods. Ziegert is aware of its responsibility towards the urban community and the environment.

Encouraging ownership is a way of sharing out the growth. Ownership is also good for the development of neighbourhoods and districts. Because owning your own home means taking responsibility for your area and your neighbourhood, which as a property owner you then take greater care of. Home ownership yields not only a personal return but also a better and more vibrant city.

Berlin has every chance of strengthening even further its reputation as a global city as well as the favour it has already won. It is and will remain Germany's "laboratory", with high-profile startups already in the expansion phase and a tech scene playing a leading global role in digital transformation and the Internet of Things. Berlin can contin-ue to establish itself as an art hub, as a

As a real estate company we take our contribution to urban development seriously. Profitability is important but every bit as important at least is a design for successful urban living in the future.

medical research cluster, as a Mecca for food,

as a liberal heartland modelling the principle

of transculturality.



Sven Henkes/Managing Director Ziegert

Directs the operational side of Ziegert and is responsible for all valueadding Services of the company, from consulting with property developers to marketing and sales as well as the Studio Z interior design service.



⁷ A vision of the future: the Molecule Man as seen from the roof of the UPSIDE

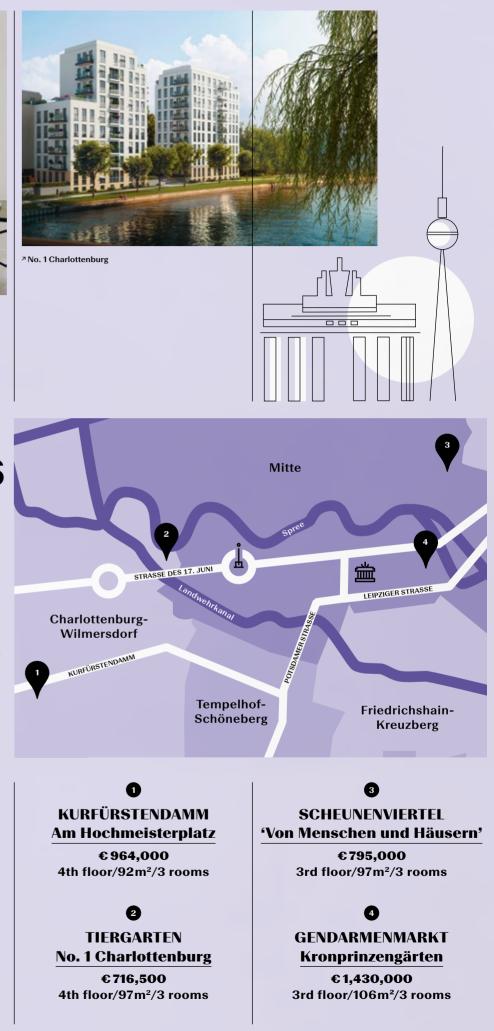






TRIPLE A LOCATIONS

Whether in the exclusive City West area, the serene Tiergarten park or the hip Scheunenviertel, one thing's sure: Berlin has many ready-to-move-in apartments in Triple A locations. Below are some price examples of the most interesting properties.



Berlin

80

 apartments sold for over € 10,000/m² in 2017 As of: 18 May 2018

408

• apartments on offer for over € 10,000/m² in July 2018

€17,610,000

highest sales price achieved for an apartment in 2017

Am Hochmeisterplatz'

\bigcirc

CITY **CHECK** BERLIN

As Berlin's economy continues to grow dynamically, the city has also seen its population rise sharply. Construction activity has been slow to gather pace and the number of housing completions remains, as yet, low. Consequently, there is a pronounced housing shortage which has resulted in higher purchase and rental prices and a lower vacancy rate.

Gross wages

Median* of monthly gross wages of full-time

employees subject to social insurance contribution

SOCIO-DEMOGRAPHICS

In recent years, Berlin's strong population growth has significantly outpaced residential completion rates. The home ownership rate has remained unchanged at 15% for years and is the lowest of any city in

CONSTRUCTION INDUSTRY The increase in the number of building permits has been much higher than the number of completions. The number of € 3.024 apts. for which a permit has been issued but have not been completed yet, now stands at around 60.000 residential units.

P 24.800

C 15,669

2017

P 25-207 C 13,659

P 22,365

C 10,722

P 19.199

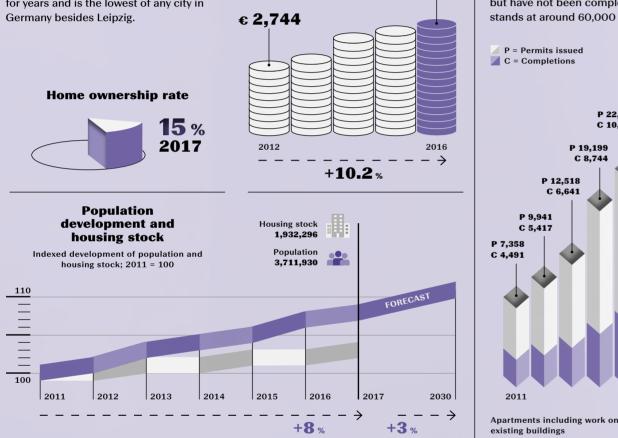
C 8,744

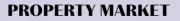
P 12,518

C 6.641

P 9,941

C 5,417

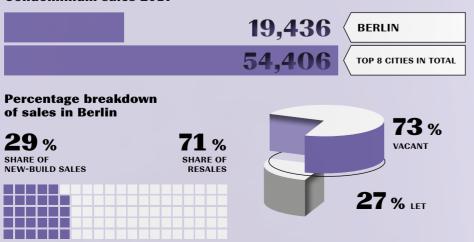




While sales volumes are decreasing, sales revenue remains constant. With around 36% of all sales in the top 8 cities, this is the largest market in Germany, the biggest part of which are resales



Condominium sales 2017

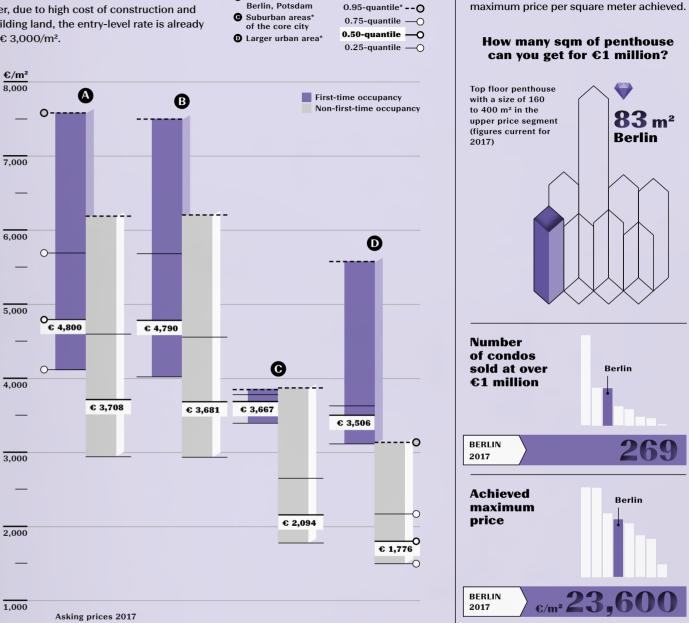


ASKING PRICES BY LOCATION

With square metre prices for a condominium being on average € 1,000 lower, Berlin's surrounding region is increasingly considered as an affordable alternative. However, due to high cost of construction and building land, the entry-level rate is already at € 3,000/m².



A City Core cities:



SUPPLY AND DEMAND

The number of requests exceeds the number of offers: this excess demand is

Ratio Ratio of condominiums offered to number of requests (2017)¹



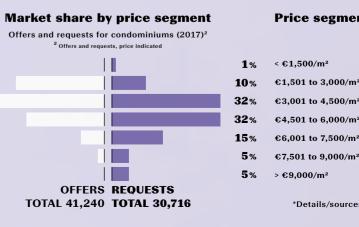
26% 42% 23% 7% 2% 0%

0%

PRIME MARKET

The German capital has established itself as the prime market for condominiums. In terms of the number sold at over € 1 million. Berlin ranks third among the 8 cities considered; fourth place in terms of the maximum price per square meter achieved.

particularly pronounced in the price segment over € 6.000/m².



Price segments



Art plays an increasingly important role in the economic and spatial development of a city—an appraisal from Berlin.

Since the fall of the wall art has flourished in Berlin. Disused spaces, cheap rent and institutional tolerance especially in the nineties and noughties offered just about endless room for creativity and experimentation, fostered the growth of a vibrant and diverse arts and culture scene and turned the city into a centre of interest, dare we say a place of dreams, for artists and creative professionals from around the world.

The latest estimates by the Professional Association of Berlin Visual Artists (BBK-Berlin) indicate that 8,000 to 9,500 visual artists now live in the city, an increase of more than 50 percent compared to figures quoted in a survey by the German Institute for Economic Research (DIW) in 2006. According to a study recently published by the Institute for Strategy Development (IFSE), Berlin boasts



the world's second highest density of artists per inhabitant after New York, just ahead of London and streets ahead of Paris. Berlin is now only second to New York as the world's most important production base for contemporary art and is regarded in the international art scene as a seal of quality.

Commercial galleries are the main place for viewing contemporary art and play a core role in supporting and introducing artists as well as positioning and marketing their artwork. According to the latest estimate by the Gallery Association of Berlin (LVBG) there are now around 300 commercial galleries in Berlin, making the city one of the foremost gallery hubs in Europe. Added to these are countless project spaces, community galleries, private collections and museums as well as regular events such as the Gallery Weekend, the Berlin Biennale and the art berlin art fair, all presenting contemporary art that draws art connoisseurs, curators and collectors from around the world to the city.

Art does not only, however, affect the cultural development of a city but also its economic and spatial development as well as the competition between cities. Artists and galleries favour unfinished or unusual spaces in relatively central locations, transforming

these into centres of interest through their exhibitions. Gallery owner Johann König, for example, uses the St. Agnes church in Kreuzberg, a monolithic and rather austere sixties building, as his gallery space. Another example is the art project The Haus. Last year more than 150 artists appropriated a disused bank building near the Kurfurstendamm over a period of several months before the building was torn down.

While in 2006 artists lived and worked mainly in Prenzlauer Berg, Mitte and Friedrichshain (DIW), now it is Kreuzberg and Neukölln boasting the highest concentrations of artists (IFSE). The gallery scene has expanded since the nineties from the Scheunenviertel area in the Mitte district primarily via Kochstrasse and Checkpoint Charlie in Kreuzberg and more recently around Potsdamer Strasse in the Schöneberg district over to the old West Berlin gallery scene around Savignyplatz and Fasanenstrasse in Charlottenburg.

The activities of artists and galleries gives areas a certain status which is expressed through an increase in value and makes these areas attractive to other commercial activity. This is currently plain to see around Potsdamer Strasse in Schöneberg, which has evolved from a rough area with drugs and

prostitution to a fashionable spot for galleries, designer shops and chic restaurants.

What's more, it seems to be precisely this vibrant arts and culture scene with its artists, galleries, dance, music and theatre that is increasingly responsible for pulling entrepreneurial talent and capital into the city. If Berlin's development limped along behind growth forecasts in the nineties and noughties despite investment in infrastructure and construction, and even dwindled for a time, the city's development has again gathered pace over the last few years. The economy and population are growing, while unemployment and public debt have subsided.

According to the 2014 "Third Report on the Creative Industries" by the Berlin administration, this growth is borne amongst other things by economic sectors ascribed to the so-called knowledge economy, with activities revolving around information, creativity and technology: so-called creative industries like music, broadcasting, film, design, books, print media, advertising, art, performing arts, architecture and software/games.

Particularly in recent times, Berlin has also evolved into an important global centre for technology startups, as described by urban researcher Richard Florida, author of the widely debated book "The Rise of the Creative Class" and his most recent publication, "The New Urban Crisis", in response to our enquiry:

"A leading urban economist once said, 'Berlin is a popular place for art [but] has no innovation, no startups and no economic productivity. Nowadays Berlin is one of the world's leading places for venture capital (VC) investment in startups; in Europe only London attracts more VC, Berlin now prospers precisely because of the vibrant arts and culture scene."

Nevertheless, the art market is just one area of many where the growing pains





300 • Galleries

€ 150 m. • Total turnover of all Berlin Galleries in 2013

an extremely competitive so-called winner takes it all market with a small number of very successful and often highly visible players at the tip of the pyramid, a mid-market segment and a broad base with a long tail-end of self-promotion practices.

According to the IFSE survey, around 20 percent of Berlin's artists can live on their artistic work. The average annual income is quoted at 20,000 euros, which is half of the average annual income of someone in full-time employment in Germany.

A survey of galleries carried out by the IFSE in 2013 puts the total turnover of Berlin's galleries at just short of 150 million euros. 81 percent of the total turnover is generated by 15 percent of galleries registering an average turnover of 3.5 million euros, 13 percent of turnover is generated by 25 percent of galleries with turnovers of between 200,001 and 500,000 euros, while 60 percent of galleries with an annual turnover of less than 200,000 euros contribute barely 6 percent to-

associated with these developments are becoming increasingly apparent. The general perception in the public mind that art is expensive and that artists and in particular galleries make lots of money is only part of the total picture. In fact, the art market is



$60.000 \,\mathrm{m}^2$ • Exhibition space

wards the total turnover. 73 percent of Berlin's galleries sell mostly paintings with price tags between 1,001 and 10,000 euros.

The mid-market segment has tended to be under the greatest pressure, it being hard to move up to the top, and while price tags have increased as artists become more well known, they are not yet established and their newcomer premium no longer applies. Added to this are greater overheads for larger or additional premises, participation in international art fairs and more staff.

More recently, a growing number of contributors, the global market, discontinuation of a reduced rate of taxation for art sales in Germany as well as rising rents and property prices are not only intensifying pressure on the mid-segment but are also making it harder for young artists and galleries to enter into the market-yet it is precisely these who give rise to new and innovative developments and contribute to vitality and diversity. This is because the more homogeneous a place, the less creative or productive it is, therefore increasing the relative appeal of other places either within a city or in other cities not just for artists and other creative professionals but also for talent and businesses. Or, in the words of Richard Florida:

"When cities become less affordable the risk arises that precisely those features that contributed to growth will drop away while innovative talent and businesses will leave."

Art and the city, it seems, make for a complex and not entirely easy relationship.



Dr. Melanie Fasche/Author

Lives and works in Berlin and Bayreuth, has a PhD in urban and regional economics from the HafenCity University (HCU) in Hamburg, and is currently researching and teaching in the fields of the art market, start-up economy and urban development at the Department of Economic Geography at the University of Bayreuth.

Daniel Libeskind

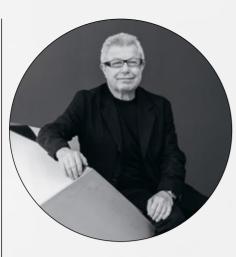
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" ARCHI-TECTURE IS MUSIC

"

He designed the Jewish Museum in Berlin. With the Sapphire, he completed his first residential property in the city. Daniel Libeskind's buildings seek to inspire people. We talk to him about architecture as music and the perfect Libeskind apartment.

by Hermin Charlotte Bartelheimer



Mr. Libeskind, you lived in Berlin for over 14 years. How has the character of the city evolved?

Berlin has grown from a teenager into a young woman (laughs). It has changed tremendously for the better. When I came to live in Berlin, it was a divided city. It's amazing to see the development. It has become such a diverse place full of interesting people. Yes, I love Berlin.

What is this young woman going to do next?

Well, she might get married.

And settle down?

(Laughs) Yeah, I mean, sometimes that's inevitable.

You have recently completed the 'Sapphire' project in Berlin. What tempted you to create a residential building here?

I saw it as a challenge, because so much of Berlin's architecture is still very conventional. It's still haunted by the idea that everything must be white, simple and reduced. So I was glad to get a very typical site. A corner plot, twenty metre building height, all the usual Berlin building restrictions applied. The question was: How can we really be innovative here? How can we create something beautiful? To live in and for the street. To show you can create twenty-first century architecture within the regulatory framework.

"Residential buildings are often underestimated," you said recently. "But they are the poetry of architecture."

Yes! What is architecture for? It's not about that one-off-museum. Not that one church. It's about everyday life. The poetry of life. That's what's so fascinating about designing a residential building like the Sapphire. To show that it can be an energizing element, something you see in the morning when you look through your window, a fixed point that gives you a sense of orientation in an ever-changing cosmos. That's very important —and it is poetic.

How would you describe the quality of the 'Sapphire' as a poem? Is it enchanting or disturbing?

A poem must be everything. A poem is not a slogan. It's not a manifesto. It's about dreams. Atmosphere. A certain complexity within the simplicity of a structure.

For the 'Sapphire' you also designed part of the interior. didn't you?

Yes, I designed the look of the bathrooms, the terraces and the kitchens. And also such features as the stairs. The whole aesthetic properties of the building.

What does the perfect Libeskind apartment look like?

A Libeskind apartment is elegant. Sophisticated. And it should have something genuinely interesting. Something that makes vou dream.

So, how do you achieve that?

It has to do with colours, texture and forms. Look, you design a building for people you don't know-you don't know who will live there It's about creating a space. And a space is not created by walls or windows. But by a geometry that awakens all your senses. And people then fill that space with their own dreams and ideas. That's the emotive power of architecture.

"Writing about music is like dancing about architecture," said jazz legend Thelonious Monk. What is architecture incapable of?

I think architecture can't be tasked with social engineering. You cannot engineer a person through the space around them. That's an illusion of the Nineties. But you can create spaces that allow them to grow and live in a beautiful way.

Good architecture can't make us better people?

No, I don't think so. Not really (laughs). A very evil person can still live in a very beautiful apartment. But architecture can give people a different sense of reality, it can be a counterpoint.

Where do you get your ideas from? The Jewish Museum was inspired by Walter Benjamin's book 'One Way-Street' and Schoenberg's 'Moses and Aron'. You wanted the museum to be a continuation of this unfinished musical work ...

Architecture is music. It's a musical art. From its fundamental acoustic beauty to the fact that spaces are organized in timenot just in space. Every architect who is aware of that knows that music is the key to proportions, to a sense of a horizon and to creating a liveable space.

You are a former musician yourself. Do you see your role as an architect more as a composer or as a conductor? Or both? As composer, absolutely. It's very

similar. It's like composing a score. Like a Mozart score. It's nothing more than dots and lines for some people. But for others, it opens a world of meaning which is very, very precise. It's very mathematical. Such a score must be given to someone who knows to interpret it. In a sensitive way. It's the same way with an architectural drawing. It's a kind of code made up of lines and points and plans. A builder interprets this code to create something subjective and social, it's a performance that leads up to a premiere.

What would be a fitting way to applaud the performance of your buildings?

To take a deep breath. Fill your lungs with air. To feel a rush, an inspiration. You shouldn't appreciate a building only with your eyes.

"An intrusive interior is like the unwanted third person at a dinner for two. It can be annoying," says British architect Stephen Williams. What annoys you, about an interior?

It seems to me that he's talking about a certain neutrality. I don't believe in that. I think a well-constructed space is more than zero. More than neutral. It is a persona. But it should be the right persona for the given activity. Going to bed. Eating. Meeting friends.

Where do you live, where do you feel you are at home?

I live in many places. I live in New York. In Milano. I have something in Berlin. I am in Asia. Paris. In Africa. The world is just a beautiful place to live in.



Sapphire

Minerva

• 2017 Completion date

• 72 **Residential units**

• Chausseestrasse 43, 10115 Berlin • A project by Econcept, Eqviva and





 (\mathbb{Z})

CLIENT **PORTFOLIO** NATIONAL 2017



Clients from other parts of Germany

International clients

Berlin, Berlin, everyone wants to be in Berlin. The allure of the capital city continues unabated-and attracts ever more international buyers.

Commercial enterprises and startups appreciate the international atmosphere while the art and culture on offer reflects the cosmopolitan diversity and the liberal attitude to life. It's where people govern, research and do business. No wonder foreign buyers are focusing more and more of their attention on the German capital.

In 2017, for example, more than 43 percent of Ziegert prime segment clients were from abroad. And yet the appeal of home ownership lies not only in investment: 50 percent of international buyers purchase prime segment apartments for their own use. This is a telling demonstration of the city's high appeal. Charlottenburg-Wilmersdorf, Mitte and Friedrichshain-Kreuzberg stand out as the most popular areas for buying property. An overview of the origins and preferences of international Ziegert clients.

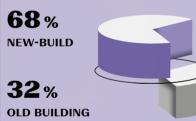


INTER-

Ziegert customers from 37 nations TOP 3: Great Britain, Russia, USA



Type of apartment:



Purpose of apartment:

47% FOR OWN USE

53%

AS CAPITAL INVESTMENT

FOR OWN USE Avg. unit price € 586,000 Avg. QM 90.4m² most common purchase motivation: "better quality of life"

AS CAPITAL INVESTMENT

Avg. unit price € 405,000 Avg. QM 70.4m² most common purchase motivation: "Investment"/"Retirement provision" ZZIEGERT

Most popular districts in

- Charlottenburg-Wilmersdorf

International

price range¹:

Clients in upper

- Friedrichshain-Kreuzberg

Berlin:

Purpose of

apartment:

50%

FOR OWN USE

50%

AS CAPITAL

INVESTMENT

1-€ 7,500/m² and up

- Mitte

BERLIN IN FLUX

From Berlin to the surrounding region:



From the surrounding region to the Berlin:

13,363

Metropolitan area

to Berlin (excluding those from Brandenburg):

215,592

+70% over 2007

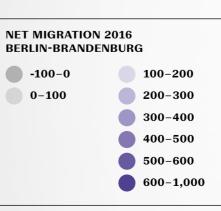
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to Brandenburg (excluding those from Berlin):

94,937

+56% over 2007

Germany (excl. Berlin and Brandenburg) and abroad



From Berlin's surrounding region to the greater metropolitan area:



From the greater metropolitan area to Berlin's surrounding region:



Berlin 9

Surrounding

region

From Berlin to the greater metropolitan area:



From the greater metropolitan area to Berlin:

7,746

Berliners are increasingly attracted to the areas just outside the city. Popular boroughs for Berliners moving to Brandenburg include Potsdam, Falkensee, Blankenfelde-Mahlow, Bernau bei Berlin and Schönefeld, Most moves from Brandenburg to Berlin start in Potsdam. Cottbus. Falkensee. Schönefeld and Brandenburg an der Havel. 14 percent of these people are older than 55 and want to spend their remaining years in an urban environment.

Moves away from Berlin to Brandenburg have gone up by 14 percent since 2007. Moves to Berlin from Brandenburg have by contrast gone down by 12 percent over the same period. 54 percent of Berliners moving to Brandenburg are between 18 and 30 years old. Conversely, the proportion of Brandenburgers in this age group moving to Berlin stands at 23 percent.

1 — The Berlin-Brandenburg metropolitan area consists of Berlin, Berlin's hinterland and the "wide metropolitan area.'

WHAT **BUYERS** WANT

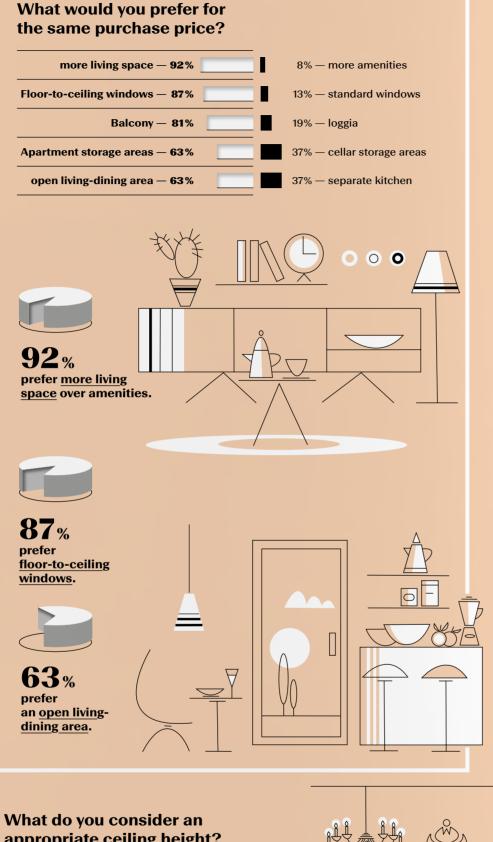
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Prices for residential property are rising. Buyers are becoming more demanding. As a result, distinctive, high-quality product concepts are becoming increasingly important.

Ziegert is already developing future product concepts together with building contractors and uses its findings from client workshops to develop appropriate recommendations.

For 92 percent of customers, more living space remains more important than additional amenities. What else do buyers value?

In May 2018, we asked 1,936 prospective buyers in the upper price segment in Berlin about their housing preferences.



Which of the following amenities would influence your purchase of a condominium?

	cale of 1 (unimportant) to 5 (very important) o consider the most important?						
5	Cellar	-					
4,5	Car parking space						
1,3	Security technology						
1,2	Bicycle parking						
3,3	Fitted kitchen						
3,1	Electric car charging station						
3	Built-in closets	Ĺ					
< 3	Smart home system	-					
	Concierge						
	Communal areas						
	Fitness room in the building						
< 2	Carshare parking						
	Hotel services						
	Wine cellar						
	Cinema						

How many parking spaces do you need?



To what extent would the location and view influence your purchase of a condominium?

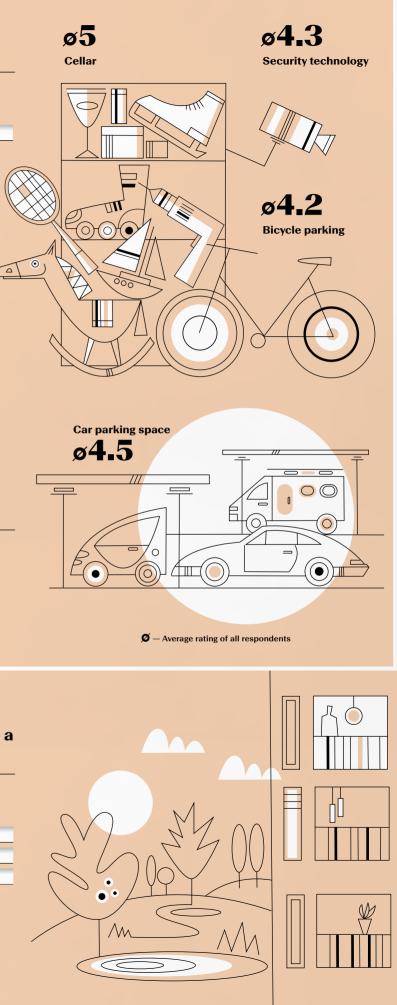
On a scale of 1 (unimportant) to 5 (very important) what do consider the most important?

- Good connections to public transport 5
- < 5 Central location View of a park/lake/sea < 4 Access to a long-distance train station
- Access to an airport Access to a highway
- < 3 Proximity to places of interest

appropriate ceiling height?



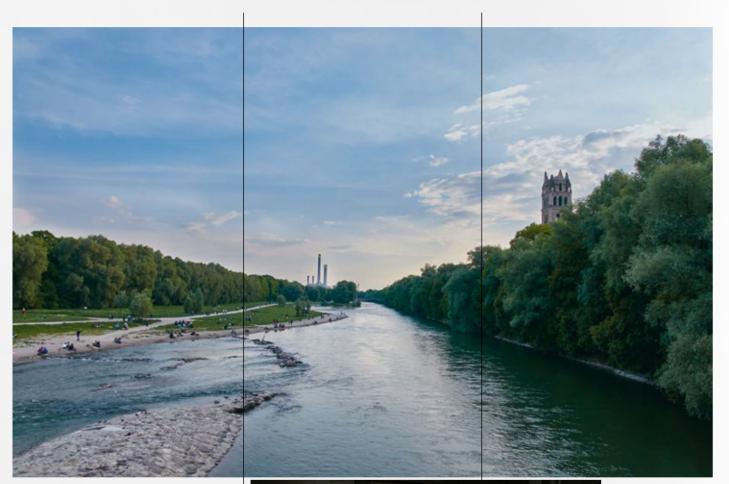
91% desire a ceiling height of at least 2.70m.



by Ulf Pape

MUNICH The elusive city

Somewhere between rustic and grandiose, biotech and beer garden: Munich confounds with contradictions as hardly any other German city can—and yet manages to stay so incredibly relaxed.



⁷ The river flows ever on: The Isar—Munich's gentle artery never ceases to captivate.





A view of the BMW World Architects: COOP Himmelb(I)au

On any given morning there's a remarkable spectacle to be witnessed on the Marienplatz square. Between eight and ten o'clock you can see people from the Far East kneeling or lying on the ground. No, they're not engaging in a religious ritual, but rather they're trying to photograph each other in such a way that Munich's three major sights all fit in the frame behind the person being photographed: the Mariensäule column, the New Town Hall tower at the top of which the Münchner Kindl stands 85 metres up in the air with arms outstretched, and, behind that, the steeples of the Frauenkirche church, almost 100 metres tall. The fact that all these buildings stand so close together and reach so high into the blue and white sky instantly floors these Asian tourists-whose city tours usually start in the morning here on the Marienplatz.

In doing so they realise something that everyone who comes to Munich realises: the city is almost impossible to grasp. Whether that's with a camera or in its beauty. The splendour of the historic façades meets expansive oases of green. It doesn't matter whether it's the Englischer Garten with its Chinese Tower, or the rustic taverns like the **Fraunhofer in the Glockenbachviertel** district or **Bratwurstglöckl am Dom**. It doesn't matter whether it's the **Frühlingsanlagen park along the Isar river** or the **City Palace** and **Nymphenburg Palace**—it's all so beautiful, so quaint, so Bavarian, so great, that it's almost impossible to grasp.

However, no city can live solely on its yesterdays. All icons of Munich's beauty are just so finished, so settled, so untouchable. How does a city like this manage to provide space for all its people, for fresh ground and new ideas?

I meet young architect Benedict Esche, born in 1988, in a side street between the main station and Stachus square, not far from the central shopping street Neuhauser Strasse. Here we find a string of strip joints, cheap hotels and hookah bars. He pushes open iron doors that open onto the stairwell of a multi-storey car park from the early seventies. We take the lift up to the top parking level. Here, together with his practice Kollektiv A, he has created an oasis: reminiscent of a Robinson Crusoe treehouse and riddled with nooks and crannies, this wooden construction perches in the middle of the roof and is home to a garden and open-air bar. Built from the most rudimentary beechwood slats and Euro pallets, it's the perfect place to wind down a summer's evening in Munich over some fine beverages. Although it only opened in July, this jewel of a place is already busy enough on a Wednesday evening. This is no hipster venue but a roof garden open to all. Between the islands of seating there are raised beds where regulars are welcome to grow their own herbs for cooking. A beehive is currently in the making. This place is a successful example of the kind of refuge that can be carved out in Munich's urban density.

"We just looked at the city from above," says Esche, "on Google Maps, and searched for vacant spaces." In doing so the roof of the Alpina multi-storey car park caught their eye—and now the finished product is reflected in sunset red in the glass fronting of a neighbouring office building. From up here you can even see the steeples of the Frauenkirche. Munich's density is a blessing when you benefit from the short distances, and a curse when it comes to opening up new spaces. From the roof of the car park, Esche points to the hidden attics of the surrounding pitchroofed Wilhelminian-era houses. "There's huge potential for densification right there." says Esche, Densification: architect-speak for living space still to be tapped. He enthuses about the 4.5-metre-high attic spaces and what could be made of them, as we now sit in the "Hindu Kush" restaurant near the main station tucking into excellent ashak, Afghan dumplings stuffed with leeks. In terms of cuisine Munich has of course also much more to offer than just knuckle of pork and roast chicken.

No other city in Germany offers a higher quality of life than the Bavarian state capital. This was demonstrated recently in a **comparative study by the consulting firm Mercer**, which rated more than 450 cities according to economic and social criteria.



ⁿ So who needs the ocean? The most well known of Munich's "standing waves" – the Eisbach wave at the Haus der Kunst

The economy is booming, the tech base attracts international professionals and Munich is home to more DAX companies than any other German city. At 28 percent, Munich's proportion of foreign nationals is higher than Berlin's. The infrastructure is good, a new high-speed ICE train connection to Berlin of less than 4 hours was recently opened and construction work to relieve pressure on the S-Bahn rail system's core line is underway. With 56 public parks, surfing on the 'eternal' Eisbach wave alongside the Haus der Kunst art museum and the Alps right on your doorstep, there are few places better than Munich to enjoy yourself outdoors.





⁷ Like a shining star: the Lenbachhaus Städtische Galerie, Architects: Foster+Partners

"We are Italy's northernmost city," says <u>Fredrik</u> <u>Werner</u>. He meets me in the **Maxvorstadt** district, in a building that also stands for successful repurposing. What was once a factory and garden centre in the back courtyard is now home to Henn architectural office where



Werner works and around which he now leads me. The structure of one of Munich's oldest industrial buildings was retained. The offices housed inside it extend partly into the front building, a Wilhelminian-era construction. Henn employs around 350 architects at its offices in Munich, Berlin and Peking and ranks among the five largest architectural offices in Germany.

"There haven't been as many building sites in Munich for a very long time as there are now," Werner says. Despite its expanded structure, he feels, Munich time and again faces the task of self-regeneration. He would like the city to show "fresh architectural courage." This would, he says, create places like the radically modern Lenbachhaus museum annex, home

32-33 City Portrait: Munich

to one of his favourite places, Café Ella. This overlooks the Königsplatz, a showcase for the classicism of Ludwig I. One of many locations where Munich offers an expanse of space at the heart of the city.

(Z)

Munich's openness flies in the face of all the "mia san mia" (we are who we are) clichés. This can be measured in the time it takes for newcomers to get themselves a traditional costume. As is apparent from a view of the city on any given weekend-way beyond the Oktoberfest. For example, on a Friday around midnight when a high-spirited group of young women merry with wine leaves a sushi restaurant where a hen party has been underway - in Russian, in Dirndls, with flowers woven into their coiled plaits.

The unpredictable shifts between the rustic and the grandiose, the past and the future, between high-tech and "Pfiat di" (Godspeed), between lederhosen and Louis Vuitton—it is these that make the city as characterful as its countless public figures. Whether it's the city's chief bartender Charles Schumann, who always has dust clinging to his leather shoes from the gravel in the Hofgarten behind Schumann's bar, or Bibiana Beglau, the leading lady of the Residence Theatre, already a fixture of the townscape as she dashes around on her racing bike. When on a Saturday morning during the annual film festival the actor Wolfgang Fierek drives up near the Bayerischer Hof hotel on his Harley Davidson for the umpteenth time, photographers and fans call out to him as naturally as Hollywood director Oliver Stone shooting his film "Snowden" here or Freddie Mercury picking Munich as his home in the early 80s. The only thing that's blue and white is the sky over Munich. The city itself shines in many different colours.

Munich has a quality of light that you don't get in other cities. It's the light that falls through treetops onto a beer garden. A hundred years ago and more, the broad leaves of the chestnut trees provided shade for beer kegs. The Impressionist painter Max Liebermann captured this light in his 1884 painting "Münchner Biergarten". It hangs in the Neue Pinakothek art museum as though it means to explain the whole city.

Nowadays everyone who makes it to Munich ambles around in this light. No visitor or indeed any Munich native would miss out on the unique sense of togetherness prevailing in the city's beer gardens. "It's this combination of Bavarian 'Gemütlichkeit'

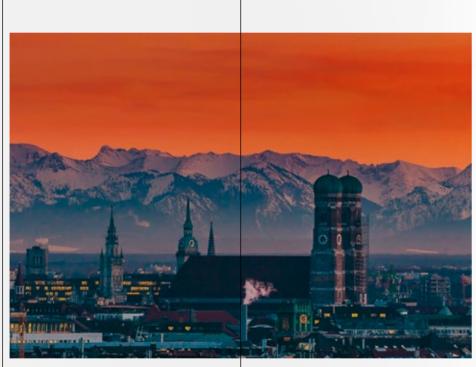


(warmth and good cheer), the Italian pursuit of pleasure and a gentle snobbery blowing in from a vaguely Anglo-Saxon direction," Fredrik Werner encapsulates. And what about all those curmudgeons of which Munich is supposed to have so many? "Oh them," says the Hamburg-born Benedict Esche over our Afghani dinner, "that kind of grumpiness is just the Bavarian blues. It's actually really nice."

Anyone on the Viktualienmarkt picking up a coffee, freshly squeezed juice or food for the day ahead will in any case be feeling cheerful thanks to the market's friendly bustle. But when they continue just a few steps on to the Marienplatz, the sight of Asian tourists lying on the ground taking photographs will remind them not only how hard it is to grasp the beauty of Munich but also that they live in a city where other people come on holiday.



The Brandhorst Museum, Mediator between the busy Maxvorstadt and Munich's Kunstareal, Architects Sauerbruch Hutton



⁷ Kitschy but breathtaking: Munich's Frauenkirche in the glow of sunset against the backdrop of the Alps



Ulf Pape/Author

Lives in Hamburg and Munich, is Cultural Editor for the GQ Magazine and also writes for other publications. His most recent book, "It's Market Day", written together with the chef Fabio Haebel, has just been published.

Mercer survey **Quality of Living Ranking** 2018

No.

Vienna

Zurich

Auckland

Geneva

Basel

Vancouver

Copenhagen

Munich

Asking price

€ 7,335/m²

● € 19.55/m²

Asking rental price

(refurbished) median 2017:

(refurbished) median 2017:

3rd place

• 3rd place: Munich

• 6th place: Düsseldorf

• 7th place: Frankfurt

Μ

of which: 13.3 % green space

> 1.3 % water

4.1 % forest

Public transport

4.2[%]

(2016 total)

Particulate matter

21_{µg/m³}

matter worldwide



Area data





Passenger kilometres per inhabitant in 2016 for the Munich transport association (MVV) area

Unemployment rate



(December 2016)

Comparison: Germany 6.1%

pollution in urban areas

(PM10¹; avg. annual value 2013)

Comparison: Onitsha (Nigeria) 594 µg/m³; avg. annual value 2009 city most polluted by particulate

Düsseldorf 6th place

Asking price (refurbished) median 2017: ● € 4.500/m²

Asking rental price (refurbished) median 2017: ● € 12.06/m²

- Total area: 217.41 km² Green space: 9.4% Water: 7.0% Forest: 12.8%
- Public transport: 1,598 passenger kilometres per inhabitant (in 2015)
- Unemployment rate: 7.4% (in 2016)
- Particulate matter pollution: 21 $\mu g/m^{3}$ (PM10¹: avg. annual value 2013)

Frankfurt 7th place

Asking price (refurbished) median 2017: € 5.500/m²

Asking rental price (refurbished) median 2017:

- € 14.75/m²
- Total area: 248.31 km² Green space: 7.5% Water: 2.1% Forest: 14.7% Other spaces in green belt: 24,3%
- Public transport: 1,317 passenger kilometres per inhabitant (in 2015)
- Unemployment rate 6.2% (in 2016)
- Particulate matter pollution: 22 $\mu g/m^{3}$ (PM10¹; avg. annual value 2013)

1 – Particulate matter (inhalable fine dust)

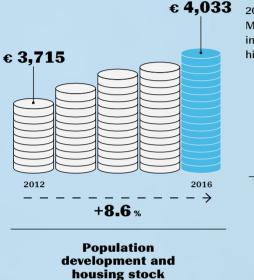
CITY CHECK MUNICH

Munich is an economic powerhouse within Germany and offers an outstanding quality of life. Both factors go a long way to explain why the level of condominium prices in Munich is the highest in all of Germany. Even the surrounding area of Munich commands higher prices than the other cities in the top 8 condominium markets.

Gross wages

 \bigcirc

Median* of monthly gross wages of full-time employees subject to social insurance contributions



Indexed development of population and

housing stock; 2011 = 100

110

100

2011

CONSTRUCTION INDUSTRY SOCIO-DEMOGRAPHICS

The population boom continues: Munich is forecast to grow by almost one-fifth by 2030. One reason for this huge influx is Munich's high quality of life, which, according to a study conducted by Mercer, is the highest among the top 8 cities.

Home ownership rate

Housing stock 794,628

Population

1,543,938

Munich has improved its administration to cope with its high population growth. The result: record number of building permits in 2017.



PROPERTY MARKET

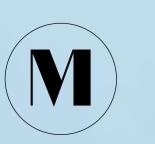
2012

2013

2014

2015

Germany's second-largest market for condominiums after Berlin. The proportion of let units is lower than in the other top 8 cities.



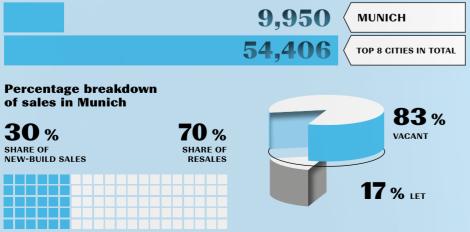
Condominium sales 2017

2016

+9%

2017

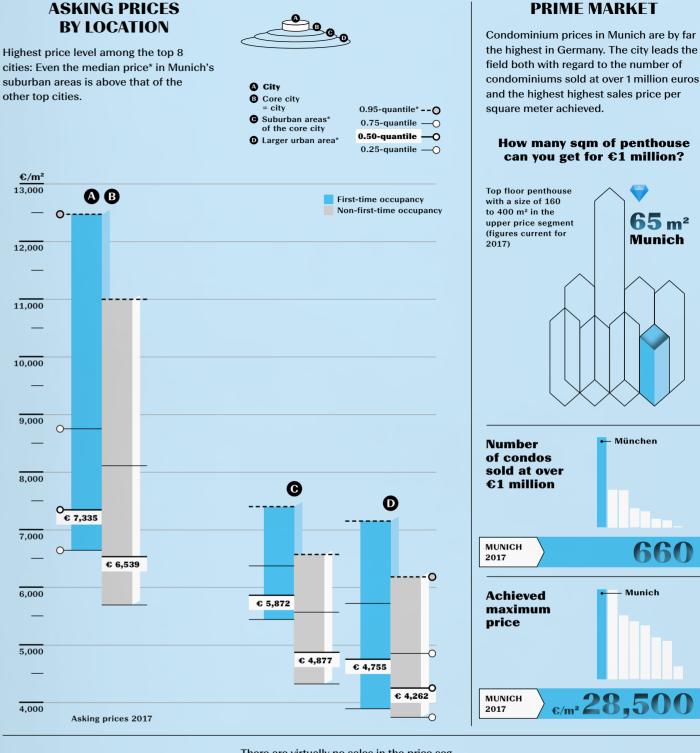
+17 %



ASKING PRICES BY LOCATION

cities: Even the median price* in Munich's suburban areas is above that of the other top cities.

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SUPPLY AND DEMAND

Ratio

Ratio of condominiums offered to number of requests (2017)¹

¹ All offer

There are virtually no sales in the price segment below € 4,500/m². Half of the requests are in the price range from € 9,000/m².



Price segments

0%	< €1,500/m²
0%	€1,501 to 3,000/m ²
1%	€3,001 to 4,500/m ²
9 %	€4,501 to 6,000/m ²
19%	€6,001 to 7,500/m²
22 %	€7,501 to 9,000/m²
49 %	> €9,000/m²

 (\mathbb{Z})

by Frank Steinhofer

HAMBURG A rising tide of confidence

Big constructions, big names. Hamburg is making a name for itself thanks to the stunning architecture of buildings like the Elbphilharmonie and Elbtower-and is poised to rediscover itself afresh.

"FERTIG". Emblazoned on the facade in huge letters, one word—"FINISHED". An impulse goes through the city, the country and the whole world: The Elbphilharmonie is opening its doors. Finally. The soaring costs, the years of halted construction, all the aggravation. All forgiven and forgotten. The cacophony resolves into one unanimous verdict-it is the crowning glory that Hamburg has been longing for.

A building that brings the city to the world's attention. "The Elbphilharmonie has injected vitality into the city of Hamburg and given it a new outlook," says Kent Nagano, General Music Director. "It opens up a modern international vision of the city," something to which the New York Times promptly attested, ranking Hamburg among its top ten travel destinations.

A modern international visionsomething to buoy up a city whose residents often describe Hamburg as "the most beautiful city in the world" when they feel uneasy about their own city. For a long time there have been good reasons for this. Urban marketing has extolled Hamburg as a city of culture. Yet creative professionals and artists long ago ran wild in Berlin and most of the more than 13 million tourists in 2017—new record figures -preferred musicals to museums, staved the weekend in budget hotels and then left again.

Meanwhile the city of Hamburg may have kept its promise of building 6,000 apartments every year. Yet instead of building good quality homes for everyone, there sprung up uninspired, uniform new-builds. "Most of what is being built right now is hard to beat in



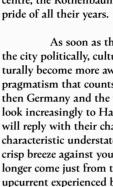


⁷ Elbphilharmonie, visualisation by blo

terms of dreariness," states Hanno Rauterberg, architecture critic. "It's architecture in the spirit of the container, the main point of it being it's practical and quick."

Hamburg regularly occupies top spots in rankings of liveable cities, for example tenth place in a list by The Economist. It's usually praised for its stability, health care and good infrastructure. Nothing in there to thrill the city's residents. In short: For a long time Hamburg was satisfactory to all and inspiring to no-one.

The completion of the Elbphilharmonie has started a turnaround that is gratifying to see. Hamburg has been able to build on an old story; a maritime narrative of great distances and an international mindset has come alive once more. "Having the viewing platform as a public space is at least partly responsible for the townsfolk identifying with the Elbphilharmonie," according to Michael Koch, Professor of Urban Planning at the HafenCity University. He feels that in general the concert hall contributes to "identity formation and self-assurance as regards urban planning and citizenship." This is perhaps the most crucial insight: Good buildings are legends in 3D.





⁷ Restored facade of the Hamburger Kunsthalle I H Architect

All of a sudden millions of visitors are flocking to the HafenCity, which despite its central location used to seem like a stagnant subsidiary. All of a sudden new restaurants are opening up like Bianc by Michelinstarred chef Matteo Ferrantino, conspicuous in their aspiration rather than the brisk processing of tourists' needs. All of a sudden new green spaces are springing up, like the Baakenpark. Even the new Elbtower by David Chipperfield is now being received more favourably and with greater curiosity. For the first time internationally renowned architects are building in the city.

"What is reflected back at Hamburg is that it is of cultural interest, something that shapes us as people as well," says Carsten Brosda, Hamburg's Senator for Culture and Media. This view inspires hope.



Hamburg has many sides and so much to offer. The port, the sandy riverside beaches along the Falkensteiner Ufer, the classical music tradition including Brahms, Mahler and the Mendelssohn Bartholdy siblings, its public spirit in place of smallmindedness, the journalistic power of the resident publishing houses such as "Der Spiegel" and Gruner + Jahr, the rough and ready subculture, the ethnicities, the Deichtorhallen art centre, the Rothenbaum villas bearing the

As soon as the people who shape the city politically, culturally and architecturally become more aware that it's not just pragmatism that counts but also extravagance. then Germany and the world will once again look increasingly to Hamburg. Its inhabitants will reply with their charming smiles, full of characteristic understatement. The perpetually crisp breeze against your face will then no longer come just from the north but from the upcurrent experienced by a city that is not just beautiful and liveable—but now once again motivating and inspiring.





Frank Steinhofer/Author

lives in Mexico City and Hamburg. He writes for the SPIEGEL Group, the Monopol art magazine and for the Architektur & Wohnen magazine.

Residential projects

by star architects

HAMBURG

HERZOG & DE MEURON

Elbphilharmonie Location: HafenCity, floors: 26 Usage: Concert hall, hotel, residential (condominium and rental) Completion date: 2017



HADI TEHERANI

Quartier Strandkai Location: HafenCity, floors: 15 **Usage: Residential** Completion date: 2022 (projected)

BERLIN

DANIEL LIBESKIND

Sapphire Location: Mitte, floors: 6 Usage: Residential (condominium), commercial Completion date: 2017

FRANKFURT

BEN VAN BERKEL

FOUR Frankfurt Location: City centre, floors: 29 (Turm Terra) Usage: residential (condominium and rental), hotel, commercial, offices Completion date: 2023 (projected)

BJARKE INGELS GROUP

OMNITURM Location: Banking district, floors: 45 Usage: Residential (rental), offices Completion date: 2019 (projected)

MUNICH

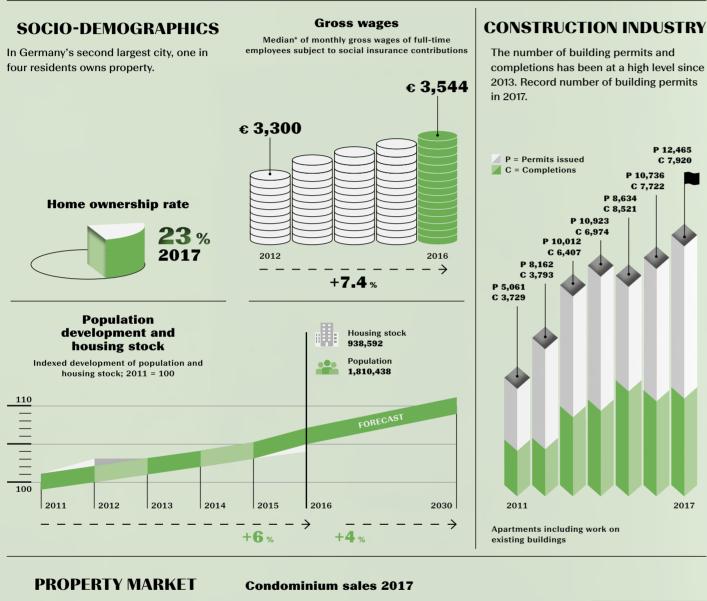
HADI TEHERANI

Pandion Reflect Location: Neuhausen, floors: 6 Usage: Residential (condominium) Completion date: 2018

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CITY **CHECK** HAMBURG

Hamburg's HafenCity—the largest urban development project in Europe-with the Elbphilharmonie concert hall and exclusive residential projects puts the city in a class of its own and has created a new prime market, alongside established locations around the Alster and in the Blankenese district. Plus: Hamburg's surrounding areas have also seen a shift in demand away from detached homes and an increased demand for condominiums.



In the third-largest condominium market. the share of rented-out apartments is 9% of all offers, this is the lowest percentage among the top 8 cities.



6.300 54.406

Percentage breakdown of sales in Hamburg 28%



completions has been at a high level since 2013. Record number of building permits P 12,465 C 7,920 P 10,736 C 7.722 P 8,634 C 8,521

2017

HAMBURG

TOP 8 CITIES IN TOTAL

91%

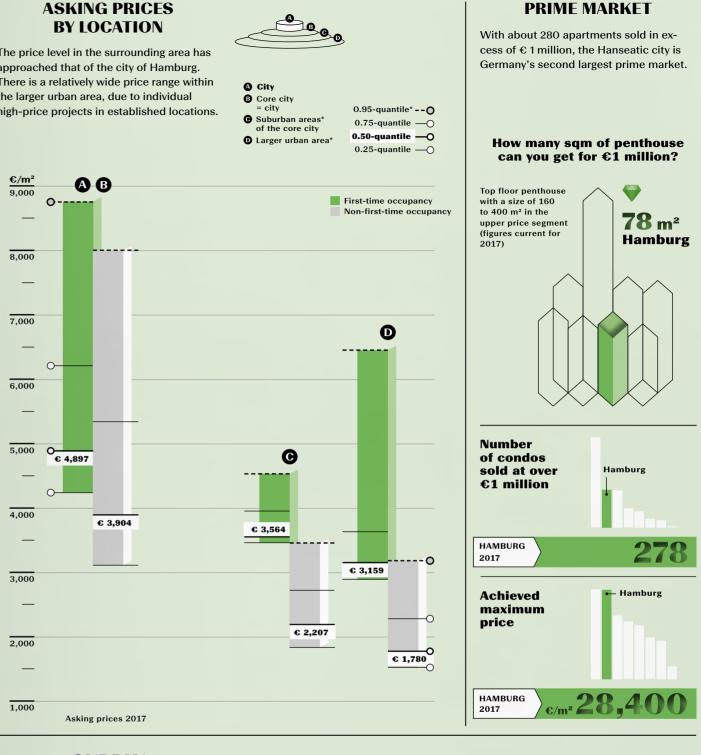
VACANT

9% LET

ASKING PRICES BY LOCATION

The price level in the surrounding area has approached that of the city of Hamburg. There is a relatively wide price range within the larger urban area, due to individual high-price projects in established locations.

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SUPPLY AND DEMAND

More than 50% of requests are in the segment from € 6,000/m², while just under two



0% 14% 39% 26% 14% 4% 3%

thirds of offers are in the range between € 3,000/m² and € 6,000/m².



Price segments

0%	< €1,500/m²
2%	€1,501 to 3,000/m ²
7%	€3,001 to 4,500/m ²
9%	€4,501 to 6,000/m ²
3%	€6,001 to 7,500/m ²
3%	€7,501 to 9,000/m²
6%	> €9,000/m²

Go green!

Why it pays to consider more green space when planning buildings and neighbourhoods.

Hamburg is growing

More and more people want to live in Hamburg. The number of inhabitants is predicted to rise to 2 million by 2030. According to the Economist Intelligence Unit, in 2017 the city once again made it into the ten

Yet it is precisely these expansions that are causing Hamburg residents concern. There is talk of "gobbling up green space", of the fear that Hamburg's characteristic feature—a unique network of waterways and parks conceived 100 years ago by Fritz Schumacher-will be destroyed. The catalyst for

Whenever I talk to inhabitants or visitors the same questions arise: "How come newbuilds are so ugly?" And "How can it be so hard to build beautiful green areas again like in the old Hamburg districts?"

To me this criticism is entirely justified; above all I see missed opportunities, since it is neither expensive nor difficult to build beautiful green areas! However, it does require a new strategy, co-creative ideas and intelligent architecture.



"Most Liveable Cities" in the world-foremost because it is seen as "Germany's greenest city".

Hamburg is building

As a response to this growth the city has adopted ambitious targets. The aim is to build 20,000 new apartments, develop new districts-for example in Neugraben or Oberbillwerder-and to extend "the leap over the Elbe". Here's where innovative hybrids of port, industry and residential areas are emerging on two of the Elbe's islands, Veddel and Wilhelmsburg.



these fears seems to be the approach to building in Hamburg in recent decades. I enjoy talking to people about "their" city and ask them what they love about it, what they need and feel the absence of. And what they think about the decisions made by city planners, architects, property developers and owners.

One of the problematic examples most often talked about is the Überseequartier, an area that is actually quite superbly situated alongside the Magdeburger Hafen and the Northern Elbe as well as the Sandtorpark and Strandkai area. Yet many criticise how "underground parking spaces are no doubt more important than trees" in this area and how any open space seems to have been "concreted over". For example in Othmarschen Park, where people feel that the green spacedubbed a "modern ghetto"—has simply been "squashed in" between the high-rises and then furnished with a few "small low-maintenance bushes". It all comes across as forlorn and desolate—just like Altona's new central area.



A new strategy

Typically it's the construction process that takes centre stage. The city provides the land that the developers use for their calculations and on which architects design buildings, garages and streets. It's only later that a landscape architecture company is brought in on the project to fashion all the areas that have been left over. This is what gives rise to "squashed" areas as in Othmarschen Park.

Two recent Hamburg projects demonstrate what we can do better in the future: an idea that won in Oberbillwerder develops architecture and landscape in sync rather than in turn. Nature is afforded the same status as buildings—they are established together from the outset. In Hafencity's Baakenpark, green space was actually prioritised ahead of building development. Its green mounds with viewpoints, its orchard meadows, children's playing areas and sports fields and its areas for people of all ages to meet; these were all more important than the buildings. Shortly after opening it is already apparent how successful this concept is: many Hamburg residents come even from other parts of the city to experience this vibrant, colourful place.

Co-creative ideas

We are used to working in separation: the architects here, the landscape architects there, over there the building contractor and gardeners, maybe later at some point the end-user. This is another area where many opportunities are missed!

In Denmark, the Netherlands and Austria we are now already seeing some very exciting ideas where developers are working together with residents and food specialists. Or we see new districts and neighbourhoods springing up where biologists, beekeepers, gardeners and architects are teaming up with businesses. Co-creations between architects and natural scientists, between sociologists, landscape specialists and property developers are neglecting nature no longer.

Only these new alliances can create new, green ideas-and intelligent architecture!

Intelligent architecture

A new co-creative way of building is a revolt against standardised construction: When nature and greenery are intended as an inherent part of a building then large blocks of houses, bare walls, flat roofs and bleak façades are no longer possible. Instead we find intelligent solutions such as roof gardens with lush vegetation or urban gardening systems that think about houses in a completely different way-what is top and bottom, inside and out.

From urban gardening it's only a short leap to indoor farming. In place of the usual bars, we can make natural balcony railings, with loggias and private in-between spaces that lend buildings not only new greenery but also a fascinating new kind of geometry; allowing projections and recesses as well as terraces. The remaining facades also offer a great wealth of options for emphasising plant life or else to form them entirely from green algae. In short: Not everything has to be square and functional.

My conclusion

Hamburg is in an ideal position to continue its green and hearty growth in the future. Fritz Schumacher's model is a fantastic bedrock, since he saw the city as an organism that is only alive because of its waterways and green spaces: "Building areas come about even when you don't attend to them. Open areas disappear when you don't attend to them!" He wrote this in 1919—and we can take this dictum to heart even today.

In terms of construction projects happening now, this can be translated as: It is only when we learn to plan not just on a large scale and in terms of function and economics but also creatively and socially that we can cultivate a healthy city. To date people have seen our construction activity as problematic. Green space is disappearing. Let that be the solution—build more to create more green space!



Julia Erdmann/Author

Is an architect and urban planner, and founded the JES network in 2017. She matches projects with the right ideas and people, and acts as a creative interface between the owners, city authorities, architects and future users.

ADEPT/The Connected City

Oberbillwerder-the blueprint for the housing projec envisages a mix of buildings for living, business, shop ning, entertainment, recreation as well as co buildings and spaces. The layout of this new 'green' district is designed around the former drainage ditche running along the fields in straight lines. There will be a ring road for motor traffic and separate pedestrian and cyclist-friendly streets as well as wide and narroy waterways and retention basins for excess rainwater a well as communal facilities and areas. Residents will be able to choose between waterside, rural and urban living and a range of matching building styles.





by Frank Steinhofer

We paint houses

From Herzog & De Meuron to UNStudio: The world's foremost architecture practices are building on their visualisations. bloomimages creates the first depictions of buildings that—as in the case of the Elbphilharmonie—soon shape whole cities. A conversation with Christian Zöllner, the founder and creative director, about the value of visualisations.



True or false? Three weeks before the first press conference your former employer Herzog & De Meuron still needed visualisations of the completed Elbphilharmonie? Yes, it was a huge show of trust,

an exciting time and at the same time an overwhelming challenge. I was supposed to visualise something for my home town, all on my own? Nowadays we carry out big projects all around the world. But usually you don't get a sense of the impact on the life of a city. Here you do.

What happened next?

The initial designs were presented to the public at the press conference. Up to then it wasn't at all clear whether or not the Elbphilharmonie was even going to be built at all. The tension was palpable. But the designs met with great approval, in the media, abroad, amongst the population. No-one felt the need to oppose them. The Elbphilharmonie was suddenly happening.

So the designs looked so good that everyone was in favour of the concert hall?

Hamburg's main feature is its homogeneity. Everything looks the same, nothing stands out, it's all built from the same identical material. As an overall structure this definitely carries weight. However, there just isn't anything that can be singled out, something to show the world. This need for a kind of big city panache, to be seen from the outside, is something the design seems to have satisfied.

How important is a realistic presentation of buildings before they are built?

Photorealistic images appeal to people's emotions, that's the great thing about them. Because of what people usually tend to look at, most are well-versed in photos and film—they are familiar media. People are not so accustomed to other forms of artistic representation. Photorealistic representations

are therefore the medium of choice for public processes-also for reasons of fairness.

Why is that?

When you float a flurry of completely abstract ideas and people are supposed to respond to them, then at the end of the day you could conjure up whatever you wanted from those ideas. If beforehand you have to represent an idea in concrete terms, then that's where you can get a real thumbs up or thumbs down.

How do you make something look like it's already there?

Initially you play the role of intermediary, collecting information which is then summarised and relayed in condensed form. A kind of journalist, if you like. We interview the architects, the structural engineers, the interior designers; just about everyone con-cerned with the make-up of a building. We interpret their ideas and filter out what is important for an image. Then we move on to the staging of a building. It's like with photography-it's about lighting, environment, incidental figures.

What does bloomimages do in this process that is different?

To a certain extent it's a penchant for Romanticism. That was a period where pictures were painted by people on a journey. They painted the compositions that appealed to them. This included light and colour. In terms of what we do, this approach translates into the atmosphere of an image and the details that can be woven into a story.

Storytelling, in a sense?

It's about understated stories, not just about the cheerful woman walking towards a building with her shopping bag. We aren't so much motivated by technique, by the sheer drive for greater photorealism, but rather we focus more on those qualities that you'd need as a photographer or painter. Ultimately what we do is paint houses. Our references are artworks. Good pictures are always open to interpretation. In architectural visualisation that tends not to be the case.

Are there any other influences for visualisation at the moment?

Scandinavianism is one example. as found in interior design or fashion.

What's that like?

A dream-like atmosphere. Hazy landscapes. A mystical light. Anything considered normal in Norway and Sweden.

So less of the sunshine, radiant smiles and blue skies?

Scandinavianism is less blatant and is more receptive to quieter narratives and contemplative images. You could say that Scandinavianism also reflects a societal need for recuperation. After so many years of 'faster and more', there is now the call for calm and simplicity.



Ho Chi Minh City

Has an architect ever been disappointed with your designs?

The climactic moment comes when you unveil the project to the people who created the architecture. Often of course we are only given sketches. So that's when they see their building for the first time in a realistic context. In that moment some do doubt themselves. I'm an architect too, after all. We dream about these projects for a very long time.

And finally: What would you say is the best compliment you can get?

(Laughs) Different, but better than I had imagined myself.



Visualisation for Viktor Sørless, Dune House, Denmark

by Florian Siebeck

FRANKFURT The sky's the limit

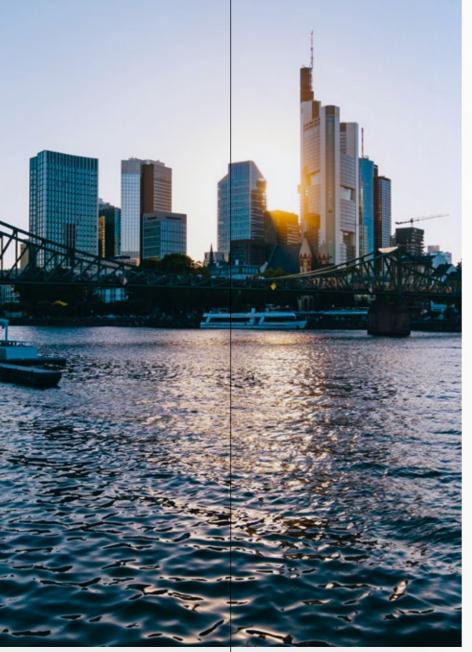
More than just a banking hub and airport—Frankfurt is currently one of the fastest-growing cities in Germany. Boasting innumerable skyscrapers, a new 'old town' and a steadily improving quality of life, it is a magnet to people from all over the world.

ZZIEGERT



action: The OMNITURM by A high-rise with Tishman Spever





the limit: view of the banking district from t

In Frankfurt, they say, you always cry twice: once when you arrive-and once when you depart. As a rule, people live in Frankfurt for professional reasons, not because it's their first city of choice-seldom do they come with the intention of settling in one of Germany's most pleasant cities. Yet Frankfurt is a city that only reveals its true face at second glance. Those who find the city too grey have obviously never strolled through the old town, and anyone who says Frankfurt is stuffy has never been in the station district. Those who maintain that it's drab have never been in Sachsenhausen. and whoever claims that it has a dearth of culture and quality of life has never enjoyed a summer evening on banks of the river Main.

"The city's a kind of educational place," says restaurateur Badia Ouahi: "You learn a lot about the world simply by living here." Ouahi comes from a Moroccan Berber family and arrived Frankfurt at the age of 22. "It was incredibly international, even the spices and vegetables. It was like a tour of the world." She now runs the café at the city's Schirn Kunsthalle (art gallery), serving dishes from as far afield as Israel, South America or North Africa. The 40-year-old describes "Frankfurter cuisine" as comprising "dishes from all corners of the world." The city has always been more global in its outlook than other German cities. After all, people from 180 nations call it home, and a third of its residents don't even have a German passport. "But it's not like Berlin with its 'parallel societies'—in Frankfurt every thing is more compact and you get to know one another, living side by side. People are not afraid of each other. This may still be the case in London, but it's unique in Germany."

The fact that Frankfurt is a city where the world comes together is also due to its central location. Frankfurt Airport is one of the world's largest air hubs and the city's main railway station is Germany's most important rail junction-Berlin, Munich, Hamburg, Brussels and Paris are each a mere four hours away. According to a study conducted by Marsh & McLennan (2009), the city boasts the 8th best infrastructure in the world and the Frankfurter Kreuz motorway junction is the busiest in Germany, while Frankfurt is also home to the world's most important internet hub.

Yet the actual city is astonishingly compact: Frankfurt is a 'city of short distances'. The city's municipal area is smaller than that of Münster and many places of interest are within walking or cycling distance. You can get almost anywhere within 10 minutes. Despite the fact that as the 5th largest city in Germany (figures released in January 2018) Frankfurt has just 741,000 inhabitants, it swells to a million during the daytime due to the high number of commuters. "For me, Frankfurt is the only truly international city in Germany," says Philipp Cronemeyer from the project developer Groß & Partner, which specialises in high-rise buildings. "The skyline, the countless global companies, the banking

district and the airport give the city a real cosmopolitan flair, something you will struggle to find anywhere else in the country."

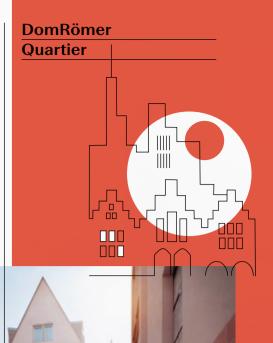
Frankfurt is a city of new arrivals-"a place where people are not judged based on their origin, but on what they can contribute to society," says Mike Josef, the head of Frankfurt's Planning Department. "The city makes people feel welcome really quickly." And he himself should know: Born in Syria in 1983, he came to Germany in 1987 and arrived in Frankfurt in 2004. After completing his studies, he became chairman of the Frankfurt branch of the SPD political party at the age of 30, and was appointed head of the Planning Department in 2016. This is anything but an

easy job: Despite the fact that Frankfurt has the highest employment density in Germany and appears to be in pole position for the future thanks to its high economic output, the influx of new arrivals (10.6 percent from 2010 to 2016) is already pushing the city to its limits. Frankfurt currently faces a shortfall of almost 40,000 apartments

25 years ago, forecasts predicted that the population would stagnate or even decline. But it has been rising steadily for over a decade. Frankfurt is one of the fastest-developing metropolis in Germany, with the districts of Kalbach-Riedberg, Gallus and Ostend expe riencing the greatest surge in growth. "The city has enjoyed a great sense of dynamism, coupled with strong growth, in recent years, as demonstrated by the 15,000 new arrivals being added each year," says Josef. "Urban growth just for the sake of it is not the goal." Due to this expansion, the Frankfurt housing market is now one of the most expensive in Germany. Unlike cities such as Vienna or Rotterdam. where public land can be allocated for development purposes for the price of EUR 200 - 300 per square metre, building land prices in Frankfurt average EUR 1,500 per square metre. This is because the city hardly owns any plots of its own. Furthermore, Frankfurt's green belt—which protects districts close to the inner city that have a well-developed infrastructure-accounts for 33 percent of the city area. And this rises to over 50 percent when the Frankfurt City Forest is included in the equation. All these areas are excluded from development.

This explains why apartments for rent or sale are being built in every nook and corner of the city. Accommodation for 40,000 people is currently being constructed in the European Quarter. In the district of Nordend, the 'Günthersburghöfe' project will deliver 1,300 apartments over the coming







7,000 square metres

City hall, 35 historic town houses

15 reconstructions 20 new buildings

Approx. 80 apartments

Approx. 30 ground floor areas for gastronomy, retail and trade

Completed in 2017, opened in 2018

46–47 City Portrait: Frankfurt

(Z)

years, while the former Siemens site in Bockenheim will host 2,500 apartments and as many as 5,000 new apartments will hit the market in the area known as 'Niederrad Office City'. 20 new residential and hybrid towers (office/hotel/residential) will be built in the city over the next few years. "Skyscraper living is in the middle of a renaissance," says Cronemeyer from the project developer Groß & Partner. "If the city can't grow in width, it can only aim for the sky." Mike Josef, however, does not regard this as a cure-all for the city's lack of accommodation. "High-rise developments cannot solve the housing problem," he says.

On the whole, the skyscrapers that gave the city its distinctive urban silhouette. even earning it the nickname 'Mainhattan', in reference to its river, have long been a source of controversy. Nowadays, the skyline, which is unique in Germany, is one of Frankfurt's leading landmarks. It was recently decided that the city's so-called High-Rise Master Plan, which regulates where and how skyscrapers may be built, is to be updated: The new districts that have been green-lighted for the construction of skyscrapers will be announced in 2021. "High-rise locations must be very carefully considered and precisely planned, otherwise they will result in an unforeseen impact on the surrounding area's property market, while the issues of wind and shading also need to be examined," says Josef. "They are difficult to integrate into their environs." Investors also always share the cost of designing the surrounding public space.

To counteract growth, however, existing neighbourhoods are also being densified, a move which is not always popular among local residents. "In the absence of wide-scale densification in existing districts, growth will prove to be unmanageable," says Cronemeyer. According to Josef, "public encounters are crucial to the feel of a city, leading to the emergence of urbanity. This includes a certain density and a good relationship between the houses and the streetscape." He goes on to point out that "the popular Wilhelminianera districts are also the most dense."

Nevertheless, there has to be enough free space, including in the city centre, where the old town that was destroyed during the war has been completely reconstructed and rebuilt. The first residents are expected to move in come autumn. "This demonstrates that the more dense development of urban spaces can result in a positive outcome, but only if one has to courage to push it through."



The level of change seen in Frankfurt is unparalleled in any other German city. A pioneering spirit is the lifeblood of the city on the river Main. According to a survey conducted by the Hamburg Institute of International Economics (HWWI) and the Berenberg private bank, Frankfurt is the best equipped of all German cities to meet the challenges of the future, just below Munich and Leipzig. "Frankfurt is becoming more urban, increasingly diverse and bigger," says Badia Ouahi. "However, this also increases my fear that affordable housing will become scarce." In Frankfurt, the prices for condominiums rose by 12.5 percent between 2016 and 2017.

But it's up to Frankfurt to counter that trend. This city with an identity somewhere between village and global metropolis, benefits from the fact that the world is becoming ever more connected. It's now up to the city to avert a scenario, such as that in New York or London, where there is a glaring lack of affordable housing for the middle class. "For many decades now, our city has been enriched by the diversity and blend of cultures, which is why we have to ensure a supply of affordable housing for the low and middleincome earners in particular," says Josef. This sense of confidence is second nature to Frankfurters anyway.



Extension of the Städelmuseum Architects: schneider+schumache

Florian Siebeck/Author

the AD Architectural Digest.

Born in Berlin, moved to Frankfurt in 2013

to be "closer to the world". Among others.

he writes for the Frankfurter Allgemeine

newspaper, the NZZ Folio, Monocle and



Skate park at the Osthafen against the backdrop of the European Central Bank

Kronberg im Taunus

Ensemble of villas in spacious parkland

Futuristic villa: over 713 m²

5 bedrooms, 4 bathrooms, top-class interior

Historic villa estate by the architect Otto Bäppler

Modernised in 2016, 5 residences

Private park property with ancient trees



Frankfurt

- 741.000 inhabitants
- +9,0 % population growth by 2030

Prime International Residential Index

Knight Frank Wealth Report 2018:



Quality of Living ranking 2018

Mercer Expat ranking (2018): No. 7 out of 231 cities worldwide



Economic powerhouse



- a 40-minute drive









300+ banks from over 50 countries **European Central Bank German Central Bank**

• Purchasing power: 114 and up to 205 in the suburbs (index-based) Ann. GDP of approx. € 200 bn. 365,000 companies

Trade fair: 2.1 m. visitors/year 4th biggest airport in Europe with over 100,000 employees

360,000 commuters every weekday **Ownership rate of only 23%** 2.8 m. residents incl. suburbs within

Brexit

potential

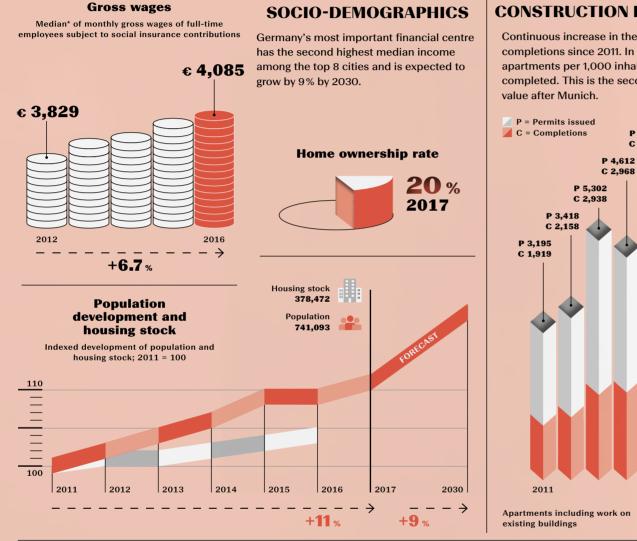
New EU headquarters: Morgan Stanley, Citigroup, Nomura, **Standard Chartered**

3.000 to 5,000 new **Frankfurters**

CITY **CHECK** FRANKFURT

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Germany's most important air traffic hub is set to benefit from Brexit in the coming years. Forecasts estimate that up to 5,000 jobs will be relocated from London to the Main metropolis. So it's only fitting that Frankfurt is redrawing its skyline with a large number of high-rise and skyscraper projects.

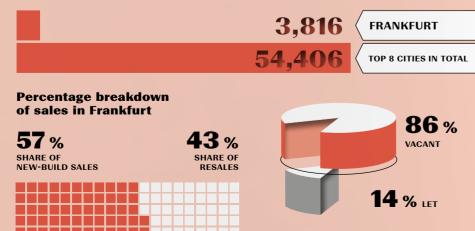


PROPERTY MARKET

ium market in the top 8 cities where the

majority of sales are new builds.

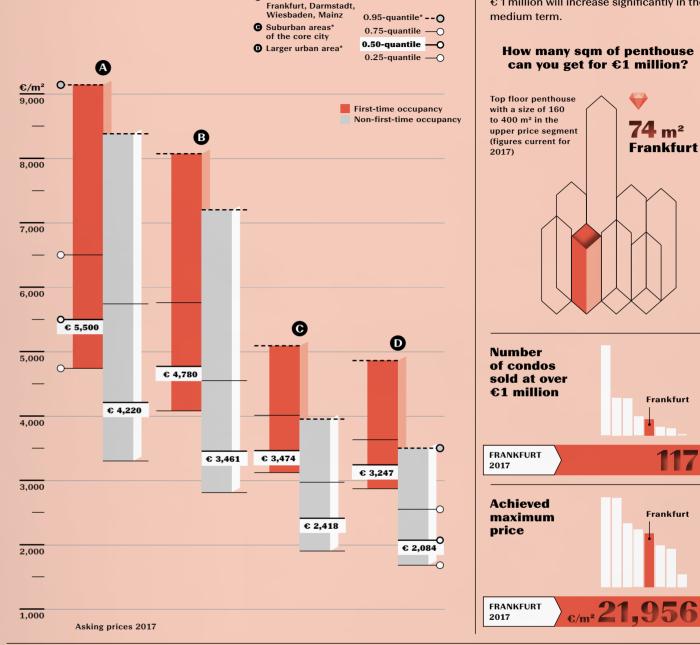
The high level of new construction activity means that Frankfurt is the only condomin-



ASKING PRICES BY LOCATION

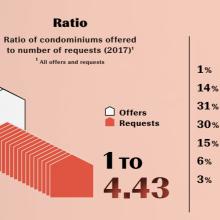
The price for a first-time occupancy apartment in Frankfurt is around 30% higher than that of a resale apartment.





SUPPLY AND DEMAND

Strongest excess demand of all top 8 cities: while around three quarters of offers are in the price segment below € 6,000/m²,







CONSTRUCTION INDUSTRY Continuous increase in the number of

completions since 2011. In 2016, 5.0 apartments per 1,000 inhabitants were completed. This is the second highest

> P 5,196 C 3,333

> > P 4.329

C 3.669

2016



around 60% of the requests are in the price segment from € 6,000/m².

Market share by price segment

Offers and requests for condominiums (2017)² ests price indicated



Price segments

Frankfurt

Frankfurt

1%	< €1,500/m²
3%	€1,501 to 3,000/m²
14%	€3,001 to 4,500/m²
23%	€4,501 to 6,000/m²
23%	€6,001 to 7,500/m²
16%	€7,501 to 9,000/m²
20%	> €9,000/m²

PRIME MARKET

As a result of several exclusive high-rise projects which are either in the planning stage or already under construction, the number of condominiums sold at over € 1 million will increase significantly in the

How many sqm of penthouse can you get for €1 million?

Ben van Berkel

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A CITY FOR ALL

Ben van Berkel designed the central station in Arnhem, while in Rotterdam he created a new iconic landmark for the city in the form of the Erasmus Bridge, which links the north and south sides of the city. In an interview, the Dutch architect explained how he now intends to revitalise Frankfurt's financial district with the largescale FOUR project.

by Dorothea Metasch





Your FOUR project will remould the Frankfurt skyline by adding four new skyscrapers. How do you aim to breathe more life into the banking district?

In a place like this, you need to meticulously plan the right mix of uses to create a diverse, vibrant city centre that has something for everybody. The aim of the City Council was to make the area more accessible, opening it up for more public use. This is what inspired our "A City for All" design concept.

What does it actually involve?

The challenge involved much more than just creating a balanced mix of working, living, relaxation and recreation spaces, but also how to integrate new connecting

routes and squares throughout the area. We had to connect the district with the city's shopping and pedestrian areas.

How did you manage that?

We have many welcoming spaces in the area, such as a roof garden, city square, child daycare centre, two hotels and numerous restaurants and shops These amenities can all be found in the main building. They

attract more people to the new urban area and significantly boost the quality of the time spent in the financial district.

Please tell me more about your 'clockwise planning' approach.

By concentrating only on the monouse of a place, such as offices, much of its potential goes untapped! This pitfall can be avoided by planning in a clockwise direction. It's about activating and using the place around the clock. Applying a mixed-use concept of this calibre in the financial district will not only vitalise the area by day, but will also result in the emergence of a whole new world of evening activities, giving the district a vital type of social sustainability. Photo: © Inga Powillei

The introduction of a new residential and leisure component is also a key element of this strategy.

Mike Josef, the head of Frankfurt's Planning Department, is delighted that your towers are a prelude to a 'paradigm shift'. Which new face would you like to give the financial hub?

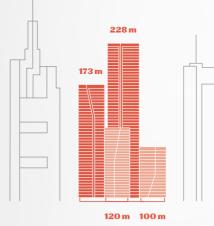
Based on a development concept that is unique to Europe, FOUR Frankfurt is being built for the general population. Thanks to brand-new infrastructure, we succeeded in connecting the formerly isolated financial district with the city centre. Financial districts the world over are often mono-functional, separate areas. We set ourselves the goal of changing this with FOUR Frankfurt and



instead create a fully integrated, lively new city quarter.

How attractive do you actually find Frankfurt?

Designing the FOUR project really appealed to me because I know the city so well. Ever since the 1990s I have lived and breathed this culturally fascinating city and would even go as far as to call it avantgarde. So I know what it feels like to be a visitor here. By getting to know Frankfurt better over time, it's quite easy to fall in love with the place. Frankfurt now also plays a more prominent role than ever on the European stage. We have now also opened an office there, meaning that I will get to return



to Frankfurt even more often thanks to the FOUR project.

You've taught at many different third-level institutions, including the Städelschule in Frankfurt. What advice do you have for young emerging architects?

I always do my utmost to encourage young architects to think for themselves to cultivate their own philosophy about what they stand for in their profession. I also advise them to find entirely new ways to deal with the future. Example: How should information be handled correctly? There's much more to architecture than just a beautiful shape.

If you and your team face new challenges, you get in touch with professionals from other fields, such as fashion designers or artists. To what extent does dialogue help you to come up with new ideas?

Dialogue is vital for attaining different perspectives on a design and updating the way it functions. Sometimes you are really constrained, but we always give it our all. Like when we have a competition or develop new ideas. We want to push the boundaries of the profession as far as possible. To a certain extent, you meander between your own knowledge and that of others to bring about a fully operational design process. The architecture of today is the product of many minds, just like so many things in modern society.

How would you describe your architectural philosophy?

I'm a big fan of performance at all levels: spatially and organisationally, and in terms of sustainability and health. I advocate a style of architecture that not only creates an imposing image, but which also has a powerful and profound lasting effect.



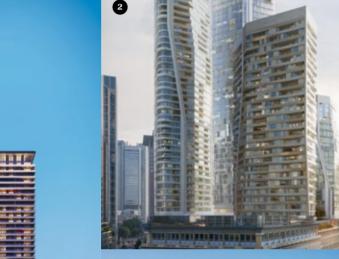


52-53 Special Feature

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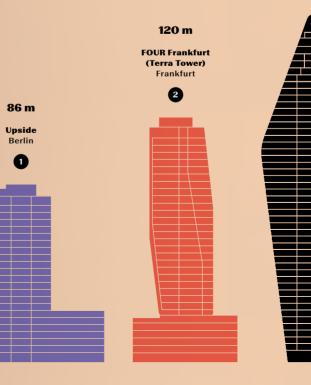
4







1 Upside Berlin	4 Ward
• Location: Mariane-von-Rantzau	• Loc
Strasse, Friedrichshain, Berlin	Arro
• 22 floors / 179 apartments	• 55 f
Price example: 22nd floor / 307 m² / € 4,352,000	Price 52nd
2 FOUR Frankfurt (Terra Tower)	5 125 G
• Location: Junghofstrasse,	• Loc
City Centre, Frankfurt am Main	Fina
• 29 floors / 234 apartments	• 92 f
Price example:	Price
24th floor / 131 m² / € 2,227,000	83rd
3 One Blackfriars	6 432 P
• Location: 1 Blackfriars Road,	• Loc
Southwark, London	Mid
• 52 floors / 274 apartments	• 96 f
Price example:	Price
42nd floor / 289 m² / € 14,138,820	95th 1
Source: Ziegert, Knight Frank; as of: July 2018, exchange rate: 10 July 2018	
	Q



Luxury in the clouds—Germany is currently experiencing a boom when it comes to residential towers. And it's not surprising that one city is at the vanguard of this development: Frankfurt. The foundation stone for the skyline was laid back in the 1960s by Hans Kampffmeyer (SPD party), the former head of the Planning Department, with his groundbreaking 'finger plan', which deliberately flouted the principle of eave height and therefore continues to shape Frankfurt's cityscape down to this

very day.

Up to now, skyscrapers have only been used for work purposes. Almost twenty new high-rise residential buildings are now being built in Frankfurt. A lot of space towering towards the sky on a small plot vertical living is destined to enhance urban life. The FOUR project eclipses everything that has ever been attempted in Germany. The ensemble of buildings consists of a hotel and office tower, each with two residential towers. Not only that, but several shops and restaurants, a child daycare centre, a roof garden open to the public and a food hall will instill a new sense of life into the urban space.

The future belongs to residential skyscrapers—keep reading for an overview of other exciting international projects.

Non-binding visualisatio

5

dian (East Tower)

cation: Marsh Wall, rowhead Quay, London floors / 427 apartments

<u>e example</u>: I floor / 78 m² / € 1,593,300

areenwich

cation: 25 Greenwich Street, ancial District, New York floors / 273 apartments

<u>e example</u>: | floor / 154 m² / € 5,238,262

Park Avenue

170 m

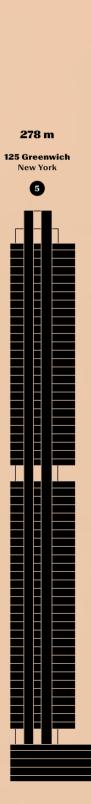
ne Blackfriars

3

cation: 432 Park Avenue, dtown, New York floors / 106 apartments

example: floor / 767 m² / € 69,950,920





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432 Park Avenue New York



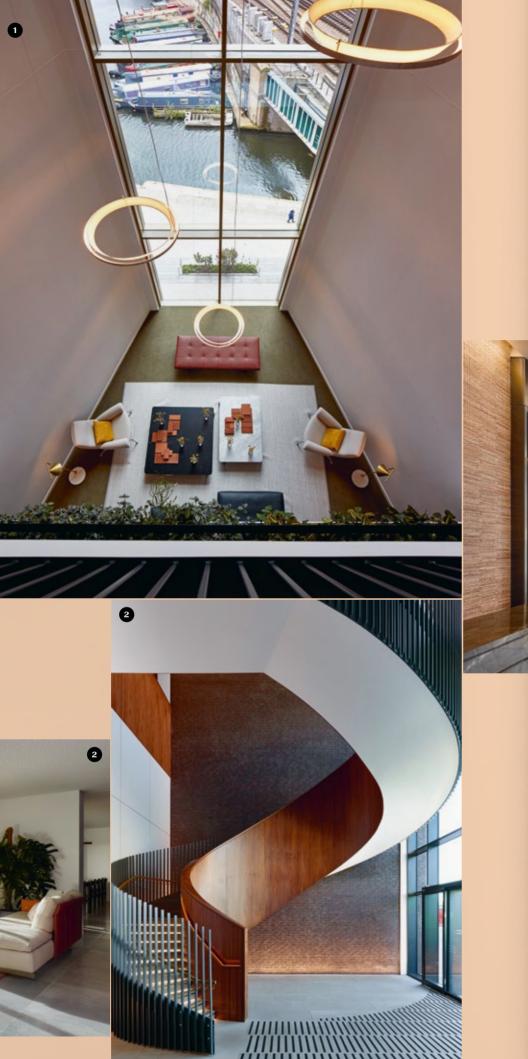
54-55 Special Feature

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Come on in!

Home starts where the lobby begins. It rolls out the carpet for the all-important first impression, defines the mood and sets the standards for an all-round, enticing residential atmosphere.

The whole issue of an outstanding concept, timeless high-grade materials and sophisticated illumination is steadily growing in importance. Here are some examples of a perfect entrée.



1 Tapestry, Kings Cross, London 3 2 Plimsoll, Kings Cross, London 3 56 Leonard Street, New York 4 Marbella M2, New York 5 Pure, Berlin 6 Sapphire, Berlin



COLOGNE A reticent beauty

Cologne and innovative architecture? Not everyone's first association. Yet the city on the Rhine offers much more than just drab apartment blocks or the world-famous cathedral, surprising visitors with its characteristic, urban profile.



↑ Cologne's patchwork aesthetic: the Kolumba Mu by architect Peter Zumthor A world unto itself: the 4.6-hectare Gerling site in the centre of Cologne, ksg architects → The Qvest hotel in the Neo-Gothic Gereon monaster





When it comes to iconic architecture, everybody agrees that Cologne has some veritable jewels, such as the old town, the cathedral and the old remaining buildings in the Südstadt part of town, or in the Belgian or Agnes Quarters. These sights are the first port of call for tourists and the aforementioned districts are the most sought-after residential areas among the people of Cologne.

Cologne's cityscape is often described as an architectural patchwork. One could even maintain that the various architectural elements that make up the big picture do not quite gel together: A few tiled post-war buildings here, the colourful and cute houses of the old town there, the Rheinauhafen harbour area with its modern 'crane houses' and right in the middle the Domplatte (Cathedral Square).

But the period of post-war modern ism, during which Germany reinvented itself, has also definitely produced some aesthetically remarkable buildings that are well worth a second or third glance. The conceptual artist Merlin Bauer wanted people to open their eyes and came up with the 'Love Your City' initiative, challenging the inhabitants of Cologne to take a closer look at their surroundings.

"What kind of weird ship is that?" was how Peter Zumthor described his first encounter with the Opera House and Theatre Ensemble designed by Wilhelm Riphahn. But upon closer inspection, the world-famous architect realised that it's "a great building," and its design was perhaps even "inspired by Scandinavian architecture." The 'Love Your City' campaign draws attention to precisely those buildings whose architectural qualities deserve more recognition. Over the course of several years, various buildings were selected as the Building of the Month. This involved attaching a colossal rosette to their façade or erecting a huge 'Love Your City' sign on the roof.

Artists such as Rosemarie Trockel, Gerhard Richter and Sigmar Polke, along with architects such as Peter Zumthor, were particularly supportive of the campaign to save the theatre from a planned demolition. Candida Höfer captured the beauty of the Opera House with her distinctive style of photographs.

The 'Love Your City' project was launched in 2005 following the demolition of another post-war building, the Josef Haubrich Art Gallery. The group calls for the preservation of the architectural heritage of the 1950s and 60s. Saving the Opera House and Theatre Ensemble from the wrecking ball was one of the group's most successful campaigns: The decision to demolish the Riphahn Ensemble was revoked following a petition for a referendum on the issue and a major renovation was subsequently approved. However, the reopening date has yet to be announced due to major delays in the construction process.

image.

Whatever their views on the merits of the cathedral or post-war modernism, one thing the city's residents do agree on is that Cologne is a state of mind as much as it is a place. Even if you are not a cheerful Carnival reveller from the Rhineland, you will quickly succumb to Cologne's charm, sense of laissez-



facade

faire and openness of its inhabitants. Cologne is a place where friendships are quickly formed. When it's party time here, you don't just party - you celebrate the city. But without even a hint of arrogance (an accusation often aimed at the city's arch enemies in neighbouring Düsseldorf)-unpretentious pride is the overriding motto. Cologne really doesn't care if it's underestimated.

Although the city is much less hyped than Berlin, where there was a veritable wave of immigration at the end of the 1990s and early noughties, it is a much warmer and more easy-going place. The fashion designer Bent Angelo Jensen from the fashion label Herr von Eden perfectly hit the nail on the head in an interview with Qvest Magazine: "In Berlin you always meet interesting, exciting people, whereas in Cologne you meet friends."

The people of Cologne are not only renowned for their tolerance (according to the adage 'it takes all kinds'), but also their willingness to help. This sense of helpfulness is particularly characteristic of the 'kölscher

Just across the road from the Ensemble lies the Kolumba Museum, Designed by Peter Zumthor, there is a stark contrast between its style and that of the Opera House or other nearby buildings. But it is precisely these disparities that prompted Merlin Bauer to coin the phrase 'patchwork aesthetics'. Zumthor worked these contrasts into his architecture and even enframed them in huge floor-to-ceiling windows which, for example, merge the city's post-war architecture with the Gothic spires of the cathedral in a single



eum: play of light and shadow on the

Cologne in numbers

70% of Cologne's buildings were in ruins at the end of the World War II. Except for cellars, no house in the old town was inhabitable. The Cathedral was spared due to its Gothic style.

4

50

16

NO.

70%

Cologne's oldest surviving structurethe so-called Ubier Monument-dates back to the year 4 A.D. making it the oldest known stone structure north of the Alps.

Cologne is one of **Germany's 10 oldest** cities-it was awarded its town charter in the year 50 A.D.

Cologne's longest street is 21.6 km long (Militärringstrasse); while its shortest street is 16 m long (Tipsgasse).

Around the year 1500. Cologne, with its approx. **45,000** inhabitants, was **Germany's largest** and most important trading city.



No building in Cologne may be higher than the Cologne Cathedral-157 m

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Klüngel', or 'Cologne Clique', a witty reference to the locals' system of mutual support. Former mayor Konrad Adenauer put it like this: "Mer kennt sich, mer hilft sich," expressing the idea that 'those who know one another help one another' in the local dialect. One could say that 'Klüngel' is a type of local corruption with a certain charm: It's not always about self-interest or quid pro quo, but rather involves building networks from which one could subsequently benefit.

The people of Cologne have embraced Merlin Bauer's call to 'Love Your City'. Despite the fact that Cologne's aesthetic beauty isn't immediately obvious, they love their city with all their heart and have a huge sense of neighbourhood loyalty.

With its countless cafés, bars and boutiques, the Belgian Quarter has become a little too hip for some, but if you want to study Cologne's nightlife in its purest form, you should grab a Kölsch beer from a kiosk on a balmy summer evening and try to find a free spot on a bench on Brussels Square. And then you will see for yourself that Cologne is also a university city: Boasting a student population of around 100,000, students account for approximately 10 percent of all Cologne's inhabitants. With its Wilhelminianera houses, the Church of St. Agnes (from which the district's name was derived) and the Higher Regional Court, whose impressive neo-Baroque façade inspired the author Heinrich Böll to merely refer to it as



⁷ The Kapelle St. Joseph amid former office buildings of the Gerling Insurance Group





The Katharina-Schauberg-Promenade on the Bhine embankment

'the castle', the steadily increasing popularity of the Agnes Quarter has led to rising house prices.

Although the various districts of Cologne are generally not homogeneous, the Gereon Quarter is a world apart from the other areas. Following a two-year renovation, this is where The Qvest Hotel was opened in 2014 in the former Neo-Gothic Gereon Monastery. Standing on the idyllic forecourt in front of this imposing building, it's hard to believe that you're in the centre of Cologne, as the square is shielded from the noise of the bustling ring road. You will immediately feel the urge to linger on one of the benches in front of the hotel.

The Bar Rossi, which also welcomes non-guests, is located on the ground floor of the building. The hotel, which had long been home to the city archive, means that the general public can once again enjoy the splendour of the former monastery. Despite being a commercial venture, the hotel really adds to the appeal of the quarter, not least for lovers of art and design. The owner of the hotel and publisher of Qvest Magazine, Michael Kaune, has furnished the establishment in midcentury style with pieces from his private art collection. Design classics by Mies van der Rohe, Eileen Gray and Ray & Charles Eames really come into their own in the sacred atmosphere.

Right next to the hotel lies the little chapel of Saint Joseph, which had remained hidden from the public for over 40 years. The office block of the Gerling insurance group was unceremoniously erected around the chapel. The only way of accessing it was via a corridor leading into the sacred Gothic building, which was home to a business library at the time. The adjacent buildings were not demolished until the extensive renovation of the Gerling office complex. The Kaune Contemporary Gallery, which primarily exhibits video and photo works, moved in 2007.

The 4.6-hectare Gerling Quarter makes up a large part of the Gereon Quarter. Banks and insurance companies set up their administrative headquarters after World War II. The Gerling insurance group was one of the most noteworthy companies to move in, and its corporate building dominated the local cityscape. Following the sale of the insurance giant in 2006, the company gradually moved out, and the Gerling Quarter, along with its iconic rotunda, fell into a state of decay. And that's how it stayed until 2010. when plans for the rejuvenation of the guarter were first drawn up. Recent years have seen extensive renovations and urban densification. New apartments, offices, restaurants and a conference centre are being built. Thanks to the many offices that are to be rented out here, the Gereon Quarter will remain true to its tradition of being an 'office district'. Nevertheless, the number of apartments is set to increase. The Gereon Quarter is about to be reinvented as a bustling urban district.



⁷ The Circle 25hours Hotel in a spectacular rotunda

The main square in the middle of the insurance complex is still rather deserted due to the construction work and lack of restaurants or cafés. The beige paving stones, which aesthetically merge with the natural stone façade, along with the three fountains designed by Arno Breker, create an atmosphere reminiscent of a piazza in southern Europe. The bright surfaces even reflect the light on cloudy days, creating a unique atmosphere that offers a welcome change from the rest of Cologne's architecture, which is often rather grey and dull.

Here too, a hotel breathes new life into a listed building. The historic Gerling rotunda inspired the creators of the 25hours Hotel 'The Circle' to highlight the atmosphere at the time of the German economic miracle of the 1950s and 60s and the era's technological utopias. The in-house bar and NENI restaurant offer a rarefied view of the city, and the ground floor features a co-working space and café. Its interior design, which is the brainchild of the Berlin-based designer Werner Aisslinger, is intended to make the hotel a magnet for tourists, instilling new life into the locality. But the people of Cologne will have to restrain their curiosity for a little longer due to the fact that the construction work in the Gerling Quarter has been delayed 'somewhat'. But once the city's residents have made this part of the city their own, it is bound to exude its very own inimitable charm, just like everything else in Cologne.





Theresa Rand/Author

she works as a furniture designer.





The Circle 25hours Hotel: Interior design characterised by the spirit of the 60s and futuristic utopias

Asking rental price ranges¹

BASED ON YEAR OF CONSTRUCTION COLOGNE **CITY CENTRE**

<u>11</u>	12	13	14	15	16	17				
€/m²										
		€12.	<u>1919</u> 00/m² 30/m²							
	<u>1919–1949</u> € 11.10/m² – € 13.70/m²									
	€11.	<u>0-195</u> 40 /m² .10/m²	-							
	€1	56–19 1.60 /m 4.30 /n	1 ² -							
	<u>1965-1972</u> €11.00/m² - €14.00/m²									
		1973-: € 12.00 € 14.70)/m² –							
	ŧ	.984-1 2 11.50 / 2 15.00	/m² –							
	€	<u>991-2</u> 12.10/ 14.40/	′m² –							
2006-2015 € 12.60/m² - € 16.90/m²										
<u>after 2016</u> € 14.00 /m² – € 17.00 /m²										

CITY CHECK **COLOGNE**

Gross wages

As an important media centre and a popular student city, Cologne experiences a high demand for residential space in spite of the fact that its cityscape is dominated by post-war architecture. Low construction activity, due to only hesitantly granted building permits and low availability of building land, has resulted in steep price increases, especially in the densely built-up central city locations.

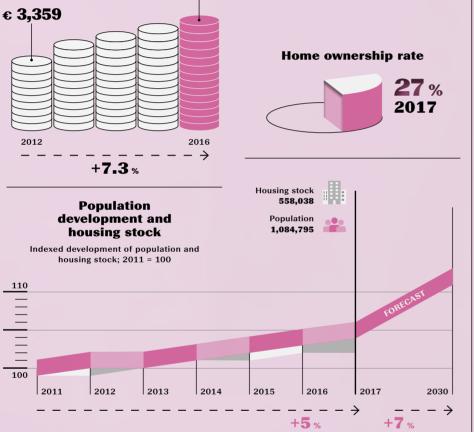
SOCIO-DEMOGRAPHICS

CONSTRUCTION INDUSTRY

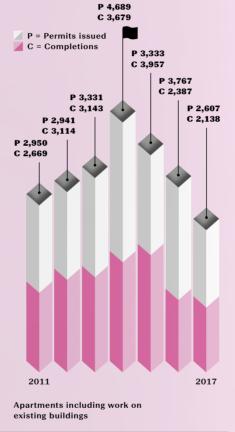
Median* of monthly gross wages of full-time employees subject to social insurance contributions Steady population growth at a relatively low level. In contrast, the home ownership rate is the second highest among the top 8 cities € 3.605 Home ownership rate

Condominium sales 2017

2017 lowest number of building completions in 7 years. So far, the city has not produced a concept to counter the housing shortage.

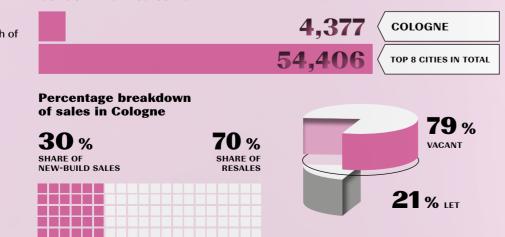


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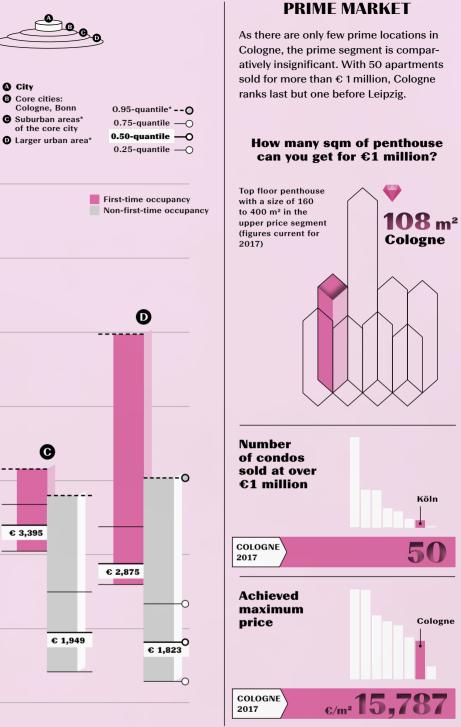
PROPERTY MARKET

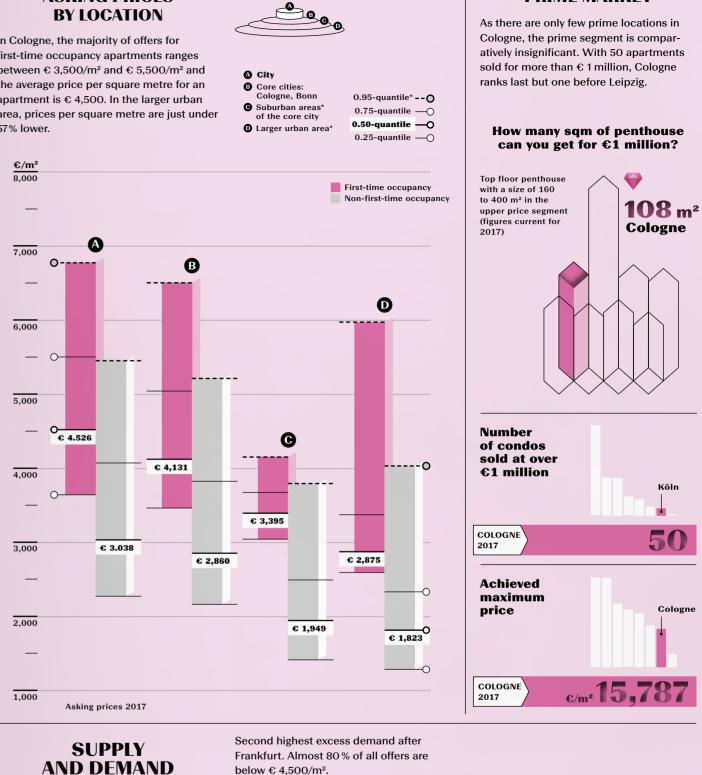
Fourth largest number of condominium sales in the top 8 cities; around one-fifth of all apartments sold are let.



ASKING PRICES BY LOCATION

In Cologne, the majority of offers for first-time occupancy apartments ranges between € 3.500/m² and € 5.500/m² and the average price per square metre for an apartment is € 4,500. In the larger urban area, prices per square metre are just under 57% lower.







Market share by price segment

Offers and requests for condominiums (2017)² ² Offers and requests, price indicated



Price segments

1%	< €1,500/m²
7%	€1,501 to 3,000/m²
7%	€3,001 to 4,500/m²
4%	€4,501 to 6,000/m²
8%	€6,001 to 7,500/m²
6%	€7,501 to 9,000/m²
7%	> €9,000/m²

(Z)

by Julia Malz

DÜSSELDORF Nippon-upon-Rhine

Düsseldorf, the erstwhile 'office desk' of Germany's industrial Ruhr region is home to more Japanese than any other city in Germany. They have helped make the city what it is today: open to the world and open for business.

The origins of the special relationship between Tokyo and Düsseldorf go back to the aftermath of the Second World War. Around 10 million cubic metres of rubble were clogging up the streets of the state capital. Industrial production had ground to a standstill. At the same time there was great demand in Japan for heavy industry machinery and products. While its relations with Germany had previously been focused on the overseas port of Hamburg and Berlin, Japan came to regard Düsseldorf as a place to gain access to machinery and expertise in steel and mechanical engineering.

And so, in the early 1950s, the first Japanese arrived in the Rhine-Ruhr areawhich is now one of the largest economic centres in Europe-to buy machinery and industrial plants for the reconstruction of their own industry. It soon became clear that both countries shared a high regard for virtues such as hard work, cleanliness, courtesy and punctuality. This realization of cultural overlap promoted a sense of mutual appreciation and a welcoming attitude towards the subsequent high number of Japanese immigrants who, to this day, face few obstacles in obtaining a work permit and enjoy high social regard in Germany.

When big corporations like Fuji film, Hitachi and Toshiba set up shop in Düsseldorf they brought their management with them who were soon joined by their families. In 1954 the Mitsubishi company was entered in the local commercial register, in 1957 Okura & Co. The Japanese community in Düsseldorf grew apace with Japan's international success as a trading nation. Gradually, a comprehensive infrastructure





A bit of Japanese culture on the Rhine: The EKO-Haus

developed, including retail shops, banks, doctors, booksellers, freight companies, insurance businesses, a Chamber of Commerce and Industry, a Consulate General, schools and cultural centres.

In 2017, more than half a century later, the Japanese state consulate counted 7,619 Japanese citizens within Düsseldorf's city boundary. Though this represents just 1.1 percent of the total population, it means the city is home to the third largest Japanese enclave after London and Paris. Over generations this has helped shape the character of the city. Düsseldorf as a centre for business is now a major economic player. According to the 2016 European Investment Monitor by accountants Ernst & Young, Düsseldorf ranks among the three major European regions after London and Paris for foreign direct investment.



⁷ The big three: Frank Gehry's building ensemble at the

In 2014, Japanese airline All Nippon Airways took a chance and started direct flights to Japan, something other airlines had always been hesitant to do because of anticipated low uptake. Japan's largest airline now runs daily non-stop flights from Düsseldorf to the Tokyo Narita international hub. This not only extends the long-haul range of North Rhine Westphalia's predominant airport, it also promotes the interchange of the German-Japanese community in the state capital. Something that goes nicely with the legend of the Japanese dragon. Dragons, which in the original translation of "Kami Tobi" actually means "paper hawk", were from the outset used for practical purposes like moving building materials or ferrying people.

In 1975, as a mark of gratitude for the hospitality shown to them, the Japanese community presented the Düsseldorf townsfolk with a Japanese garden. This 5,000 square metre garden in the Nordpark long ago became a favourite haunt of the people of Düsseldorf. In the city's Niederkassel district



Julia Malz/Author

Born 1982 in Aachen, she has been writing as a freelance journalist and author in German and English for societal, cultural and business publications such as Bilanz or Die Welt since 2009.

there stands Europe's only Japanese temple of the Jodo-Shinshū, one of the largest Japanese schools of Buddhism.

Right at the heart of the city, in the area around Immermannstrasse, lies the neighbourhood affectionately known by the people of Düsseldorf as "Little Tokyo". According to Ziegert research, prices in this area for new-build first occupancy condominiums are mid-range, at 4,700-5,200 euros per square metre. Whereas the first business pioneers from Japan still slept in their offices, now they stroll along with their families and crowd the bars and restaurants of a neighbourhood they created for themselves and their hosts. Immermannstrasse is also where the German-Japanese Centre was built in 1978 and which, at 180 million Deutschmarks, still represents the largest single Japanese investment in Düsseldorf. The Centre is home to the Japanese Consulate General, the Japanese Chamber of Commerce to Düsseldorf, a travel agency and beyond that a 600-bed hotel with Japanese restaurants.

Add to this the economic presence of 405 Japanese businesses in Düsseldorf. At the heart of the most populous German state, Düsseldorf offers the industrious Japanese people reasonable rates for establishing and running a business as well as an extensive infrastructure by land, water and air.

Since the days of the first pioneers, tradespeople and their families from the land of the rising sun have in Düsseldorf encountered good local conditions for economic prosperity. This in addition to an experienced, cultural appreciation that gives Germany's most populous state a kind of enlightenment in the way it interacts with supposed foreigners. Düsseldorf is a valid contender for the crown of secret champion: for its sound approach and fruitful alliances in both business and culture.



Japan in Düsseldorf

15 to 20 Japanese companies set up a business in Düsseldorf every vear.

405 Japanese companies employ about 32,000 people.

Over 7,000 Japanese people live in Düsseldorf-a quarter of all Japanese in Germany as a whole.

A Japanese school was founded in 1971: Japanese media, such as newspapers and TV are widely available; there's also a Japanese golf club and Japanese football clubs.

The **EKO House** of Japanese Culture is home to the only Japanese Buddhist temple in Europe.

At the University of Düsseldorf and four other colleges in the region, over 1,500 students are enrolled in Japan-related courses, where they study the language, culture, society, economy and politics of Japan.

The Institute for Modern Japan at the Heinrich Heine University in Düsseldorf, with over 600 students, is one of the largest centres of Japanese studies in Germany.

Asking prices

TOKYO / Shibuya

2 rooms, 56 m², 6th floor, completion date 2013 € 695,000 / € 12,400/m²

DÜSSELDORF / Oberkassel

4 rooms, 109 m² 1st floor, completion date 2018 € 715,000 / € 6,600/m²



CITY **CHECK** DÜSSELDORF

(Z)

The seat of large trading companies and global banks, a commercial centre at the heart of the Rhine-Ruhr economic region and-surprisingly compact: city centre, airport and trade fair centre are only a ten minute-trip apart. All of which explains the strong demand for prime property and that Düsseldorf achieved the third highest maximum price among the top 8 cities.

SOCIO-DEMOGRAPHICS

Strong population growth in 2014 and 2015. Düsseldorf's Population is forecast to grow at a medium pace of 4% per year.

CONSTRUCTION INDUSTRY Following a sharp drop in the number of

building permits and completions in 2015,

construction activity has increased signifi-

P 4,659

C 2,612

P 1,453 C 1.136

P 2,911

C 2.373

P 2,267

C 1.367

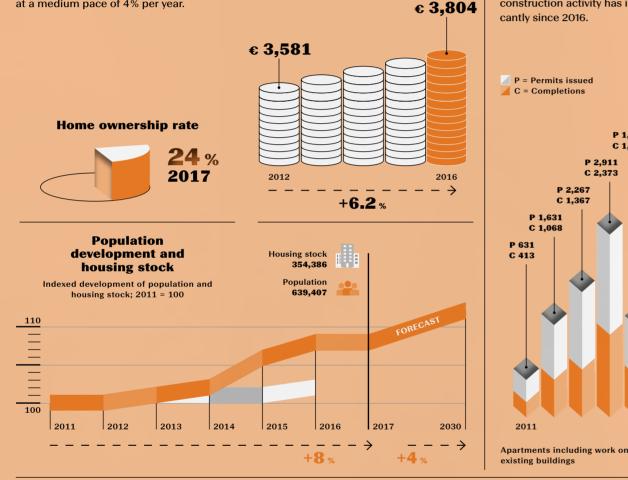
P 1,631

C 1.068

P 3.753

C 2.813

2017





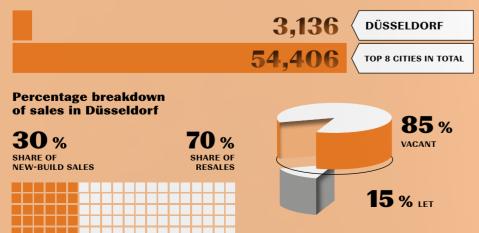
Condominium sales 2017

Gross wages

Median* of monthly gross wages of full-time

employees subject to social insurance contributions

Figures for Düsseldorf's condominium market are in midfield for all categories.



ASKING PRICES BY LOCATION

Prices of resale apartments in the core cities are, on the whole, still significantly below the price level of Düsseldorf, with average prices at only around 40% of the Düsseldorf price.

€/m²

7.000

6.000

5.000

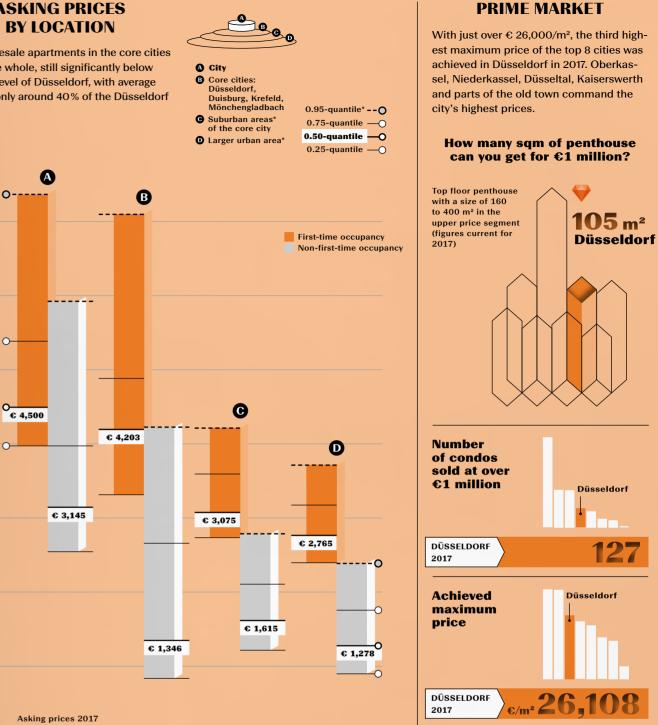
4.000

3.000

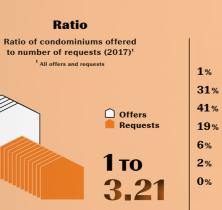
2,000

1,000





SUPPLY AND DEMAND More than three times as many requests as offers in 2017; 60% of offers and requests are in the same price range of between € 3,000 and € 6,000/m².





Price segments

1%	< €1,500/m²
9%	€1,501 to 3,000/m²
2%	€3,001 to 4,500/m ²
D%	€4,501 to 6,000/m²
5%	€6,001 to 7,500/m²
6%	€7,501 to 9,000/m ²
7%	> €9,000/m²

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by Burkhard Maria Zimmermann

STUTTGART Reinventing the city

For centuries, Stuttgart has produced a never-ceasing stream of inventions, from automotive technology to everyday appliances. Its reputation as a technological powerhouse makes it easy to miss the beauty and quality of life Baden-Wuerttemberg's capital has to offer.



7 Two icons: The Mercedes-Benz Type 8 Roadster in front of the Le-Corbusier-Haus in Stuttgart's Weißen hof development, 1928



The curved double helix: The iconic Mercedes-Ben Museum, UN Studio

Nobody's ever built anything like this around here. The Weißenhof Siedlung housing estate, built for the International Building Exhibition (IBA) in Stuttgart in 1927, was a revolution in its time and is still considered to be one of the most impressive building complexes of the Bauhaus movement. The artistic director for the housing estate on the Killesberg was Ludwig Mies van der Rohe, who later became director of the Bauhaus in Dessau. Together with architects such as Walter Gropius and Peter Behrens, he created the Weißenhof Estate with its 33 houses comprising 63 apartments which are today regarded as typical of the Bauhaus school: bright, affordable living space with clear surfaces, harmonious proportions, and a balanced colour scheme. "In the Weißenhof Siedlung, international exponents of the Bauhaus School combined industrial manufacturing and craftsmanship in a new way which showcased a humane architectural style," says Dr. Alexander Rieck, 51, scientist at the Fraunhofer Institute for Industrial Engineering IAO and director of the international firm of architects LAVA. "In other words, it was about the liberation of man through art."

about 18 000

But some of the most remarkable achievements are often brought about by comparatively small businesses. Fittingly referred to as "hidden champions", some of them really seem to be hiding. "Some of the best engineers in the world live and work in the Stuttgart area," says Alexander Rieck, speaking with a pleasant Jogi-Löw-esque lilt which always seems to convey a sense of friendly but unshakeable resolution. "Saudi Arabia is currently investing four billion euros in new digital manufacturing processes for the construction industry, and we at the Fraunhofer Institute are working on a major project with Saudi research institutions." When representatives of these institutions stayed for a visit in Stuttgart a while back, Rieck took them on a coach tour of engineering companies based in small villages in the Swabian Alb. "Our visitors were astonished when they first saw these companies, because their offices and factories don't look like much," says



>> Both a memorial as well as a green oasis: Rising an additional 40 metres, the Birkenkopf is an artificial hill formed from rubble of the Second World Wa

All of this was a completely new way of thinking and in that sense it was typical of Stuttgart. For centuries the city has been one of the most important centres of innovation in Germany. The automobile, the modern wind turbine, the spark plug and the calculator, the Leitz folder, the electric hand drill and the copying machine were all invented here. For decades, more patent applications have been filed in Stuttgart than anywhere else in Germany, over 400 per 100,000 inhabitants. Every seventh euro German companies invest in research and development is spent by a company in this region. This is equal to an investment into Germany's technological future of 13 million euros, every day. Almost 25 percent of the workforce in Stuttgart are employed by a high-tech company, a rate unmatched anywhere else in Europe. With this in mind, the organically curved Mercedes-Benz Museum with its huge window fronts

and cavernous interior spaces may well be regarded as a cathedral of automobility. Daimler alone employs about 81,000 people in this region, Bosch about 35,000, and Porsche

> there is efficient and unpretentious, but definitely not cool. But the products are among the best you can find in the field of mechanical engineering today." Stuttgart's tech expertise is appreciated as far afield as Hollywood: About a third of the visual effects for the fourth season of "Game Of Thrones" was created by Mackevision in Stuttgart.

Rieck. "Everything

The region's job market attracts highly qualified workers. They come for the jobs-but they stay because of the quality of life. In a 2018 ranking by the consulting firm Mercer, Stuttgart came 28th among the 231 cities with the highest quality of life in the world: Located in a valley basin. Stuttgart enjoys such a mild climate that it is the only German state capital with a vineyard within city limits, and is also otherwise very green. "The green U", a U-shaped band of six interconnected parks, winds its way up for eight kilometres from the baroque splendour of the Neue Schloss with its palace square to the slopes of the Killesberg hill, where the Weißenhof housing estate is located. Stuttgart is also often underrated as a cultural centre: The Stuttgart Staatstheater hosts opera, ballet and drama performances and is the world's biggest single-venue performing-arts operation of its kind. Stuttgart's art and music scene has also made a great contribution to popular culture and gained nationwide recognition. "Die Fantastischen Vier" and singer Max

Herre popularized German hip-hop in the 1990s and are still among the most important musicians in the genre. S Rapper Cro-who used to work as a cartoonist for the Stuttgarter Zeitung-also hails from Stuttgart. No concert is complete without going for a drink afterwards. There are plenty of cafés and restaurants to choose from in the historic Bohnenviertel quarter and in the hip Heusteigviertel quarter. After all, you don't want to miss out on the fine Wurttemberg wine.

Life is good in Stuttgart—if you can find an apartment in the tight housing market. At the end of 2016, buying an existing property cost around 15 percent more than a year earlier: in 2011 over 20% of existing properties were sold at less than 1,500 euros per square meter-today only three percent are sold at this rate. It's obvious that more housing is needed, it just isn't quite clear where it can be built. "Outside the city, some areas cannot be built on because they are protected nature conservation sites or have to remain open as fresh air corridors for the city," says Sven Matis, 38, spokesman for the city of Stuttgart. The redevelopment of Stuttgart's main station as part of the Stuttgart 21 project at least opens up a number of new possibilities.

"Stuttgart focuses its effort primarily on urban regeneration and higher-density development," says Matis. "One area that will become available for building within the next few years, is the Rosenstein Quarter behind the new main station, where around 6,000 new apartments could potentially be built." New areas will also become available in the Neckar park near the stadium and on the grounds of the former IBM headquarters.

So while construction will continue in Stuttgart, it's not clear where and how much. This depends largely on how things will go for the automotive industry. For Daimler, 2017 was the year with the highest turnover in the company's entire history. However, looking at the overall situation, there's a lot of food for thought for the car manufacturers. The exhaust gas scandal has upset many consumers and while driving bans for diesel cars were being discussed in Germany, Tesla, for the first time, reached its planned weekly quota of 5,000 vehicles for the new "Model 3" at its factory in Fremont. California, in June 2018. 450,000 pre-orders for the model had already been placed by the end of the first quarter. Sven Matis isn't worried: "Swabian companies have always been very quick to respond to technological innovations," he says. "Stuttgart's mayor is very confident that automakers and their suppliers will adapt quickly to change."

Apparently, this process is already under way: Bosch is cooperating with Tesla on the development of technologies for autonomous driving and Porsche plans to launch its first electric car, the Mission E, in 2019. Daimler plans to invest 10 billion euros to have ten electric models in its portfolio by 2022. In 2017, the company bought shares

68-69 City Portrait: Stuttgart

in a start-up company called Volocopter which develops electric air taxis, and its own subsidiary, Moovel, offers an app that combines car sharing and public transport. Daimler envisions a future in which autonomous electric vehicles are networked with one another and are used by many people via car sharing.

Who will buy a car then? Where can it be parked? And how will cars be built? Nobody knows, but Andreas Hofer will have entire districts designed to adapt to these

point cities will begin to feel like dormitories where all people live in isolation. I'm fascinated by the idea of creating ways of living together that don't feel like cramped, student flatshare communities and we'll develop projects to achieve that."

How will plans of companies like Daimler affect the way we build in the future? "I am certain that in 2027 we will not be able to comprehend the way we went about this city in 2017," says Hofer. "At present, cars are parked for over 90% of the time. According to some estimates, car sharing may reduce the



Burkhard Maria Zimmermann/Author

Every day during his philosophy studies at

King's College in London, Burkhard Maria

Zimmermann was aware of how traffic can

either encumber or enliven a city. He now lives in Berlin and writes about travel for

Merian, National Geographic and Traveler

magazine, and about culture for Die Zeit.



(Z)

A spectacular sight: the Porsche Museum, conceived by Delugan Meissl Associated Architects, Vienna

developments-and they will have to be built within the next 9 years. Hofer is the artistic director of the IBA in 2027—which takes place 100 years after the Weißenhof settlement was built. So, is he excited? Well, Hofer is from Zurich and as you would expect from a Swiss person, he preserves his calm. However, "I'm aware that the IBA has set the bar very high," the 56-year-old admits laughingly. "But that's a good thing, because there's nothing worse than starting a project and finding that nobody cares!"

Five to seven new housing estates are to be built, and the only thing you can already say for sure is that, just like in the past, the IBA is intended to break new ground-because much of what is common and familiar today, is actually outdated. "Today, about 50% of all households in cities are single-person households," says Hofer. "But I don't think building more 1.5-room apartments is the way to go, because at some





The interior of the new city library by the South Korean architect Eun Young Yi

number of parked cars to three percent of the current volume. As a result, many parking spaces and underground car parks will no longer be needed and new areas will become available." But whatever happens, the people of Stuttgart will come up with a solution. They always have, and they always will.

Stuttgartwhere innovation is at home

tion is due to the diversity

of its economic structure-

a mix of global players and

businesses, a highly qualified workforce and one of the

leading research and devel-

Companies from all sectors

and every branch boosts the

business hub, thereby adding

and branches of industry operate in Stuttgart, and each

city's attractiveness as a

to its prosperity.

vibrant medium-sized

opment environments.

Export

Stuttgart's strength as a loca-Highest export rate of all German cities (2016 figures)

Skilled employees



Percentage of highly qualified employees (2013 figures)

rankings.

It is therefore no coincidence that various location and city rankings, compiled by various institutes, repeatedly have the Stuttgart economic area in one of the top spots.



€ **13** m.



- Comparison: Germany around 2 percent



Patent applications

per 100,000 employees

More patents are registered in Stuttgart than in any other region of Germany, and local companies have a long undisputed tradition of being at the top of statistical

Research and

development

Daily investment in research

One out of every seven euros invested by German companies in research and development comes from a business based in the Stuttgart region.

Over seven percent of the regional gross domestic product is invested in research and development.

That's more than double the Lisbon target set by the EU for 2020.

ICD/ITKE Research Pavilion 2015-16



tic investigation into shell structures

The Institute for Computational Design (ICD) and the Institute of Building Structures and Structural Design (ITKE) of the University of Stuttgart have completed a new research pavilion demonstrating robotic textile fabrication techniques for segmented timber shells.

The pavilion is the first of its kind to employ the industrial sewing of wood elements on an architectural scale. It is part of a successful series of research pavilions which showcase the potential of computational design, simulation and fabrication processes in architecture.

The project was designed and realized by students and researchers within a multi-disciplinary team of architects. engineers, biologists, and palaeontologists.

• Segments: 151

Prefabricated by robotic sewing. Each of them is made out of three individually laminated beech plywood strips, ranging between 0.5 and 1.5 m in diameter.

- Weight: 780 kg
- Size: 85 m²
- Structural weight: 7.85 kg/m²

Resulting material thickness/span ratio of 1/1000 on average

CITY CHECK **STUTTGART**

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Innovation is at the heart of Stuttgart's economic success. A pioneering spirit, the promotion of research and development, and comparatively high gross wages attract increasing numbers of young. educated and gualified people to the state capital of Baden-Württemberg. Accordingly, Stuttgart's condominium prices are second only to Munich's among the top 8 cities.

Gross wages

Median* of monthly gross wages of full-time

SOCIO-DEMOGRAPHICS

The highest median* of gross wages and at the same time the highest home ownership rate of the top 8 cities show a clear correlation between income and ownership rate. **CONSTRUCTION INDUSTRY** With 2,129 completed apartments in 2017,

P 2,134

C 2,125

P 1.461

C 2,129

2017

P 1.909

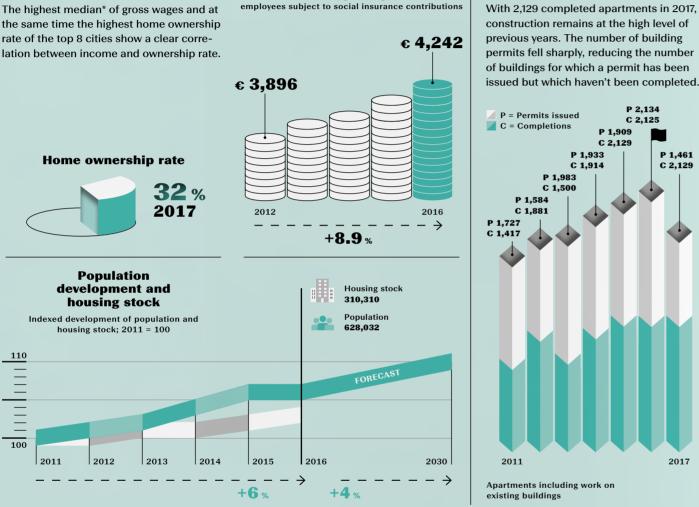
C 2.129

P 1,933

C 1,914

P 1.983

C 1.500

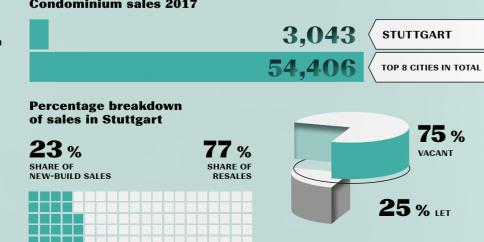


PROPERTY MARKET

Condominium sales 2017

Among the top 8 cities, the number of condominiums sold in 2017, was lowest in Stuttgart. More than three quarters of all sales were resales.

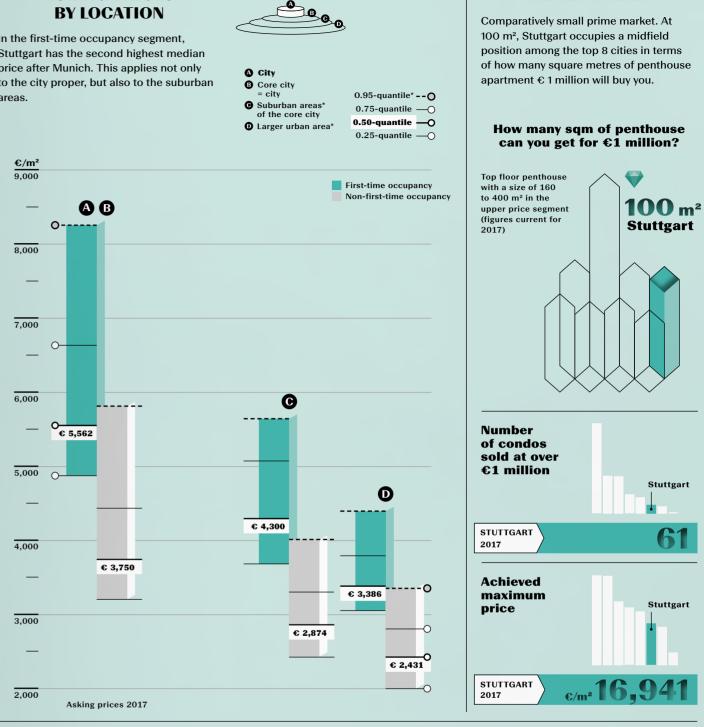




ASKING PRICES BY LOCATION

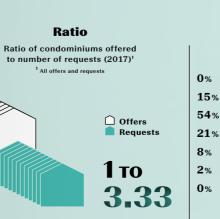
In the first-time occupancy segment, Stuttgart has the second highest median price after Munich. This applies not only to the city proper, but also to the suburban areas.

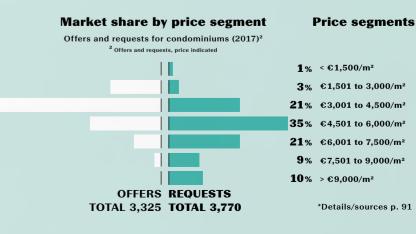
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SUPPLY AND DEMAND

In the price segment below € 4,500/m², the number of offers clearly exceeds the number of requests.





PRIME MARKET

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by Frank Steinhofer

DESIGN FOR THE CREATIVE CONSUMER

As Vice President of Design at GROHE, Michael Seum is in charge of forging sensory experience and meticulous precision. A conversation about the new criteria for bathrooms as both living area and space for defining the individual.



In the late eighties and early nineties, bathrooms were in a state of permanent hibernation when it came to ambitious design. How has the character of bathrooms changed since then?

The changes have been staggering. Today's generation is faced with disruption and political dislocation—they are surrounded by uncertainty. This has led to a growing need for a safe haven.

What does this development mean for the homes of the future?

In the meantime, boundaries have become blurred and are being redefined. The kitchen was the first space to be opened up. Meanwhile bedrooms are no longer just a place to sleep but have also become a place of refuge. The bathroom, once intended for hygiene and privacy, is now being assimilated into the residential unit as a new living space. In times of fast-paced movement, it relieves us of our restlessness and becomes a place where we can relax and reconnect with ourselves. The future of bathrooms lies in wellbeing. Bathrooms are turning into our own private spas.

How are you responding to the growing demand for individualisation?

The consumer becomes the curator. We incorporate this mindset into the development of new products and offer customers a wide selection of colours and surfaces. They still want the familiarity of an iconic, classic design but at the same time they want the option of a very personal look and feel. To this end we also consult with the world's top architects and hotel designers as well as creative professionals from the fashion industry. We talk to those sectors working closely with colour.

How do you create a new freedom of choice in bathrooms?

Our entire range—from tapware to showers and accessories—offers a variety of colours, whether that's through exquisite brushed surfaces or surfaces that are highly polished. Graphite for example is the perfect companion to pure white or tone on tone environments and works wonderfully with concrete or light wood. Or take nickel, which blends well with plants and greenery to create a look of immaculate clarity and natural warmth.

What does your own ideal bathroom look like?

I'm a minimalist. For me water is a transformative element. It transcends thoughts and feelings. This is reflected in the way I would design a bathroom. I would focus on puristic tone on tone environments. Graphite, for example, as a sea of calm. And I would bring my wardrobe into the bathroom to blur the sequence of rooms.

GROHE fosters developments in "Intelligent Living": one of your systems ensures water supplies are immediately shut off in case of flooding, while another feature shows how much water is being used. How do technological possibilities affect design?

Technology works primarily behind the scenes, for example to monitor or regulate water usage. It corresponds with an interconnected smart home. On top of this many consumers also want analogue taps, something elemental based on touch. So the future of technology also involves the seamless integration of efficiency and sensory experience.



Perfect match: The GROHE Colours collection provide a perfect way to express your personality.



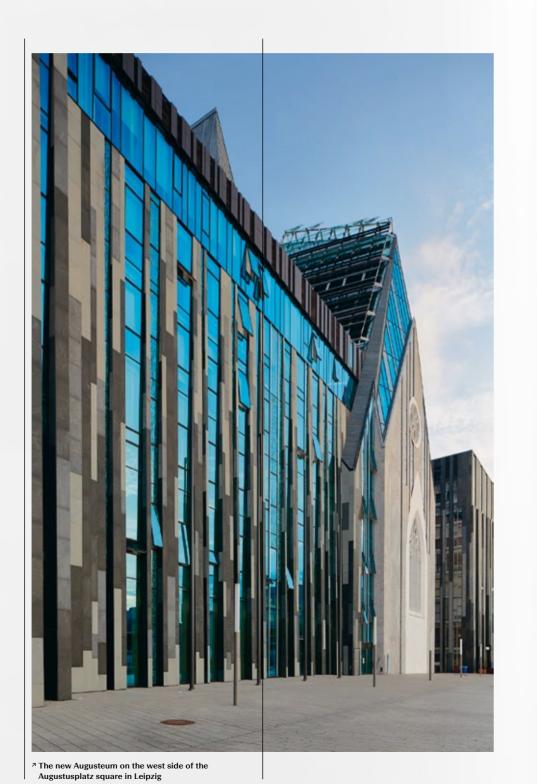




by Caroline Rosales

LEIPZIG A city come alive!

Ten years ago, this was a city that stood vacant. Now Leipzig is experiencing a massive upswing and is growing like no other German city.





They can't imagine a world where they aren't at the centre of everything. It's a time of euphoria, revolution, an uncontrollable creative force, of ubridled youth taking over their city. They open an illegal club in a disused transmissions factory that used to belong to a guy from Switzerland, they run a porn film rental business, one dreams of a boxing career, the other of a soulmate. At the end awaits at least temporary failure, if that is a definition at all worthy of the meaning. Because failure is relative and at the end everything remains in motion. And life goes on-forwards.

It's a rare film that manages to depict the spirit of a city as Andreas Dresen did with Leipzig in his film "As We Were Dreaming". This is a city where after the fall of the Wall around 100,000 jobs were lost in industry, where at the turn of the century a fifth of all apartments still stood empty. Yet it's a city that has for years been growing on an unforeseen scale. In 2017 the population grew by 1.9 percent, while forecasts predict that by 2030 the city's population will stand at 720,000.

In the cult film "As We Were Dreaming", five young adults of modest circumstances, in essence still children, construct their own utopia. They do this in a place where that was possible, in 1989 in Leipzig in the former Sternburg brewery in the city's Lützschena district. "There was hardly any surveillance of the premises at night. So people were still able to have parties there of an evening," remembers Peter Hartwig, 54 years old and Dresen's executive producer. For Hartwig, who spent half his childhood with his aunt in Dresden, the film-an adaptation of a novel by Clemens Meyer-came as a gift, an opportunity to show the reality of life as it was when the wall fell, something left out of the history books. "That's doubtless how most people experienced it," comments Dresen on his film. And Peter Hartwig, contemporary witness, attests to this: "A society was suddenly no more and then along came another one," he says. "And that was heady and wild."

The city has spawned enormous creative potential over recent years, like the artist Neo Rauch, the most high-profile representative of the New Leipzig School, or the Eigen + Art gallery, one of the foremost in the world which is based in the Leipziger Spinnerei. Added to this are countless startups, young entrepreneurs, artisans, dancers, musicians and film-makers. The reason why they are all able to flourish in Leipzig is down to two things.

For one thing Leipzig never had to commit itself, but instead was allowed to evolve, all in the shadow cast by Berlin, the febrile capital where innovators and creators often seem to drown in a torrent of competition. Designer Maria Seifert agrees. Berlin is "shallow, oversaturated," she feels. To showcase her work there she would have needed to



take out a huge loan. In her home town, by contrast, her ideas had space to unfold.

Her fashion is designed to be sustainable, an elegant understatement. She buys thrown out fabric remnants, doesn't use plastic packaging and makes bags from offcuts to do her bit for the environment. And all in her name, because that's what's on the label.

The scene for new businesses and startups has been flourishing in Leipzig



⁷ The Spinlab in Leipzig: a kick start for start-ups

"

Leipzig is the new place to start a business

Uwe Albrecht

Deputy Mayor for Economics

"

⁷ Bibliotheca Albertina: university reading room

since the noughties. "The start-up scene in Saxony is showing strong and vibrant growth," according to Martin Dulig (SPD), Minister for the Economy. Anyone taking the plunge into self-employment, he says, can rely on financial support from the state. "Establishing a business will at any rate never fail due to lack of funding."

Leipzig is flying high. The city's Plagwitz and Lindenau districts, where Peter Hartwig described "whole streets" standing empty, are now a launch ground for startups and hangout for hipsters, the movers and shakers of the future. Space has opened up for new and visionary economies: in the 'Baumwollspinnerei', an old cotton mill, the 'Tapetenwerk', an ex-wallpaper factory, and in the Social Impact Lab. Robert Schenker, a Leipzig native, founded "Schenker Technologies" and with his laptops ranks among the few manufacturers who can stand up to competition from Asia in the form of Lenovo and Acer. Lofts have been built in the former Buntgarnwerke, the largest industrial facility of the Gründerzeit period. And 470 apartments are under construction in the Lindenauer Hafen harbour area, just a few kilometres from Leipzig city centre.

The growing demand for housing in Leipzig stems mainly from the number of large businesses that have settled in the area. "Leipzig is the new place to start a business." Deputy Mayor for Economics Uwe Albrecht (CDU) recently stated. This is not just down to large firms such as BMW with its 5,300 employees or DHL with 4,900, but instead because around two thirds of the workforce are employed by small or medium-sized businesses with fewer than 250 employees. Since 2010, Leipzig has seen the creation of 44,200 jobs that are subject to social insurance contributions.

Despite a steady rise in rental costs, around 40,000 students still manage to find affordable apartments in Leipzig, at least according to figures released by the City of Leipzig. These students inject energy into the city, even more so when they go on to start a business soon after graduating.

(Z)

Like graduates Jeanette Schmidt and Henriette Grewling who, after finishing their Bachelor theses, started their own business with a "Sauberkasten"-cleaning box-that promotes cleaning without toxins. "Catch-all terms and chemical terminology often conceal toxic ingredients that cause damage to the environment and our health," so asserts the mission statement on their website. "Unnecessary substances" should be banned from the home. Pay 35 euros and you get a "Sauberkasten" containing the ingredients needed for ten different environmentally friendly cleaning agents-to make yourself. Mixing the different components at home saves you money, so the founders promise.

The fact that all these forces, this momentum is amassing in Leipzig does not surprise film producer and photographer Peter Habicht. "We've always been a trade fair centre with a large international crowd." In the past, as a film student in Babelsberg, the Dokfilm festival was an annual highlight for Andreas Dresen's collaborator. "It was the one opportunity to broaden our horizons and see contributions from around the world." Nowadays it is the German literary scene focusing its attention on the Leipzig Book Fair.

In contrast to Dresden, dubbed "the valley of the clueless" in GDR jargon because its valley location blocked West German television reception, Leipzig has always been a cosmopolitan city. Even Johann Wolfgang Goethe lauded Leipzig in his lifetime, as did Martin Luther before him, for its fashionable boulevards and the understated levity of its French attitude to life. "Leipzig to me is dear: Paris in miniature, how it refines its people!" Goethe has his character "Frosch" proclaim in Auerbach's Cellar in "Faust I".

Change is good, even the scent, the smell when you alight from the train at Leipzig's main station, says Peter Hartwig, has changed for ever. Before the wall fell, he says, whole rows of houses were enveloped in fumes, it smelled of coal, that is no longer the case. The air is much clearer, considerably better. And the winds of change, of awakening, blow a gentle breeze. After all, Leipzig already has all the momentum it needs.





Caroline Rosales/Author

Born 1982 in Bonn, she works as an editor for the FUNKE Mediengruppe. She has also published two non-fiction books. In 2012 she set up her blog "Stadt Land Mama", which today one of the biggest parenting blogs in Germany.



⁷ The Stelzenhaus industrial monument in Plagwitz



Leipzig

- 590.337 inhabitants 2017
- Highest level of population growth of all German cities 2013-2017: +9.5%



E 204,116 2016: C 67,626 E 255,507

2001:

C 47,876

2002

2005

BMW

2006

2008

DHL

HWWI/Berenberg City ranking 2017

Germany's most future-oriented cities

- 1st place: Munich
- 2nd place: Leipzig
- 3rd place: Frankfurt





Condominium prices

• Avg. new-build purchase prices (completion date after 1990), initial sale:

2007-2017: +69%

• Avg. purchase prices for refurbished older buildings, initial sale: 2007-2017: +91%

2011

Germany:

COMPAREX AG HEADQUARTERS

Economic development 2001–2016

C = **company** (CCI members) E = employees subject to social insurance

The most important companies to set up here

• PORSCHE AG ASSEMBLY PLANT Over 4,000 employees, and rising

ASSEMBLY PLANT About 5,300 employees, and rising

AMAZON LOGISTICS CENTRE about 1,900 employees

LEIPZIG HUB About 4,900 employees

In 2016, freight volume (including postal volume) exceeded the 1 m. tonne mark for the very first time.

Freight volume ranking

1st place: Frankfurt **2nd place: Leipzig 3rd place: Cologne/Bonn**

About 2,000 employees worldwide

No. of companies 2016

67,626

No. of employees subject to social insurance 2016

255,507

High employment growth from 2010 to 2016:

+44,000

Employees subject to social insurance

= +21%

Tourism

- 1991
- 3,500 hotel beds

2016

• OVER 15,000 HOTEL BEDS The number has more than guadrupled.

Architecture

• A third of all buildings in Leipzig dates back to the Wilhelminian era.

WALDSTRASSENVIERTEL DISTRICT

Lying to the north-west of the city centre, Leipzig's Waldstrassenviertel district is one of the largest Wilhelminian-era quarters in Europe.

This famous residential neighbourhood features examples of almost all distinctive architectural styles, such as Classicism, Art Nouveau, Art Deco, Bauhaus, along with so-called Eastern Modernism.

Over 95 % of all buildings have already been refurbished.

(\mathbb{Z})

CITY CHECK **LEIPZIG**

€ 2,419

2012

2011

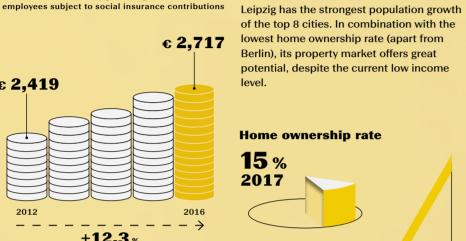
Gross wages

Median* of monthly gross wages of full-time

With a projected population growth of around 22% by 2030, Leipzig has the greatest development potential of all major German cities. With its large portfolio of Wilhelminian-era architecture, comparatively low prices and attractive returns, Leipzig is attracting great interest among investors: In 2017, 95% of buyers of refurbished period apartments came from other parts of Germany.

SOCIO-DEMOGRAPHICS

CONSTRUCTION INDUSTRY



Several planned major projects have raised the number of building permits to the highest level since 2000. Consequently, the number of building completions will also increase in the coming years.

P 2.547

C 1.625

2016

P 2.142

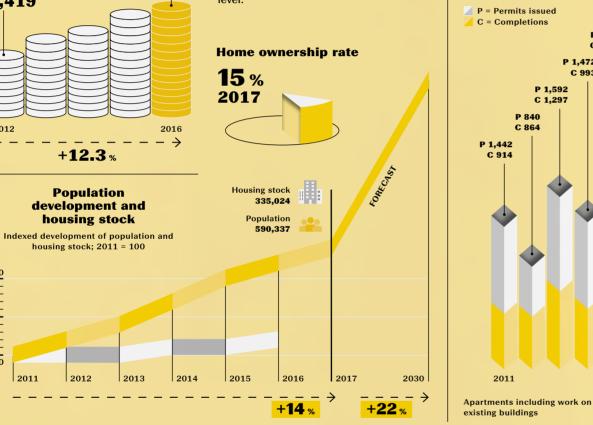
C 1.779

P 1,472

C 993

P 1,592

C 1,297

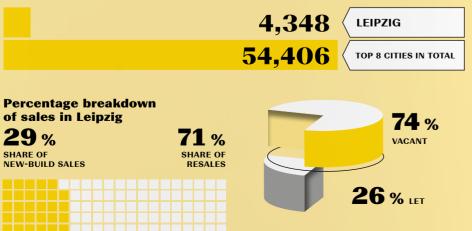


PROPERTY MARKET

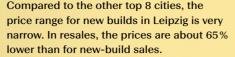
With 7.4 condominiums sold per 1.000 inhabitants in 2017, Leipzig ranks first among the top 8 cities. In total, more than a quarter of apartments were let at the time of sale



Condominium sales 2017



ASKING PRICES BY LOCATION



Ratio

Batio of condominiums offered

to number of requests (2017)¹

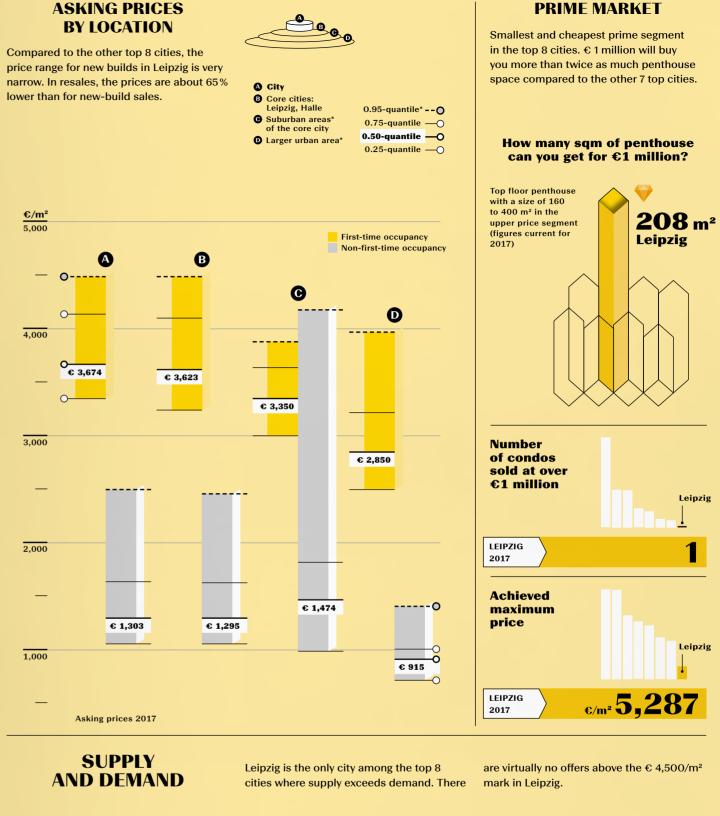
¹ All offers and requests

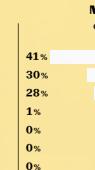
Offers

1 то

Requests

0.78





Market share by price segment Offers and requests for condominiums (2017)² Offers and requests, price indicated

OFFERS REQUESTS TOTAL 7,414 TOTAL 2,278

Price segments

8% <€1,500/m² 48% €1,501 to 3,000/m² **29%** €3.001 to 4.500/m² **10%** €4,501 to 6,000/m² 2% €6,001 to 7,500/m² **1%** €7,501 to 9,000/m² **2%** > €9.000/m²

*Details/sources p. 91

Exterior design

Gardens and roof terraces—for Nikolaus Ziegert these are the ultimate advertisement for any house. Plants and gardens not only link buildings into the dynamic rhythm of growth and the seasons, it is ultimately what completes a residential property.



Nikolaus Ziegert The owner and founder in his garden

Nikolaus Ziegert, owner of ZIEGERT Real Estate, has always been fascinated by nature in all its glory. In keeping with this, he decided in 1983 to go to Berlin to train as a biology teacher. Yet even during his studies Ziegert, a native of Bremen, set up his first business: selling flowers. Two years after starting his degree Nikolaus Ziegert encountered the real estate market. His deep connection to plants has endured.

"I get home and walk through the garden to the front door, to my apartment," he enthuses. "To my left and right the garden blooms in many colours, oleander, roses, lavender. I smell the fragrance of my energising home all around me. Anyone buying their own apartment feels their pulse quicken when they sense vitality, healthful living and nature working in harmony to fortify them on their way home. If this is something every property buyer wants, why is it so rarely provided?"

For Nikolaus Ziegert, gardens are an integral part of the building, not simply a visual add-on. This is something ZIEGERT clients benefit from, because anyone involved in a project is encouraged to turn an apartment into an oasis of green. "Usually building contractors or developers simply run out of money," Nikolaus Ziegert explains. "The budget dries up. Or else indifference prevails or creating a home that is an expression of a client's dream just isn't part of the mindset." It could all be much simpler, he feels, if more possibilities were exhausted and an appreciation of the value of more greenery were to grow

"Part of a peaceful, restful haven is being surrounded by nature and plants, which represent beauty, joy and health," professes Nikolaus Ziegert. "I can only properly commit to an apartment, a project, a home when my needs, my way home have been taken into consideration. The adornment of a garden space, a 'front garden', that invites us in and speaks to our emotions is what ultimately makes the buzz of buying your own property complete."

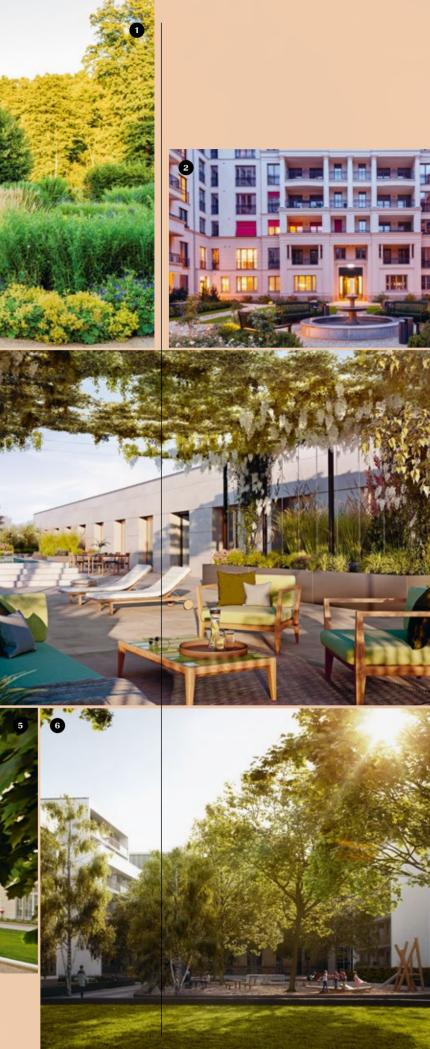
Part of a peaceful, restful haven is an environment of nature and plants...

"

1 Nikolaus Ziegert's private garden in Brandenbur

- 2 Rose gardens in Charlottenburg-Wilmersdorf Berlin
- **3** Planned courtyard for the PURE in Berlin-Friedrichshain
- Planned patio for the PURE in Berlin-Friedrichshain
- 5 The courtyard garden of the Cumberland House, Berlin-Charlottenburg
- 6 'Am Schlosspark', Berlin-Charlottenburg





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By Till Johannes Brühöfener-McCourt Head of Research



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Out of the present,

just a moment in the measurement of time, we must analyse the past to see in it patterns of behaviour that allow us a brief look at what is to come. And that in full awareness of Dan Ariely's (Professor of Psychology and Behavioural Economics, Duke University) rationale: "...that from a behavioural economics perspective we are fallible, easily confused, not that smart, and often irrational."

It seems as though the last few years of this decade have shown no systematic "as if" patterns of behaviour on the residential property markets, as might have been observed before the last real estate credit crisis in den USA. Instead, developments are consistent with fundamental micro as well as macroeconomic data pertaining to the different residential property markets and their market segments.

We can however observe societal developments that will also have a lasting influence on the behavioural patterns in German residential property markets. We should pay close attention to these.

For one thing the steady integration of a common European sphere of activity promotes population movements between countries. Something from which thriving and well-connected regions will increasingly profit. And this will lead to even greater internationalisation of the corresponding residential property markets.

On the other hand we can assume that mutually reinforcing developments, like the societal trend towards an "urban lifestyle," the vacating of rural areas and the withdrawal of the state from across-the-board provisions with modern, up-to-date infrastructure, will increase the demand for living space in thriving metropolitan areas even further.

The process of private pension and retirement plans, which in its current form is still more or less in its infancy, will over the coming decades yield new behavioural patterns defining the residential property markets. "Empty nesters" will waste no time looking for age-appropriate residential property in environments with an urban infrastructure. Furthermore, residential property as a product, whether as a capital investment or for personal use to prevent poverty in later life through rental arrears, will be a crucial component of private retirement planning.

These new or else increasingly influential behavioural patterns that are emerging for the future are part of a continual rise in the complexity and differentiation of the residential property markets typical of contemporary societal systems. More than ever we need more comprehensive analyses to ensure these developments are accompanied by innovative products, sales activities and marketing measures. This is what motivates us! It is for this reason, that Ziegert research observes markets not just from a regional, national or international perspective. It also conducts differentiated analysis of submarkets and segments with a focus on understanding the dynamics particular to each.

A: SUPPLY AND DEMAND IN THE TOP 8 CITIES

Supply and demand (condominium) in the top 8 cities 2017
Percentage distribution of OFFERS by living space

 \bigcirc

	<= 25 m²	26-55 m²	56-75 m²	76-95 m²	96-110 m²	111-140 m ²	> 140 m²	Base value	1 room	2 rooms	3 rooms	4 rooms	>= 5 rooms	Base value
Berlin	0.5%	22.8%	26.7%	15.5%	9.4%	13.7%	11.5%	41,240	12.6%	35.0%	27.9%	14.5%	10.0%	41,240
Munich	1.2%	19.5%	23.6%	25.2%	13.1%	9.8%	7.6%	4,167	12.0%	28.0%	36.3%	17.5%	6.2%	4,167
Hamburg	0.4%	15.5%	23.4%	22.8%	13.0%	14.3%	10.6%	7,857	6.2%	28.5%	41.0%	17.2%	7.1%	7,857
Frankfurt	0.3%	13.4%	21.1%	22.8%	12.6%	15.1%	14.6%	10,936	6.9%	22.7%	37.4%	23.8%	9.2%	10,936
Cologne	1.4%	21.3%	26.7%	22.4%	10.4%	10.0%	7.8%	3,325	10.8%	30.5%	37.3%	16.2%	5.2%	3,325
Düsseldorf	1.2%	15.5%	20.2%	20.0%	13.1%	14.7%	15.3%	3,612	9.1%	27.6%	37.2%	19.7%	6.4%	3,612
Stuttgart	0.5%	21.7%	28.8%	22.9%	10.9%	9.8%	5.2%	4,821	8.4%	29.5%	41.0%	15.2%	6.0%	4,821
Leipzig	0.3%	29.9%	29.4%	13.9%	6.2%	11.9%	8.4%	7,414	6.5%	43.9%	27.4%	15.3%	6.9%	7,414

Percentage distribution of OFFERS by number of rooms

	Percentage distribution of SEARCHES by living space								Percentage distribution of SEARCHES by number of rooms					
	<= 25 m²	26-55 m²	56-75 m²	76-95 m²	96-110 m²	111-140 m ²	> 140 m²	Base value	1 room	2 rooms	3 rooms	4 rooms	>= 5 rooms	Base value
Berlin	0.8%	24.9%	28.3%	24.4%	12.7%	6.5%	2.5%	35,395	12.3%	36.9%	34.0%	14.2%	2.6%	42,915
Munich	3.1%	28.5%	26.8%	23.8%	10.5%	5.4%	2.0%	6,647	14.8%	34.6%	33.2%	15.6%	1.8%	7,831
Hamburg	1.0%	23.7%	29.7%	25.9%	11.8%	5.7%	2.1%	8,439	9.7%	36.6%	34.7%	16.2%	2.8%	10,858
Frankfurt	1.5%	20.7%	25.0%	27.2%	14.6%	7.9%	3.1%	13,680	9.9%	30.1%	36.3%	20.6%	3.0%	18,883
Cologne	1.9%	23.1%	29.2%	27.9%	11.1%	5.6%	1.1%	4,819	8.8%	32.6%	38.6%	17.5%	2.4%	6,446
Düsseldorf	1.2%	18.8%	26.4%	27.6%	15.7%	8.3%	2.0%	6,909	7.8%	31.1%	39.7%	18.9%	2.4%	9,598
Stuttgart	1.5%	20.0%	29.6%	27.2%	14.0%	6.3%	1.3%	9,301	8.1%	29.2%	38.7%	21.1%	2.9%	11,452
Leipzig	1.5%	30.1%	29.1%	20.9%	11.7%	5.2%	1.5%	2,898	10.1%	40.6%	31.7%	15.0%	2.6%	3,604

	Supply	and dem	and (rent	al apartr	nents) in	the top 8	017								
	Percentage distribution of OFFERS by living space									Percentage distribution of OFFERS by number of rooms					
	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$									2 rooms	3 rooms	4 rooms	>= 5 rooms	Base value	
Berlin	0.2%	27.6%	35.3%	18.9%	7.0%	6.0%	5.1%	57,940	15.3%	43.6%	28.5%	9.3%	3.2%	57,940	
Munich	2.4%	29.6%	26.8%	20.7%	8.7%	7.8%	4.0%	17,948	21.3%	36.9%	29.9%	9.4%	2.4%	17,948	
Hamburg	0.8%	28.0%	33.9%	19.8%	7.5%	6.3%	3.7%	16,924	12.0%	43.8%	33.2%	8.8%	2.1%	16,924	
Frankfurt	1.8%	19.8%	23.8%	20.5%	13.2%	12.4%	8.5%	14,436	11.7%	32.3%	36.4%	15.1%	4.5%	14,436	
Cologne	2.7%	28.0%	30.4%	20.8%	8.2%	6.5%	3.4%	12,046	16.5%	38.9%	34.1%	8.6%	1.8%	12,046	
Düsseldorf	1.4%	24.7%	27.5%	20.4%	10.6%	9.3%	6.0%	12,835	13.4%	38.4%	34.6%	10.5%	3.2%	12,835	
Stuttgart	2.7%	26.3%	28.6%	21.1%	10.2%	8.4%	2.7%	7,816	13.9%	34.4%	37.7%	11.2%	2.8%	7,816	
Leipzig	1.1%	31.6%	39.1%	13.9%	5.1%	5.6%	3.5%	25,310	12.4%	44.2%	30.9%	9.8%	2.7%	25,310	

	Percenta	Percentage distribution of SEARCHES by living space								Percentage distribution of SEARCHES by number of rooms					
	<= 25 m²	26-55 m²	56-75 m²	76-95 m²	96-110 m²	111-140 m ²	> 140 m²	Base value	1 room	2 rooms	3 rooms	4 rooms	>= 5 rooms	Base value	
Berlin	1.9%	40.3%	34.4%	16.6%	4.3%	1.9%	0.7%	116,667	27.1%	41.7%	23.7%	6.1%	1.3%	219,075	
Munich	4.1%	46.7%	30.8%	12.8%	3.4%	1.7%	0.5%	51,299	27.9%	43.4%	22.6%	5.4%	0.7%	90,046	
Hamburg	2.3%	45.0%	35.4%	12.5%	3.1%	1.2%	0.4%	37,842	23.3%	46.3%	24.1%	5.5%	0.8%	61,271	
Frankfurt	3.3%	43.5%	31.2%	15.0%	4.4%	2.0%	0.6%	29,232	23.4%	42.9%	26.2%	6.8%	0.8%	50,618	
Cologne	3.7%	46.3%	32.8%	13.1%	2.9%	1.1%	0.2%	44,569	22.0%	43.3%	28.0%	6.1%	0.7%	68,087	
Düsseldorf	2.1%	39.8%	32.8%	18.4%	4.9%	1.6%	0.4%	29,346	19.9%	43.1%	28.8%	7.5%	0.7%	43,302	
Stuttgart	3.6%	40.5%	34.6%	14.9%	4.3%	1.5%	0.6%	13,448	25.0%	41.8%	25.8%	6.5%	0.9%	30,291	
Leipzig	1.6%	35.8%	38.6%	18.5%	3.8%	1.2%	0.4%	14,992	16.2%	39.5%	32.5%	10.4%	1.4%	22,104	

	Asking prices for vaca	nt condo	miniums in the	e top 8 cities	s in 2017		
		Median (€/m²)	0.25 quantile (€/m²)	0.75 quantile (€/m²)	0.95 quantile (€/m²)	Max. (€/m²)	Max. unit price (€)
Berlin	Total	4.138	3.300	5.050	6,897	8.934	3,150,000
	New build	5.000	4.235	5,888	7.722	8.934	2.850.000
	First-time occupancy	4,800	4,108	5,710	7,629	8,934	2,850,000
	Non-first-time occupancy	3,708	2,932	4,587	6,214	8,925	3,150,000
Munich	Total	6,964	6,160	8,471	11,711	15,786	4,900,000
	New build	7,279	6,653	8,556	11,963	15,786	4,900,000
	First-time occupancy	7,335	6,649	8,763	12,475	15,786	4,900,000
	Non-first-time occupancy	6,539	5,696	8,118	11,000	15,669	4,770,000
Hamburg	Total	4,475	3,503	5,850	8,402	12,676	3,600,000
-	New build	4,931	4,254	6,295	8,791	12,598	3,599,000
	First-time occupancy	4,897	4,245	6,220	8,785	12,598	3,599,000
	Non-first-time occupancy	3,904	3,121	5,348	8,019	12,676	3,600,000
Frankfurt	Total	4,923	3,746	6,141	8,878	11,667	3,950,000
	New build	5,483	4,739	6,437	9,054	11,646	3,950,000
	First-time occupancy	5,500	4,748	6,513	9,150	11,646	3,950,000
	Non-first-time occupancy	4,220	3,314	5,750	8,394	11,667	3,800,000
Cologne	Total	3,415	2,500	4,455	6,008	8,418	2,925,000
	New build	4,520	3,686	5,501	6,730	8,418	2,099,000
	First-time occupancy	4,526	3,645	5,511	6,779	8,418	2,925,000
	Non-first-time occupancy	3,038	2,275	4,080	5,455	8,211	2,200,000
Düsseldorf	Total	3,756	2,866	4,668	6,913	9,721	2,850,000
	New build	4,476	4,088	5,377	7,363	9,721	2,850,000
	First-time occupancy	4,500	3,978	5,389	7,368	9,721	2,850,000
	Non-first-time occupancy	3,145	2,553	3,982	5,934	9,500	2,750,000
Stuttgart	Total	4,041	3,358	5,057	7,000	9,655	2,080,000
	New build	5,861	5,158	6,901	8,483	9,655	2,080,000
	First-time occupancy	5,562	4,878	6,642	8,257	9,655	2,080,000
	Non-first-time occupancy	3,750	3,205	4,444	5,820	9,356	1,890,000
Leipzig	Total	1,951	1,227	3,568	4,334	4,549	1,359,000
	New build	3,591	3,210	3,991	4,369	4,549	1,303,575
	First-time occupancy	3,674	3,350	4,138	4,493	4,549	1,320,000
	Non-first-time occupancy	1,303	1,061	1,639	2,498	4,530	1,359,000

Asking prices for tenanted apartments in the top 8 cities in 2017

		Median (€/m²)	0.25 quantile (€/m²)	0.75 quantile (€/m²)	0.95 quantile (€/m²)	Median unit price (€)	0.25 quantile unit price (€)	0.75 quantile unit price (€)	0.95 quantile unit price (€)
Berlin	Total	3,156	2,545	3,849	4,764	199,500	139,772	299,000	719,000
	50-70 m ² living space	2,987	2,328	3,693	4,538	179,000	139,900	219,000	279,000
Munich	Total	6,165	5,252	7,550	9,863	355,000	250,000	480,000	785,250
	50-70 m ² living space	6,004	5,287	7,496	9,714	359,000	313,025	446,000	589,100
Hamburg	Total	3,200	2,703	4,234	5,888	189,000	142,000	259,000	507,400
	50-70 m ² living space	3,046	2,632	3,969	5,733	185,000	159,200	240,000	353,000
Frankfurt	Total	3,817	2,824	4,728	6,248	238,000	179,500	359,250	571,700
	50-70 m ² living space	3,627	2,936	4,621	5,875	220,000	173,891	261,250	339,650
Cologne	Total	2,924	2,234	3,829	5,179	169,000	120,000	240,000	423,000
	50-70 m ² living space	2,918	2,150	3,800	4,728	175,000	129,000	219,500	307,940
Düsseldorf	Total	3,060	2,442	3,868	4,969	192,750	125,720	316,375	728,900
	50-70 m ² living space	2,757	2,354	3,151	3,955	159,000	131,883	194,625	245,600
Stuttgart	Total	3,571	3,064	4,097	4,918	212,500	165,000	290,000	393,575
	50-70 m ² living space	3,455	3,000	3,882	4,871	195,000	169,000	232,375	289,250
Leipzig	Total	1,494	1,240	1,800	2,393	85,000	63,375	118,888	208,700
	50-70 m ² living space	1,461	1,210	1,708	2,057	85,000	69,900	100,000	140,000

Gross initial yield of tenanted apartments for sale in the top 8 cities in 2017

		Median (in %)	0.25 quantile (in %)	0.75 quantile (in %)	0.95 quantile (in %)		Median (in %)	0.25 quantile (in %)	0.75 quantile (in %)	0.95 quantile (in %)
Berlin	Total	2.75	2.20	3.57	5.27	50-70 m ² living space	2.91	2.37	3.69	5.28
Munich	Total	2.80	2.32	3.27	4.30	50-70 m ² living space	2.74	2.34	3.19	4.02
Hamburg	Total	3.56	3.06	4.13	5.37	50-70 m ² living space	3.51	3.03	4.09	5.05
Frankfurt	Total	3.44	2.95	4.00	5.42	50-70 m ² living space	3.52	3.12	4.09	5.13
Cologne	Total	4.00	3.28	4.93	7.95	50-70 m ² living space	3.97	3.13	4.93	7.32
Düsseldorf	Total	3.88	3.27	4.77	6.46	50-70 m ² living space	3.98	3.62	4.70	5.34
Stuttgart	Total	3.50	3.05	4.06	5.23	50-70 m ² living space	3.53	3.08	4.03	5.11
Leipzig	Total	4.78	4.02	5.70	7.69	50-70 m ² living space	4.80	4.06	5.60	7.82

Net rents excluding heating in the top 8 cities in 2017

		Median (€/m²)	0.25 quantile (€/m²)	0.75 quantile (€/m²)	0.95 quantile (€/m²)	Max rent w/o heat (€/m²)	Max rent w/o heat (€/mo.)
Berlin	Total	10.00	8.00	12.48	16.51	21.72	7,350
	First-time occupancy	12.37	10.60	14.94	18.04	21.70	7,214
	Non-first-time occupancy	9.20	7.54	11.47	15.33	21.72	7,350
Munich	Total	18.01	15.40	22.89	33.01	41.61	11,960
	First-time occupancy	19.55	17.01	24.00	31.92	41.61	8,935
	Non-first-time occupancy	17.45	14.94	22.24	33.33	41.61	11,960
Hamburg	Total	11.61	9.65	14.00	18.03	23.61	6,950
	First-time occupancy	13.90	12.00	15.90	20.00	23.55	6,900
	Non-first-time occupancy	11.00	9.32	13.33	17.33	23.61	6,950
Frankfurt	Total	13.97	12.00	16.00	20.27	26.67	10,000
	First-time occupancy	14.75	13.25	16.82	21.36	26.67	6,900
	Non-first-time occupancy	13.37	11.50	15.46	20.00	26.67	10,000
Cologne	Total	11.00	9.47	12.82	16.00	21.67	6,000
	First-time occupancy	12.50	11.00	14.21	17.33	21.50	5,000
	Non-first-time occupancy	10.63	9.20	12.38	15.33	21.67	6,000
Düsseldorf	Total	10.50	9.23	12.17	15.66	21.00	6,800
	First-time occupancy	12.06	10.59	13.75	17.20	21.00	5,000
	Non-first-time occupancy	10.02	9.05	11.75	15.00	20.97	6,800
Stuttgart	Total	15.23	12.16	22.08	29.79	38.00	4,723
	First-time occupancy	15.59	13.67	18.09	28.72	36.96	4,723
	Non-first-time occupancy	15.00	11.92	22.85	29.80	38.00	3,990
Leipzig	Total	6.51	5.74	7.80	10.78	13.56	3,750
	First-time occupancy	8.75	7.64	10.57	12.00	13.15	2,477
	Non-first-time occupancy	6.25	5.55	7.05	8.89	13.56	3,750

Market for parking spaces in the top 8 cities 2017

Product share of the total market	(in %)

	Parking deck, garage	Outdoor parking space, carport	Not specified
Berlin	63.6	24.4	12.0
Munich	85.1	8.4	6.5
Hamburg	69.4	16.3	14.2
Frankfurt	73.0	3.6	23.4
Cologne	69.2	19.8	11.0
Düsseldorf	80.3	12.8	6.9
Stuttgart	66.8	21.5	11.7
Leipzig	61.2	16.4	22.4

Vendors of condominiums in the top 8 cities in 2017 Total

Total				New build			
Real estate agents (share in %)	Property developer (share in %)	Private indi- viduals (share in %)	Other (share in %)	Real estate agents (share in %)	Property developer (share in %)	Private indi- viduals (share in %)	Other (share in %)
74.2	11.4	3.0	11.4	64.2	30.5	1.4	3.9
53.4	23.7	8.8	14.2	32.8	56.5	3.7	7.0
56.8	17.3	6.3	19.4	42.0	39.8	1.5	15.9
60.1	15.2	10.6	14.2	44.5	41.3	4.4	9.8
58.8	7.6	11.8	21.8	49.7	23.5	5.2	21.7
73.1	5.7	8.1	13.1	78.7	16.4	1.9	3.0
55.9	11.9	11.9	20.3	34.9	51.7	3.8	9.6
42.7	21.6	1.8	33.9	26.7	65.2	0.5	7.6
	Real estate agents (share in %) 74.2 53.4 56.8 60.1 58.8 73.1 55.9	Real estate agents Property developer (share in %) 74.2 11.4 53.4 23.7 56.8 17.3 60.1 15.2 58.8 7.6 73.1 5.7 55.9 11.9	Real estate agentsProperty developer (share in %)Private indi- viduals (share in %)74.211.453.423.78.856.817.360.115.210.658.87.673.15.755.911.9	Real estate agents (share in %)Property developer (share in %)Private indi- viduals (share in %)Other (share in %)74.211.43.011.453.423.78.814.256.817.36.319.460.115.210.614.258.87.611.821.873.15.78.113.155.911.911.920.3	Real estate agents (share in %)Property developer (share in %)Private indi- viduals (share in %)Other (share in %)Real estate agents (share in %)74.211.43.011.453.423.78.814.256.817.36.319.460.115.210.614.258.87.611.821.873.15.78.113.175.911.911.920.3	Real estate agents (share in %)Property developer (share in %)Private indi- viduals (share in %)Other (share in %)Real estate agents (share in %)Property developer (share in %)74.211.43.011.430.514.432.856.556.817.36.319.442.039.860.115.210.614.244.541.358.87.611.821.849.723.573.15.78.113.178.716.455.911.911.920.334.951.7	Real estate agents (share in %)Property developer (share in %)Private indi- viduals (share in %)Other (share in %)Real estate agents (share in %)Property viduals (share in %)Private indi- viduals (share in %)74.211.43.011.464.230.51.453.423.78.814.232.856.53.756.817.36.319.442.039.81.560.115.210.614.244.541.34.458.87.611.821.849.723.55.273.15.78.113.178.716.41.955.911.911.920.334.951.73.8

Unit price (median) per accessory unit title (in €)

Parking deck, garage	Outdoor parking space, carport	Not specified
30,000	15,000	27,000
20,000	10,000	21,750
24,500	9,800	20,000
24,900	15,000	20,000
20,000	10,000	19,000
24,000	10,000	19,900
19,900	10,000	15,000
19,500	7,500	20,000

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B: SUPPLY AND DEMAND IN THE METROPOLITAN REGIONS (TOP 8 CITIES)

Offers in the metropolitan region of BERLIN in 2017 core cities: Berlin, Potsdam

RENTAL APARTMENTS	Type of area	Number	Living space (m ²)	Median (€/m²)	0.25 quantile (€/m²)	0.75 quantile (€/m²)	0.95 quantile (€/m²)
First-time occupancy	Core cities	15,337	1,268,214	12.06	10.50	14.55	18.00
	Suburbs of the core cities	256	20,662	9.93	9.00	10.55	11.99
	Commuter belt	629	50,151	9.95	8.57	11.00	13.54
Other offers	Core cities	45,756	3,280,921	9.20	7.56	11.34	15.24
	Suburbs of the core cities	1,164	83,788	8.00	7.50	9.00	10.69
	Commuter belt	1,673	118,345	7.78	6.99	8.53	9.98
CONDOMINIUMS							
First-time occupancy	Core cities	11,410	1,158,509	4,790	4,012	5,705	7,541
	Suburbs of the core cities	555	45,226	3,667	3,363	3,765	3,823
	Commuter belt	410	35,643	3,506	3,096	3,626	5,586
Resale	Core cities	20,472	1,812,050	3,681	2,900	4,550	6,214
	Suburbs of the core cities	372	27,603	2,094	1,722	2,596	3,827
	Commuter belt	595	41,718	1,776	1,467	2,155	3,121
Let	Core cities	11,742	903,963	3,088	2,456	3,793	4,730
	Suburbs of the core cities	252	15,778	1,993	1,752	2,169	2,648
	Commuter belt	371	25,451	1,724	1,486	1,964	2,467

Offers in the metropolitan region of MUNICH in 2017 core city: Munich

RENTAL APARTMENTS	Type of area	Number	Living space (m²)	Median (€/m²)	0.25 quantile (€/m²)	0.75 quantile (€/m²)	0.95 quantile (€/m²)
First-time occupancy	Core city	4,788	378,414	19.54	17.00	24.00	31.92
	Suburbs of the core city	932	75,346	14.47	13.49	15.87	19.22
	Commuter belt	1,315	109,648	12.47	11.07	13.85	17.92
Other offers	Core city	13,192	942,850	17.43	14.93	22.22	33.33
	Suburbs of the core city	3,128	225,929	13.00	11.87	14.50	19.13
	Commuter belt	3,478	257,591	11.03	9.89	12.46	15.07
CONDOMINIUMS							
First-time occupancy	Core city	3,933	365,907	7,335	6,649	8,763	12,475
	Suburbs of the core city	420	39,127	5,872	5,445	6,380	7,410
	Commuter belt	909	78,739	4,755	3,900	5,730	7,156
Resales	Core city	5,191	441,549	6,539	5,696	8,118	11,000
	Suburbs of the core city	1,309	106,316	4,877	4,326	5,583	6,579
	Commuter belt	975	79,228	4,262	3,750	4,864	6,194
Let	Core city	1,815	116,562	6,078	5,171	7,301	9,718
	Suburbs of the core city	422	28,943	4,654	4,000	5,176	6,373
	Commuter belt	557	33,873	4,034	3,582	4,800	5,178

Offers in the metropolitan region of Hamburg in 2017

	core city: Free and Hanseatic City	of Hamburg
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RENTAL APARTMENTS	Type of area	Number	Living space (m²)	Median (€/m²)	0.25 quantile (€/m²)	0.75 quantile (€/m²)	0.95 quantile (€/m²)
First-time occupancy	Core city	3,395	275,480	13.89	12.00	15.90	20.00
	Suburbs of the core city	793	63,482	11.10	10.02	12.20	13.30
	Commuter belt	780	61,553	9.95	9.00	10.52	12.06
Other offers	Core city	13,541	963,831	11.00	9.32	13.33	17.33
	Suburbs of the core city	2,829	197,629	9.09	8.23	10.00	11.48
	Commuter belt	3,599	247,226	7.88	7.00	8.84	11.10
CONDOMINIUMS							
First-time occupancy	Core city	3,141	316,393	4,897	4,245	6,220	8,785
	Suburbs of the core city	705	61,370	3,564	3,468	3,963	4,539
	Commuter belt	365	31,243	3,159	2,898	3,635	6,455
Resale	Core city	4,045	362,743	3,904	3,120	5,349	8,018
	Suburbs of the core city	1,302	95,755	2,207	1,841	2,726	3,458
	Commuter belt	1,221	101,353	1,780	1,533	2,288	3,194
Let	Core city	673	44,120	3,465	2,818	4,500	5,939
	Suburbs of the core city	249	16,895	2,308	1,971	2,613	3,193
	Commuter belt	167	11,122	1,816	1,394	2,264	3,458

Offers in the metropolitan region of FRANKFURT in 2017 core cities: Darmstadt, Frankfurt, Wiesbaden, Mainz

RENTAL APARTMENTS	Type of area	Number	Living space (m²)	Median (€/m²)	0.25 quantile (€/m²)	0.75 quantile (€/m²)	0.95 quantile (€/m²)
First-time occupancy	Core cities	7,241	665,888	14.01	12.19	16.00	20.20
	Suburbs of the core cities	3,024	265,111	11.03	9.86	12.50	14.85
	Commuter belt	2,046	178,772	10.00	8.95	11.56	13.79
Other offers	Core cities	16,625	1,287,315	11.86	10.00	14.21	18.65
	Suburbs of the core cities	11,180	843,864	9.50	8.39	10.67	13.04
	Commuter belt	8,218	630,869	8.39	7.46	9.52	11.92
CONDOMINIUMS							
First-time occupancy	Core cities	2,284	238,958	4,780	4,090	5,767	8,083
	Suburbs of the core cities	2,274	230,934	3,474	3,128	4,024	5,100
	Commuter belt	1,515	150,895	3,247	2,876	3,635	4,869
Resale	Core cities	3,870	366,015	3,461	2,821	4,555	7,213
	Suburbs of the core cities	4,259	365,082	2,418	1,909	2,981	3,961
	Commuter belt	3,573	308,483	2,084	1,659	2,557	3,508
Let	Core cities	1,302	94,509	3,016	2,580	3,852	6,010
	Suburbs of the core cities	1,195	84,613	2,338	1,957	2,835	3,854
	Commuter belt	967	70,152	2,125	1,728	2,569	3,419

Offers in the metropolitan region of COLOGNE in 2017 core cities: Cologne, Bonn

RENTAL APARTMENTS	Type of area	Number	Living space (m²)	Median (€/m²)	0.25 quantile (€/m²)	0.75 quantile (€/m²)	0.95 quantile (€/m²)
First-time occupancy	Core cities	3,605	300,739	11.92	10.50	13.50	16.50
	Suburbs of the core cities	1,425	122,459	10.00	9.00	10.97	12.60
	Commuter belt	559	48,991	8.95	7.95	9.86	13.91
Other offers	Core cities	13,737	976,931	10.19	8.97	12.00	15.00
	Suburbs of the core cities	7,136	535,175	8.00	7.10	9.00	11.11
	Commuter belt	3,112	237,944	7.20	6.46	8.18	13.31
CONDOMINIUMS							
First-time occupancy	Core cities	1,178	117,287	4,131	3,467	5,054	6,506
	Suburbs of the core cities	749	72,252	3,395	3,049	3,678	4,162
	Commuter belt	384	37,178	2,875	2,600	3,377	5,984
Resale	Core cities	3,916	326,967	2,860	2,165	3,832	5,215
	Suburbs of the core cities	2,499	209,649	1,949	1,420	2,500	3,802
	Commuter belt	825	71,809	1,823	1,289	2,339	4,037
Let	Core cities	1,335	92,080	2,706	2,179	3,702	4,975
	Suburbs of the core cities	534	37,230	1,997	1,564	2,449	3,205
	Commuter belt	222	16,200	1,743	1,364	2,248	4,412

Offers in the metropolitan region of DÜSSELDORF in 2017 core cities: Düsseldorf, Duisburg, Krefeld, Mönchengladbach

RENTAL APARTMENTS	Type of area	Number	Living space (m ²)	Median (€/m²)	0.25 quantile (€/m²)	0.75 quantile (€/m²)	0.95 quantile (€/m²)
First-time occupancy	Core cities	3,988	340,514	10.50	8.00	12.75	16.01
	Suburbs of the core cities	1,655	136,719	8.89	7.50	10.00	12.14
	Commuter belt	319	26,603	8.00	7.20	8.89	10.00
Other offers	Core cities	26,637	1,893,627	6.98	5.79	9.62	13.00
	Suburbs of the core cities	16,350	1,173,743	6.95	6.00	8.05	9.84
	Commuter belt	1,879	144,756	6.29	5.59	7.00	8.25
CONDOMINIUMS							
First-time occupancy	Core cities	1,796	191,600	4,203	3,315	4,893	7,097
	Suburbs of the core cities	1,288	127,678	3,075	2,736	3,600	4,219
	Commuter belt	231	21,082	2,765	2,399	3,180	3,715
Resale	Core cities	1,710	115,936	1,346	842	2,660	4,227
	Suburbs of the core cities	1,025	72,165	1,615	1,222	2,112	2,786
	Commuter belt	98	7,458	1,278	902	1,764	2,387
Let	Core cities	7,636	600,518	1,150	698	2,391	4,482
	Suburbs of the core cities	5,106	412,078	1,525	1,099	2,015	2,936
	Commuter belt	715	60,780	1,273	816	1,596	2,180

Offers in the metropolitan region of STUTTGART in 2017 core city: Stuttgart

RENTAL APARTMENTS	Type of area	Number	Living space (m²)	Median (€/m²)	0.25 quantile (€/m²)	0.75 quantile (€/m²)	0.95 quantile (€/m²)
First-time occupancy	Core city	1,337	108,441	15.58	13.64	18.09	28.72
	Suburbs of the core city	1,412	118,617	11.67	10.37	13.13	19.97
	Commuter belt	586	50,940	10.00	9.06	11.44	12.94
Other offers	Core city	6,495	474,125	15.00	11.90	22.85	29.80
	Suburbs of the core city	6,559	470,400	10.02	8.99	11.80	20.44
	Commuter belt	1,959	142,408	8.75	7.81	9.79	11.61
CONDOMINIUMS							
First-time occupancy	Core city	549	52,769	5,562	4,878	6,642	8,257
	Suburbs of the core city	2,303	191,591	4,300	3,689	5,084	5,648
	Commuter belt	755	67,701	3,386	3,062	3,798	4,399
Resale	Core city	1,960	159,106	3,750	3,205	4,444	5,820
	Suburbs of the core city	4,810	372,101	2,874	2,433	3,309	4,020
	Commuter belt	1,828	140,727	2,431	2,000	2,813	3,358
Let	Core city	818	55,237	3,623	3,107	4,141	5,702
	Suburbs of the core city	1,518	100,091	2,746	2,386	3,117	3,729
	Commuter belt	541	34,122	2,349	2,057	2,767	3,421

Offers in the metropolitan region of Leipzig in 2017 core cities: Leipzig, Halle (BBSR source figures have been amended)

RENTAL APARTMENTS	Type of area	Number	Living space (m²)	Median (€/m²)	0.25 quantile (€/m²)	0.75 quantile (€/m²)	0.95 quantile (€/m²)
First-time occupancy	Core cities	5,402	490,885	8.50	7.40	10.31	12.00
	Suburbs of the core cities	65	5,671	8.28	7.34	9.20	10.07
	Commuter belt	100	8,575	7.37	6.00	8.50	9.82
Other offers	Core cities	26,165	1,646,278	6.09	5.50	7.00	8.67
	Suburbs of the core cities	833	51,046	5.79	5.36	6.71	8.50
	Commuter belt	1,410	86,952	5.51	5.03	6.02	7.00
CONDOMINIUMS							
First-time occupancy	Core cities	2,439	276,093	3,623	3,240	4,100	4,490
	Suburbs of the core cities	267	33,026	3,350	3,000	3,636	3,880
	Commuter belt	38	3,148	2,850	2,503	3,219	3,971
Resale	Core cities	3,390	227,725	1,295	1,061	1,631	2,464
	Suburbs of the core cities	206	13,822	1,474	999	1,819	4,178
	Commuter belt	649	39,674	915	717	1,010	1,413
Let	Core cities	2,038	130,025	1,494	1,229	1,804	2,391
	Suburbs of the core cities	210	13,445	1,399	1,279	1,475	2,237
	Commuter belt	235	14,773	1,019	914	1,139	1,595

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C: KEY FIGURES OF THE TOP 8 CITIES CONDOMINIUM MARKETS (Figures provided by the respective committee of assessors)

Berlin

2016 2017

Change compared t

2016-2017

Number of sales by purchase price category

	3.000 to	4.000 to	5.500 to	7.500 to	from	Total price	Total price
	3.999 €/m²	5.499 €/m²	7.499 €/m²	9.999 €/m²	10,000 €/m²	1,0 to 2,5 Mio. €	from 2,5 Mio. €
2016	4,538	4,160	1,194	171	56	253	24
2017	4,333	4,149	1,970	332	80	242	27
Change compared to 2016–2017	-4.5%	-0.3%	65.0%	94.2%	42.9%	-4.3%	12.5%

Number of first sales and resales First sales Resales Number Number 5,464 13,133 4,882 11,707

-10.7%

Number and purchase prices (total market - first sale - resale)

-10.9%

		0.25 quantile (PP [€/m²])	0.50 quantile (PP [€/m²])	0.75 quantile (PP [€/m²])	0.95 quantile (PP [€/m²])	Maximum (PP [€/m²])	Mean price (€/m²)	Nr of condo sales (with floor space data provided)
First sales	2016	3,700	4,382	5,230	6,938	30,061	4,591	5,347
	2017	4,028	4,910	6,120	7,805	18,201	5,136	4,830
	Change compared to 2016–2017	8.9%	12.0%	17.0%	12.5%	-39.5%	11.9%	-9.7%
Resales	2016	1,840	2,529	3,344	4,847	12,280	2,705	12,589
	2017	2,056	2,903	3,802	5,248	23,600	3,044	11,010
	Change compared to 2016–2017	11.7%	14.8%	13.7%	8.3%	92.2%	12.5%	-12.5%
Total market	2016	2,067	2,971	4,101	5,846	30,061	3,209	20,573
	2017	2,365	3,379	4,565	6,759	23,600	3,626	18,331
	Change compared to 2016–2017	14.4%	13.7%	11.3%	15.6%	-21.5%	13.0%	-10.9%

Key transaction figures for the total market - (number, sales volume, average prices)

	2016	2017	Change compared to 2016/2017
Number of all condos sold	21,426	19,436	-9.3%
Transaction volume (in €)	5,329,514,020	5,236,927,254	-1.7%
Number of sales: condos with floor space data provided	20,573	18,331	-10.9%
Transaction volume of all sold condos with floor space data provided (in €)	5,084,607,497	4,924,806,485	-3.1%
Floor-space turnover	1,509,955	1,315,186	-12.9%
Max. purchase price of a condo (in $\textcircled{\bullet}$)	12,840,000	17,610,000	37.1%

Munich

Number of sold condominiums of which new-builds Median price overall market Median price new building Maximum price per m² achieved Number of condominiums sold at over €1 million Terpnericing volume condominiums Transaction volume condomi of which first sales of which resales

Key transaction figures for the total market - (number, prices and floor space)

2017
9950 (rounded)
3,000 (rounded)
6,500 €/m²
8,000 €/m²
28,500 €/m² (rounde
660 (rounded)
€ 4,455 million
€ 1,720 million
€ 2,735 million

Hamburg

0045	Number		Number		Turr	over in mil	llion €	-	space m ²		
2016 2017	2,010 1,761		4,999 4,539			2,420 2,554			6,000 7,200		
	Number of sales b	v nuch-		00010/10000	nurchess						
		y purcna)00 to	5.500 to	egory/max. 7.500 to	fror		Total price	Total	price !	Max price	Max. unit p
	3.999 €/m² 5.49	99 €/m	7.499 €/m²	9.999 €/m	² 10.000	€/m² > 4	€1,000,0	00 >€2,5	600,000	Max. price per m ²	in €
2016 2017		,982 ,622	693 868	147 237	72 77		247 278		30 47	23,437 28,400	5,220,00 9,500,00
	Duration and a set				>						
	Purchase prices (1 Total condominium n		ket – new-bi	iilds – resa	- I	uild oonde		built no m	are then the	ee years ag	
		quantile	0.75 quantile	0.95-quar		quantile	0.50 qua		75 quantile	, ,	5-quantile
2016 2017	2,945 3	3,958 1,332	4,945 5,507	7,132 8,034	3	953 315	4,62 5,21	3	5,648 6,175		7,884 8,884
-011	Resales/portfolio	.,	0,001	0,001		010	0,=1		0,110		0,001
		quantile	0.75 quantile	0.95-quar	tile						
2016 2017		3,438 3,750	4,554 4,934	6,505 7,462							
Frankfu	rt										
	Number/share	e of first s	sales and re	sales							
	First sales of ne (New-build)	w-builds	First sales of	new-builds	First sale a conversion	fter	Res	sales		Total	
2010		are in % 3.05%	Number 194	Share in % 4.36%	Number	Share in 13.749			Share in % 38.84%	Number	Share in S
2016 2017	1,635 4	2.85%	157	4.11%	611 389	10.19%	%	1,727 1,635	42.85%	4,446 3,816	100.00% 100.00%
Total	3,549 4	2.96%	351	4.25%	1,000	12.10%	/0	3,362	40.69%	8,262	100.00%
	Transaction v	olume (tu	rnover/living	g space) by	first sales	and resa	ales				
	First sales of ne (New-build)			f new-builds	First sale conversio	n		Resales		Total	
		Total area [m²]	Total PP (adjusted)[+			d)[€] are	Total ea [m²]	Total Pl (adjusted)		[m²] (adj	otal PP usted)[€] a
	879,471,847	174,873	94,561,338	18,903							
2016 2017	828,180,944	144,967	74,024,800	14,668	196,184, 128,855,	489 31	9,281 1,082	438,451,8 496,719,9	31 122,	235 1,527	7,781,163 3
		144,967		14,668		489 31			31 122,	235 1,527	7,781,163 3
2017	828,180,944	144,967 319,840	74,024,800	14,668 33,571	128,855, 325,039,	489 31 620 80	1,082 0,363	496,719,9	31 122,	235 1,527	7,781,163 3
2017	828,180,944	144,967 319,840	74,024,800 168,586,138 se prices (to 0.25 qua) 14,668 3 33,571) tal market ntile 0.50 q	128,855, 325,039, - first sale uantile 0.7	489 31 620 80 s - resal 5 quantile	1,082),363 es) 0.95 qu	496,719,93 935,171,80 nantile	31 122, 06 248, Maximu	,235 1,527 ,762 3,136 m	7,781,163 3 6,450,355 6 Max. unit pr
2017 Total	828,180,944	144,967 319,840	74,024,800 168,586,138 se prices (to 0.25 qua (PP [€/r 4,10) 14,668 33,571 otal market ntile 0.50 q n²]) (PP [1 4	128,855, 325,039, - first sale uantile 0.7 E/m²]) (P	489 31 620 80 s – resal 5 quantile P [€/m²]) 5,694	1,082),363 es) 0.95 qu (PP [€ 7,7	496,719,93 935,171,8 mantile /m²]) (P	31 122, 06 248, Maximu P (adjusted) 17,948	,235 1,527 ,762 3,136 m [€/m²]) (7,781,163 3 5,450,355 6 Max. unit pr (PP (adjusted) 5,510,00
2017 Total	828,180,944 1,707,652,791 new-builds (new-builds)'	144,967 319,840 Purcha 2016 2017 2016	74,024,800 168,586,138 se prices (to 0.25 qua (PP [€/i 4,10) 4,544 5,586) 14,668 33,571 otal market ntile 0.50 q n ²]) (PP [1 4 9 5 6 3	128,855, 325,039, - first sale uantile 0.7 C/m²]) (P 715 463 905	489 31 520 80 s − resal 5 quantile P [$€/m^2$]) 5,694 6,238 5,451	1,082 0,363 es) (PP [€ 7,7 8,3 9,3	496,719,93 935,171,84 /m²]) (P 725 349 372	31 122, 06 248, P (adjusted) 17,948 18,334 14,607	,235 1,527 ,762 3,136 m [€/m²]) (}	7,781,163 3 5,450,355 6 Max. unit pr (PP (adjusted) 5,510,00 2,630,00
2017 Total 1st sales of r 1st sales of r	828,180,944 1,707,652,791 new-builds (new-builds)'	144,967 319,840 Purcha 2016 2017 2016 2017 2016	74,024,800 168,586,138 se prices (to 0.25 qua (PP [€/i 4,10 4,54; 2,58(2,63; 2,18() 14,668 33,571 • tal market ntile 0.50 q n ²]) (PP [1 4 9 5 6 3 2 4 0 2	128,855, 325,039, - first sale uantile 0.7 2/m ²]) (P 715 463 905 398 830	489 31 620 80 \mathbf{s} $-$ resal 5 quantile \mathbf{P} \mathbf{P} $(\mathbf{E}/\mathbf{m}^2)$) $5,694$ $6,238$ $5,451$ $6,194$ $4,496$ $4,496$	1,082 0,363 es) 0.95 qu (PP [€ 7,7 8,3 9,3 8,5 9,7,7	496,719,93 935,171,80 /m²]) (P 725 349 372 916 554	31 122, 06 248, Maximu P (adjusted) 17,948 18,334 14,607 21,956 13,800	,235 1,527 ,762 3,136 m [€/m²]) (}	7,781,163 3 5,450,355 6 Max. unit pr (PP (adjusted) 5,510,00 2,630,00 2,481,00 2,350,00
2017 Total 1st sales of r 1st sales of r	828,180,944 1,707,652,791 new-builds (new-builds)' new-builds ²	144,967 319,840 Purcha 2016 2017 2016 2017	74,024,800 168,586,138 se prices (to 0.25 qua (PP [€// 4,10] 4,54(2,58(2,63) 5 2,18(2,57(14,668 33,571 otal market ntile 0.50 q n²]) (PP [i 1 4 9 5 56 3 2 4 0 2 4 3	128,855, 325,039, - first sale uantile 0.7 E/m ²]) (P 715 463 905 398	489 31 520 80 s - resal 5 quantile P [\mathcal{E}/m^2]) 5,694 6,238 5,451 6,194	1,082 0,363 es) (PP [€ 7,7 8,3 9,3 8,5 7,7 7,5	496,719,93 935,171,84 /m ²]) (P 725 349 372 216	31 122, 06 248, Maximu P (adjusted) 17,948 18,334 14,607 21,956	235 1,527 ,762 3,136 m [€/m²]) ((} ;	7,781,163 3 6,450,355 6 Max. unit pr (PP (adjusted) 5,510,00 5,510,00 2,630,00 2,481,00 2,350,00 2,600,00
2017 Total 1st sales of r 1st sales afte	828,180,944 1,707,652,791 new-builds (new-builds) ¹ new-builds ² er conversion	144,967 319,840 Purcha 2016 2017 2016 2017 2016 2017	74,024,800 168,586,138 se prices (to 0.25 qua (PP [€// 4,10] 4,54(2,58(2,63) 2,18(2,57(2,27(2,67(14,668 33,571 otal market ntile 0.50 q n*l) (PP [* 1 4 9 5 6 3 2 4 0 2 4 3 5 3	128,855, 325,039, - first sale uantile 0.7 2/m ²]) (P 715 463 905 398 830 415	489 31 620 80 \mathbf{s} - resal \mathbf{s} - \mathbf{resal} \mathbf{s} - \mathbf{s} \mathbf{s} - \mathbf{s} \mathbf{s} - \mathbf{s} <td< td=""><td>1,082 0,363 es) 0.95 qu (PP [€ 7,1 8,3 9,3 8,5 7,6 6,5</td><td>496,719,93 935,171,80 /m²]) (P 725 349 372 916 554 514</td><td>31 122, 06 248, Maximu P (adjusted) 17,948 18,334 14,607 21,956 13,800 11,305</td><td>,235 1,527 ,762 3,136 m [€/m²]) (} ; ; ; ; ; ; ; ; ; ;</td><td>Max. unit pr (PP (adjusted) 5,510,00 2,630,00 2,481,00 2,350,00 2,587,50 2,5750,00 2,587,50 2,750,00</td></td<>	1,082 0,363 es) 0.95 qu (PP [€ 7,1 8,3 9,3 8,5 7,6 6,5	496,719,93 935,171,80 /m²]) (P 725 349 372 916 554 514	31 122, 06 248, Maximu P (adjusted) 17,948 18,334 14,607 21,956 13,800 11,305	,235 1,527 ,762 3,136 m [€/m²]) (} ; ; ; ; ; ; ; ; ; ;	Max. unit pr (PP (adjusted) 5,510,00 2,630,00 2,481,00 2,350,00 2,587,50 2,5750,00 2,587,50 2,750,00
2017 Total 1st sales of r 1st sales of r 1st sales afte Resale	828,180,944 1,707,652,791 new-builds (new-builds) ¹ new-builds ² er conversion	144,967 319,840 Purcha 2016 2017 2016 2017 2016 2017 2016 2017	74,024,800 168,586,138 se prices (to 0.25 qua (PP [€// 4,10] 4,54(2,58(2,63) 5, 2,18(2,57(5, 2,27(2,88) 5, 2,88)	14,668 33,571 otal market ntile 0.50 q n"]) (PP [1 4 9 5 6 3 2 4 40 2 4 3 5 3 5 3 5 4	128,855, 325,039, - first sale uantile 0.7 C/m ²]) (P 715 463 905 398 830 415 108 547	$\begin{array}{rrrr} 489 & 31\\ 520 & 80\\ \hline & & \\ \hline \hline & & \\ \hline \hline & & \\ \hline & & \\ \hline \hline \\ \hline \hline & & \\ \hline \hline \\ \hline \hline \\ \hline \hline \\ \hline \hline \hline \\ \hline \hline \hline \\ \hline \hline \hline \\ \hline \hline \hline \hline \\ \hline \hline \hline \hline \hline \hline \\ \hline	L,082),363 0.95 qu (PP I€ 7,7 8,3 9,3 8,5 7,6 6,5 6,5 6,5 7,7	496,719,93 935,171,80 /m²]) (P 725 349 372 316 054 547 391	31 122, 06 248, Maximu P (adjusted) 17,948 18,334 14,607 21,956 13,800 11,305 12,016 13,778	235 1,527 ,762 3,136 m [€/m²]) (4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	7,781,163 3 3,450,355 6 Max. unit pr (PP (adjusted) 5,510,00 2,630,00 2,481,00 2,350,00 2,350,00 2,587,50 2,750,00 5,510,00
2017 Total 1st sales of r 1st sales of r 1st sales afte Resale	828,180,944 1,707,652,791 new-builds (new-builds) ¹ new-builds ² er conversion	144,967 319,840 Purcha 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017	74,024,800 168,586,138 se prices (to 0.25 qua (PP [€// 4,10] 4,54(2,58(2,63) 5, 2,18(2,57(5, 2,27(2,88) 5, 2,88)	14,668 33,571 otal market ntile 0.50 q n"]) (PP [* 1 4 9 5 6 3 2 4 0 2 40 2 5 3 5 4 0 4 0 4 0 4 0 4	128,855, 325,039, - first sale uantile 0.7 S/m ²]) (P 715 463 905 398 830 415 108 547 112 579	$\begin{array}{rrrr} 489 & 31\\ 520 & 80\\ \hline \mathbf{s} &- \mathbf{resal}\\ \hline 5 & \mathbf{quantile}\\ \hline P & [\mathbf{c}/m^2])\\ \hline 5 & (694)\\ 6 & (238)\\ 5 & (4194)\\ 4 & (496)\\ 5 & (165)\\ 4 & (229)\\ 4 & (745)\\ 5 & (113)\\ 5 & (830)\\ \hline \end{array}$	1,082),363 es) 0.95 qu (PP [€ 7,7 8,5 9,5 8,5 7,6,5 6,5 6,5 7,7 7,7	496,719,93 935,171,8 (m ²]) (P 725 349 372 916 054 514 547 991 882 790	Maximu P (adjusted) 17,948 18,334 14,607 21,956 13,800 11,305 12,016 13,778 17,948 21,956	235 1,527 ,762 3,136 m [€/m²]) ((} ; ; ; ; ; ; ; ; ; ; ;	7,781,163 3
2017 Total 1st sales of r 1st sales of r 1st sales afte Resale	828,180,944 1,707,652,791 new-builds (new-builds) ¹ new-builds ² er conversion	144,967 319,840 Purcha 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017	74,024,800 168,586,138 se prices (to 0.25 qua (PP [€/t 4,10) 4,54t 2,58t 2,58t 2,58t 2,58t 2,57t 2,27t 2,27t 2,67t 2,88t 3,36t	14,668 33,571 otal market ntile 0.50 q n"]) (PP [* 1 4 9 5 6 3 2 4 0 2 40 2 5 3 5 4 0 4 0 4 0 4 0 4	128,855, 325,039, - first sale uantile 0.7 C/m ²]) (P 715 463 905 398 830 415 108 547 112 579 price categ of new-	$\begin{array}{rrrr} 489 & 31\\ 520 & 80\\ \hline \mathbf{s} &- \mathbf{resal}\\ \hline 5 & \mathbf{quantile}\\ \hline P & [\mathbf{c}/m^2])\\ \hline 5 & (694)\\ 6 & (238)\\ 5 & (4194)\\ 4 & (496)\\ 5 & (165)\\ 4 & (229)\\ 4 & (745)\\ 5 & (113)\\ 5 & (830)\\ \hline \end{array}$	1,082 0,363 es) 0.95 qu (PP [€ 7,; 8,; 9,; 9,; 6,5 6,5 6,5 7,7 7,7 sub mar fter	496,719,93 935,171,8 (m ²]) (P 725 349 372 916 054 514 547 991 882 790	Maximu P (adjusted) 17,948 18,334 14,607 21,956 13,800 11,305 12,016 13,778 17,948 21,956	235 1,527 ,762 3,136 m [€/m²]) ((} ; ; ; ; ; ; ; ; ; ; ;	7,781,163 3 3,450,355 6 Max. unit pr (PP (adjusted) 5,510,00 2,630,00 2,481,00 2,350,00 2,350,00 2,587,50 2,750,00 5,510,00
2017 Total 1st sales of r 1st sales afte Resale Total market	828,180,944 1,707,652,791 new-builds (new-builds) ¹ new-builds ² er conversion	144,967 319,840 Purcha 2016 2017 2016 2016 2016 2016 2016 2016 2016 2016	74,024,800 168,586,138 se prices (to 0.25 qua (PP [€/n 4,101 4,544 2,633 2,184 2,633 2,184 2,633 2,184 3,268 3,366 r of sales by ales of new- (new-builds)'	14,668 33,571 otal market ntile 0.50 q n"]) (PP [1 4 4 5 3 2 4 0 2 40 2 5 3 5 3 5 4 9 5 40 2 4 3 5 4 7 purchase [First sales builds² Number S	128,855, 325,039, - first sale uantile 0.7 C/m ²]) (P 715 463 905 398 830 905 398 830 415 108 547 112 579 price categ of new- for conare in % N	489 31 620 80 s - resal 80 5 quantile 9 F (C/m^2]) 5,694 $6,238$ 5,451 $6,194$ 4,496 $5,165$ 4,229 $4,745$ 5,113 $5,830$ 5,830 ory and so 5,830 ory and so 1000000000000000000000000000000000000	1,082),363 (0.95 qu (PP [€ 7,7 8,3 9,3 9,3 8,5 7,6 7,5 6,5 6,5 6,5 7,7 7,7 7,5 8 ub mar fter	496,719,93 935,171,80 /m ²]) (P 725 349 372 916 054 547 954 547 954 547 954 547 954 547 991 882 790 kets (firs t Resales Number	Maximu (adjusted) 17,948 18,334 14,607 21,956 13,800 11,305 12,016 13,778 21,956 13,778 21,956 t sales and Share in %	235 1,527 ,762 3,136 m [€/m²]) (} ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	7,781,163 3 5,450,355 6 (PP (adjusted) 5,510,00 2,630,00 2,481,00 2,350,00 2,587,50 2,750,00 5,510,00 5,510,00 5,510,00
2017 Total 1st sales of r 1st sales afte Resale Total market 2016 > 3,00 > 4,00	828,180,944 1,707,652,791 new-builds (new-builds) ¹ new-builds ² er conversion 00 €/m ² -4,000 €/m ² 00 €/m ² -5,500 €/m ²	144,967 319,840 Purcha 2016 2017 2016 2016 2016 2016 2016 2016 2016 2016	74,024,800 168,586,138 se prices (to 0.25 qua (PP [€/, 4,10] 4,10] 4,54 2,58 2,57 2,277 2,63 3,360 r of sales by ales of new- (new-builds) * 47.17% 68.03%	14,668 33,571 14,668 33,571 0 tal market (PP [1 4 9 5 6 3 2 4 9 2 4 3 0 2 4 3 0 2 4 3 0 4 0 2 4 3 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4	128,855, 325,039, - first sale uantile 0.7 2/m ²]) (P 715 463 905 398 830 415 108 547 112 579 Price categ of new- F C nare in % N 3.37%	$\begin{array}{rrrr} 489 & 31\\ 520 & 80\\ \hline {\bf s} - {\bf resal}\\ \hline {\bf 5} \ {\bf quantile}\\ {\bf P} \ [{\bf c}/m^2])\\ 5,694\\ 6,238\\ 5,451\\ 6,194\\ 4,496\\ 5,165\\ 4,229\\ 4,745\\ 5,113\\ 5,830\\ \hline {\bf ory\ and\ s}\\ \hline {\bf irst\ sale\ a}\\ {\bf onversion}\\ \hline {\bf umber} \ {\bf S}\\ 76\\ 98\\ \end{array}$	1,082),363 es) 0.95 qu (PP [€ 7,7 8,5 7,7 7,7 5,5 sub mar fter hare in % 9.15% 7.29%	496,719,93 935,171,80 /m²]) (P 725 349 372 916 554 514 514 514 514 514 514 514 514 514	Maximu P (adjusted) 17,948 18,334 14,607 21,956 13,800 11,305 12,016 13,778 21,956 t sales and Share in % 40,31% 21,41%	235 1,527 ,762 3,136 m [€/m²]) (0 3 4 7 5 5 5 5 5 6 7 7 6 8 7 7 6 8 7 7 6 8 7 7 6 8 7 7 6 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8	7,781,163 3 3,450,355 6 Max. unit pri (PP (adjusted) 5,510,00 2,630,00 2,481,00 2,350,00 2,481,00 2,350,00 2,587,50 2,750,00 5,510,00
2017 Total 1st sales of r 1st sales afte Resale Total market 2016 $> 3,00$ > 4,00 > 5,50	828,180,944 1,707,652,791 new-builds (new-builds) ¹ new-builds ² er conversion 00 €/m ² -4,000 €/m ²	144,967 319,840 Purcha 2016 2017 2016 2017 2016 2017 2016 2017 2017 2016 2017 2017 2016 2017 2017 2016 2017 2017 2017 2016 2017 2017 2017 2017 2017 2017 2017 2017	74,024,800 168,586,138 se prices (to 0.25 qua (PP [€/r 4,10; 4,54; 2,58; 2,63; 2,27; 2,27; 2,27; 2,27; 2,88; 3,36; r of sales by ales of new- (new-builds)' Share in % 47.17%	14,668 33,571 otal market ntile 0.50 q n"" (PP [-1] 1 4 9 5 5 3 2 4 0 2 4 3 5 3 5 3 5 4 0 2 4 3 5 4 0 4 9 5 4 3 5 4 0 4 7 purchase First sales builds ² Number S 28 44 28 11	128,855, 325,039, - first sale uantile 0.7 5/m ²]) (P 715 463 905 398 830 415 108 547 112 579 Price categ of new- f c tare in % N 3.37%	489 31 620 80 s - resald 80 5 quantile 91 5 (94 6,238 $5,451$ 6,194 $4,496$ 5,165 $5,165$ 5,113 $5,830$ 60 ory and sonversion 98 60 15	1,082),363 es) 0.95 qu (PP [€ 7,7 8,3 9,3 8,5 7,6 6,5 7,7 5,5 6,5 7,7 7,7 5,5 8,6 9,15% 7,29% 9,15% 7,29% 9,98% 8,62%	496,719,93 935,171,80 /m²]) (P 725 349 772 916 554 554 554 554 554 554 554 554 554 55	Maximu P (adjusted) 17,948 18,334 14,607 21,956 13,800 11,305 12,016 13,778 17,948 21,956 t sales and Share in % 40.31%	235 1,527 ,762 3,136 m [€/m²]) (} ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	7,781,163 3 5,450,355 6 (Max. unit pri (PP (adjusted)) 5,510,00 2,630,00 2,481,00 2,350,00 2,630,00 2,587,50 2,750,00 5,510,00 5,510,00 5,510,00 5,510,00 5,510,00
2017 Total 1st sales of r 1st sales of r 1st sales afte Resale Total market 2016 $> 3,00$ > 4,00 > 5,56 > 7,50 > 10,0	828,180,944 1,707,652,791 new-builds (new-builds) ¹ new-builds ² er conversion 00 €/m ² -4,000 €/m ² 00 €/m ² -5,500 €/m ² 00 €/m ² -7,500 €/m ² 00 €/m ² -10,000 €/m ²	144,967 319,840 Purcha 2016 2017 2016 2016 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2016 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2016 2016 2016 2016 2016 2016 2016	74,024,800 168,586,138 se prices (to 0.25 qua (PP [€/, 4,10] 4,544 2,586 2,633 3,2,186 2,577 2,2	14,668 33,571 otal market ntile 0.50 q n"]) (PP [i] 1 4 9 5 6 3 2 4 0 2 4 3 5 3 5 4 0 2 4 3 5 4 0 4 First sales builds² 8 44 28 11 6	128,855, 325,039, - first sale uantile 0.7 5/m ²]) (P 715 463 905 398 830 415 108 547 112 579 price categ of new- F C nare in % N 3.37% 4.66% 6.32% 3.33%	489 31 620 80 s - resald 80 5 quantile 91 5 (94 6,238 $5,451$ 6,194 $4,496$ 5,165 $5,165$ 5,113 $5,830$ 60 ory and sonversion 98 60 15	L,082),363 es) 0.95 qu (PP [€ 7,7 8,5 9,5 8,5 7,7 7,7 sub mar fter hare in % 9,15% 7.29% 9,98% 8.62% 22.22%	496,719,93 935,171,80 /m ²]) (P 725 849 972 916 954 914 547 991 882 790 kets (first Resales Number 335 288 112	Maximu Maximu P (adjusted) 17,948 18,334 14,607 21,956 13,800 11,305 12,016 13,778 17,948 21,956 t sales and Share in % 40,31% 21,41% 18.64% 17.82% 16.67%	235 1,527 ,762 3,136 m [€/m²]) (, , , , , , , , , , , , ,	7,781,163 3 3,450,355 6 Max. unit pri (PP (adjusted) 5,510,00 2,630,00 2,481,00 2,350,00 2,600,00 2,587,50 2,750,00 5,510,00 5,00 10,00 8,00 10,000 8,00 10,000 8,000,00 10,000 8,000,00 8,000,00 10,000 8,000,00 8,000,00 8,000,00 10,000 8,000,000
2017 Total 1st sales of r 1st sales of r 1st sales after Resale Total market 2016 $> 3,00$ > 4,00 > 5,56 > 7,56 > 7,50 > 10,400 > 3,000 > 3,000 > 4,000 > 4,000 > 3,4000 > 4,000 > 3,4000 > 3,0000 > 3,00000 > 3,00000 > 3,00000 > 3,00000 > 3,000000 > 3,000000 > 3,000000000000000000000000000000000000	828,180,944 1,707,652,791 new-builds (new-builds) ¹ new-builds ² er conversion er 00 €/m ² -4,000 €/m ² 00 €/m ² -5,500 €/m ² 00 €/m ² -10,000 €/m ² 00 €/m ² -3,500 €/m ² 00 €/m ² -5,500 €/m ²	144,967 319,840 Purcha 2016 2017 2016 2016 2016 2016 2016 2016 2016 2016	74,024,800 168,586,138 se prices (to 0.25 qua (PP [€/n 4,101 4,544 2,631 2,571 2,270 2,637 2,270 2,637 3,360 r of sales by ales of new- (new-builds)' Share in % 47.17% 68.03% 66.72% 67.24% 27.78% 26.63% 58.85%	14,668 33,571 otal market ntile 0.50 q n"]) (PP [1 4 5 5 3 2 4 0 2 40 5 5 3 5 3 5 4 0 2 4 5 5 3 5 4 0 4 7 purchase First sales builds² Number Si 28 44 28 11 6 3 17 33	128,855, 325,039, - first sale uantile 0.7 E/m²]) (P 715 463 905 398 830 415 108 547 112 579 Price categ of new- F c mare in % N 3.37% 4.66% 6.32% 3.33% 2.57% 3.01%	489 31 620 80 \mathbf{s} - resald \mathbf{s}	1,082),363 es) 0.95 qu (PP [€ 7,7 8,3 9,3 8,5 7,6 7,5 7,5 sub mar fter hare in % 9.15% 9.98% 8.62% 22.22% 9.68%	496,719,93 935,171,80 /m²]) (P 725 349 372 916 554 554 554 554 554 554 554 554 554 55	Maximu (adjusted) 17,948 18,334 14,607 21,956 13,800 11,305 12,016 13,778 21,956 t sales and Share in % 40.31% 21.41% 18.64% 17.82% 16.67% 61.12% 30.84%	235 1,527 ,762 3,136 m [€/m²]) (0 a b b c m ([€/m²]) (0 a b c m Total b c m Total b c n 1,345 601 1,74 18 661 1,096 b 1,096 b 1,007 1	7,781,163 3 3,450,355 6 (Max. unit pri (PP (adjusted)) 5,510,00 2,630,00 2,481,00 2,630,00 2,630,00 2,587,50 2,750,00 5,510,00 5,510,00 5,510,00 5,510,00 5,510,00 5,510,00 100.00% 100.00% 100.00%
2017 Total 1st sales of r 1st sales of r 1st sales after Resale Total market 2016 $> 3,00$ > 4,00 > 5,56 > 7,56 > 0,0,2017 $> 3,00> 4,00> 5,50> 7,55> 7,55> 7,56$	828,180,944 1,707,652,791 new-builds (new-builds) ¹ new-builds ² er conversion er conversion 0 €/m ² -5,500 €/m ² 00 €/m ² -10,000 €/m ² 00 €/m ² -10,000 €/m ² 00 €/m ² -5,500 €/m ² 00 €/m ² -5,500 €/m ² 00 €/m ² -10,000 €/m ² 00 €/m ² -10,000 €/m ²	144,967 319,840 Purcha 2016 2017 2017 2017 2016 2017 2017 2017 2017 2017 2017 2017 2017	74,024,800 168,586,138 se prices (to 0.25 qua (PP [€/i 4,101 5, 2,58i 2,58i 2,57i 5, 2,18i 2,57i 5, 2,27i 5, 2,27i 5, 2,27i 5, 2,88i 3,36i r of sales by ales of new- (new-builds)' Share in % 47.17% 68.03% 66.72% 67.24% 27.78% 26.63% 58.85% 72.70% 51.27%	14,668 33,571 otal market ntile 0.50 q n"]) (PP [1 4 - 5 3 2 4 0 2 4 3 5 4 0 2 4 3 5 4 0 4 7 purchase First sales builds² Number Sl 28 44 28 11 6 3 17 33 32 14	128,855, 325,039, - first sale uantile 0.7 S/m ²]) (P 715 463 905 398 830 415 108 547 112 579 price categ of new- F C nare in % N 3.37% 3.27% 4.66% 6.32% 3.33% 2.57% 3.01% 3.47%	489 31 620 80 s - resal 5 5 quantile P [$(E/m^2])$ 5 (694 6 ,238 5 ,451 6 ,194 4 ,496 5 ,165 4 ,229 4 ,745 5 ,113 5 ,830 ory and s irst sale a onversion umber S 76 98 60 15 4 2 64 80 53 15	(1,082 (1,082 (1,082) (1,085)	496,719,93 935,171,80 /m²]) (P 725 349 372 916 954 514 547 790 kets (first Resales Number 335 288 112 31 3 3 404 338 167 48	Maximu P (adjusted) 17,948 18,334 14,607 21,956 13,800 11,305 12,016 13,778 21,956 t sales and 40.31% 21,41% 18,64% 17,82% 16,67% 61,12% 30,84% 18,09% 30,38%	235 1,527 ,762 3,136 m [€/m²]) (0 a b b c c c m²]) (0 a c m²]) (0 c m²]) (0	7,781,163 3 3,450,355 6 Max. unit pr (PP (adjusted) 5,510,00 2,630,00 2,481,00 2,350,00 2,587,50 2,750,00 5,510,00 5,510,00 5,510,00 5,510,00 5,510,00 5,510,00 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00%
2017 Total 1st sales of r 1st sales of r 1st sales after Resale Total market 2016 $> 3,00$ > 4,00 > 5,56 > 7,56 > 0,0,2017 $> 3,00> 4,00> 5,50> 7,55> 7,55> 7,56$	828,180,944 1,707,652,791 new-builds (new-builds) ¹ new-builds ² er conversion 00 €/m ² -4,000 €/m ² 00 €/m ² -5,500 €/m ² 00 €/m ² -7,500 €/m ² 00 €/m ² -0,000 €/m ² 00 €/m ² -0,000 €/m ² 00 €/m ² -7,500 €/m ² 00 €/m ² -7,500 €/m ² 00 €/m ² -7,500 €/m ²	144,967 319,840 Purcha 2016 2017 2016 2016 2016 2016 2016 2016 2016 2016	74,024,800 168,586,138 se prices (to 0.25 qua (PP [€/t 4,100 4,54 2,588 2,633 2,188 2,633 2,277 2,277 2,277 2,277 3,2,888 3,360 r of sales by ales of new- (new-builds)' Share in % 47,17% 68,03% 66,72% 67,24% 27,78% 26,63% 58,85% 72,70% 51,27% 76,47%	14,668 33,571 otal market ntile 0.50 q n"]) (PP [1 4 4 5 3 2 4 0 2 40 2 5 3 5 4 0 4 7 S 3 5 4 4 5 4 6 3 5 4 6 3 7 33 32 14 2 14	128,855, 325,039, - first sale uantile 0.7 C/m ²]) (P 715 463 905 398 830 415 108 547 112 579 price categ of new- F C nare in % N 3.37% 3.27% 4.66% 6.32% 3.33% 2.57% 3.01% 3.47%	$\begin{array}{rrrr} 489 & 31\\ 520 & 80\\ \hline {\bf s} - {\bf resal}\\ \hline {\bf 5} \ {\bf quantile}\\ \hline {\bf P} \ [{\bf C}/{\bf m}^2]) \\ 5,694 \\ 6,238 \\ 5,451 \\ 6,194 \\ 4,496 \\ 5,165 \\ 4,229 \\ 4,745 \\ 5,113 \\ 5,830 \\ \hline {\bf ory \ and \ s}\\ \hline {\bf irst \ sale \ a}\\ {\bf onversion}\\ \hline {\bf umber} \ {\bf S}\\ 76 \\ 98 \\ 60 \\ 15 \\ 4 \\ 2 \\ 64 \\ 80 \\ 53 \\ 15 \\ 3 \\ \end{array}$	(1,082 (1,082 (1,082) (1,085)	496,719,93 935,171,80 /m ²]) (P 725 849 972 916 954 954 954 954 954 954 954 954 954 954	Maximu P (adjusted) 17,948 18,334 14,607 21,956 13,800 11,305 12,016 13,778 21,956 t sales and Share in % 40,31% 21,41% 18,64% 17,82% 16,67% 61,12% 30,84% 13,73%	235 1,527 ,762 3,136 m [€/m²]) (a b b c c m²]) (a c m²]) (a c m²) (a c m²]) (a c m²) (a c c m²) (a c m²) (a c c m²) (a c c c c c c c c c c c c c	7,781,163 3 3,450,355 6 (Max. unit pri (PP (adjusted) 5,510,00 2,630,00 2,481,00 2,587,50 2,750,00 5,510,00 5,00,00 5,00,00 5,00,00 5,00,00 5,00 100,00% 100,00% 100,00% 100,00%
2017 Total 1st sales of r 1st sales of r 1st sales after Resale Total market 2016 $> 3,00$ > 4,00 > 5,56 > 7,56 > 0,0,2017 $> 3,00> 4,00> 5,50> 7,55> 7,55> 7,56$	828,180,944 1,707,652,791 new-builds (new-builds) ¹ new-builds ² er conversion er conversion 0 €/m ² -5,500 €/m ² 00 €/m ² -10,000 €/m ² 00 €/m ² -10,000 €/m ² 00 €/m ² -5,500 €/m ² 00 €/m ² -5,500 €/m ² 00 €/m ² -10,000 €/m ² 00 €/m ² -10,000 €/m ²	144,967 319,840 Purcha 2016 2017 2017 2016 2017 2017 2016 2017 2017 2017 2016 2017 2017 2017 2017 2017 2017 2017 2017	74,024,800 168,586,138 se prices (to 0.25 qua (PP [€/i 4,101 5, 2,58i 2,58i 2,57i 5, 2,18i 2,57i 5, 2,27i 5, 2,27i 5, 2,27i 5, 2,88i 3,36i r of sales by ales of new- (new-builds)' Share in % 47.17% 68.03% 66.72% 67.24% 27.78% 26.63% 58.85% 72.70% 51.27%	14,668 33,571 otal market ntile 0.50 q n"] (PP [-] 1 4 9 5 5 3 2 4 0 2 4 3 5 3 5 4 0 2 4 3 5 4 0 3 5 4 0 4 9 First sales builds² Number Si 28 11 6 3 32 14 2 2 unit price First sales	128,855, 325,039, - first sale uantile 0.7 S/m ²]) (P 715 463 905 398 830 415 108 547 112 579 Price categ of new- F C nare in % N 3.37% 3.27% 4.66% 6.32% 3.33% 2.57% 3.01% 3.47% 8.86% 3.92%	$\begin{array}{rrrr} 489 & 31\\ 520 & 80\\ \hline {\bf s} - {\bf resal}\\ \hline {\bf 5} \ {\bf quantile}\\ \hline {\bf P} \ [{\bf C}/{\bf m}^2]) \\ 5,694 \\ 6,238 \\ 5,451 \\ 6,194 \\ 4,496 \\ 5,165 \\ 4,229 \\ 4,745 \\ 5,113 \\ 5,830 \\ \hline {\bf ory \ and \ s}\\ \hline {\bf irst \ sale \ a}\\ {\bf onversion}\\ \hline {\bf umber} \ {\bf S}\\ 76 \\ 98 \\ 60 \\ 15 \\ 4 \\ 2 \\ 64 \\ 80 \\ 53 \\ 15 \\ 3 \\ \end{array}$	(1,082 (1,08	496,719,93 935,171,80 /m ²]) (P 725 849 972 916 954 954 954 954 954 954 954 954 954 954	Maximu P (adjusted) 17,948 18,334 14,607 21,956 13,800 11,305 12,016 13,778 21,956 t sales and Share in % 40,31% 21,41% 18.64% 17.82% 16.67% 61,12% 30.84% 13.73% s and resa	235 1,527 ,762 3,136 m [€/m²]) (a b b c c m²]) (a c m²]) (a c m²) (a c m²]) (a c m²) (a c c m²) (a c m²) (a c c m²) (a c c c c c c c c c c c c c	7,781,163 3 3,450,355 6 (Max. unit pr (PP (adjusted) 5,510,00 2,630,00 2,630,00 2,481,00 2,600,00 2,587,56 2,750,00 5,510,00 5,510,00 5,510,00 5,510,00 5,510,00 5,510,00 100.00% 100.00% 100.00% 100.00% 100.00%
2017 Total 1st sales of r 1st sales of r 1st sales after Resale Total market 2016 $> 3,00$ > 4,00 > 5,56 > 7,56 > 0,0,2017 $> 3,00> 4,00> 5,50> 7,55> 7,55> 7,56$	828,180,944 1,707,652,791 new-builds (new-builds) ¹ new-builds ² er conversion er conversion 0 €/m ² -5,500 €/m ² 00 €/m ² -10,000 €/m ² 00 €/m ² -10,000 €/m ² 00 €/m ² -5,500 €/m ² 00 €/m ² -5,500 €/m ² 00 €/m ² -10,000 €/m ² 00 €/m ² -10,000 €/m ²	144,967 319,840 Purcha 2016 2017 2017 2017 2017 2017 2017 2017 2017	74,024,800 168,586,138 se prices (to 0.25 qua (PP [€/t] 4,101 4,54 2,58 2,58 2,27 2,27 2,27 2,27 2,27 2,27 3,2,88 3,360 r of sales by ales of new- (new-builds)' Share in % 47,17% 68,03% 66,72% 67,24% 27,78% 26,63% 58,85% 72,70% 51,27% 76,47% r of sales by ales of new- (new-builds)'	14,668 33,571 otal market ntile 0.50 q n"]) (PP [1 4 4 5 3 2 4 0 2 4 3 5 3 5 4 0 2 4 3 5 4 0 4 7 33 5 4 0 4 6 3 7 33 32 14 2 14 2 14 2 14 2 14	128,855, 325,039, - first sale uantile 0.7 C/m ²]) (P 715 463 905 398 830 415 108 547 108 547 108 547 108 547 108 547 108 547 108 547 108 547 108 547 108 547 108 547 112 579 Drice category and 548 3.92%	489 31 620 80 5 quantile P $[€/m^2]$) $5,694$ $6,238$ $5,451$ $6,194$ $4,745$ $5,113$ $5,113$ $5,830$ ory and so sirst sale a onversion umber S 76 98 60 15 $4,229$ $4,745$ $5,113$ $5,830$ ory and so 60 15 3 60 15 4 2 64 80 53 15 3 3 64 sub m 64 sub m 175 3	(,082),363 (9),363 (9),363 (9),363 (9),363 (9),363 (9),363 (9),363 (9),363 (9),363 (7),57 (7),77 (496,719,93 935,171,80 /m ²]) (P 725 349 372 916 054 314 547 991 882 790 kets (first 882 790 kets (first 882 790 kets (first 335 288 112 31 338 112 31 338 167 48 7 7 first sale: Resales	Maximu P (adjusted) 17,948 18,334 14,607 21,956 13,800 11,305 12,016 13,778 21,956 t sales and Share in % 40,31% 21,41% 18,64% 17,82% 16,67% 61,12% 30,84% 13,73% s and resa	235 1,527 ,762 3,136 m [€/m²]) (a, 136 m [€/m²]) (a, 136 m Total a, 136 a, 136 a, 136 a, 136 a, 136 b, 136 a, 136 b, 136 b, 136 b, 136 c, 1	7,781,163 3 5,450,355 6 (PP (adjusted) 5,510,00 2,630,00 2,481,00 2,587,50 2,750,00 5,510,00 5,00,00 100,00% 100,00% 100,00% 100,00% 100,00% 100,00%
2017 Total 1st sales of r 1st sales of r 1st sales after Resale Total market 2016 $> 3,00$ > 4,00 > 5,50 > 10,0 2017 $> 3,00$ > 4,00 > 5,55 > 7,50 > 10,0 > 10,0	828,180,944 1,707,652,791 new-builds (new-builds) ¹ new-builds ² er conversion er conversion 0 €/m ² -5,500 €/m ² 00 €/m ² -10,000 €/m ² 00 €/m ² -10,000 €/m ² 00 €/m ² -5,500 €/m ² 00 €/m ² -5,500 €/m ² 00 €/m ² -10,000 €/m ² 00 €/m ² -10,000 €/m ²	144,967 319,840 Purcha 2016 2017 2017 2017 2017 2017 2017 2017 2017	74,024,800 168,586,138 se prices (to 0.25 qua (PP [€/t] 4,101 4,54 2,58 2,58 2,27 2,27 2,27 2,27 2,27 2,27 3,2,88 3,360 r of sales by ales of new- (new-builds)' Share in % 47,17% 68,03% 66,72% 67,24% 27,78% 26,63% 58,85% 72,70% 51,27% 76,47% r of sales by ales of new- (new-builds)'	14,668 33,571 otal market ntile 0.50 q n"] (PP [i] 1 4 9 5 5 3 2 4 0 2 4 3 5 3 5 4 0 2 4 3 5 4 0 3 5 4 0 4 7 7 First sales 8 11 6 5 3 28 44 28 11 6 3 32 14 2 2 9 unit price First sales 9 9 14 2 14 2 14 2 14 2 14 2 14 2 14 33 3	128,855, 325,039, - first sale uantile 0.7 C/m ²]) (P 715 463 905 398 830 415 108 547 108 547 108 547 108 547 108 547 108 547 108 547 108 547 108 547 108 547 108 547 112 579 Drice category and 548 3.92%	489 31 520 80 s - resal 5 quantile P [c /m ²]) 5,694 6,238 5,451 6,194 4,496 5,165 4,229 4,745 5,113 5,830 ory and s irst sale a onversion umber S 76 98 60 15 15 3 umber S 15 3	(,082),363 (9,95 qu (PP [€ 7,7 8,3 9,3 9,5 6,5 6,5 7,7 7,7 sub mar fter hare in % 9.15% 7.29% 9.988% 8.62% 22.22% 9.68% 7.30% 5.74% 9.49% 9.49% 9.49% 9.49%	496,719,93 935,171,80 /m ²]) (P 725 349 372 916 054 314 547 991 882 790 kets (first 882 790 kets (first 882 790 kets (first 335 288 112 31 338 112 31 338 167 48 7 7 first sale: Resales	Maximu P (adjusted) 17,948 18,334 14,607 21,956 13,800 11,305 12,016 13,778 21,956 t sales and Share in % 40,31% 21,41% 18.64% 17.82% 16.67% 61,12% 30.84% 13.73% s and resa	235 1,527 ,762 3,136 m [€/m²]) (a, 136 m [€/m²]) (a, 136 m Total a, 136 a, 136 a, 136 a, 136 a, 136 b, 136 a, 136 b, 136 b, 136 b, 136 c, 1	7,781,163 3 3,450,355 6 Max. unit pr (PP (adjusted) 5,510,00 2,630,00 2,481,00 2,350,00 2,587,50 2,750,00 5,510,00 5,510,00 5,510,00 5,510,00 5,510,00 5,510,00 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00%

1 Sold at most 4 years after construction 2 other sales of new-builds

Transaction volume	
Turnover in million €	Living space m ²
2,420	466,000
2,554	377,200

(Z)

Cologna

	Number of sa	ales by category	, first sale & I	resale/transaction	volume (turnover/living space)
	First sales of new-builds	First sale after conversion	Resales	Transaction volume in €	Transaction vol- ume in m ²
016	1,466	315	3,009	1,261,710,498	367,670
2017	961	363	3,053	1,129,006,883	320,500

Number of sales by purchase price category/max. purchase price

	> 3,000 €/m²	> 4,000 €/m²	> 5,500 €/m²	> 7,500 €/m²	> 10,000 €/m²	Total price > €1,000,000	Total price > €2,500,000	Max. price per m ²	Max. unit price in €
2016	2,468	1,320	133	17	4	49	2	12,702	4,800,000
2017	2,349	1,287	228	23	1	50	3	15,787	2,865,000

Purchase prices (total market – first sales – resales)

	total market (€	:/m²)			First sales of new-builds (€/m²)				
2016 2017	0.25 quantile 2,057 2,213	0.50 quantile 3,075 3,171	0.75 quantile 4,132 4,234	0.95-quantile 5,130 5,525	0.25 quantile 3,772 3,900	0.50 quantile 4,345 4,567	0.75 quantile 4,751 5,127	0.95-quantile 5,622 6,101	
	First sale after	conversion (rent	al to investment	property)(€/m²)	Resales (€/m²)				
	First sale after 0.25 quantile	conversion (rent 0.50 quantile	al to investment 0.75 quantile	property)(€/m²) 0.95-quantile	Resales (€/m²) 0.25 quantile	0.50 quantile	0.75 quantile	0.95-quantile	

Düsseldorf

Number of sales by category, first sale & resale/transaction volume (tu

	First sales	Resales	Transaction volume first sales in €	Transaction volume first sales in m ²	Transaction vol- ume resales in €	Transaction volume resales in m ²
2016	1,063	2,204	512,464,419	108,080	480,283,895	163,056
2017	936	2,200	504,400,878	93,462	583,431,178	172,247

Number of sales by purchase price category/max. purchase price

	> 3,000 €/m²	> 4,000 €/m²	> 5,500 €/m²	> 7,500 €/m²	> 10,000 €/m²	Totalprice > €1,000,000	Total price > €2,500,000	Max. price per m ²	Max. unit price in €
2016	1,718	710	666	141	34	73	6	15,903	4,680,000
2017	1,450	674	663	258	93	127	8	26,108	5,850,000

Purchase prices (total market - new-builds - resales)

	Total condomin	nium market (in	€/m²)		New-build condominiums (in €/m²)				
	0.25 quantile	0.50 quantile	0.75 quantile	0.95-quantile	0.25 quantile	0.50 quantile	0.75 quantile	0.95-quantile	
2016	2,081	2,902	4,049	5,685	3,885	4,261	4,771	6,838	
2017	2,308	3,179	4,368	6,883	4,120	4,538	6,167	8,224	
	New-build cond ments (in €/m²		irst-time occupa	ancy/refurbish-	Condominium resales (in €/m²)				
	0.25 quantile	0.50 quantile	0.75 quantile	0.95-quantile	0.25 quantile	0.50 quantile	0.75 quantile	0.95-quantile	
2016	3,874	4,275	4,798	6,883	1,857	2,440	3,119	4,643	
2017	4.120	4,551	6,167	8.274	2.067	2.671	3.467	5,286	

Stuttgart

	Number an	Number and transaction volume (turnover/living space) of first sales and resales									
	First sales/n	ew-builds/convers	sions	Resales							
	Number	Turnover in €	Living space m ²	Number	Turnover in €	Living space m ²					
2016	1,035	472,142,818	89,942	2,555	593,247,595	187,637					
2017	686	358,621,083	62,157	2,357	585,659,938	168,653					

Number of sales by purchase price category/max. purchase price

	3.001 to 4.000 €/m²	4.001 to 5.500 €/m²	5.501 to 7.500 €/m²	7.501 to 10.000 €/m²	from 10.000 €/m²	Total price 1,0 bis 2,5 Mio. €	Total price ab 2,5 Mio. €	Max. price per m ²	Max. unit price in €
2016	903	698	294	53	11	50	2	15,506	5,030,000
2017	943	712	256	54	9	58	3	16,941	5,240,000

Purchase prices (total market - new-builds - resales)

	Residential pro	perty overall ma	nrket (€/m²)		Residential property, new-builds, max. 3 calendar years (€/m²)				
	0.25 quantile	0.50 quantile	0.75 quantile	0.95-quantile	0.25 quantile	0.50 quantile	0.75 quantile	0.95-quantile	
2016	2,589	3,276	4,355	6,386	4,598	5,091	6,069	7,964	
2017	2,878	3,534	4,548	6,355	4,906	5,486	6,355	8,324	
	New-build resid conversion (€/r		first occupancy	after	Resales of residential property (€/m²)				
	0.25 quantile	0.50 quantile	0.75 quantile	0.95-quantile	0.25 quantile	0.50 quantile	0.75 quantile	0.95-quantile	
2016	3,931	4,829	5,808	7,711	2,427	2,900	3,551	4,671	
2017	4,327	5,090	6,063	8,080	2,745	3,256	3,930	5,192	

Leipzig

2016 2017

2016 2017

2016 2017

2016 2017

First sales/new-builds/conversions			Resales	Resales				
Number	Share in %	Turnover/million +	Number	Share in %	Turnover/m	illion €		
1,479	32	457.6	3,151	68	308.8			
1,271	29	420.3	3,077	71	339.	9		
Number of sa	ales by purch	ase price catego	ory/max. pur	chase price				
3.001 to 4.000 €/m²	4.001 to 5.500 €/m²	> 5,500 €/m² >	Total price €1,000,000	Total price > €2,500,000	Max. price per m ²	Max. unit price in €		
969	124	0	1	0	5,242	1,200,000		
741	321	0	1	0	5,287	1,065,000		
Purchase pri	ces (total ma	rket – first sales	s – resales)					
Total market [€	;/m² of living sp	ace]		New-builds, fir	st sales [€/m²	of living space		
0.25 quantile	0.50 quantile	0.75 quantile	0.95-quantile	0.25 quantile	0.50 quantil	e 0.75 quant		
1.265	2,634	3,547	4,004	3,275	3,461	3,779		

Total market [€/m ² of living space]				New-builds, first sales [€/m ² of living space]			
0.25 quantile	0.50 quantile	0.75 quantile	0.95-quantile	0.25 quantile	0.50 quantile	0.75 quantile	0.95-quantile
1,265	2,634	3,547	4,004	3,275	3,461	3,779	4,388
1,364	2,049	3,737	4,260	3,425	3,729	4,166	4,513
	st sales of refurc	oisnea perioa pr	operty [€/m² of				
living space]	st sales of refur	oisnea perioa pr	operty [€/m- of	Resales [€/m² o	of living space]		
living space]	0.50 quantile	0.75 quantile	0.95-quantile	Resales [€/m² o 0.25 quantile	of living space] 0.50 quantile	0.75 quantile	0.95-quantile
						0.75 quantile 1,643	0.95-quantile 2,294

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GLOSSARY

Definition of metropolitan regions according to the BBSB Centres of metropolitian regions (core cities) are defined as municipalities/ cities with a population of at least 100,000 inhabitants which have surplus of commuters, i.e. more people commute into these municipalities/cities than out: in the case of bordering centres, the main commuter flow must not be from the neighbouring centre and the city is the centre of an urban-rural area.

High daytime population areasare areas bordering the centre with a high daytime population (residents + balance of commuters) and a significant commuter flow to and from the centre. Although they are outside the administrative limits, they can still be considered to be part of the centre. The metropolitan region is further divided into two zones based on the commuter flow level, namely the narrow and the wider commuter belt.

The narrow commuter belt (referred to simply as the 'commuter belt' in the report) is characterized by at least 50% of commuters in the belt comm uting into a centre or a high daytime population area.

The report considers only metropolitan regions excluding the wider comr belt. The report also considers Halle-Leipzig as a metropolitan region although it

SOURCES

Page 10: Diagram: Germany's top condominium markets: Statistisches lesamt, Amt für Statistik Berlin-Brandenburg, Landeshauptstadt München Statistisches Amt, Statistisches Amt für Hamburg und Schleswig-Holstein, Stadt Frankfurt Bürgeramt Statistik und Wahlen, Amt für Stadtentwicklung und Statistik Köln, Landeshauptstadt Düsseldorf Amt für Statistik und Wahlen. Landeshauptstadt Stuttgart Statistisches Amt, Ordnungsamt Leipzig hnerregister), Gutachterausschuss für Grundstückswerte in Berlin terausschuss für Grundstückswerte in Hamburg, Gutachteraussch im Bereich der Landeshauptstadt München, Gutachterausschuss für ndstückswerte in der Stadt Köln. Gutachterausschuss für Immobilie für den Bereich der Stadt Frankfurt am Main, Gutachterausschuss für Grundstückswerte in der Landeshauptstadt Düsseldorf, Landeshauptstadt Stuttgart Stadtmessungsamt Immobilienbewertung und Beiträge, Stadt Leipzig Amt für Geoinformation und Bodenordnung Geschäftsstelle des Gutachterausschusses, ImmobilienScout24, Bundesinstitut für Bau-, Stadt- und schung (BBSR Bonn) Page 12: Snapshot of the German real estate market: Statistisches Bundesamt,

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tisches Landesamt des Freistaates Sachsen, Amt für Statistik Berlin-

doesn't match the BBSB definition Definition of statistical terms The medianis the middle value of an ordered data set separating the set into two equal parts. Example: Consider the following set: 37.854639284; the data set is first put into numerical order: 23344567889. The set contains a total of 11 data elements so the 6th element is the median. In this example, the value of the median is 5 as there are 5 values greater than and 5 values less than the median value. If the data set has an odd number of elements the median is equal to the value of an actual element of the set. If the set has an even number of elements, the median value is equal to the arithmetic mean of two successive values. Consider the following data set: 3 4 4 5 6 7 8 8 9 9, in this case the redian is equal to (6+7): 2 = 6.5. The median is a special case of a quar the 0.50 quantile and, like other quantiles, it is more robust against distortion by extreme values.

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Württemberg

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nhaus: Michael Bader / Gewandhaus: Jens Gerber n. 80. 81: Rosengärten: Bauwert / Pure: ZIEGER / Cumberland: Profi Partner AG /

Am Schlosspark: ZIEGERT p. 83: T.J. Brühöfener-McCourt: Andreas Riedel

Please note: The purpose of this glossary is to provide the reader with a basic and practical understanding of the terms used in the report. The explanations are not, and are not intended to be, scientifically exact defi

ntile can also be thought of as a threshold value. Example: The 0.75 antile is the value in a set for which it is true that at most 75% of values in the set are lower or equal to and at most 25% of values in the set are higher than or equal to that value. If the value of the 0.75 quantile in a set of square metric

Page 13: Diagram: Price development in international comparison: BIS Besidential

Landeshauntstadt Düsseldorf, Stadtvermessungsamt Frankfurt a. M., WHO, Landesnappistadi Dusseidori, stadivermessungsami Frankuri a. M., WHO, Lokale Nahverkehrsgesellschaft Frankfurt am Main mbH, Rheinbahn AG, MVV, Bundesagentur für Arbeit, Statistisches Bundesamt, Mercer Deutschland GmbH Pages 34, 35: City Check Munich: Landeshauptstadt München Statistisches Amt, obilienScout24, Bundesagentur für Arbeit, Gutachterausschuss im Bereich

r Landeshauptstadt München Page 37: Residential projects by star architects: Welt online (Panorama, 1 September 2017), Hadi Teherani Architects GmbH, ZIEGERT- Bank- und onsulting, ZIEGERT Knight Frank Frankfurt GmbH, Tishman Speye

Pages 38, 39: City Check Hamburg: Statistisches Amt für Hamburg und Schleswig-Holstein, ImmobilienScout24, Bundesagentur für Arbeit prices for condominiums in a given market were 4 500 €/m² then 75% of all es in the set would be below or at the threshold value 4,500 €/m²and 25% would be above or at the threshold.

Immobilienscout24 data set narameters

Our analysis considered all ads in the database which met one or more of the following parameters: · Active on Immobilienscout 24 on at least one day in the relevant year

- In the selected cities/municipalities
 Real estate types: Apartments for rent and apartments for sale
- · Living space: between 15 and 400 square metres • Number of rooms: 1, 1.5, 2, 2.5, 3, 3.5, 4, 5, 6, 7, 8, 9, 10
- Year of construction: between 1750 and year unde for the year 2017: 1750–2018)
- For each city/municipality and type of real estate the 0.01 guantile and the 0.99 quantile for the purchase price per square metre and the ord quantile for the purchase price per square metre and the rule square metre were determined and set as the lower and upper limit.

schuss für Grundstückswerte in Hamburg Pages 45, 47: Frankfurt: Stadt Frankfurt am Main, Hessisches Statistisches Landesamt, Knight Frank Wealth Report, Mercer Deutschland GmbH Pages 48, 49: City Check Frankfurt: Stadt Frankfurt Bürgeramt Statistik und Wahlen, ImmobilienScout24, Bundesagentur für Arbeit, Gutachterausschuss für Immobilienwerte für den Bereich der Stadt Frankfurt am Main Page 57: Cologne facts & figures : Amt für Stadtentwicklung und Statistik der Stadt Köln, Eberhard Isenmann: "Die deutsche Stadt im Spätmittelalter,

1250-1500: Stadtgestalt, Recht, Stadtregiment, Kirche, Gesellschaft, Wirtschaft Verlag Eugen Ulmer, Stuttgart, 1988, Wikipedia Page 59: Range of rents: Ziegert Research Pages 60, 61: City Check Cologne: Amt für Stadtentwicklung und Statistik

Köln, ImmobilienScout24, Bundesagentur für Arbeit, Gutachterausschuss für Grundstückswerte in der Stadt Köln

Page 63: Japan in Düsseldorf: Wirtschaftsförderungsamt der Landeshauptstadt Düsseldorf, ImmobilienScout24, Ziegert Research, Real Estate Japan Inc. Pages 64, 65: City Check Düsseldorf: Amt für Stadtentwicklung und Statistik Köln, ImmobilienScout24, Bundesagentur für Arbeit, Gutachterausschuss für Grundstückswerte in der Landeshauptstadt Düsseldorf

Page 69: Stuttgart - where innovation is at home: ICD/ITKE Universität Stuttgart Pages 70, 71: City Check Stuttgart: Landeshauptstadt Stuttgart Statistisches Pages 70, 71: City Check Stuttgart: Landesnauptistadt Stuttgart Statistisches Amt, ImmobilienScout24, Bundesagentur für Arbeit, Landeshauptstadt Stuttgart Stadtmessungsamt Immobilienbewertung und Beiträge Page 77: Leipzig: IHK zu Leipzig Geschäftsbereich Standortpolitik, Stadt Leipzig,

Amt für Statistik und Wahlen Leipzig, AMALYZE AG, Gutachterausschuss für Istückswerte in der Stadt Leipzig Hamburgisches WeltWirtschafts Institut

Pages 78, 79: City Check Leipzig: Statistisches Landesamt des Freistaates Sachsen, Ordnungsamt Leipzig (Einwohnerregister), ImmobilienScout24, Bundesagentur für Arbeit, Stadt Leipzig Amt für Geoinformation und nung Geschäftsstelle des Guta

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