

Logistics Property Report

Germany | Year 2018 Published April 2019



Foreword

10 years after the financial crisis, key indicators in the German logistics and industrial property market remained generally positive in 2018 and therefore largely unaffected by the current geopolitical uncertainties. In addition to the continued low interest rate climate, the flourishing economy led to vigorous demand for space in the letting market and for investment products in the investment market.

The established logistics, warehousing and industrial property real estate segment is a typical element of professionally managed national and international investment portfolios. Their share of the total German investment volume was around 10% in 2018, which is in double-digits for the second year in succession and has doubled over the last five years. However, the 2018 transaction volume was below the previous year's record of €8.7 billion, but the total of €7.5 billion is still the second-best performance ever and is 60% above the 5-year average.

The letting take-up volume of around 7.2 million sqm of warehousing and logistics space in 2018 was a new record and half a million sqm higher than the previous record performance from 2016. The principal driver was the continued growth in the e-commerce sector with its ever increasing demand for space. As over 70% of all take-up was in new-build and project developments, the level of new-build activity remains high; this has resulted in a continual supply of contemporary properties in the investment market. Occupier demand was again robust over the first three months of the year, pointing to another good performance in 2019 with a total letting volume of between 6.5 and 7.0 million sqm.

JLL has been a leading advisory consultant in the logistics and industrial property segment for many years. Our teams are available to advise and assist you in all major logistics hotspots across Germany. We hope you enjoy our report and look forward to hearing from you with any questions or feedback.



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Germany – the logistics location



The German economy grew for the ninth year in succession in 2018 but the price-adjusted GDP of 1.5%* was somewhat weaker than in previous years.



Online retail grows at double-digit percentage

According to the Bundesverband E-Commerce und Versandhandel Deutschland e.V. (German E-Commerce and Distance Selling Trade Association), e-commerce turnover grew by around 11% to €65.1 billion in 2018. Further double-digit growth to just under €71 billion is expected for 2019.

As a strongly export-orientated country, Germany benefits from globalisation and the sustained upswing in global trade, and this is reflected in current export statistics.

Goods with a value of € 1,089.7 billion

were imported by Germany.

Net exports were € 228.3 billion

Goods with a value of

€ 1,317.9 billion

were exported by Germany.

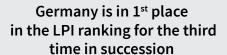


The current **DHL** Connectedness Index 2018

is produced every two years by US-based analysts based

on around three million sets of statistics. 169 countries were analysed in detail in terms of their global trade in goods, services, personnel and finance, and classified according to the intensity and geographic reach of their integration into the global economy.

According to the study, the worldwide network reached a new high point, but appears not quite as advanced as generally assumed. The three topplaced countries are the Netherlands, Singapore and Switzerland, with Germany in 10th place out of 169 countries.



Germany is one of the world's top locations, as confirmed by the Logistics Performance Index (LPI) produced every two years by the World Bank. This classifies the attractiveness of over 160 countries as logistics locations based on a variety of indicators. Germany is again in first place in the ranking in 2018, ahead of Sweden and Belgium.

* Federal Statistical Office, 2019

The letting market for warehousing and logistics space

Warehousing take-up Germany

Region	2014	2015	2016	2017	2018	2018 / 2017
	sqm	sqm	sqm	sqm	sqm	in %
Berlin	327,400	456,100	418,300	420,300	407,100	-3
Düsseldorf	283,200	328,900	175,900	261,800	320,300	22
Frankfurt	559,000	470,500	570,300	652,700	660,000	1
Hamburg	450,000	600,000	665,000	460,000	470,000	2
Munich	270,700	202,400	275,200	236,800	279,000	18
Total 'Big 5' -conurbations	1,890,300	2,057,900	2,104,700	2,031,600	2,136,400	5
Outside the 'Big 5' -conurbations*	3,666,400	4,122,300	4,572,900	4,460,900	5,072,700	14
Total	5,556,700	6,180,200	6,677,600	6,492,500	7,209,100	11

^{*}only deals ≥ 5,000 sqm

Letting volume of 7.2 million sqm sets a new record

The letting volume of 7.2 million in 2018 was a new record in the German warehousing and logistics market, exceeding 7 million sqm for the first time. This is over 500,000 sqm or 8% higher than the previous record of around 6.7 million sqm from 2016. The total volume (lettings and owner-occupiers) was 20% above the 5-year average. The majority (64%) of total take—up was attributable to lettings, which increased by 7% year-on-year. Take-up by owner-occupiers rose by 18% over the same period, and their total of 2.6 million sqm is also a new record.

Upswing in large-scale lettings

Around 6.6 million sqm of the total take-up across Germany was attributable to 375 individual transactions in the \geq 5,000 sqm size category. As in previous years, the greatest number of transactions (45%) was in the 5,000 to 10,000 sqm size category, but this equated to just 20% of total take-up volume. The strongest year-on-year growth was in the \geq 40,000 sqm size category in terms of the number of transactions (32%) and take-up volume (39%), which accounted for almost one quarter of total volume and 7% of all transactions in 2018. The average deal size in this category was 63,500 sqm.

Significant growth amongst e-commerce companies

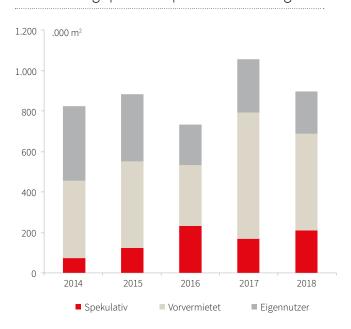
An analysis of the warehousing and logistics space take-up in the ≥5,000 sqm size category by occupier type shows that 2018 was again dominated by the distribution/logistics segment. The approx. 2.7 million sqm in this sector accounted for 40% of total take-up, significantly greater than the average of 27% p.a. over the last five years. There was also double-digit growth in take-up by manufacturing companies over the same period (21%) which accounted for a take-up of around 1.8 million sgm in 2018 (27% of total take-up). Retail companies accounted for around 1.7 million sqm, which is 7% above the 5-year average. Within the retail sector there was an above-average upswing in the e-commerce segment which accounted for a take-up of around 780,000 sqm in 2018, equating to a year-on-year increase of 50% and double the 5-year average. Three of the four largest deals of the year were in this segment: the furniture retailer XXXLutz laid the foundation stone for its new 200,000 sqm e-commerce logistics centre at the Erfurter Kreuz motorway interchange, which is due to be completed in 2022. The online retailer Amazon accounted for two of the top four deals: a new 114,000 sqm logistics centre in Oelde and an approx. 100,000 sqm facility in Sülzetal close to Magdeburg.

Ruhr area defends 1st place

In terms of the distribution of logistics space take-up in the ≥5,000 sqm size category across the German regions, the Ruhr area was in first place for the third time in succession. The total take-up of around 574,000 sqm in 2018 was a year-on-year increase of 5%. The Frankfurt region is again in second place with stable take-up of around 500,000 sqm. These two regions have led the ranking for the last five years. The Hamburg region was in third place in 2018 with 314,000 sqm, which is a year-on-year increase of 4%. The strongest year-on-year growth was in the Leipzig/Halle (59%) and Munich regions (49%). Almost 40% of total volume was taken up outside the 17 established logistics regions.

were taken up in new buildings

Warehousing space completions in the 'Big 5'



Source: JLL, January 2019

Proportion attributable to new-build remains high

Around 28.7 million sqm in the ≥5,000 sqm size category has been taken up in Germany over the last five years. Around 70% of this space was in newbuild and project developments, equating to a total of 20.3 million sqm. There was an above-average share of 74% in 2018. Almost half of all take-up was attributable to owner-occupiers, followed by lettings (build-to-suit) with 39%; the share of take-up in the speculative sector rose marginally to 12% (2017: 10%).

Fewer completions in the 'Big 5'

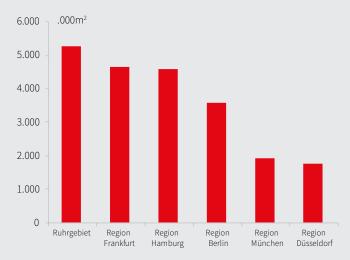
The supply of modern logistics space available in the short term has continued to fall in the 'Big 5' regions (Berlin, Düsseldorf, Frankfurt, Hamburg and Munich) in 2018. The approx. 905,000 sqm of warehousing space completed during the year was a year-on-year reduction of 15%. 23% of this space was still available at the point of completion. Around 580,000 sqm was under construction in the 'Big 5' at the end of December 2018, of which just under one third remained unlet. Most of the space (46%) under construction was in the Frankfurt region.

The investment-grade stock of logistics space (warehouses with a minimum area of 8,000 sqm, clear ceiling height of at least 6.5 metres to the underside of the roof beams and constructed since 1985) was just under 17 million sqm in the 'Big 5' in 2018. The total stock, including all space in the Ruhr area, is around 22 million sqm. We estimate the investment-grade stock of logistics space across the whole of Germany at 68 million sqm. According to the Fraunhofer Arbeitsgruppe SCC, the total stock of all logistics properties (irrespective of age, size or building quality) in Germany is around 330 million sqm (+/- 10%).

Logistics stock

The warehouse space meets the following criteria:

- it is suitable for logistics operations,
- is at least 8,000 sqm in size,
- has a clear height of at least 6.5 m and
- was built after 1985



Source: JLL, January 2019

Commentary

The following towns are covered:

Frankfurt:

Coverage includes in the entire Frankfurt region, bounded by Butzbach (Wetterau-Kreis) in the north, by Aschaffenburg in the east, by Bensheim/Heppenheim (Kreis Bergstraße) in the south and by Wiesbaden and Mainz in the west.

Hamburg:

Coverage includes Hamburg and four surrounding submarkets: the north limited by Norderstedt, Quickborn, Kaltenkirchen, Henstedt-Ulzburg; the east limited by Bargteheide, Ahrensburg, Trittau, Schwarzenbek, Geesthacht; the south limited by Lüneburg, Winsen (Luhe), Buchholz, Buxtehude; the west limited by Wedel, Uetersen-Tornesch.

Ruhr area:

Bochum, Boenen, Bottrop, Dortmund, Duisburg, Essen, Gelsenkirchen, Hagen, Hamm, Hattingen, Herne, Herten, Kamen, Luenen, Muelheim, Oberhausen, Schwerte, Unna.

Berlin

The Berlin city area and surrounding communities are included.

Munich:

Coverage includes the entire Munich region. In addition to the City of Munich itself, the region surveyed comprises the most important towns and local authorities in the administrative districts of Dachau, Ebersberg, Erding, Freising, Fuerstenfeldbruck and Munich as well as Starnberg.

Düsseldorf:

Düsseldorf, Erkrath, Hilden, Ratingen, Neuss, Krefeld, Kaarst, Haan, Grevenbroich, Korschenbroich, Langenfeld, Meerbusch, Rommerskirchen, Dormagen, Willich.



Availability of development land for logistics space continues to fall

The continuing occupier and investor demand for newbuild properties has meant that sites suitable for logistics development are in ever shorter supply in many regions. The problem is exacerbated by the fact that the logistics use is often in competition with other use types such as residential or offices, and councils and residents often have their concerns regarding increased traffic. In many cases, the price expectations are incompatible with the economic realities of the logistics business. The use of

brownfield sites and the construction of multi-storey warehouses will increase over the long-term in order to minimise the footprint of logistics uses. There are also significant differences in prices for serviced logistics sites across the individual regions. Whilst sites cost between €20 and €60/sqm in the Erfurt region, prices in the Munich region are between €450 and €550/sqm, and rising. Prices in many regions have continued to rise over the last year, most notably in the Hamburg, Munich and Ruhr area.

Owner-occupier take-up differs across the regions

Over the last five years, the average proportion of take-up across Germany attributable to owner-occupiers and lettings has been 40% and 60% respectively. In regions such as Osnabrueck/Muenster, Erfurt and other areas outside the

established logistics regions, the proportion attributable to owner-occupiers is above average at 56% - 58%. The proportion is much lower in regions such as Cologne (11%) and Nuremberg (19%) which are dominated by letting deals, which is the case in 15 of the 17 logistics regions.

Warehousing/logistics take-up ≥ 5,000 sqm, 2014 – 2018 lettings/owner-occupiers

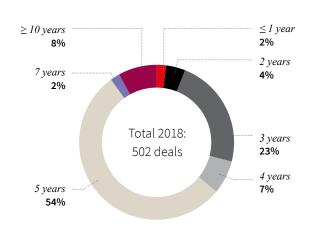
Logistics region	Lettings in sqm	Owner-occupiers in sqm	Total take-up in sqm	Relation (%) *
Ruhr area	1,929,900	893,800	2,823,700	68:32
Frankfurt	1,637,100	454,800	2,091,900	78:22
Hamburg	1,250,900	458,300	1,709,200	73:27
Rhein-Neckar	911,100	541,500	1,452,600	63:37
Berlin	1,015,900	311,300	1,327,200	77:23
Hanover/Brunswick	606,100	504,000	1,110,100	55:45
Osnabrueck/Muenster	470,500	637,100	1,107,600	42:58
Stuttgart/Heilbronn	537,500	505,200	1,042,700	52:48
Leipzig/Halle	650,600	372,800	1,023,400	64:36
Düsseldorf	651,800	349,000	1,000,800	65:35
Cologne	817,600	105,400	923,000	89:11
Moenchengladbach	640,700	254,200	894,900	72:29
Bremen	478,600	194,600	673,200	71:29
Munich	541,200	130,700	671,900	81:19
Kassel/Bad Hersfeld	499,400	125,500	624,900	80:20
Erfurt	236,600	318,400	555,000	43:57
Nuremberg	387,800	89,500	477,300	81:19
Total regions	13,263,300	6,246,100	19,509,400	68:32
Outside the regions	4,025,800	5,161,000	9,186,800	44:56
Total	17,289,100	11,407,100	28,696,200	60:40

^{*} lettings/owner-occupiers Source: JLL, January 2019

Three and five-year lease terms particularly popular

Leases across the 'Big 5' conurbations have tended to be mainly three or five-year contracts over the last few years. A total of 77% of all contracts were in these two categories in 2018. The share attributable to five-year leases decreased slightly year-on-year (from 62% to 54%), whilst the share attributable to three-year leases increased (from 16% to 23%). The 10+ year leases favoured by developers and investors contributed a share of 8% in 2018.

Lease length*



* Berlin, Düsseldorf, Frankfurt, Hamburg, Munich Source: JLL, January 2019

Prime rents rose by up to 10%

The prime rents for warehousing space in the ≥5,000 sqm size category remained stable in 9 of the 17 logistics regions under review (e.g. Frankfurt, Düsseldorf, Hanover/Brunswick Kassel/Bad Hersfeld). There were some significant rent rises in the other 8 regions. The greatest increases were in the top locations in the Berlin region (10.0%) and Stuttgart/Heilbronn (9.7%). Prime rents in the German logistics clusters vary between the Erfurt region with €3.90/sqm/month and the Munich region at €7.10/sqm/month.





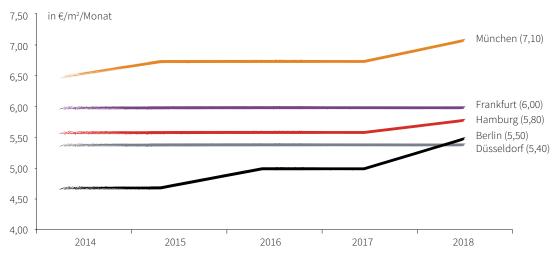
Rental bands for warehousing ≥5,000 sqm

	20		
	in €/sqr		
Region	from	to	forecast*
Munich	6.20	7.10	77
Stuttgart/Heilbronn	3.80	6.80	71
Frankfurt	4.50	6.00	7
Hamburg	4.10	5.80	71
Berlin	2.70	5.50	→
Düsseldorf	4.00	5.40	→
Ruhr area	3.00	5.20	→
Cologne	3.00	5.10	71
Nuremberg	3.50	4.95	71
Rhein-Neckar	4.00	4.90	71
Kassel/Bad Hersfeld	3.70	4.50	→
Moenchengladbach	3.75	4.50	→
Osnabrueck/Muenster	3.25	4.50	71
Hanover/Brunswick	3.00	4.40	71
Bremen	2.50	4.20	→
Leipzig/Halle	2.50	4.20	→
Erfurt	2.50	3.90	→

^{*}forecast: total 2019 compared to previous year

Source: JLL, January 2019

Prime rents for warehousing ≥5,000 sqm

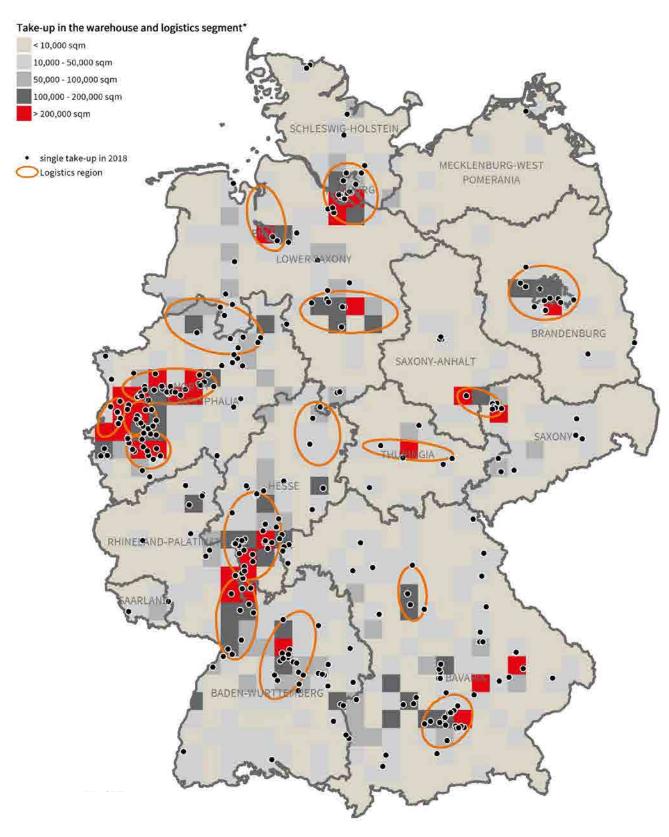


Source: JLL, January 2019

Lettings/owner occupier transactions for space over 5,000 sqm, advised by JLL in 2018

Location	Owner / investor (vendor)	Tenant (purchaser)	sqm warehouse	sqm office/ social	new building	owner- occupier transaction
Gottfrieding	P3 Logistic Parks	XXXLutz (BDSK Handels GmbH & Co. KG)	56,500	1,800	✓	
Walsrode	Dritte bauwo Log GmbH	Toys "R" Us GmbH	54,600	700	✓	
Schwarzenbruck	VIB Vermögen AG	Amm GmbH & Co. KG Spedition	20,400	700	✓	
Wunstorf	TRITAX EUROBOX PLC	HAVI Logistics GmbH	14,800	1,100	✓	
Wang	MP Holding	Rhenus Automotive Systems GmbH	11,800	1,100	✓	
Ludwigsburg	Automobilzulieferer Borg Warner	Roche Diagnostics Automation Solutions GmbH	10,300	3,100		✓
Moenchengladbach	REDEVCO Immobilien	ITC Logistic GmbH	9,900	2,600		✓
Neufahrn b. Freising	Prologis Germany Management GmbH	MAN Truck & Bus AG	9,800	600		
Leipzig	confidential	DURSTEXPRESS GmbH	8,000	400		
Augsburg	Keller & Hosp AG	KUKA AG	6,700	50		
Magdeburg	Alma Immobilien Eins GmbH	STAR COOPERATION Gesellschaft mit beschränkter Haftung	6,600	100		
Dresden	Aurelis Real Estate GmbH & Co. KG	DURSTEXPRESS GmbH	6,100	600	✓	
Fuerth	Fuchs & Söhne GmbH	Systemtrans stl GmbH	6,000	0		
Fuerth	Fuchs & Söhne GmbH	Lakner Spedition + Logistik GmbH & Co. KG	5,900	100		
Leipzig	confidential	Hanwha Q CELLS GmbH	5,300	200		
Moenchengladbach	REDEVCO Industrial Deutschland OHG	ITC Logistic GmbH	5,200	400		✓

Source: JLL



0 20 40 km

 $^{^* \}ge$ 5,000 sqm; Industrial and Logistics deals 2014 - 2018 Q4 aggregated in 20 km-grids Source: JLL Research

The investment market for logistics and industrial properties

The boom continues

The transaction volume in the logistics and industrial sector was almost €7.5 billion in 2018, the second-best performance ever. This was 14% below the previous year's record performance of €8.7 billion, but 60% above the 5-year average of €4.67 billion. This figure was significantly below this level for other real estate segments in the real estate investment market: the office segment was 43% above the 5-year average, the residential sector was 16% above and the retail segment was 10% below.

Increase in the number of single-asset transactions

Whilst the transaction volume attributable to single-asset deals rose by 31% year-on-year, the volume attributable to portfolios fell by 32%. Portfolio transactions continued to dominate with a share of 57% of the total transaction volume. The largest deals were portfolio transactions. The five largest transactions in 2018 totalled €2.46 billion, or one third of all transaction volume, including:

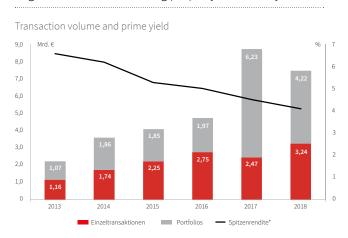
- The sale of the Laetitia portfolio by Aurelis Real Estate to Swiss Life comprising 32 commercial properties across the whole of Germany
- The sale of the Optimus Prime Portfolio by Beos to Heleba Invest for around €520 million
- The sale of a logistics portfolio by Alpha Industrial to Frasers Property, most of which (around €500 million) was in Germany.

The risk profile of these three transactions is Core Plus (i.e. properties in good to very good locations with highcredit tenants and short lease terms), and this sector accounts for 44% of all transaction volume. This trend for investors to take on greater levels of risk in terms of property location and letting situation was already evident in 2016 and 2017. Core properties are also in high demand and contributed 37% of the total transaction volume.

High dynamics in the mid-cap segment

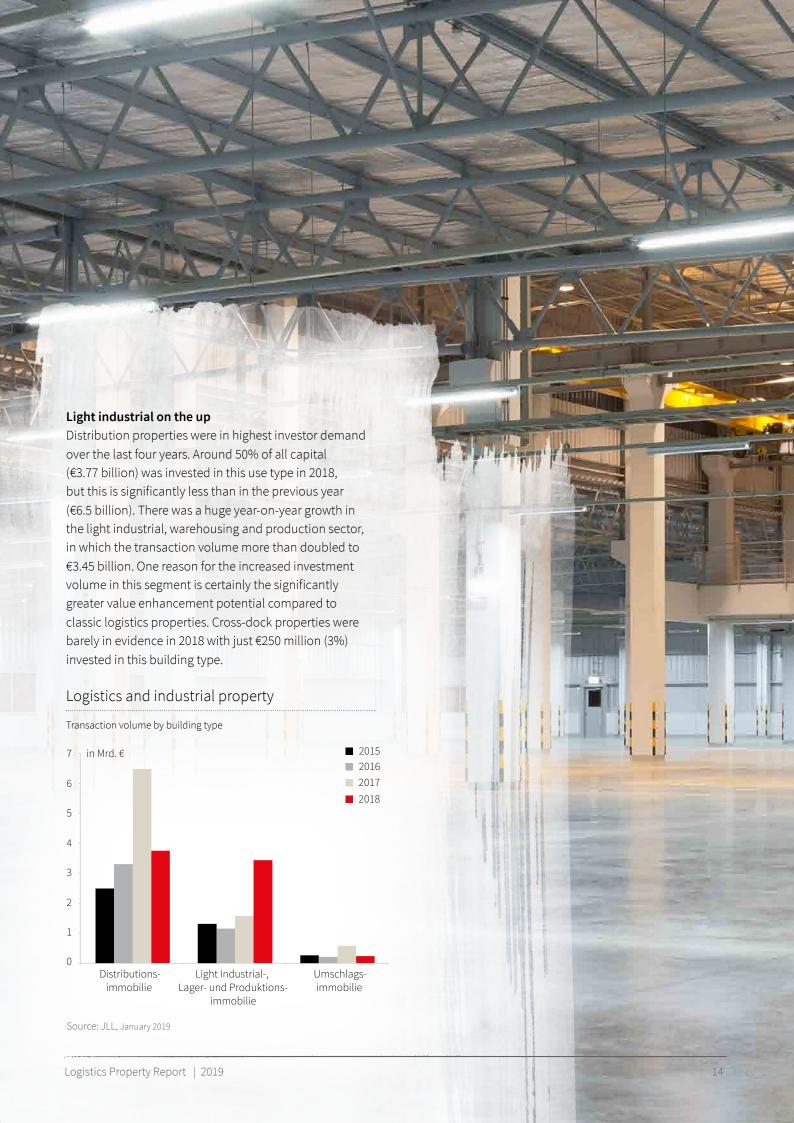
Around 230 transactions were registered in 2018, 16% more than in the previous year. The number of deals in the three- and four-digit million euro range did not increase, as in the previous year, 11 transactions of this magnitude were recorded. There was an increase in the area of smaller transactions. Purchases in the mid-cap segment (investments up to an individual size of €15 million) reached a total volume of €810 million in 2018. With 140 transactions, this is a very dynamic segment. In 2017, the figure for the same period was just under €720 million for 120 transactions.

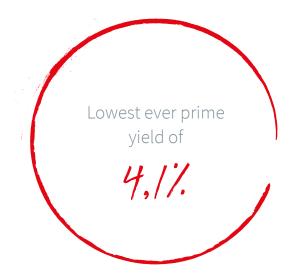
Logistics and manufacturing property in Germany



*Average net initial yields for Berlin, Düsseldorf, Frankfurt, Hamburg, Cologne, Munich and Stuttgart

Source: JLL, January 2019





Asset/fund managers are the most active investor group

The highest demand on the buy-side in 2018 came from the asset/fund managers which invested around €2.3 billion (31% of total volume). Private equity/hedge funds followed at a significant distance behind (around €850 million). In third place were REITs with around €780 million. The sell-side was dominated by the project developers which sold properties worth €2.34 billion (31%). They were followed by the corporates (€1.28 billion) and asset/fund managers (€1.06 billion).

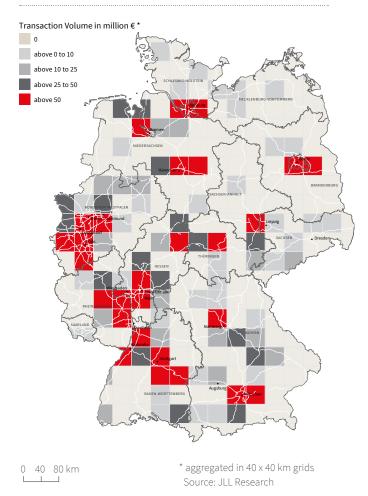
Increased investment volume by foreign investors

The market continues to be dominated by foreign capital. The share attributable to foreign investors was 59% in 2018, which is comparable with the 5-year average of 60%. By contrast, on the sell-side, 37% of the total transaction volume was attributable to foreign investors, which means that the total assets held by this group increased by €1.65 billion.

Further year-on-year fall in prime yields

Due to the high pressure amongst both national and international investors to invest, the continued low interest rate climate and the lack of product across all real estate segments, prime yields continued to fall in 2018. The most significant reduction was in the logistics sector: prime yields for logistics and industrial property fell by 40 basis points down to 4.1% in the Big 7 (Berlin, Düsseldorf, Hamburg, Frankfurt, Cologne, Munich and Stuttgart) at the end of 2018, which is the lowest level ever registered. It is expected that yields will continue to fall over the coming months.

Investment activity in the logistics and manufacturing sector 2018



What will happen in 2019?

Economic conditions continue to be generally favourable in 2019. The most significant unknowns for the real estate market in the current year are the unresolved trade war between the USA, Europe and China, the resulting possible intensification of global transaction restrictions, and a no-deal Brexit which may adversely affect the favourable business environment in Germany. As the European Central Bank postponed any interest rate hikes until 2020 at the earliest in March 2019, the low interest rate climate will continue, which means that real estate remains an attractive proposition for investors.

It is likely that total take-up volume in the warehousing and logistics sector will again exceed the €6 million sqm mark in 2019, but the ever increasing scarcity of space means that there is no new record in sight. In view of the ever decreasing supply of sites for new-build development we expect that rents will continue to rise in the most highly demanded conurbations.

There will continue to be high demand for logistics and industrial properties, and we expect the total transaction volume in 2019 to be at a similar level to 2018. On the one hand, there will be large-scale portfolio sales in the >€500 million category – two portfolios of this level are already being prepared – and on the other, sales in the midcap segment and sale-and-leaseback deals will increase. Prime yields for logistics properties will continue to fall in the Big 7 cities in 2019 from their current average of 4.1% to 3.75%.





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