

INDEX

vdp property Price Index

Q1. 2018

Dynamic start to 2018 for the German property market

Compared with the corresponding quarter the previous year:

Overall market: **+ 8.8 %**

Housing market: **+ 9.2 %**

Owner-occupied residential housing: + 7.4 %

Multi-family houses: + 10.9 %

TOP-7 Housing market: **+ 13.1 %**

TOP-7 Owner-occupied residential housing: + 10.4 %

TOP-7 Multi-family houses: + 13.7 %

Commercial property market: **+ 7.4 %**

Office properties: + 9.7 %

Retail properties: + 3,4 %



Dynamic start to 2018 for the German property market

Market as a whole

The year 2018 got off to a dynamic start for the German property market, and there is still no indication of price growth weakening. The vdp property price index (overall market) rose by 8.8% in the first quarter of 2018. This is the steepest growth rate in the entire observation period of the index. Although the price level – particularly in the large and university cities – is in some cases already very high, the strong demand for residential and commercial properties is unbroken. This is due, first, to the stable economic situation and the persistence of the low-interest-rate environment. Second, user markets remain intact, promising investors reliable returns in both the residential and the commercial property markets.

Housing market

German residential properties remain in demand, sending prices 9.2% higher than in the corresponding quarter one year earlier. In particular, this rise is being driven by the growth in prices

for multi-family houses, which are still the main focus of investors' attention. The 10.9% increase in prices in this segment is attributable to a combination of persistently rising new lease rentals (+3.5%) and the ongoing pronounced decline in the cap rate index (-6.6%). Prices for owner-occupied housing went up by 7.4% compared with the first quarter of 2017. The pick-up in new construction activity seems to be easing the situation in the market for condominiums somewhat: recording an increase of 6.3%, prices here rose less strongly than for family homes (+7.8%) for the first time.

Top 7 housing market

Developments in the top 7 markets remain more dynamic than in the market as a whole, as prices surged by 13.1% compared with the first quarter of 2017. New construction activity in all seven cities continues to fall short of the actual demand for new buildings. As a result, prices for owner-occupied dwellings advanced again, this time by 10.4%. Investors' sharp focus on these

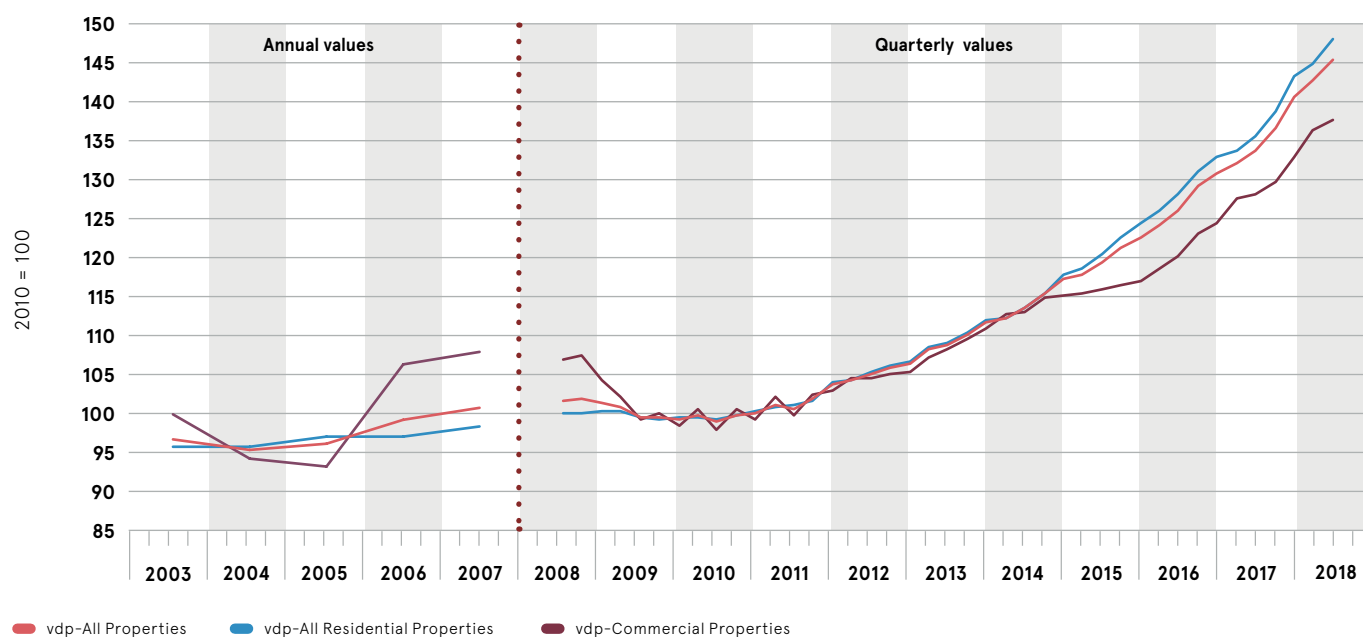
seven cities and the still-tense situation in the market for rental housing, where rents rose by 5.8%, led to an increase in prices for multi-family houses of 13.7%.

Commercial property market

In the first quarter of 2018, commercial property prices were 7.4% higher than in the corresponding period one year earlier. This increase was mainly fueled by rising prices for office premises (+9.7%). On the one hand, office space was in short supply, resulting in a further sizeable increase in rents (+4.1%). On the other hand, the cap rate index dropped again, this time by 5.2%. Prices rose less strongly for retail properties (+3.4%) than for office premises. Although investor demand is strong, the situation in the rental market is for the most part balanced, causing rents to edge up only slightly.

Real estate market as a whole

Real estate market gets off to another dynamic start in 2018

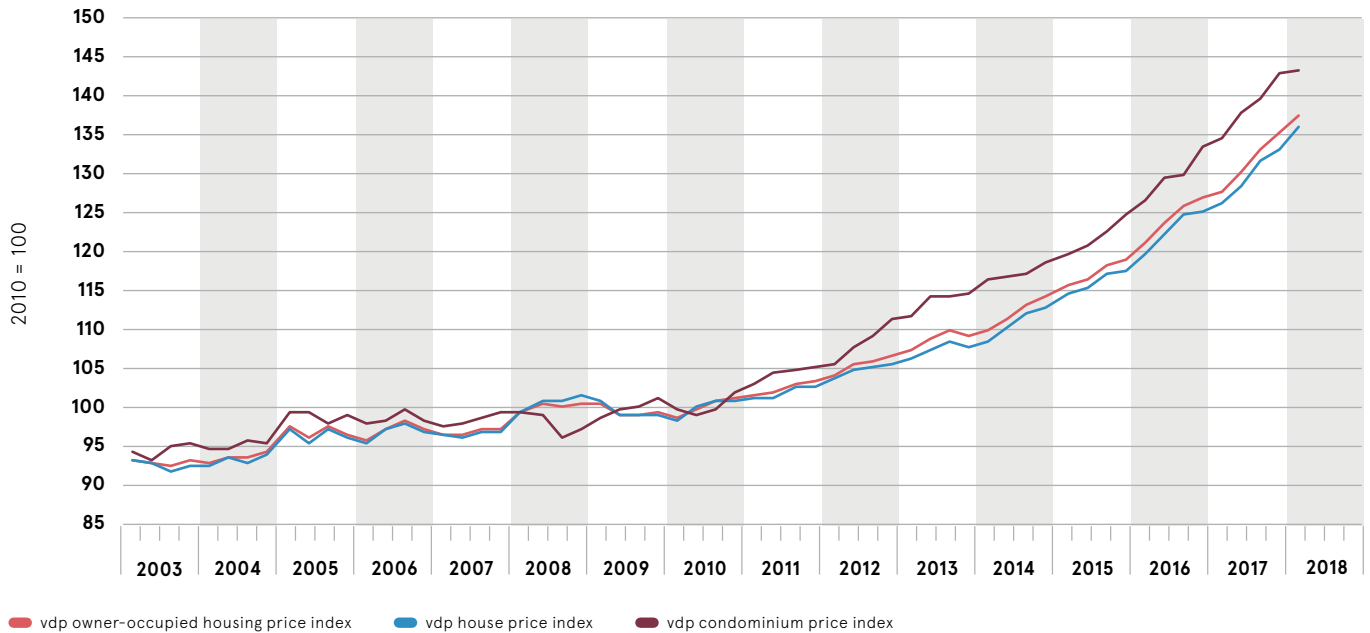


| Year | All properties | | All residential properties | | All commercial properties | |
|------|----------------|-------------------|----------------------------|-------------------|---------------------------|-------------------|
| | Index | y-o-y change in % | Index | y-o-y change in % | Index | y-o-y change in % |
| 2007 | 100.4 | 1.6 | 98.2 | 1.5 | 106.5 | 1.5 |
| 2008 | 101.4 | 1.1 | 100.2 | 2.0 | 105.2 | -1.2 |
| 2009 | 99.5 | -1.9 | 99.4 | -0.8 | 99.7 | -5.3 |
| 2010 | 100.0 | 0.5 | 100.0 | 0.6 | 100.0 | 0.4 |
| 2011 | 102.7 | 2.6 | 102.7 | 2.7 | 102.4 | 2.4 |
| 2012 | 106.4 | 3.7 | 106.7 | 3.8 | 105.5 | 3.0 |
| 2013 | 110.7 | 4.1 | 110.9 | 3.9 | 110.4 | 4.6 |
| 2014 | 115.9 | 4.7 | 116.4 | 5.0 | 114.6 | 3.8 |
| 2015 | 121.7 | 5.0 | 123.3 | 5.9 | 117.0 | 2.1 |
| 2016 | 129.5 | 6.4 | 131.4 | 6.5 | 123.7 | 5.8 |
| 2017 | 138.3 | 6.8 | 140.5 | 6.9 | 131.8 | 6.5 |

| Quarter | All properties | | All residential properties | | All commercial properties | |
|---------|----------------|-------------------|----------------------------|-------------------|---------------------------|-------------------|
| | Index | y-o-y change in % | Index | y-o-y change in % | Index | y-o-y change in % |
| Q2 2016 | 129.1 | 6.6 | 131.0 | 6.9 | 123.1 | 5.6 |
| Q3 2016 | 130.8 | 6.6 | 132.8 | 6.8 | 124.3 | 6.2 |
| Q4 2016 | 132.1 | 6.5 | 133.7 | 6.2 | 127.4 | 7.5 |
| Q1 2017 | 133.6 | 5.9 | 135.4 | 5.8 | 128.0 | 6.5 |
| Q2 2017 | 136.5 | 5.8 | 138.7 | 5.9 | 129.7 | 5.4 |
| Q3 2017 | 140.6 | 7.5 | 143.1 | 7.7 | 132.9 | 7.0 |
| Q4 2017 | 142.7 | 8.0 | 144.8 | 8.3 | 136.3 | 7.0 |
| Q1 2018 | 145.3 | 8.8 | 147.8 | 9.2 | 137.5 | 7.4 |

Owner-occupied housing

For the first time in quite some time, single-family house prices rise more strongly than condominium prices

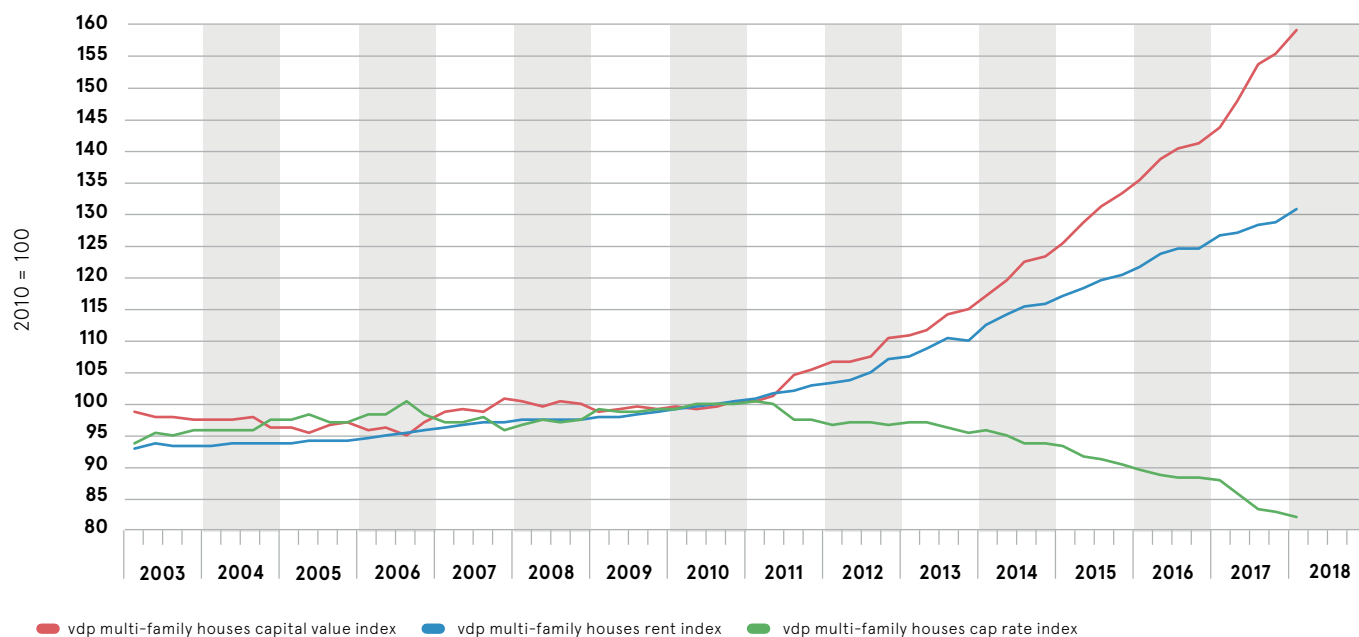


| Year | Owner occupied housing | | Single family houses | | Condominiums | |
|------|------------------------|-------------------|----------------------|-------------------|--------------|-------------------|
| | Index | y-o-y change in % | Index | y-o-y change in % | Index | y-o-y change in % |
| 2007 | 96.9 | -0.2 | 96.5 | -0.2 | 98.4 | -0.2 |
| 2008 | 100.0 | 3.3 | 100.6 | 4.3 | 97.9 | -0.6 |
| 2009 | 99.4 | -0.6 | 99.3 | -1.3 | 99.8 | 2.0 |
| 2010 | 100.0 | 0.6 | 100.0 | 0.7 | 100.0 | 0.2 |
| 2011 | 102.4 | 2.4 | 101.9 | 1.9 | 104.3 | 4.3 |
| 2012 | 105.5 | 3.0 | 104.7 | 2.7 | 108.3 | 3.9 |
| 2013 | 108.7 | 3.1 | 107.5 | 2.6 | 113.6 | 4.9 |
| 2014 | 112.1 | 3.1 | 110.8 | 3.1 | 117.0 | 3.0 |
| 2015 | 117.2 | 4.6 | 116.0 | 4.7 | 121.7 | 4.0 |
| 2016 | 124.2 | 6.0 | 122.8 | 5.8 | 129.6 | 6.5 |
| 2017 | 131.4 | 5.8 | 129.6 | 5.5 | 138.5 | 6.8 |

| Quarter | Owner occupied housing | | Single family houses | | Condominiums | |
|---------|------------------------|-------------------|----------------------|-------------------|--------------|-------------------|
| | Index | y-o-y change in % | Index | y-o-y change in % | Index | y-o-y change in % |
| Q2 2016 | 123.6 | 6.2 | 122.2 | 5.9 | 129.3 | 7.3 |
| Q3 2016 | 125.5 | 6.4 | 124.5 | 6.5 | 129.7 | 6.0 |
| Q4 2016 | 126.6 | 6.6 | 124.9 | 6.5 | 133.3 | 7.1 |
| Q1 2017 | 127.6 | 5.5 | 125.9 | 5.3 | 134.4 | 6.5 |
| Q2 2017 | 129.9 | 5.1 | 128.0 | 4.8 | 137.6 | 6.4 |
| Q3 2017 | 133.0 | 6.0 | 131.4 | 5.6 | 139.3 | 7.4 |
| Q4 2017 | 134.9 | 6.6 | 133.0 | 6.4 | 142.6 | 7.0 |
| Q1 2018 | 137.1 | 7.4 | 135.7 | 7.8 | 142.9 | 6.3 |

Multi-family houses

Strong demand continues to exert upward pressure on prices

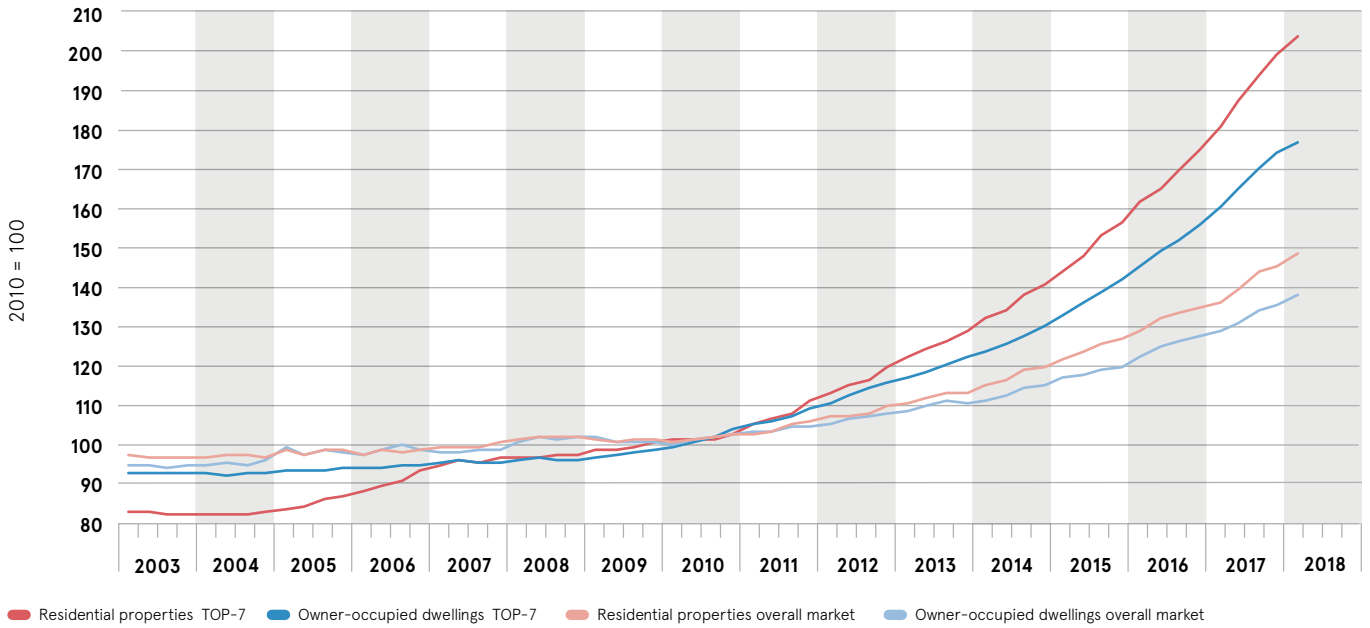


| Year | Capital value | | Residential rents | | Cap rate | |
|------|---------------|-------------------|-------------------|-------------------|----------|-------------------|
| | Index | y-o-y change in % | Index | y-o-y change in % | Index | y-o-y change in % |
| 2007 | 99.6 | 3.4 | 96.9 | 1.6 | 97.3 | -1.7 |
| 2008 | 100.4 | 0.7 | 97.7 | 0.8 | 97.4 | 0.1 |
| 2009 | 99.5 | -0.9 | 98.5 | 0.8 | 99.1 | 1.7 |
| 2010 | 100.0 | 0.6 | 100.0 | 1.5 | 100.0 | 0.9 |
| 2011 | 103.0 | 3.0 | 102.1 | 2.1 | 99.1 | -0.9 |
| 2012 | 107.9 | 4.8 | 104.8 | 2.7 | 97.1 | -1.9 |
| 2013 | 113.1 | 4.8 | 109.3 | 4.2 | 96.6 | -0.5 |
| 2014 | 120.8 | 6.8 | 114.5 | 4.8 | 94.8 | -1.9 |
| 2015 | 129.5 | 7.3 | 118.9 | 3.9 | 91.8 | -3.2 |
| 2016 | 138.7 | 7.1 | 123.7 | 4.0 | 89.1 | -2.9 |
| 2017 | 149.7 | 7.9 | 127.7 | 3.2 | 85.3 | -4.3 |

| Quarter | Capital value | | Residential rents | | Cap rate | |
|---------|---------------|-------------------|-------------------|-------------------|----------|-------------------|
| | Index | y-o-y change in % | Index | y-o-y change in % | Index | y-o-y change in % |
| Q2 2016 | 138.6 | 7.5 | 123.6 | 4.5 | 89.2 | -2.8 |
| Q3 2016 | 140.4 | 7.1 | 124.5 | 4.0 | 88.7 | -2.9 |
| Q4 2016 | 140.9 | 5.8 | 124.7 | 3.5 | 88.5 | -2.2 |
| Q1 2017 | 143.3 | 6.0 | 126.5 | 3.8 | 88.3 | -2.0 |
| Q2 2017 | 147.8 | 6.6 | 127.2 | 2.9 | 86.1 | -3.5 |
| Q3 2017 | 153.4 | 9.3 | 128.2 | 2.9 | 83.6 | -5.8 |
| Q4 2017 | 154.9 | 9.9 | 128.8 | 3.3 | 83.2 | -6.0 |
| Q1 2018 | 158.9 | 10.9 | 130.9 | 3.5 | 82.4 | -6.6 |

Owner-occupied housing Top 7*

Momentum is unbroken in the top 7 markets



For all the individual figures of the TOP-7 cities, go to www.vdpresearch.de

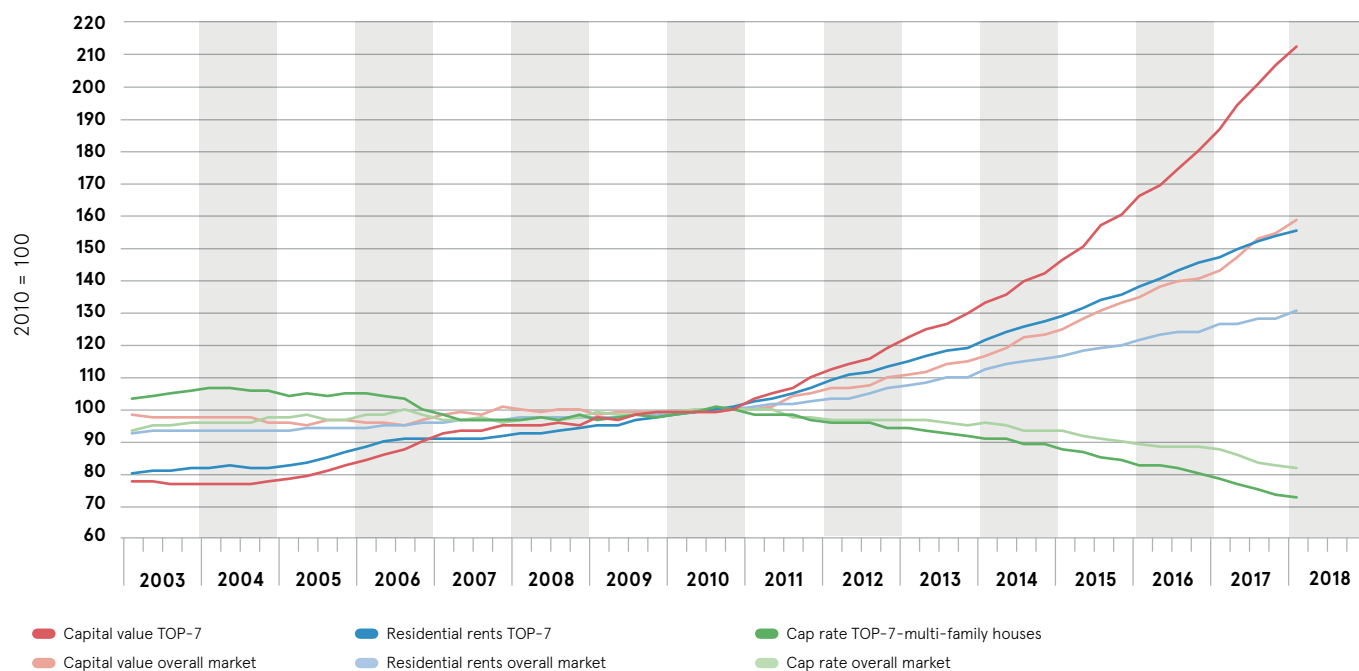
| Year | Residential properties TOP-7 | | Owner occupied housing TOP-7 | |
|------|------------------------------|-------------------|------------------------------|-------------------|
| | Index | y-o-y change in % | Index | y-o-y change in % |
| 2007 | 94.0 | 5.9 | 93.9 | 1.2 |
| 2008 | 95.4 | 1.6 | 94.5 | 0.7 |
| 2009 | 97.9 | 2.5 | 96.1 | 1.6 |
| 2010 | 100.0 | 2.2 | 100.0 | 4.1 |
| 2011 | 106.3 | 6.3 | 105.4 | 5.4 |
| 2012 | 114.9 | 8.1 | 112.0 | 6.3 |
| 2013 | 124.4 | 8.3 | 118.4 | 5.8 |
| 2014 | 135.3 | 8.7 | 125.9 | 6.3 |
| 2015 | 150.0 | 10.9 | 136.7 | 8.6 |
| 2016 | 167.6 | 11.7 | 150.0 | 9.7 |
| 2017 | 190.5 | 13.7 | 167.3 | 11.5 |

| Quarter | Residential properties TOP-7 | | Owner occupied housing TOP-7 | |
|---------|------------------------------|-------------------|------------------------------|-------------------|
| | Index | y-o-y change in % | Index | y-o-y change in % |
| Q2 2016 | 164.6 | 11.7 | 148.4 | 9.7 |
| Q3 2016 | 169.5 | 10.7 | 151.7 | 10.0 |
| Q4 2016 | 174.9 | 11.9 | 155.4 | 9.9 |
| Q1 2017 | 180.7 | 12.0 | 160.1 | 10.7 |
| Q2 2017 | 187.7 | 14.0 | 164.8 | 11.0 |
| Q3 2017 | 194.1 | 14.5 | 169.8 | 12.0 |
| Q4 2017 | 199.6 | 14.1 | 174.4 | 12.3 |
| Q1 2018 | 204.3 | 13.1 | 176.8 | 10.4 |

*Berlin, Hamburg, Frankfurt am Main, Munich, Stuttgart, Dusseldorf, Cologne

Multi-family houses Top 7*

Price growth clearly more dynamic than the average for Germany as a whole



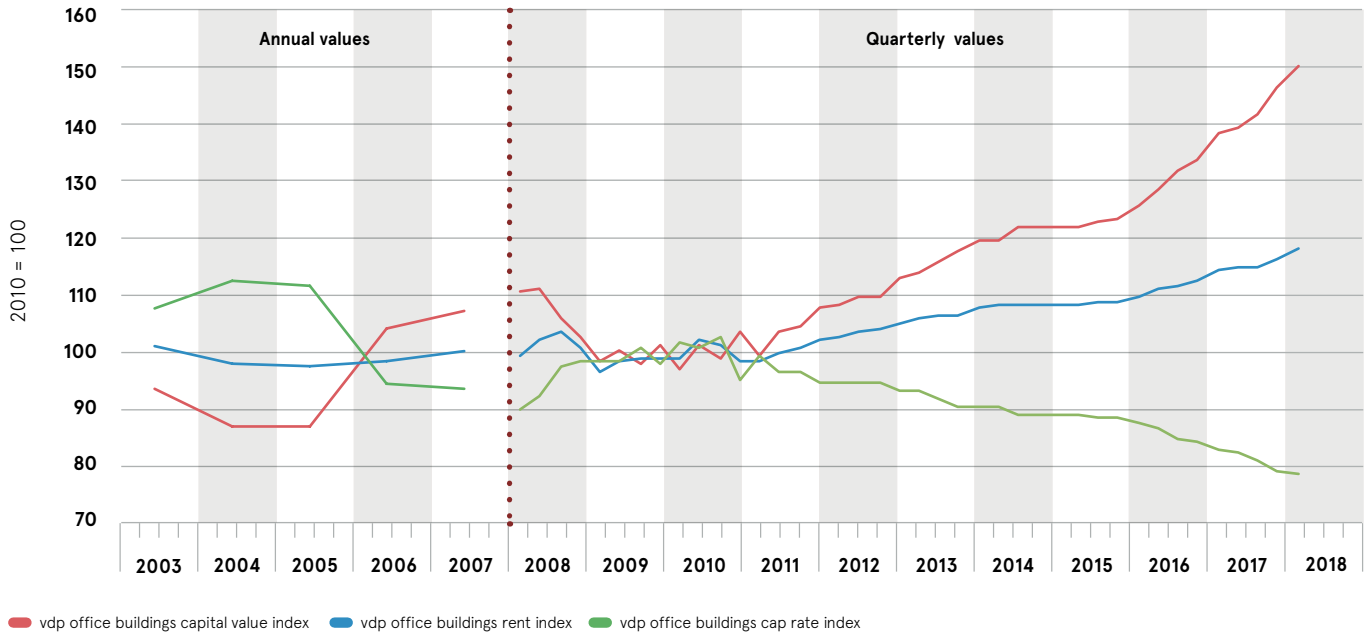
| Year | Capital value TOP-7 | | Residential rents TOP-7 | | Cap rate TOP-7 | |
|------|---------------------|-------------------|-------------------------|-------------------|----------------|-------------------|
| | Index | y-o-y change in % | Index | y-o-y change in % | Index | y-o-y change in % |
| 2007 | 94.0 | 7.4 | 91.5 | 1.1 | 97.4 | -5.8 |
| 2008 | 95.7 | 1.8 | 93.7 | 2.4 | 97.9 | 0.5 |
| 2009 | 98.4 | 2.8 | 96.4 | 2.9 | 98.0 | 0.1 |
| 2010 | 100.0 | 1.6 | 100.0 | 3.7 | 100.0 | 2.0 |
| 2011 | 106.6 | 6.6 | 104.9 | 4.9 | 98.4 | -1.6 |
| 2012 | 115.8 | 8.6 | 111.4 | 6.2 | 96.2 | -2.2 |
| 2013 | 126.2 | 9.0 | 117.6 | 5.6 | 93.2 | -3.1 |
| 2014 | 138.0 | 9.4 | 125.0 | 6.2 | 90.5 | -2.9 |
| 2015 | 153.8 | 11.4 | 132.8 | 6.3 | 86.4 | -4.6 |
| 2016 | 172.6 | 12.3 | 142.0 | 6.9 | 82.3 | -4.8 |
| 2017 | 197.1 | 14.2 | 150.7 | 6.1 | 76.5 | -7.1 |

| Quarter | Capital value TOP-7 | | Residential rents TOP-7 | | Cap rate TOP-7 | |
|---------|---------------------|-------------------|-------------------------|-------------------|----------------|-------------------|
| | Index | y-o-y change in % | Index | y-o-y change in % | Index | y-o-y change in % |
| Q2 2016 | 169.4 | 12.2 | 140.9 | 7.0 | 83.2 | -4.6 |
| Q3 2016 | 174.7 | 10.9 | 143.3 | 6.8 | 82.0 | -3.7 |
| Q4 2016 | 180.5 | 12.4 | 145.4 | 6.7 | 80.5 | -5.1 |
| Q1 2017 | 186.6 | 12.3 | 147.1 | 6.1 | 78.8 | -5.5 |
| Q2 2017 | 194.3 | 14.7 | 149.7 | 6.3 | 77.0 | -7.4 |
| Q3 2017 | 201.2 | 15.2 | 152.2 | 6.2 | 75.6 | -7.8 |
| Q4 2017 | 206.9 | 14.6 | 153.9 | 5.8 | 74.4 | -7.6 |
| Q1 2018 | 212.3 | 13.7 | 155.6 | 5.8 | 73.3 | -7.0 |

*Berlin, Hamburg, Frankfurt am Main, Munich, Stuttgart, Dusseldorf, Cologne

Office and administration buildings

Users and investors again have to pay more

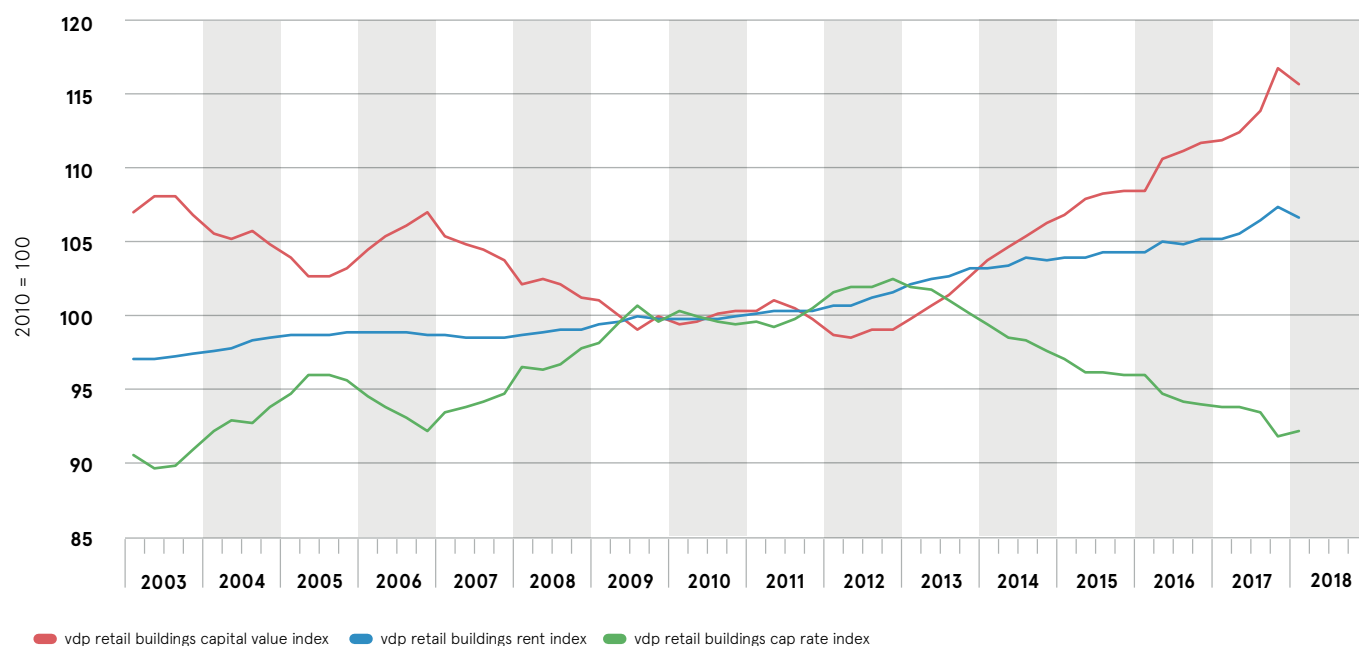


| Year | Capital value | | Residential rents | | Cap rate | |
|------|---------------|-------------------|-------------------|-------------------|----------|-------------------|
| | Index | y-o-y change in % | Index | y-o-y change in % | Index | y-o-y change in % |
| 2007 | 107.9 | 2.9 | 100.7 | 1.8 | 93.3 | -1.0 |
| 2008 | 107.2 | -0.7 | 101.3 | 0.6 | 94.5 | 1.3 |
| 2009 | 99.3 | -7.3 | 98.1 | -3.1 | 98.8 | 4.5 |
| 2010 | 100.0 | 0.7 | 100.0 | 1.9 | 100.0 | 1.2 |
| 2011 | 103.6 | 3.6 | 100.2 | 0.2 | 96.7 | -3.3 |
| 2012 | 109.9 | 6.0 | 103.6 | 3.4 | 94.3 | -2.5 |
| 2013 | 116.4 | 5.9 | 106.4 | 2.7 | 91.5 | -3.0 |
| 2014 | 120.9 | 3.9 | 108.0 | 1.5 | 89.3 | -2.3 |
| 2015 | 122.9 | 1.7 | 108.7 | 0.6 | 88.4 | -1.1 |
| 2016 | 132.4 | 7.7 | 112.1 | 3.2 | 84.7 | -4.2 |
| 2017 | 143.6 | 8.4 | 115.7 | 3.2 | 80.6 | -4.9 |

| Quarter | Capital value | | Residential rents | | Cap rate | |
|---------|---------------|-------------------|-------------------|-------------------|----------|-------------------|
| | Index | y-o-y change in % | Index | y-o-y change in % | Index | y-o-y change in % |
| Q2 2016 | 131.3 | 7.4 | 111.4 | 2.8 | 84.8 | -4.3 |
| Q3 2016 | 132.9 | 8.3 | 112.2 | 3.3 | 84.4 | -4.7 |
| Q4 2016 | 137.8 | 10.1 | 114.3 | 4.3 | 83.0 | -5.3 |
| Q1 2017 | 138.6 | 8.4 | 114.4 | 3.4 | 82.5 | -4.6 |
| Q2 2017 | 141.2 | 7.5 | 114.7 | 3.0 | 81.2 | -4.2 |
| Q3 2017 | 145.6 | 9.5 | 115.7 | 3.2 | 79.5 | -5.8 |
| Q4 2017 | 149.3 | 8.3 | 117.9 | 3.1 | 79.0 | -4.8 |
| Q1 2018 | 152.1 | 9.7 | 119.1 | 4.1 | 78.3 | -5.1 |

Retail buildings

Price increase weakens slightly



| Year | Capital value | | Residential rents | | Cap rate | |
|------|---------------|-------------------|-------------------|-------------------|----------|-------------------|
| | Index | y-o-y change in % | Index | y-o-y change in % | Index | y-o-y change in % |
| 2007 | 104.8 | -1.1 | 98.8 | -0.3 | 94.3 | 0.7 |
| 2008 | 102.2 | -2.5 | 99.1 | 0.4 | 97.1 | 2.9 |
| 2009 | 100.1 | -2.0 | 99.9 | 0.7 | 99.7 | 2.7 |
| 2010 | 100.0 | -0.1 | 100.0 | 0.1 | 100.0 | 0.3 |
| 2011 | 100.6 | 0.6 | 100.5 | 0.5 | 100.0 | 0.0 |
| 2012 | 99.0 | -1.5 | 101.2 | 0.7 | 102.2 | 2.3 |
| 2013 | 101.3 | 2.3 | 102.8 | 1.6 | 101.4 | -0.8 |
| 2014 | 105.2 | 3.8 | 103.7 | 0.9 | 98.6 | -2.8 |
| 2015 | 108.0 | 2.7 | 104.3 | 0.5 | 96.6 | -2.1 |
| 2016 | 110.6 | 2.5 | 105.0 | 0.7 | 94.9 | -1.7 |
| 2017 | 113.9 | 2.9 | 106.4 | 1.3 | 93.4 | -1.6 |

| Quarter | Capital value | | Residential rents | | Cap rate | |
|---------|---------------|-------------------|-------------------|-------------------|----------|-------------------|
| | Index | y-o-y change in % | Index | y-o-y change in % | Index | y-o-y change in % |
| Q2 2016 | 110.8 | 2.6 | 105.2 | 0.9 | 94.9 | -1.6 |
| Q3 2016 | 111.3 | 2.7 | 105.1 | 0.7 | 94.4 | -2.0 |
| Q4 2016 | 111.9 | 3.1 | 105.4 | 0.8 | 94.1 | -2.2 |
| Q1 2017 | 112.0 | 3.2 | 105.4 | 0.8 | 94.1 | -2.3 |
| Q2 2017 | 112.5 | 1.5 | 105.7 | 0.6 | 94.0 | -1.0 |
| Q3 2017 | 114.0 | 2.2 | 106.7 | 1.6 | 93.6 | -0.9 |
| Q4 2017 | 117.0 | 4.5 | 107.6 | 2.1 | 92.0 | -2.3 |
| Q1 2018 | 115.8 | 3.4 | 106.8 | 1.4 | 92.3 | -1.9 |

Methodology

Data basis

German financial institutions participating in the transaction database provide transaction details from their real estate financing business for input into the database. The database has been maintained since 2004 and provides statistically evaluable information on actual real estate transactions. Data are captured by the participating institutions in the form of appraisals of market and mortgage lending values that are prepared in the course of their mortgage lending activities. Property valuations are determined within each financial institution by certified property valuers or specially trained bank personnel. In addition to purchase price and date of purchase, the appraisal includes information about the property's macro and micro location, its age, layout and other price-influencing variables. In the case of certain types of property, information is also collected with regard to rental agreements and the date they were concluded. Information used to derive market and mortgage lending values is ascertained partly from submitted documentation and partly by valuers working in accordance with codified procedures. Table 1 provides an overview of the variables most frequently applied in the specification of individual indices for various market segments.

Substantive definitions of individual variables are coordinated with financial institutions via the contractual relationship between them and the vdp. In addition, property valuation in Germany is subject to strict regulations, which ensure that the valuation processes of individual institutions

Table 1: Variables from the vdp's transaction database

| Variable | Scaling | Characteristics |
|----------------------|---------|---|
| Makrolage | Nominal | Landkreis oder kreisfreie Stadt in Deutschland |
| Micro location | Ordinal | Very good - good - average - moderate - poor - catastrophic |
| Living /usable space | Metric | Living or usable space m ² |
| Plot size | Metric | Plot size of property in m ² |
| Year built | Metric | Year property built |
| Layout | Ordinal | Very good - good - average - moderate - poor - catastrophic |
| Condition | Ordinal | Very good - good - average - moderate - poor - catastrophic |
| Saleability | Ordinal | Very good - good - average - moderate - poor - catastrophic |
| Sub-property type | Nominal | Division of market segment into sub-segments |
| Purchase price | Metric | Purchase price of property in Euros |
| Rent | Metric | Contractual rent of property in Euros per m ² |

are harmonised to the greatest extent possible, especially as a result of the Verordnung über die Grundsätze für die Ermittlung der Verkehrswerte von Grundstücken (Regulation on the Principles for Determining the Market Value of Property – abbreviated to ImmoWertV) and the Beleihungswertermittlungsverordnung (Regulation on the Determination of the Mortgage Lending Value – abbreviated to BelWertV). Because the purchase prices and significant price-influencing characteristics of individual properties are determined in a uniform manner and because they are input into a uniform database structure, it is possible to analyse the data with the help of complex statistical procedures.

Calculation

As a result of the distinct heterogeneity of real estate properties and in order to be able to measure pure

price changes, it is necessary to take account of the varying quality of the properties concerned when measuring prices. Various procedures exist which take explicit account of the differences in the quality of individual properties in order to be able to measure pure price changes.

All vdp real estate indices are calculated by making use of so-called hedonic models. The hedonic model is based on the idea that heterogeneous commodities can be described by reference to their characteristics. In other words, a commodity can be represented as the sum of its characteristics. With regard to real estate, this means that this set of attributes might include, for example, details of physical characteristics such as plot size, living area, year built and details as to the property's location. Each of these named attributes has a specific influence on the price of the property, but

there is no market for the attributes themselves; they cannot be sold separately and therefore cannot be viewed in isolation. It is possible, nonetheless, implicitly to determine the proportion of the overall price of the property which each individual attribute makes up by examining real estate supply and demand. Multivariate regression models are used for this purpose, helping to provide a statistical estimate of the marginal contribution of each attribute. It is assumed that the model incorporates all relevant attributes and that deviations occur simply by coincidence and are not indicative of any systematic structures.

Weighting

The overall index is the weighted arithmetical average of the various price indices for residential and commercial real estate. The weightings used correspond to the share of monetary turnover in the German real estate market constituted respectively by residential and commercial real estate. Based on details provided by valuer committees (Gutachterausschüsse), these averaged 75.6% and 24.4%, respectively, between 2007 and 2012.

The weights used correspond with the percentage share of households in Germany living in their own home. For the year 2011 this share stood at 50.7%. Accordingly, 49.3% lived in a rented dwelling. The weights were derived on the basis of the building and housing census conducted by the Federal Statistical Office in 2011. The price index for owner-occupied housing is calculated as a weighted arithmetic mean of the percentage of households living in their own single-family house or condominium. In 2011 these shares amounted to 79.7% for single-family houses and 20.3% for condominiums.

For the commercial property price index, the weightings attributable to the office property capital value index and the retail property capital value index correspond to the proportion of loans in the accounts of Pfandbrief Banks that were granted to these two categories. The figures for office property and retail property amount to 60% and 40%, respectively.

Top 7 residential properties

The top 7 residential property indices are calculated analogously to the calculation for the vdp's nationwide property price indices. The indices are estimated separately for each of the cities on the basis of the transaction database. Then, the seven individual indices of the relevant market segment are aggregated according to the respective shares to form a top 7 index. For more information, please visit the website of vdpResearch.

Base year

Starting from this edition, the base year for the indices is 2010.

Publication

All vdp real estate price indices are published on a quarterly basis. Each year's first quarter index figures are published on 10 May of the same year (six weeks after the end of the quarter under review). Other publication dates are as follows:

- 10 August, 2nd quarter
- 10. November, 3. Quartal
- 10 February of the following year, 4th quarter (including figures for the year as a whole)

The index figures are released at 2:00 p.m. on the respective publication dates. Where the publication date falls

on a Saturday, Sunday or public holiday, the index figures are published on the next working day at 2:00 p.m.

The accompanying press releases are published in German and English on the websites of the Verband deutscher Pfandbriefbanken e.V. (vdp) www.pfandbrief.de and vdpResearch GmbH www.vdpresearch.de. They are also published via press agencies.

Liability disclaimer

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The member institutions of the **Association of German Pfandbrief Banks** (Verband deutscher Pfandbriefbanken, vdp) have been the market leaders in commercial real estate finance in Germany and hold sizeable market shares in residential real estate finance as well. As the representative of its member banks, the vdp performs this function vis-à-vis all executive bodies of politics on both the national and the European stage and a wider public.

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vdpResearch GmbH, a subsidiary of the Association of German Pfandbrief Banks (vdp), works intensively on compiling, analyzing and forecasting property prices in the context of real estate finance. Its remit includes measuring and forecasting trends in rents and prices in the residential and commercial property sectors at the regional and national level.

To measure the movements of rents and prices, vdpResearch makes use of a unique transaction database that is also used to provide property-related comparative prices, comparative rents and other valuation parameters. These parameters are central to specially developed software solutions for valuing standard and individual properties and are fully compliant with regulations governing market and property valuation.

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