

**More
valuable
than
before
the crisis?**

Logistics and Real Estate 2021

Focus on Values

logistik-und-immobilien.de

©2021 bulwiengesa AG

"Since the pressure to find floor space is not about to decline any time soon, peripheral locations stand to benefit from a proportionate demand strength."

Tobias Kassner, Head of Research,
GARBE Industrial Real Estate GmbH

"In the years ahead, the question whether to retrofit a given building to become more climate-friendly will become a major issue for many existing properties."

Michael Dufhues, Vorstand,
Bremer AG

"Although the outbreak of the COVID-19 pandemic precipitated a brief economic slump, the latest signs point toward growth again."

Bertrand Ehm, Director Industrial Investment,
Savills Immobilien Beratungs-GmbH

"The latest trend in selling prices also brings real estate lenders face up with the question whether these are still justifiable."

Maria Teresa Dreo-Tempsch, Marktvorständin,
Berlin Hyp AG

Table of contents

Preface

1

Logistics and Real Estate–
On value and change

P. 10

Survey partners

P. 11

Systemic relevance & the fair value issue

1.1 Covid-19 changing the
logistics business

P. 16

1.2 Logistics within the causal
fabric of society

P. 21

2

Location characteristics and regional values

2.1 Growing demand for second-tier
locations due to pent-up demand?

P. 27

2.2 Increasing building activity in
peripheral regions

P. 28

2.3 Scoring der Logistikregionen 2020

P. 31

2.4 More and more investors venturing
into secondary locations

P. 35

3

Building quality as value basis

3.1 The intrinsic value of a building

S. 38

3.2 Factors influencing the property value

S. 40

3.3 Rising construction costs will in turn
increase the property value

S. 45

3.4 Number of brown-field developments
will increase

S. 45

3.5 Bringing down prices will take longer
than their ascent took

S. 47

4

The market for property developments

4.1 Is there any way to meet the
enormous demand for space?

P. 51

4.2 Completions volume of 2020 lags
behind expectations

P. 54

4.3 A new player among the leading 20
developers

P. 55

4.4 Modest increase in pro-rata building
activity in established logistics regions

P. 60

5

Investment market for logistics property

- 5.1 Turbulent times boost logistics real estate as asset class
P. 66
- 5.2 Investment volume maintains high level in crisis-stricken 2020
P. 68
- 5.3 Investment activity by logistics region
P. 80

6

Value depending on type of use

- 6.1 Public awareness of logistics much improved
P. 85
- 6.2 The macroeconomic value-added of the logistics business
P. 86
- 6.3 Direct benefits of logistics properties
P. 89
- 6.4 The societal value added of logistics developments and its costs
P. 90
- 6.5 The logistics sector is of extraordinary significance for germany
P. 93

7

On the valuation of logistics real estate

- 7.1 Effects of location on value
P. 96
 - 7.2 Construction costs rising everywhere
P. 101
 - 7.3 The logistics sector as basis of success
P. 102
 - 7.4 Value, while subjective, is not arbitrary
P. 106
 - 7.5 Comparing capitalised earnings value with tangible value is becoming increasingly important
P. 111
- Contact & Imprint
P. 113

...the ...

...the ...

...the ...

...the ...

...the ...

...the ...

...the ...

...the ...

...the ...

...the ...

...the ...

...the ...

...the ...

...the ...

...the ...

...the ...

...the ...

...the ...

...the ...

...the ...

...the ...

...the ...

Preface



Logistics and Real Estate– On value and change

The pandemic has changed society's perception of logistics.

This is already the second study edition in times of the Corona pandemic. In the meantime, the pandemic has changed social perception of logistics. The fact that logistics is the lifelines of our economic life has been and continues to be emphasized in the study series. What is new, that the outstanding role of logistics for the economy is also a recurring topic of public discussion. The economy is a recurring topic. The mood among real estate professionals with regard to the logistics real estate asset class, as shown by the monthly surveys on the real estate climate, has meanwhile taken the top position among the commercial real estate asset classes. What does this change mean for the logistics real estate market?

We have taken these changes as an opportunity to look at the value of logistics (real estate). The study is intended to contribute to a better understanding and classification of the value influences on the logistics real estate market. In the case of e-commerce, the market developments under consideration have been relevant for a number of years or are new and induced by the Corona crisis.

We have now reached a point where a lot has changed in the world of logistics since the first logistics study was published in 2015. Thus, it was also time to renew the well-known scoring of logistics regions in order to evaluate market changes.

With this in mind, we wish you an informative read and look forward your feedback.

Survey Partners

Berlin Hyp

BREMER

The partners of this survey series are major players in real estate financing, in the developer business, in property development, in investment consultancy, and in strategic analysis and advisory services in the logistics and real estate sector. Within the framework of what is now the seventh edition of the “Logistics and Real Estate” survey, these partners bring you an in-depth overview of the latest trends and contexts in this segment. As a joint competence centre, they are in a position to provide a collective angle on the subject, a perspective that is used to make forward-looking and strategically balanced decisions.

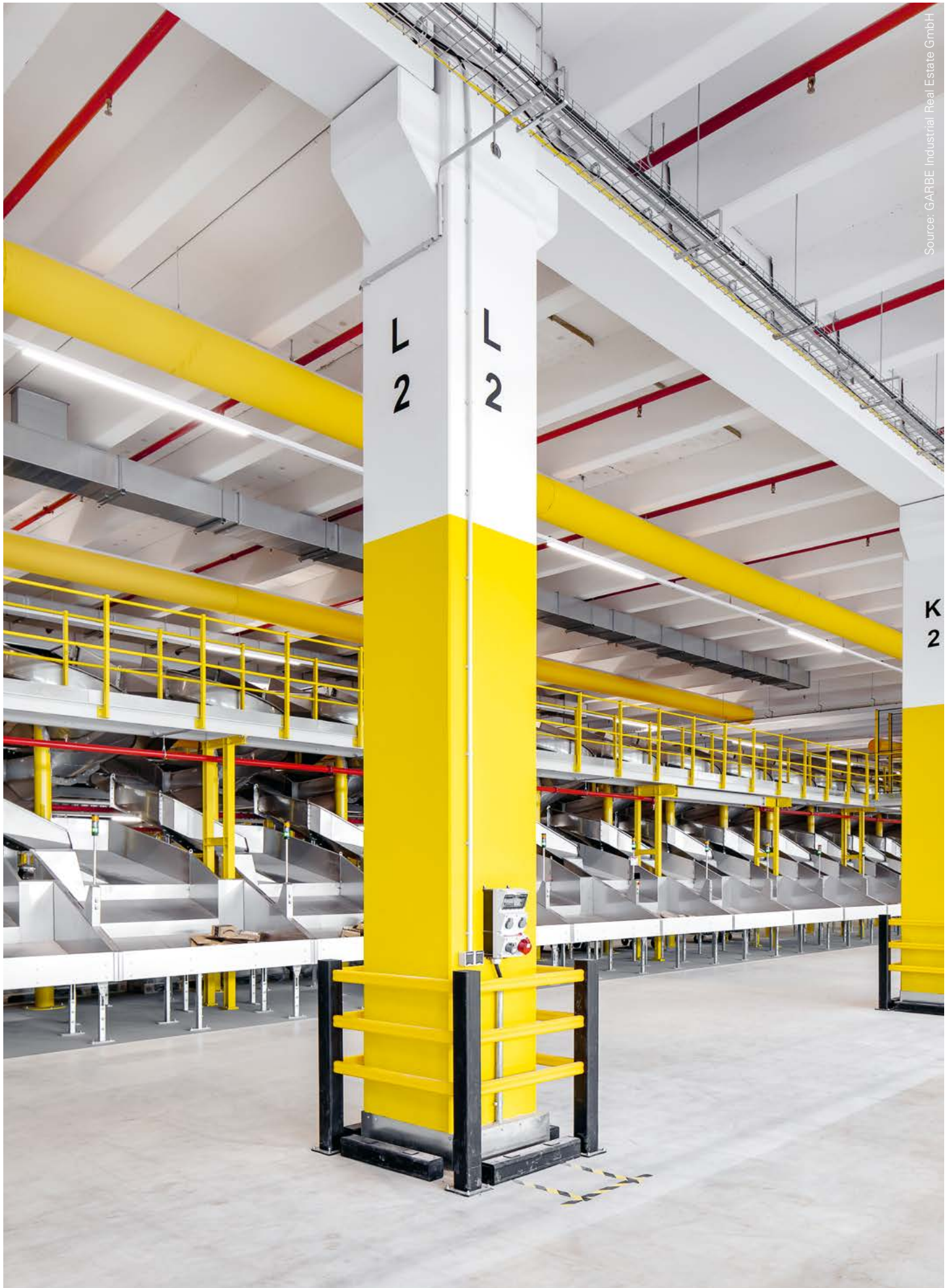
Berlin Hyp AG

Berlin Hyp is a mortgage bank specialising in large scale real estate financing for professional investors and housing companies. For these, it develops bespoke financing solutions. As a company associated with Germany’s savings banks, Berlin Hyp has access to a comprehensive spectrum of products and services. It plays a pioneering role in the development of sustainable refinancing products. The sustainability issue is a core component of its corporate strategy. The company endorses the financing of sustainable properties, and actively supports the transformation of the real estate market, so as to contribute to carbon neutrality.

Its clear-cut focus, more than 150 years of experience and its ability to play an active role in the digital transformation of the real estate industry define Berlin Hyp as a leading German real estate and mortgage credit bank.

Bremer AG

In Germany, BREMER AG counts among the leading companies in the field of turnkey construction using precast reinforced concrete elements that are planned and manufactured in proprietary plants in Paderborn, the company’s principal place of business, and in Leipzig. The majority of these precast reinforced concrete elements are based on proprietary designs. Founded in 1947 and active across Europe today, the family-owned business maintains branches in Stuttgart, Leipzig, Ingolstadt, Hamburg, Bochum, Berlin-Brandenburg, Bremen in Germany, as well as in Krakow and Pozna in Poland. As general contractor, BREMER raises buildings of any performance envelope requested and specified by its key account clients. Its spectrum of deliverables includes office schemes, home furnishing stores, refrigerated warehouses, logistics buildings, light industrial buildings and hypermarkets. What our key account customers appreciate is the top quality, the professional execution, the cost security and adherence to schedule we deliver. We are by their side every step of the way, from the property development to the production in proprietary plants, and all the way to the turn-key construction and service options for the building in operation.





bulwiengesa AG

bulwiengesa is one of the major independent analytics firms for the real estate industry in Continental Europe. For more than 30 years, bulwiengesa has supported its partners and clients in real estate industry issues as well as location and market analyses, providing detailed data services, strategic consultancy and bespoke expert opinions. The company's RIWIS online information system delivers richly informative microdata, time series, forecasts and transaction data. The data of bulwiengesa are used by Deutsche Bundesbank for the European Central Bank (ECB), the Bank for International Settlements (BIS) and the OECD, among many other clients.

Garbe Industrial Real Estate GmbH

Based in Hamburg, Garbe Industrial Real Estate GmbH is one of Germany's leading companies selling and managing logistics real estate and multi-let properties of the Unternehmensimmobilien type. For more than 30 years, the company has counted among the most important collaboration partners for transport and logistics service providers, the trade sector and the manufacturing industry. Garbe Industrial Real Estate GmbH develops, buys or sells, lets, manages and finances high-end re-lettable commercial properties in attractive transport nodes and industrial locations inside and outside Germany. At the moment, Garbe Industrial Real Estate GmbH has 158 assets in a combined value of 3.5 billion euros under management that extend over around 4.4 million square metres of lettable area.

Savills Immobilien Beratungs-GmbH

Based and listed in London, Savills is one the leading real estate service providers active worldwide. Founded in 1855, the company looks back on a long history of tremendous growth. Rather than following trends, Savills sets its own, and today has more than 600 offices and partners in the Americas, Europe, Africa, Asia Pacific and the Middle East, and employs over 39,000 professionals.

In Germany, Savills employs a staff of around 200 professionals at 7 offices in the country's leading real estate locations – Berlin, Cologne, Düsseldorf, Frankfurt, Hamburg, Munich and Stuttgart.

the 1990s, the number of people in the UK who are aged 65 and over has increased from 10.5 million to 13.5 million, and the number of people aged 75 and over has increased from 4.5 million to 6.5 million (Office for National Statistics 2000). The number of people aged 65 and over is projected to increase to 16.5 million by 2020, and the number of people aged 75 and over to 8.5 million (Office for National Statistics 2000).

There is a need to understand the needs of older people, and to ensure that the health care system is able to meet these needs. This paper reports on a study that was carried out to explore the needs of older people, and to identify the factors that influence these needs. The study was carried out in a general practice in the south of England, and involved a series of focus group discussions with older people, and with general practitioners (GPs) and other health care professionals (HCPs) who were involved in the care of older people.

The study was carried out in a general practice in the south of England, and involved a series of focus group discussions with older people, and with GPs and other HCPs who were involved in the care of older people. The study was carried out in a general practice in the south of England, and involved a series of focus group discussions with older people, and with GPs and other HCPs who were involved in the care of older people.

The study was carried out in a general practice in the south of England, and involved a series of focus group discussions with older people, and with GPs and other HCPs who were involved in the care of older people. The study was carried out in a general practice in the south of England, and involved a series of focus group discussions with older people, and with GPs and other HCPs who were involved in the care of older people.

The study was carried out in a general practice in the south of England, and involved a series of focus group discussions with older people, and with GPs and other HCPs who were involved in the care of older people. The study was carried out in a general practice in the south of England, and involved a series of focus group discussions with older people, and with GPs and other HCPs who were involved in the care of older people.

The study was carried out in a general practice in the south of England, and involved a series of focus group discussions with older people, and with GPs and other HCPs who were involved in the care of older people. The study was carried out in a general practice in the south of England, and involved a series of focus group discussions with older people, and with GPs and other HCPs who were involved in the care of older people.

The study was carried out in a general practice in the south of England, and involved a series of focus group discussions with older people, and with GPs and other HCPs who were involved in the care of older people. The study was carried out in a general practice in the south of England, and involved a series of focus group discussions with older people, and with GPs and other HCPs who were involved in the care of older people.

The study was carried out in a general practice in the south of England, and involved a series of focus group discussions with older people, and with GPs and other HCPs who were involved in the care of older people. The study was carried out in a general practice in the south of England, and involved a series of focus group discussions with older people, and with GPs and other HCPs who were involved in the care of older people.

The study was carried out in a general practice in the south of England, and involved a series of focus group discussions with older people, and with GPs and other HCPs who were involved in the care of older people. The study was carried out in a general practice in the south of England, and involved a series of focus group discussions with older people, and with GPs and other HCPs who were involved in the care of older people.

1

Systemic relevance and the fair value issue



1.1

Covid-19 changing the logistics business

Systemic relevance—nothing captures the essence of the logistics business in 2020 as aptly as this term. It suddenly became perfectly clear to everyone anywhere in the wake of the coronavirus pandemic just how essential logistics are. Closed borders, disruptions of supply chains, container bottlenecks – there were a number of instances that highlighted the importance of a smoothly functioning logistics sector for modern society. But what does the term “systemic relevance” actually signify?

Is systemic relevance merely a keyword that you apply to a given sector whenever a crisis situation arises, or are there actually identifiable and quantifiable effects that constitute systemic relevance? No doubt, logistics represent a key element of Germany's infrastructure. But what sort of societal value-added does it offer, and has its value increased in the course of the past year? Or did logistics only take centre stage for a brief interlude before receding into the background again, remaining busy behind the scenes?

>







This issue of the survey series “Logistics and Real Estate” will take a closer look at the intrinsic value of logistics real estate and trace its performance last year or indeed over the past few years. Certain long-term trends are readily identifiable that began to emerge well before the outbreak of the pandemic. From a consumer’s perspective, the acceptance of and demand for online shopping opportunities has been steadily increasing for a number of years. The parcel volume to be handled by German courier and parcel service provider is setting fresh records year after year. In 2020, the demand was further spurred by shifting consumption patterns in the wake of the lockdown and the trend toward working from home. Latest figures document a tremendous surge in shipment volumes last year. And the development is not about to peak any time soon. Jumping up by +10% compared to 2019, the shipment volume grew much faster than a mere continuation of the trend would most likely have prompted.

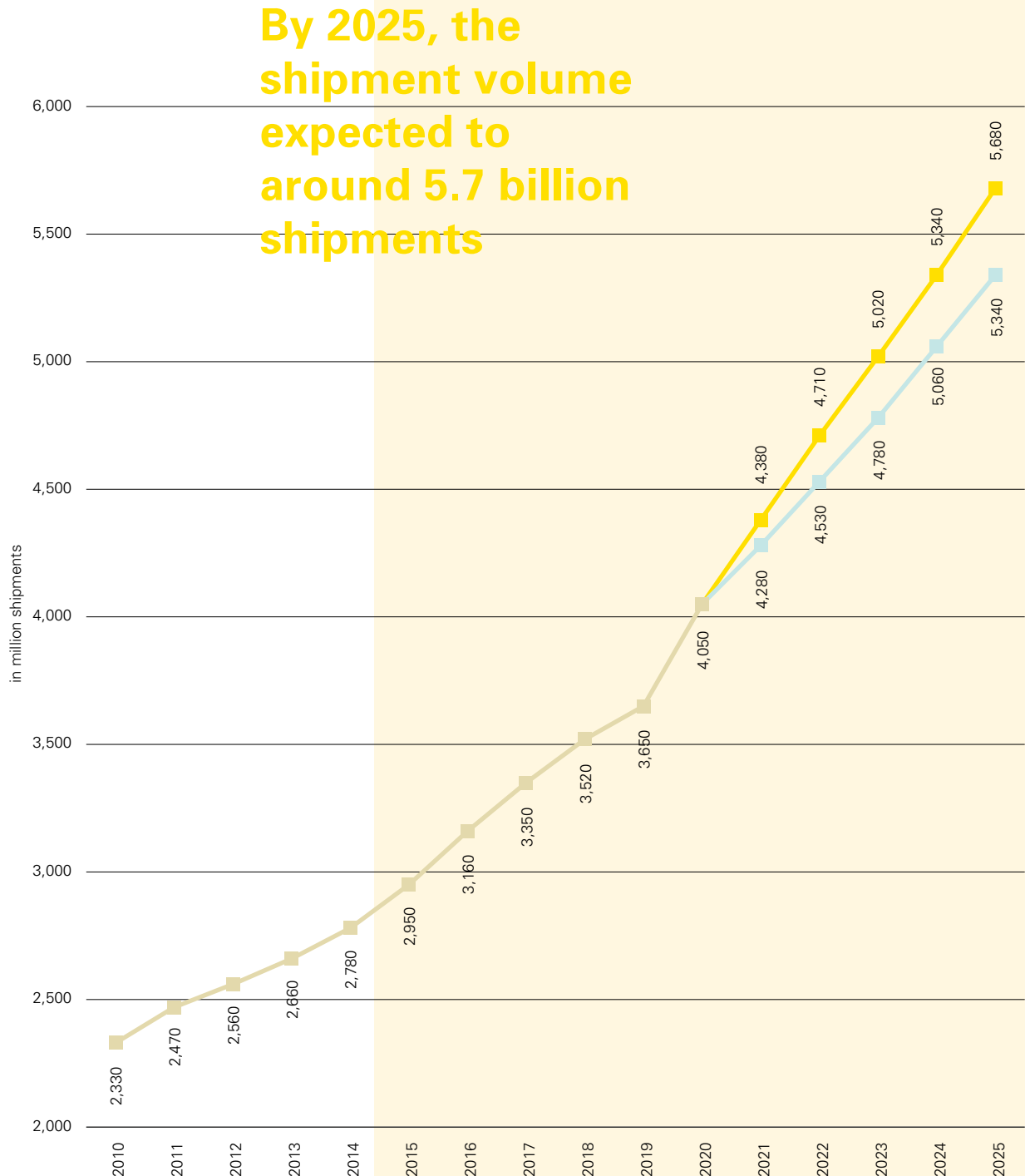
+10%

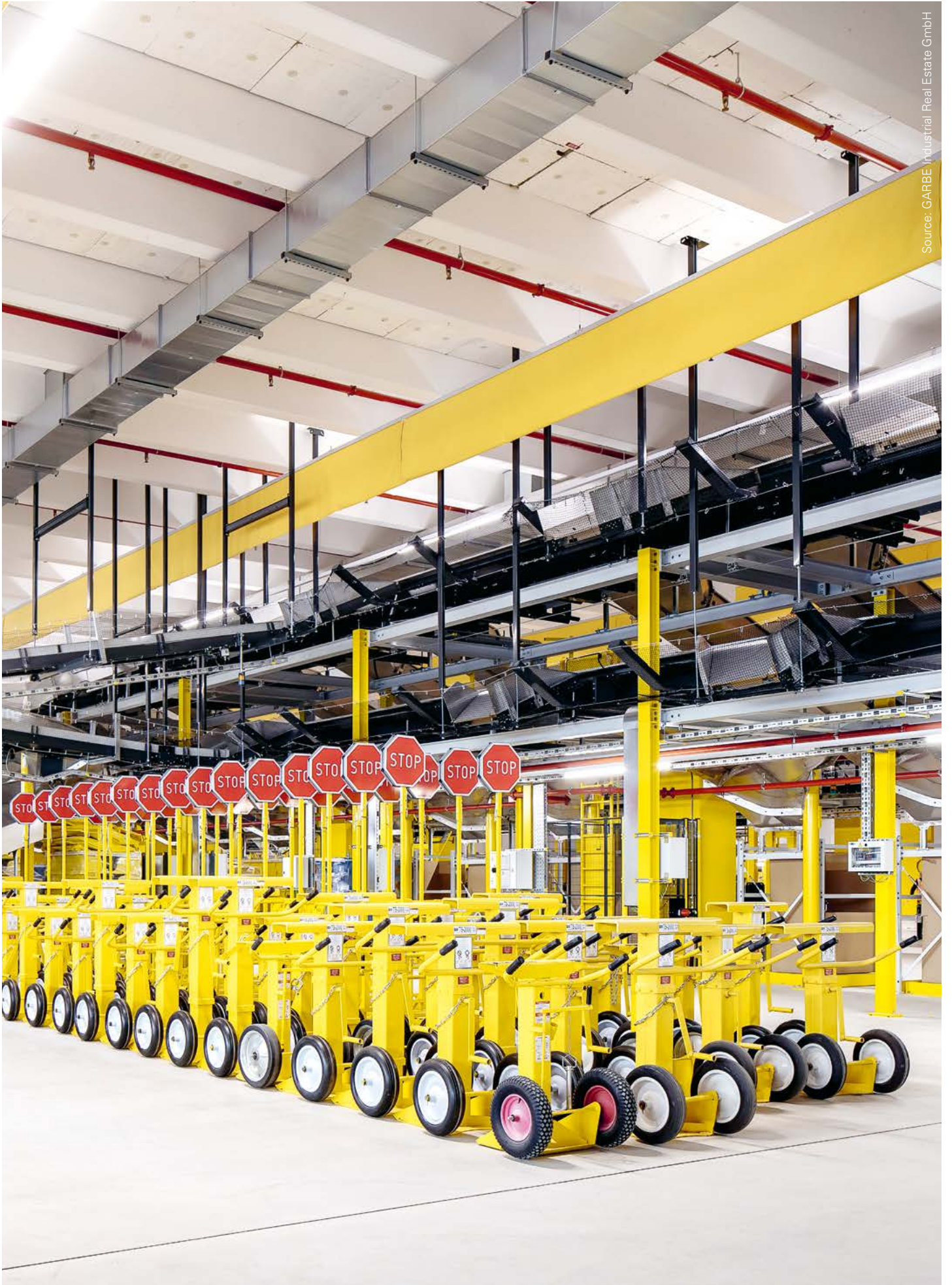
Increase in shipment volumes (compared to 2019)

Forecast development of the CEP shipment volumes through 2025

■ Course
■ Trend extrapolation
■ Forecast

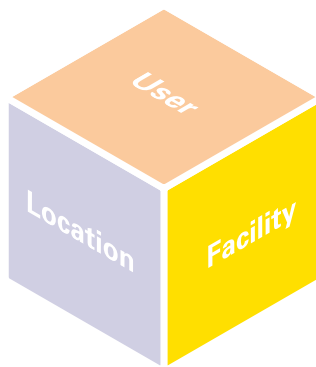
Source: KEP-Studie 2020.





1.2

Logistics within the causal fabric of society



Corona was an anomaly with far-reaching consequences, both for society in general and for the economy. No one could have foretold the full impact of events seen in 2020. It seems as if the uncertainty about the further development, the chance of another lockdown, and the macroeconomic impact kept growing from one month to the next. Another factor that defined the international perception in 2020—and now 2021—is the situation on the financial markets. Following a stock market slump in the spring of 2020, markets—backed by the monetary easing policy of central banks—bounced back and climbed to new high-water marks. Across the globe, low levels of interest, low earnings prospects or indeed the threat of penalties have increased the willingness to invest. Rising demand has prompted corresponding price growth and is paving the way for ever more expensive capital goods while prompting the question whether such price hikes are even justifiable. This question was raised more than once in regard to logistics and real estate in the course of last year. Are we looking at just another tulip mania or a verifiably sustainable performance? To answer this, the subsequent inquiry will focus on logistics real estate. The question being: Are logistics assets more valuable now than they were before the crisis?

The totality of the individual elements within a causal relationship can be considered a system—such as, for instance: population, politics and economy. Within the economy, in turn, the various industries, and the various companies within a given industry, each function as elements within a decidedly complex economic system. So, what constitutes the relevance of certain elements vis-à-vis others? Economic actors—be they an industry, a company or a worker—become highly relevant whenever they are particularly well networked within the overall system.

This means: An industry boasting a large number of interdependencies with other industries and economic sectors can claim a high degree of systemic relevance. This is, no doubt, the case with the logistics industry.

According to the argument above, a high degree of relevance coincides with advanced interconnectedness, meaning a higher complexity of the respective system unit. The logistics sector and modern supply chains are systems of enormous complexity, and even minor anomalies can precipitate major ramifications. It is precisely the cumulative occurrence of unexpected circumstances that can lead to major upheavals within the respective overall system. The coronavirus pandemic caused just such an anomaly, putting the system of the logistics sector and the resilience of Germany's supply chains to the test. Some developments—container bottlenecks, border closures, and congestions—proved obviously unavoidable, but when allowing for its enormous complexity, it must be said that the modern logistics sector coped rather well with the crisis.

>



What reason would justify the pace at which logistics real estate prices have gone up?



the 1990s, the number of people in the UK who are employed in the public sector has increased from 10.5 million to 12.5 million, and the number of people in the public sector who are employed in health care has increased from 2.5 million to 3.5 million (Department of Health 2000).

There are a number of reasons for this increase. One of the main reasons is the increasing demand for health care services. The population of the UK is ageing, and there is a growing number of people with chronic conditions such as heart disease, diabetes, and asthma. This has led to an increase in the number of people who need to be treated in hospitals and other health care settings.

Another reason for the increase in the number of people employed in the public sector is the increasing demand for health care services. The population of the UK is ageing, and there is a growing number of people with chronic conditions such as heart disease, diabetes, and asthma. This has led to an increase in the number of people who need to be treated in hospitals and other health care settings.

A third reason for the increase in the number of people employed in the public sector is the increasing demand for health care services. The population of the UK is ageing, and there is a growing number of people with chronic conditions such as heart disease, diabetes, and asthma. This has led to an increase in the number of people who need to be treated in hospitals and other health care settings.

A fourth reason for the increase in the number of people employed in the public sector is the increasing demand for health care services. The population of the UK is ageing, and there is a growing number of people with chronic conditions such as heart disease, diabetes, and asthma. This has led to an increase in the number of people who need to be treated in hospitals and other health care settings.

A fifth reason for the increase in the number of people employed in the public sector is the increasing demand for health care services. The population of the UK is ageing, and there is a growing number of people with chronic conditions such as heart disease, diabetes, and asthma. This has led to an increase in the number of people who need to be treated in hospitals and other health care settings.

A sixth reason for the increase in the number of people employed in the public sector is the increasing demand for health care services. The population of the UK is ageing, and there is a growing number of people with chronic conditions such as heart disease, diabetes, and asthma. This has led to an increase in the number of people who need to be treated in hospitals and other health care settings.

A seventh reason for the increase in the number of people employed in the public sector is the increasing demand for health care services. The population of the UK is ageing, and there is a growing number of people with chronic conditions such as heart disease, diabetes, and asthma. This has led to an increase in the number of people who need to be treated in hospitals and other health care settings.

2

Location characteristics and regional values





2.1

Growing demand for second-tier locations due to pent-up demand?

A central element in the valuation of a logistics property is always also the location that property is inextricably tied to. Since locations strongly favoured on the demand side cannot be replicated at will, plots in premium locations consequently sell at ever higher prices. This begs the question which geographic patterns underlie the site preferences, and would the current shortage of space in top locations not make it seem worthwhile to consider alternative location as well?

In previous years, demand for logistics facilities concentrated mainly on metro regions and their surroundings. Among the most important locational factors that supersede all other aspects is the triad of land availability, infrastructure connectivity (especially road infrastructure) and potential labour supply. To be sure, metro areas tend to have the strongest attractive pull in this context. They generally offer great economic strength, convenient access to the transportation infrastructure and, in densely settled areas, a large population potential within reach, which also implies a potential labour basis. The high appeal of metro regions and the keen interest they generate is qualified by limited supply and subsequently pent-up demand with the result that the triad of locational factors becomes unbalanced. Available land is becoming an ever-scarcer commodity in Germany's sought-after locations. Given this shortage in top-category spots, second-line locations are steadily gaining in attractiveness. After all, these tend to offer conditions for logistics operations just as good as metropolitan sites.



2.2

Increasing building activity in peripheral regions

20%

Share of peripheral counties in volume of completions

35%

Share of central counties in volume of completions

45%

Share of very central counties in volume of completions

An indicator for the attractiveness of a given place is the local trend in new construction volume. At least in theory, property developments will generally move ahead only in places where it is safe to assume a sustained strong demand for space.

Starting with a geographic analysis is a good way to answer the question how the relationship between central locations and the periphery is evolving. Based on the classification defined by the BBSR Federal Institute for Research on Building, Urban Affairs and Spatial Development, the rural districts of Germany range from “very central” all the way to “very remote” area types. The cartographic overview illustrates that rural districts which qualify as “remote locations” are clustered mainly in the centre of Germany. Locations labelled “very remote” are found primarily in the north-eastern part of the country, primarily in Mecklenburg-West Pomerania. Rural districts of the “very central” category are clustered around the Rhine-Ruhr conurbation and in south-west Germany.

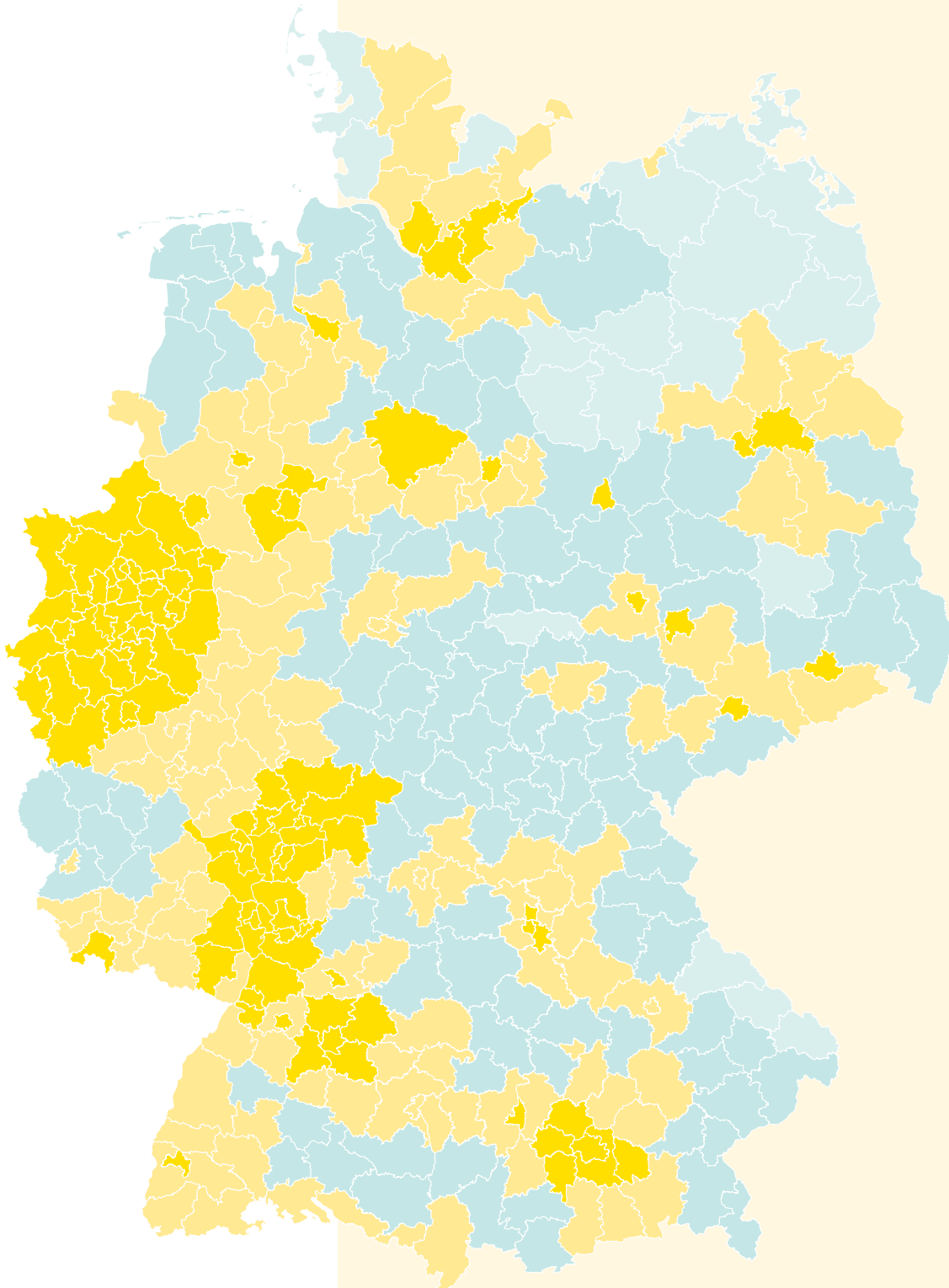
A look at the share that completed logistics facilities have in Germany’s total volume of completions reveals the development outlined above: As recently as 2011, the “very central” districts still accounted for 65 % of the total completions volume, up from nearly 60 % the year before, the share of central districts steadily declined in subsequent years. It should be borne in mind here that a large percentage of the completions in the central district represent suburban locations, meaning outside the city limits proper. In 2020, the new construction volume in central districts made up less than half of the total at 49 % for the first time since the start of the observation period. The share is expected to drop to 45 % percent this year and to equal 46 % next year.

While completions in very central locations experienced a modest decline, the significance of peripheral locations for property developments jumped up noticeably. The share of this area type in the completions total rose from about 14 % during the years 2010 through 2018 up to around 17 % in 2019, and will maintain this level. In fact, the share of peripheral locations is expected to climb to 24 % of the completions total by 2022. If this trend was to continue, it would be reasonable to expect the share of the peripheral regions to exceed that of the central ones.

Districts in germany by area type (BSR)

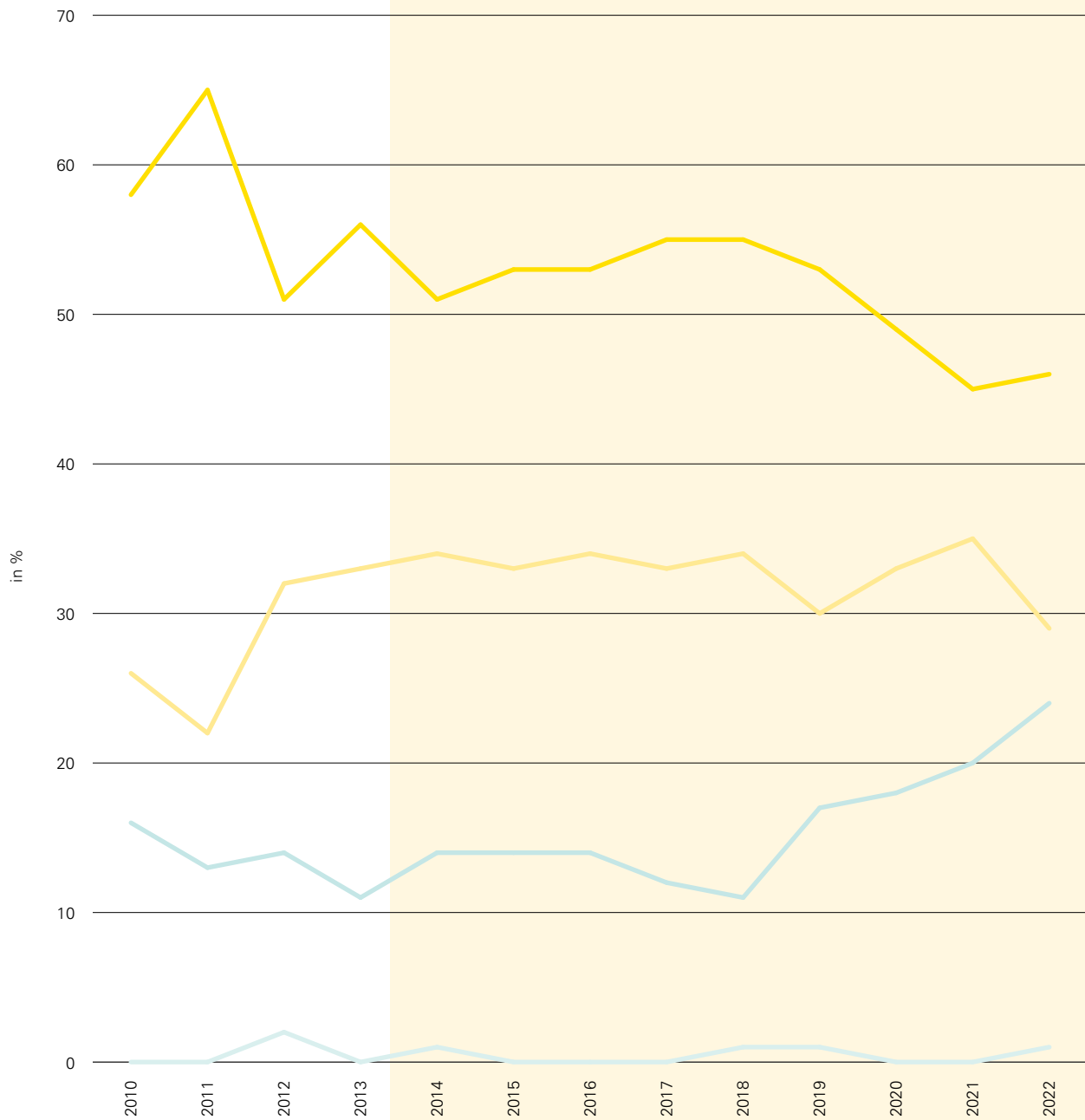
- very central
- central
- peripheral
- very peripheral

Source: Proprietary chart based on the BBSR area type mapping



Share of the area types in the overall completions volume of logistics real estate in Germany

- very central
- central
- peripheral
- very peripheral



2.3

Scoring of the logistics regions in 2020

Starting with the very first issue, the survey series “Logistics and Real Estate” included the derived market attractiveness of Germany’s logistics regions in the form of a “scoring.” For several years now, the scoring was published separately from the main survey. This year, however, you will find the latest logistics regions scoring integrated in the current issue, giving you the chance to take a closer look at the appeal of the tier-two logistics regions below.

How does the scoring work? The overall scoring is composed of several sub-scores that include, for instance, the metrics of existing stock of logistics assets, completions, take-up or transactions – all of it aggregated on the level of the logistics regions and over time. In addition, regional economic factors enter into the analysis, such as the gross value added in the area of trade and transportation or the number of insurable employees. This collection of metrics is supplemented by figures on the trends in rents, yields and land prices – differentiated for each logistics region. Generally speaking, the analysis of market attractiveness represents a perennial and annually updated project that supports the “Logistics and Real Estate” survey series with a reliable data basis, and that provides significant conclusions about the dynamic at work in the various logistics regions of Germany. The analysis included the year-end figures of 2020 as well as the latest forecasts from the first half of 2021.

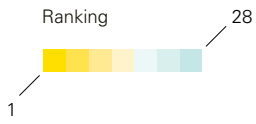
Berlin and Hamburg vying for the top spot

The latest scoring once again shows the Berlin logistics region top the list. Just like in 2019, the logistics region stands out with impeccable fundamentals. Demand for logistics facilities is huge. New-build construction is concentrated in the southern to south-eastern periphery of Berlin. The dynamic market action is fuelled by fast rent growth. On the whole, the logistics region defended its top score by maintaining a strong upper score of supply, demand for space and rent level. However, it is closely trailed by the second-placed logistics region of Hamburg, which has also boasted sound fundamentals for many years. Both logistics regions have consistently been among the top three since 2015.

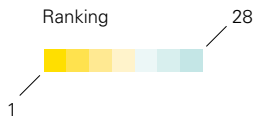
Top ten dominated by the usual suspects

This year’s top-ten list of logistics regions in Germany includes candidates that repeated their outperformance in spite of the fact that they had previously ranked lower for many years. One is the Dortmund logistics region, the other being Bremen and North Sea ports. It is actually the first time that Bremen and North Sea ports made the top-five. The good ranking is explained primarily by high scores in the categories investment demand (1st place), land availability (8th place) and general demand (9th place). Placing seventh this year, Dortmund made the top group by returning excellent scores in the categories general demand (1st place), supply (4th place) and investment demand (4th place).

Ranking of the logistics regions by the 2020 scoring



Scoring ranks of the logistics regions over time



Logistics regions	2020	2019	2018	2017	2016	2015
Berlin	1	1	1	2	3	2
Hamburg	2	2	2	3	1	1
Dusseldorf	3	3	8	10	4	5
Bremen and North Sea ports	4	13	18	14	8	11
Rhine-Main/Frankfurt	5	5	5	7	5	4
Rhine-Neckar	6	4	4	6	10	10
Dortmund	7	8	15	19	17	19
Halle/Leipzig	8	10	10	4	6	3
Cologne	9	14	7	9	7	7
Hanover/Brunswick	10	7	9	11	9	8
A4 motorway Saxony	11	21	21	18	19	16
Rhine-Neckar	12	11	14	12	14	17
Munich	13	9	3	1	2	6
Lower Bavaria	14	6	11	5	12	9
Muenster/Osnabrück	15	24	17	13	22	12
East westphalia-Lippe	16	15	16	15	15	18
Stuttgart	17	16	6	8	11	13
Upper Rhine	18	12	13	16	26	15
Aachen	19	20	12	21	23	25
A4 motorway Thuringia	20	23	25	23	21	27
Ulm	21	17	22	27	25	23
Augsburg	22	18	19	17	13	22
Magdeburg	23	25	27	28	28	28
Nuremberg	24	19	20	20	16	20
Kassel/Goettingen	25	27	24	26	20	14
Bad Hersfeld	26	22	26	25	18	21
Saarbrücken	27	26	23	22	27	24
Koblenz	28	28	28	24	24	26

**“Demand in
Germany has
traditionally been
strongest in the
prime locations.”**

2.4

More and more investors venturing into secondary locations



Tobias Kassner, Head of Research,
GARBE Industrial Real Estate GmbH

“The shorter the distance to the metro regions, the stronger the competition with other asset classes for suitable spots. In most cases, policymakers tend to prefer their use by other asset classes. Municipalities often overlook the logistics type of use, while becoming increasingly reluctant to zone new land for commercial use in their business areas anyway. Another obstacle is the growing period of time that it takes a development to progress from its inception to the approval of the local development plan.

It also makes little sense to hunt for entirely unknown locations or true insider tips, because transparency on the German logistics real estate market has significantly improved in recent years – not least because of this survey series. Places like Magdeburg, which ranked near the bottom of the list just a few years ago, have clearly moved up the ladder in the constant reshuffling of ranks. This is true both for the occupier and for the investor side. Whether a second-tier location is potentially suitable for a given occupier and, if so, which one, depends on the specific motive for seeking a new site. The key question behind any motive is always: Will this location let me conduct my logistics business? Recent evidence suggests that the conditions logistics operators need to be able to do their jobs are available not just in the top locations but in secondary locations, too. Aspects that have been increasingly prioritised lately are transportation access and the accessibility of end consumers.

Since investors focus on current cash flow of the rental income, they follow the same principles that occupiers apply when assessing a given location. However, their risk considerations are much more restrictive, for instance in the context of debt funding. This explains why investors may take a more sceptical view of a given location than an occupier would.

But again, market evidence shows that more and more investors are venturing into secondary locations. The investment risk is slightly higher here because you need to bear in mind that it will be harder than in a metro region to find a new occupier in case the incumbent tenant files for insolvency or decides to leave. Since the pressure to find floor space is not about to decline any time soon, peripheral locations stand to benefit from a proportionate demand strength. One problem plaguing such “grade C” locations is, however, that their large supply of land at an attractive price level coincides with a limited labour supply because of the low population density. Highly labour-intensive logistics sectors like e-commerce therefore have to scrutinise a given location with this aspect in mind.

Just how the quality of location is likely to develop long-term depends on various factors. A good example illustrating the change would be Bad Hersfeld in central Germany. At a time when e-commerce was in its infancy and the network for CEP service providers and e-fulfilment centres poorly developed, very central and easily accessible locations played a key role. Locations like Bad Hersfeld evolved. But from the start, sourcing all the human resources locally was not easy. Apace with the increasing network densification, locations that are close to end consumers and show a high labour density are gaining in importance, whereas locations from the pioneering days are successively losing in appeal.”

3

Building quality as value basis



3.1

The intrinsic value of a building

Aside from the location which is capitalised in the land price, the value of a property is defined to a large extent by the value and quality of the actual building. In this case, the value reflects primarily the value created by the materials and labour that went into the construction of the building. But of truly lasting value are only structures that are built to meet the needs not just of their present but of their future occupiers, too. At the same time, building units should be designed for adaptability to future requirements.





3.2

Factors influencing the property value

12^m

Hall heights are increasingly becoming more and more the standard

Certain basic requirements should be met in any case to ensure long-term demand for its floor space. Depending on the property type, meaning distribution or transshipment, different characteristics of a property may be prioritised. A definitive criterion for the attractiveness of an investment-grade property is its long-term marketability, which depends on its ability to attract a new tenant once an incumbent tenant moves out.

The repurposing options and alternative use potential of a building are, of course, largely defined by the way the building was structurally designed at the time it was built. A good way to achieve this kind of flexibility is to standardise the layout as much as possible. Moreover, the property should meet all regulations that could become applicable, such as fire protection and climate change mitigation rules. Although logistics real estate is principally designed according to a rather generic concept, specific characteristics can make a big difference. In the case of highly specialised property types like mechanised delivery sites, the warehouse layout is primarily determined by the logistics workflows of the sorter and the sorter's user-dependent design. This could result in very specific property characteristics that would not permit the installation of different sorting equipment.

Which way forward for logistics property development?

Tomorrow's logistics real estate will increasingly prioritise aspects that are conducive to environmental sustainability. On the demand side, such aspects will increasingly be sought or indeed requested in future. In addition, changing logistics processes will necessitate the adaptation of buildings to the new parameters. Warehouse heights of 12 metres will gradually become the standard as a result of efforts to make warehousing more efficient. It is also quite conceivable that the installation of induction loops in the floor will be requested more and more often to ensure effective use of automated equipment. In short, the efficiency with which logistics can be operated is decisive for corporate success and thus represents a key criterion in the selection of a given rental property.

Major shifts in the occupier base can also be associated with new sets of requirements for logistics properties. Such effects are being felt even today. E-commerce companies, for example, require a larger number of loading docks because of their increased stock turnover rate. The present standard of one dock for every 1,000 sqm of floor area is no longer sufficient for many e-commerce players. At the same time, occupiers from the online retailing sector prefer large-scale properties in order to accommodate their huge warehousing needs, not least for the storage of diverse small parts and for their returns management.

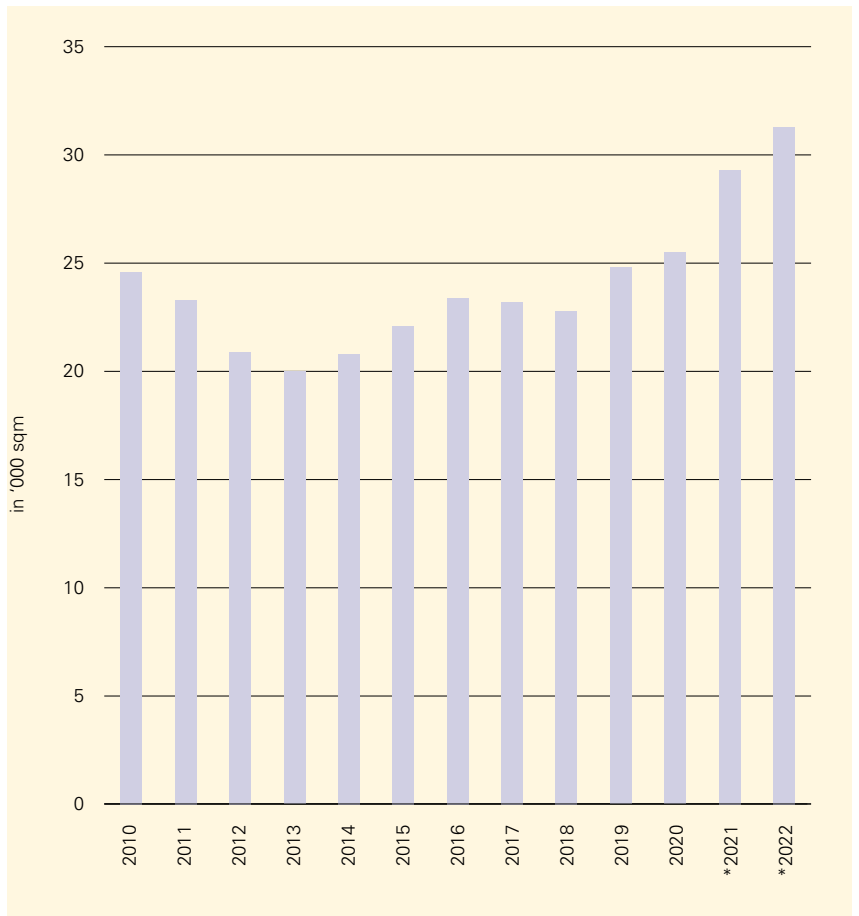
The trend toward large-volume properties also manifests itself in the trend that the size of the total useful area has followed over the past years. As it so happens, the number of large-scale properties has increased, especially in the most recent years. The trend is quite obvious even in the absence of dramatic increases in any given size band.

>

Development of average total useful area of logistics properties

■ Average total usable area in sqm

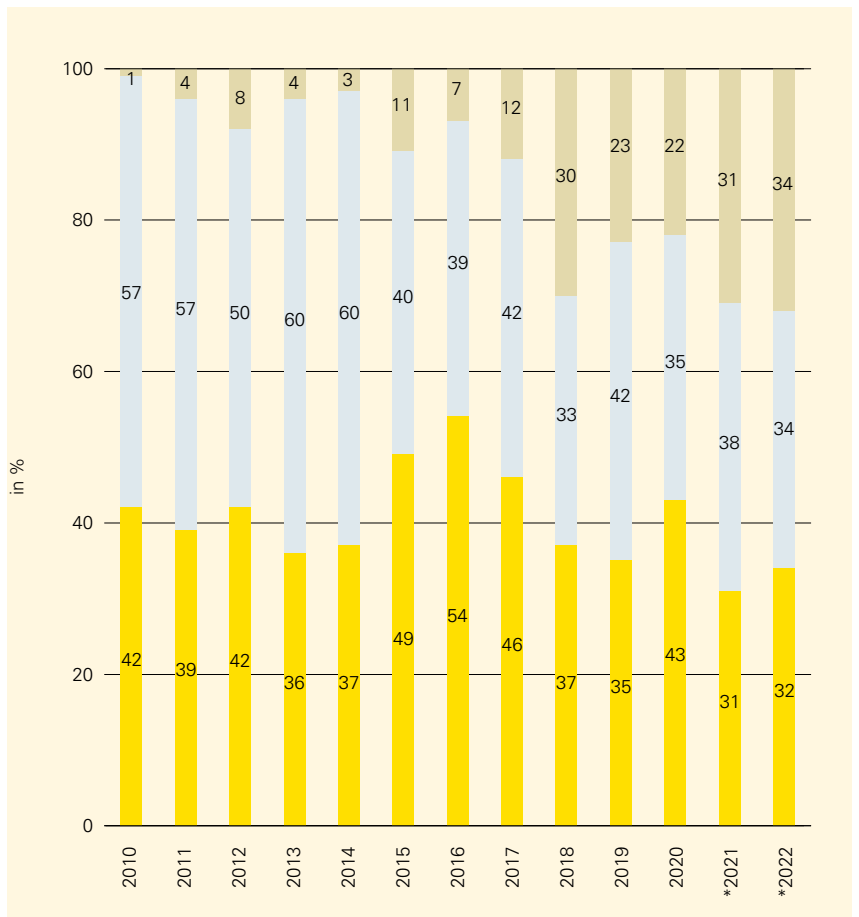
*The evaluation includes all completions up to the key date of 30/06/2021 plus floor space still in the pipeline (projects under construction or in planning, scheduled for completion before the end of 2021 or in 2022).



Breakdown of project type shares in the completions volume over time

■ Built-to-suit developer
 ■ Built-to-suit owner-occupier
 ■ Speculative share

*The evaluation includes all completions up to the key date of 30/06/2021 plus floor space still in the pipeline (projects under construction or in planning, scheduled for completion before the end of 2021 or in 2022).



To put this in perspective: Modern logistics properties typically range in a size band of about 25,000 to 30,000 sqm of total useful area. During the pipeline years of 2021 and 2022, large-volume properties will keep gaining in influence. The size of the properties completed this year and next year will average 29,300 and 31,300 sqm, respectively.

Growing number of logistics properties built for multi-tenant occupancy

One of the reasons for the growing unit sizes is the increasing relevance of multi-tenant properties. Another reason is the growing share of speculative developments in the total completions volume. In the years before 2015, the share of logistics space built on speculation never crossed the mark of 10 %, whereas the average share of such developments for the years 2018 through 2022 is projected to average 28 %. Inversely, the number of owner-occupiers developing their own assets is declining. While the share of built-to-suit developments of owner-occupiers had averaged 54 % between 2010 and 2015, it dropped to about 37 % during the period of 2016 through 2022.

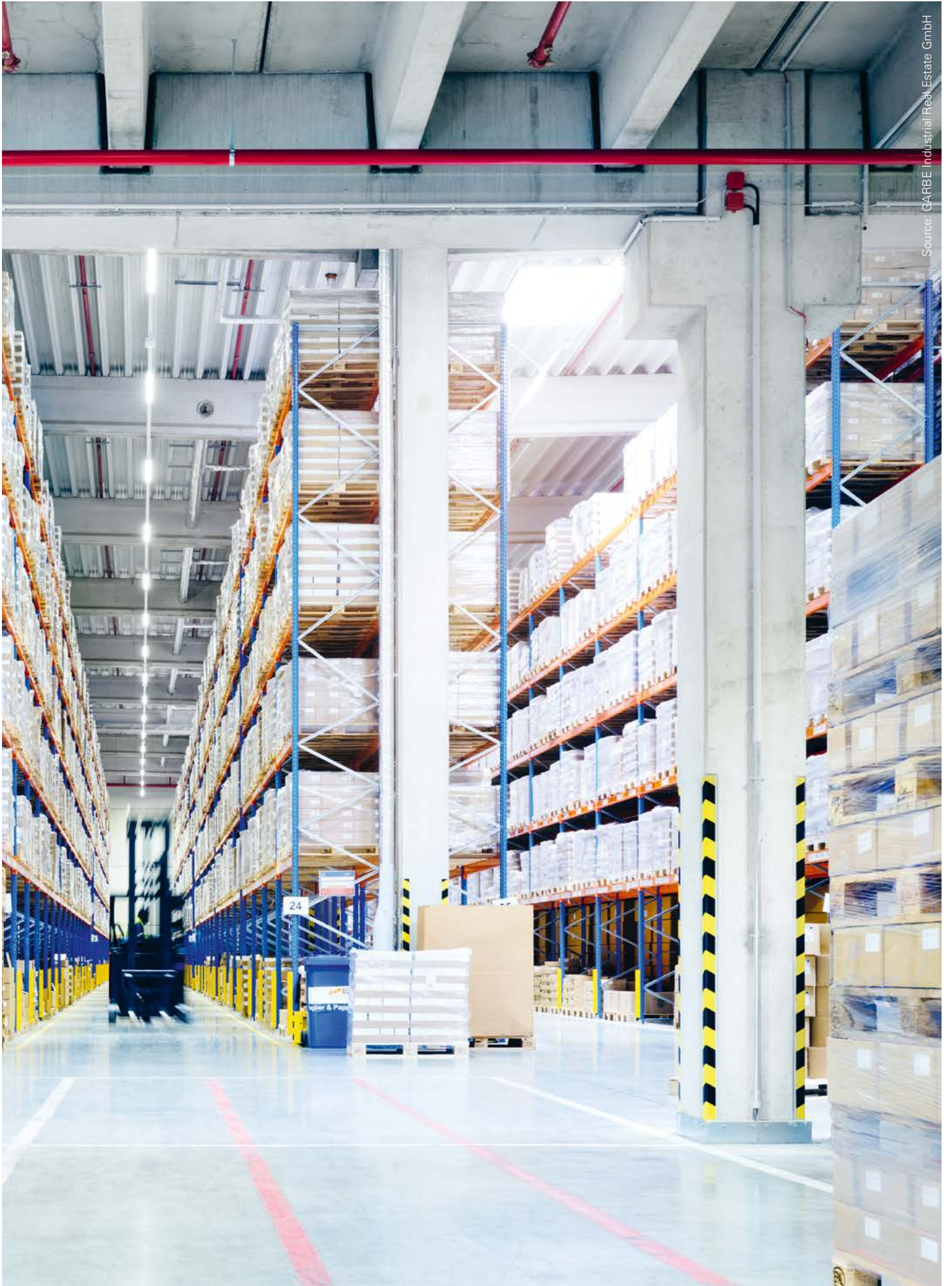
Obvious precondition for the speculative construction of a multi-tenant scheme is the possibility to partition the premises so as to be able to host several tenants in the building. Each of the potential units should have a dedicated access to the office units, e. g. from the mezzanine level, and have dedicated loading bays. In other words, each of the units should have everything it needs to run the respective logistics workflows autonomously. This means that a sound basis for a property's multi-tenant capability should be laid during its construction phase.

54 %

Share of built-to-suit developments by owner-occupiers from 2010 to 2015

37 %

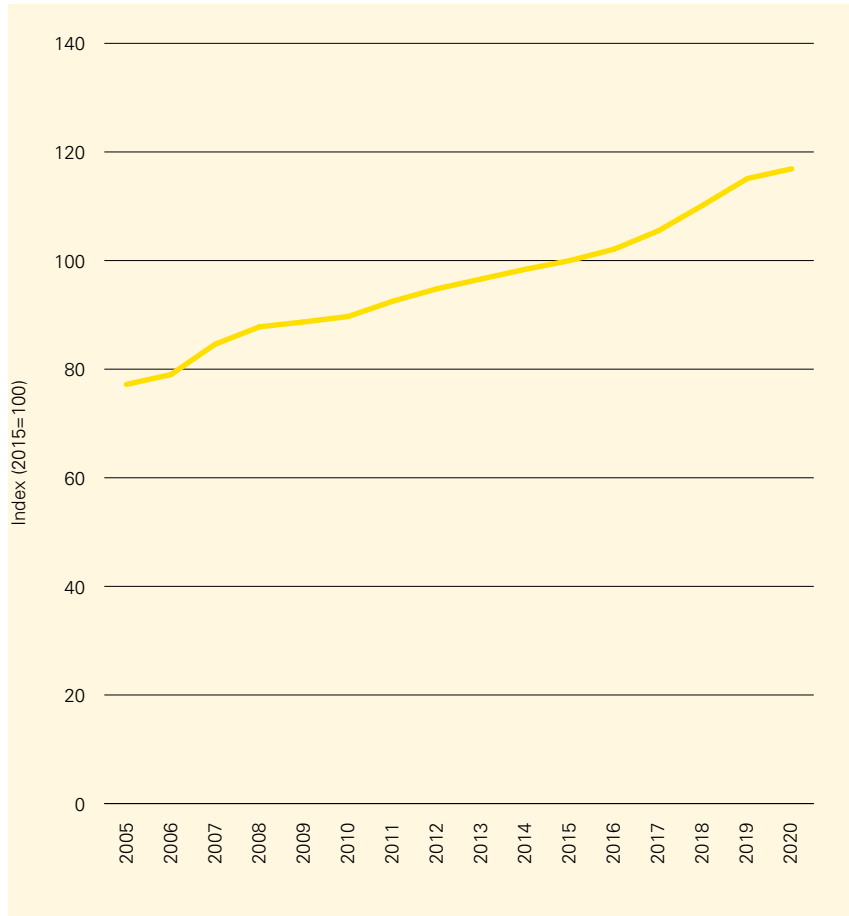
Share of built-to-suit developments by owner-occupiers from 2016 to 2022



Development of the construction cost index for commercial operational buildings

— Construction cost index (structural work on building)

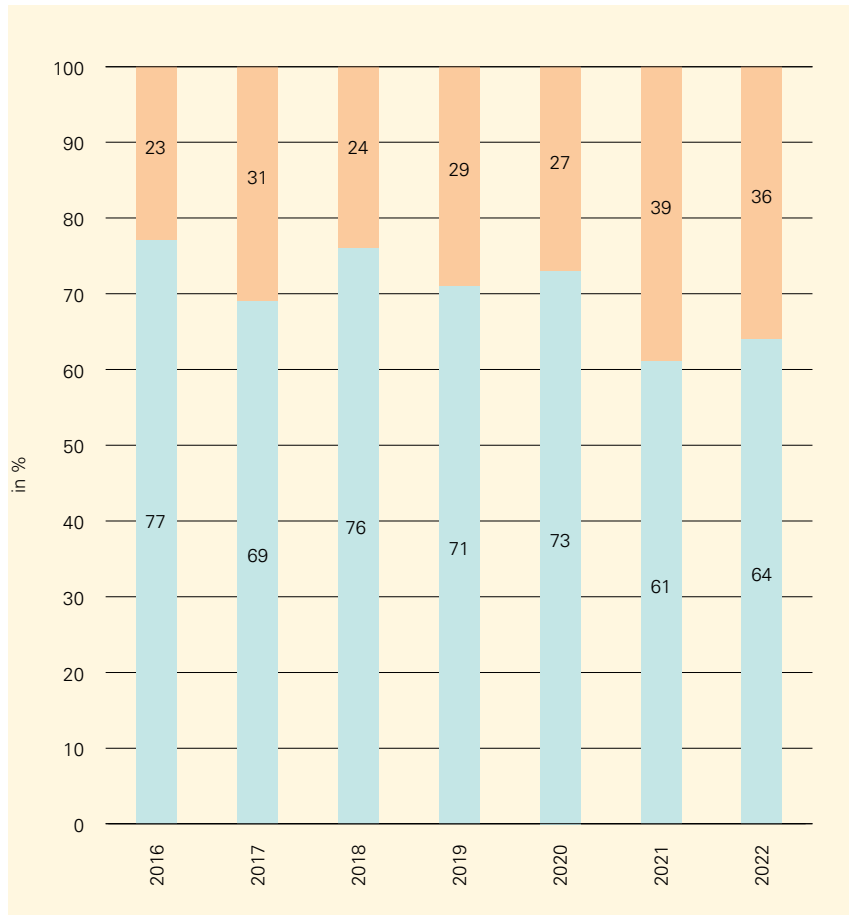
*Source: Federal Statistical Office; construction services are work services for the purpose of erecting structures, including the delivery of materials or building parts.



Breakdown of brownfield and greenfield developments over time

■ Greenfield
■ Brownfield

*The evaluation includes all completions up to the key date of 30/06/2021 plus floor space still in the pipeline (projects under construction or in planning, scheduled for completion before the end of 2021 or in 2022).



3.3

Rising construction costs will in turn increase the property value

Construction cost ratios such as the construction cost index serve as guidance on how the price level is trending. To determine the construction cost indices, the prices of construction work necessary to erect buildings are monitored over time. There are a number of circumstances that caused construction costs to go up in recent years.

The construction boom that Germany has seen lately is reflected in the well-filled order books of contractors. Strong demand worldwide has caused a shortage in building materials which in turn is steadily driving up prices. Not least, it is the ongoing global crisis that has further exacerbated these difficulties and shortages.

A look at the performance of the price index for commercial operational buildings impressively illustrates the upward trend. Relative to the base year of 2015, the construction cost index showed a score of 77.2 in 2005 and has steadily pushed up in the years since. On average, the index gained by 2.6 points annually between 2005 and 2020. In 2017, the price growth began to accelerate noticeably, reflected in spurts of nearly 5 index points at times.

3.4

Number of brown-field developments will increase

Land shortage calls for new solutions in the construction sector

One cost driver in property development, aside from the actual construction services, are the costs of land whose anyway rapid growth has further accelerated over the past years. As the supply of developable land is drying up fast, alternative solutions are urgently called for. Plots on greenfield land are barely available in Germany anymore, least of all in conurbations. This ties in with the political decision to limit soil sealing, which has caused the supply of greenfield land to contract even faster. A proven workaround to cope with the land shortage is therefore the recycling of derelict brownfield sites. Especially economic rust-belt regions such as the Ruhr offer a huge potential for brownfield developments of this kind. Over the past five years, brownfield developments claimed a share of nearly 26 % out of Germany's total completions volume, allowing for minor fluctuations from one year to the next. Striking to note is also the above-average share of brownfield developments among the projects that will be completed in 2021 and the year thereafter: Approximating 40 % this year and 35 % next year out of the total development volume, it appears to confirm the trend toward a growing significance of brownfield schemes.

Another possible response to the shortage of land and the rising costs of it is the development of multi-storey properties. However, multi-storey logistics properties are still in their pioneering phase in Germany. This type of construction seems to make sense only in areas that have virtually run out of land, and where the nature of a given business makes it mandatory to maintain storage capacity in the area. Whenever multi-storey construction is deemed an option, the building's floor load capacity and manoeuvring space must be adapted to the requirements of the incoming occupier. As a consequence thereof, the lower floor may resemble a maze of uprights that some occupiers will have a hard time coping with.

"It is safe to assume that it will take much longer for prices to decline again than it took them to surge to such a high level."

3.5

Bringing down prices will take longer than their ascent took



Michael Dufhues,
member of the executive board of Bremer AG

“The construction quality of new logistics buildings has definitely improved in recent years. The gain in quality is explained by a plethora of changes that have come to be integrated into the properties over time. A generally higher quality standard on the occupier side has prompted an increasingly value-oriented way to build. This is reflected, for example, in the fact that clear warehouse heights have lately been elevated from 10 m to more than 12 m, or in the increase in thermal insulation and larger daylighting areas in roofs and walls. Larger shares of office units and mezzanine areas have also precipitated changes in building volume. In addition, regulatory requirements necessitate structural adjustments, a case in point being the waterproofing beneath the base slab that is now mandated by the Water Resources Act (WHG). At the same time, a more efficient use of warehouse space also necessitates higher permissible floor loads and improved planarity for different storage systems. Generally speaking, fixtures for the intralogistics and conveyor systems of logistics warehouses keep getting more sophisticated in their design. These changes are matched by changing building requirements – for example in the way that fire-resistant compartments are structured.

Other defining aspects in the structural design of logistics properties concern sustainability and efficiency. Energy-efficient LED lighting therefore plays an ever-increasing role. In order to permit the operation of photovoltaic systems, load reserves to accommodate such roof-mounted systems should be included in the planning from the start. Something to remember is that the sustainability of a property depends on its durability. Ultimately, only a durable building deserves to be called resource-conserving. A property of multiple use options only merits that label if the original planning effort, rather than limiting itself to the

concerns and requirements of the first-time occupier, includes investments in extra warehouse height, energy supply, sprinkler concept, fire-resistant compartments, building height, bottom load, office expansions and other things. General modernisation works should not be required during the first 15 to 20 years, although this obviously does not include work necessitated by normal wear and tear or damage in the context of day-to-day use. In the years ahead, the question whether to retrofit a given building to become more climate-friendly will become a major issue for many existing properties.

One challenge that has given the industry headaches lately are the soaring costs of construction, which are essentially caused by a sharp increase in the costs of building materials in the recent past. Major price drivers include the costs of steel, petroleum-based materials (PVC, roofing foils, plastics etc.), timber-based materials, among others. The prolonged construction boom in the private sector has also led to capacity bottlenecks for contractors, while the pandemic has created further shortages as a result of disrupted supply chains. The temporary shortages will surely be followed by recovery. From today's perspective, however, prices do not seem to have peaked yet, and material prices will not soften any time soon. It is safe to assume that it will take much longer for prices to decline again than it took them to surge to such a high level.

Future logistics real estate will meet even higher sustainability standards, and specific certificates verifying the fact will become available, while building processes and materials will have to be structured for carbon neutrality. Here, it is important to organise teams of all participating partners early on so as to plan, develop and operate such sustainable logistics properties.”

the 1990s, the number of people in the UK who are employed in the public sector has increased from 10.5 million to 12.5 million, and the number of people in the public sector who are employed in the health sector has increased from 2.5 million to 3.5 million (Department of Health 2000).

There are a number of reasons for this increase. One of the main reasons is the increasing demand for health services. The population of the UK is increasing, and the number of people who are aged 65 and over is increasing rapidly. This has led to an increase in the number of people who are in need of health services, and this has led to an increase in the number of people who are employed in the health sector.

Another reason for the increase is the increasing demand for health services in the private sector. The private sector has been growing rapidly in the UK, and this has led to an increase in the number of people who are employed in the private sector. This has led to an increase in the number of people who are employed in the health sector.

A third reason for the increase is the increasing demand for health services in the voluntary sector. The voluntary sector has been growing rapidly in the UK, and this has led to an increase in the number of people who are employed in the voluntary sector. This has led to an increase in the number of people who are employed in the health sector.

There are a number of challenges that the health sector faces in the future. One of the main challenges is the increasing demand for health services. The population of the UK is increasing, and the number of people who are aged 65 and over is increasing rapidly. This has led to an increase in the number of people who are in need of health services, and this has led to an increase in the number of people who are employed in the health sector.

Another challenge is the increasing demand for health services in the private sector. The private sector has been growing rapidly in the UK, and this has led to an increase in the number of people who are employed in the private sector. This has led to an increase in the number of people who are employed in the health sector.

A third challenge is the increasing demand for health services in the voluntary sector. The voluntary sector has been growing rapidly in the UK, and this has led to an increase in the number of people who are employed in the voluntary sector. This has led to an increase in the number of people who are employed in the health sector.

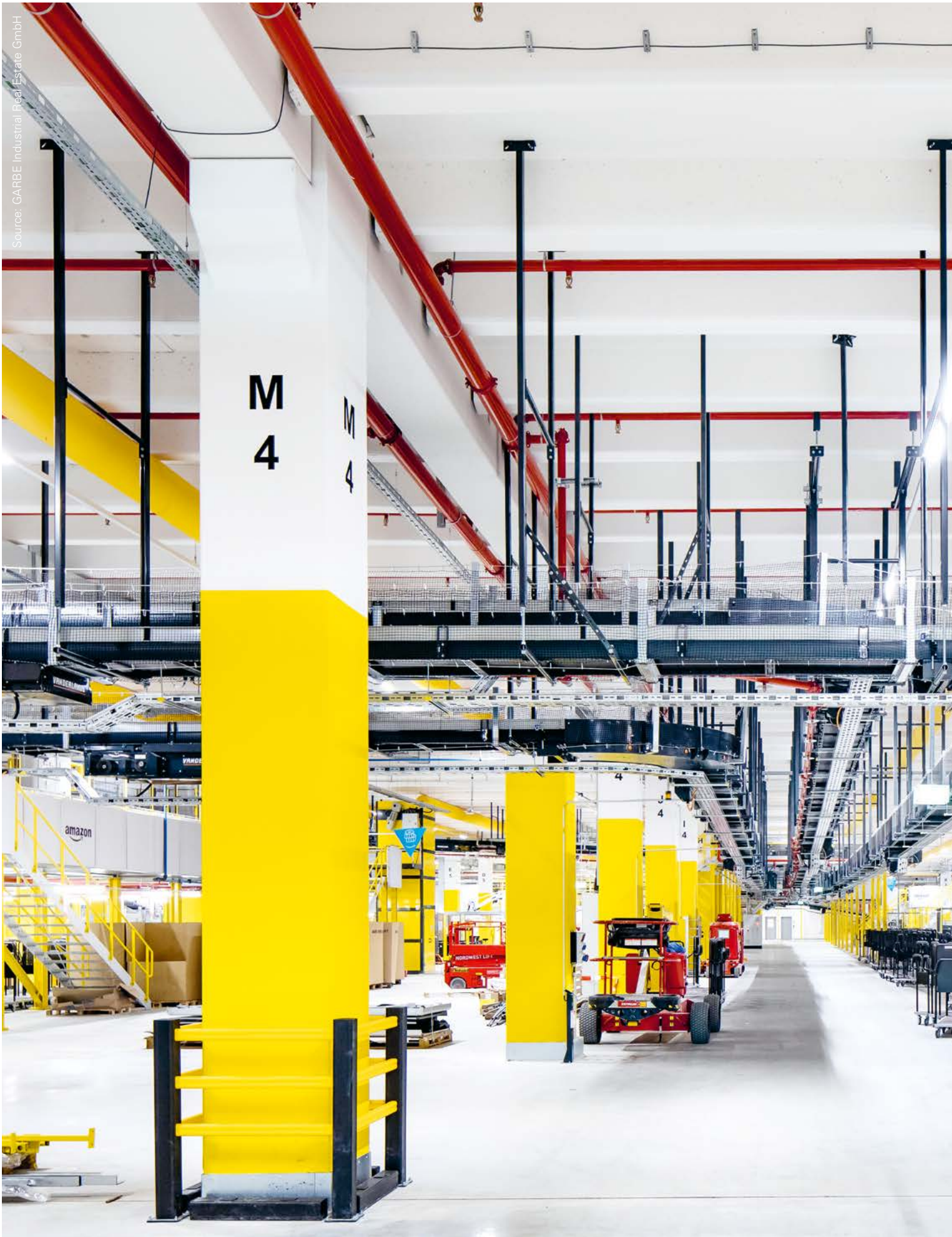
There are a number of ways in which the health sector can meet these challenges. One way is to increase the number of people who are employed in the health sector. This can be done by increasing the number of people who are employed in the public sector, the private sector, and the voluntary sector.

Another way is to increase the efficiency of the health sector. This can be done by increasing the number of people who are employed in the health sector, and by increasing the number of people who are employed in the health sector.

4

The market for property developments







4.1

Is there any way to meet the enormous demand for space?

2,000

Objects were analyzed

The systemic relevance of logistics and the resulting need for logistics facilities remains a defining issue now as then. At the same time, the demand for space is being driven up further by the growth of e-commerce. Have there been any responses yet to the pent-up demand in regard to completions? How is the building activity distributed among the regions? And who are the most active developers?

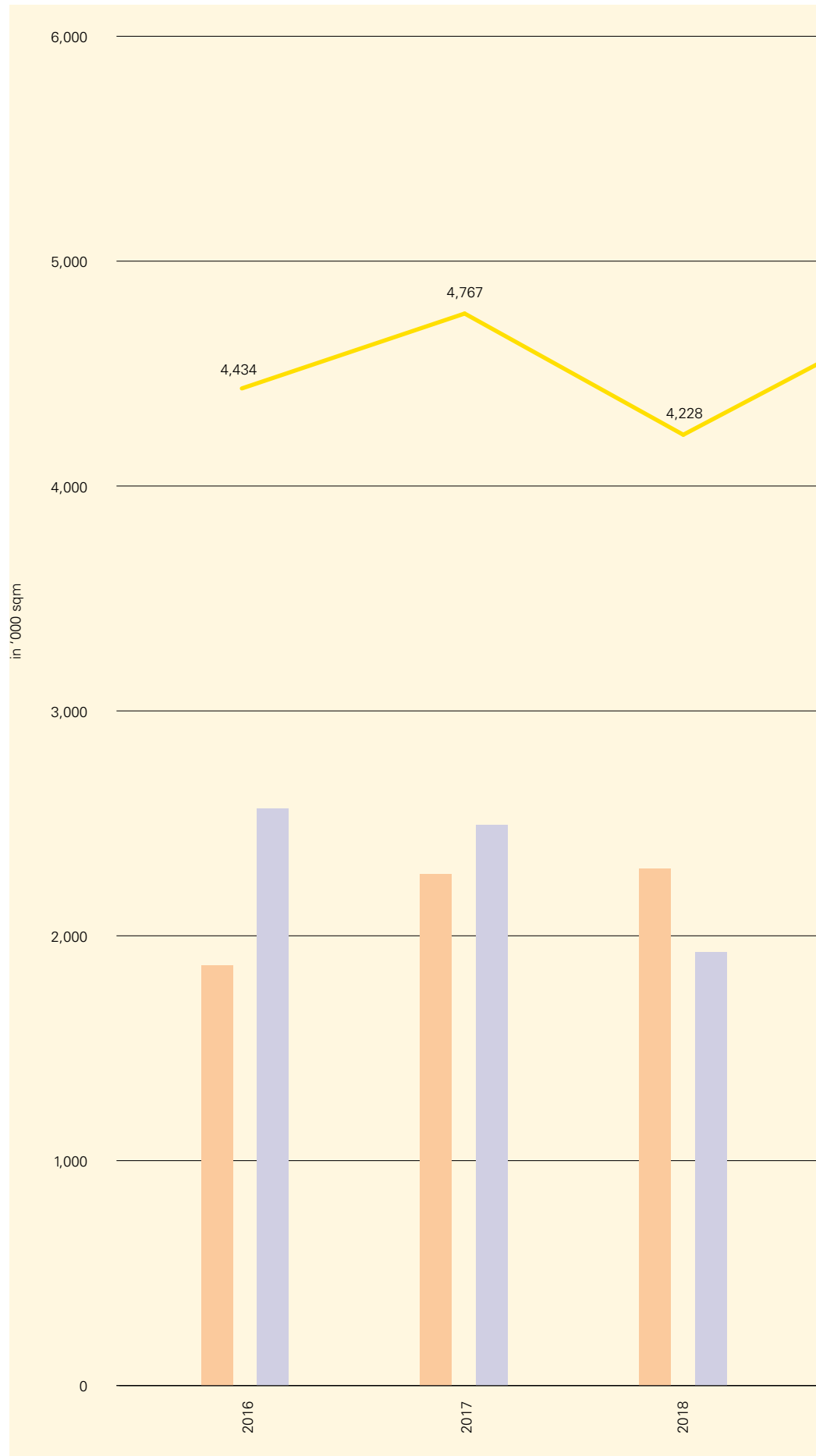
Answers are provided by the bulwiengesa real estate database, which lists all building activities in the logistics real estate segment that were identified through our research efforts, among other things. Like every year, these were matched with the data of the logistics real estate market operators. The annual data matching is limited to pure storage and logistics warehouses. Accordingly, it ignores light industrial and other commercial real estate such as business parks or similar, which are covered by the market report on multi-use / multi-let commercial real estate by Initiative Unternehmensimmobilien.

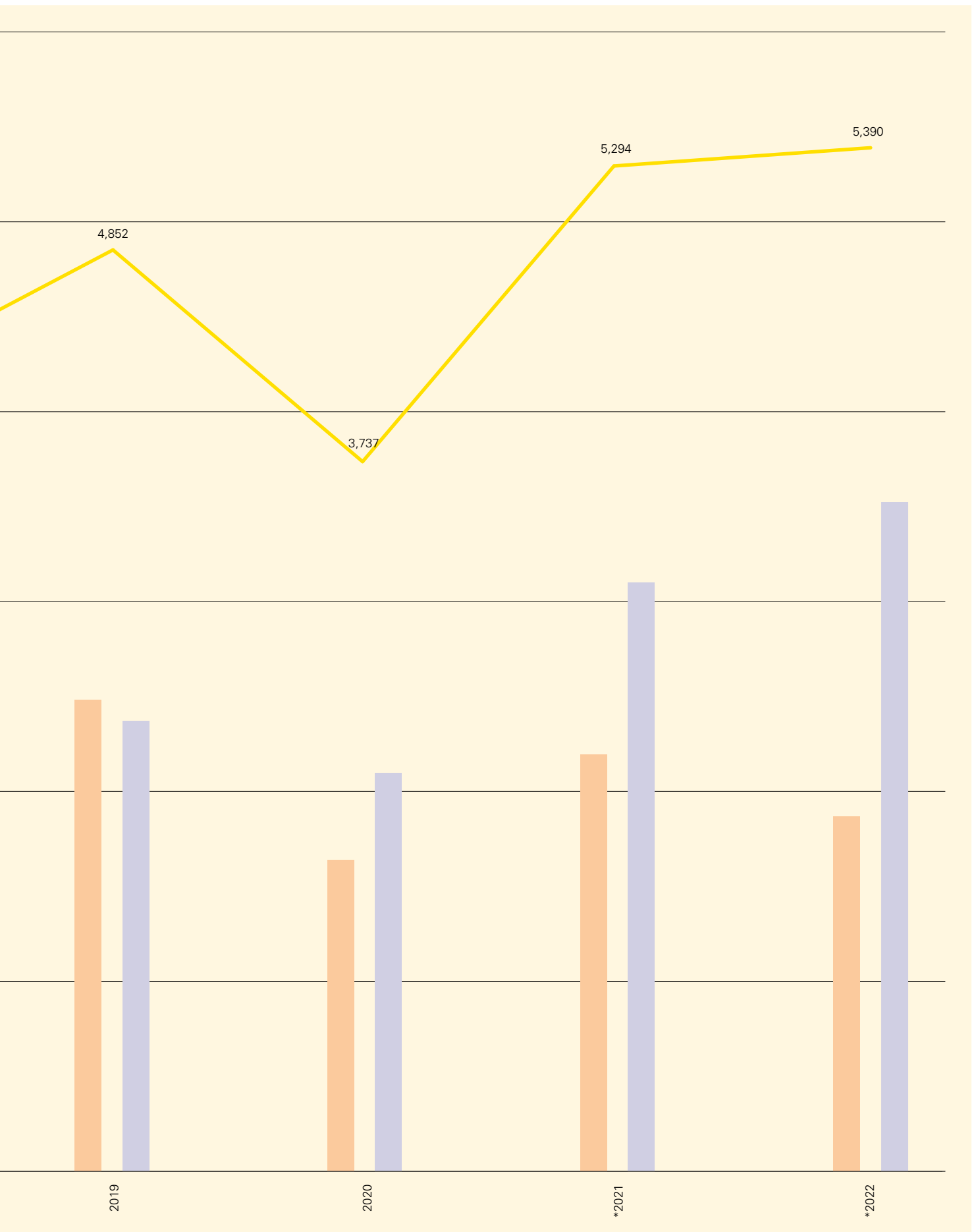
Around 2,000 assets incl. advanced-stage pipeline projects (under development or in the detailed planning stage) for 2021 and 2022 were analysed. Empirical evidence suggests that the completion of building projects or planned projects is often delayed beyond the end of the year. Accordingly, the estimated times to completion of the pipeline developments was calculated using probability factors.

Completions of new-build logistics facilities over time

- H1
- H2
- Full year

*The evaluation includes all completions up to the key date of 30/06/2021 plus floor space still in the pipeline (projects under construction or in planning, scheduled for completion before the end of 2021 or in 2022).





4.2

Completions volume of 2020 lags behind expectations

The project pipeline for 2022 suggests even at this time that building activities may set a new record with a prospective completions total of nearly 5.3 million square metres.

In the past year 2020, completions fell short of the anticipated volume of 5.2 million square metres. The sense of uncertainty prompted by the world-wide spread of the COVID-19 crisis caused the start of construction projects to be delayed and completions to be pushed back into this year. During the second half of 2020, the completions volume was about 28% higher by floor area than it had been the previous half-year. Yet with a total completions volume of around 3.7 million sqm, the 2020 total was lower than that of any other year of the observation period.

Over 2.2 Million sqm of logistics space completed during h1 2021

As a result of the delays in building completions, a new construction volume of about 5.4 million sqm is expected to come on-stream in the ongoing year of 2021. Such an output would set a new record in the completions volumes measured since the start of the market observation, and substantially exceed both the top score from 2019 and the average completions total of the past five years, which is about 4.4 million sqm. However, the majority of the predicted completions volume remains in the construction phase or indeed in the planning stage. Delays in the construction workflows or approval procedures could arguably cause a further spillover of project timelines into next year.

Completions volumes of more than 5 million sqm appear realistic for 2021 and 2022

Available information on the project pipeline for 2022 suggests even at this time that building activities may set a new record with a prospective completions total of nearly 5.3 million square metres. The strong demand for logistics facilities makes such forecasts by all means plausible. There is every indication that the market will be able to absorb new-build completions in a volume of about 5.0 million square metres.

4.3

A new player among the leading 20 developers

A new name among the leading 20 developers is Four Parx, a developer that is known for having developed one of the first multi-level logistics properties in Germany. With a total construction volume of 316,000 sqm, it made the last place on the top 20 list. Other than Four Parx, the ranking included no new players while the one that dropped out is Schwarz Group. The latter, a retail logistics operator, is no longer represented in the latest top-twenty ranking after placing fourteenth last year.

Garbe and panattoni closing in on goodman

The dominance of the Goodman Group, which has topped the developer list for many years, is now being contested, as the gap to the next closest competitors is visibly narrowing. For the time being, it has defended its top spot with a total completions volume of around 1.7 million sqm. But Panattoni and Garbe Industrial Real Estate have a massive development volume in the pipeline, especially for 2021. With a new construction volume of about 733,000 sqm (floor space in the pipeline included) in the current calendar year, Garbe moved up from fifth to third place in the ranking. Panattoni achieved a similar performance. With a total volume of around 1.6 million sqm, the property developer, whose origins are in the United States, consolidated its second place, whittling the gap to Goodman down to 178,000 sqm.

The top three are trailed by the VGP Group, which placed fourth with a total of nearly 1.2 million square metres. Dietz AG reported a completions total of around 894,000 sqm of logistics space for the entire observation period, and thus made fifth place in the ranking. Clearly the over-achiever among the top 10 developers is GLP, having moved from ninth up into sixth place with a completions total of around 762,000 sqm.

Fiege, a domestic property developer also active as logistics service provider, made the top 10 for the first time. Bringing up the rear in this year's list of Germany's leading ten developers are Prologis (684,000 sqm), Segro (568,000 sqm) and GIC/P3 (539,000 sqm).

CEP service provider and retail logistics operator make ranking

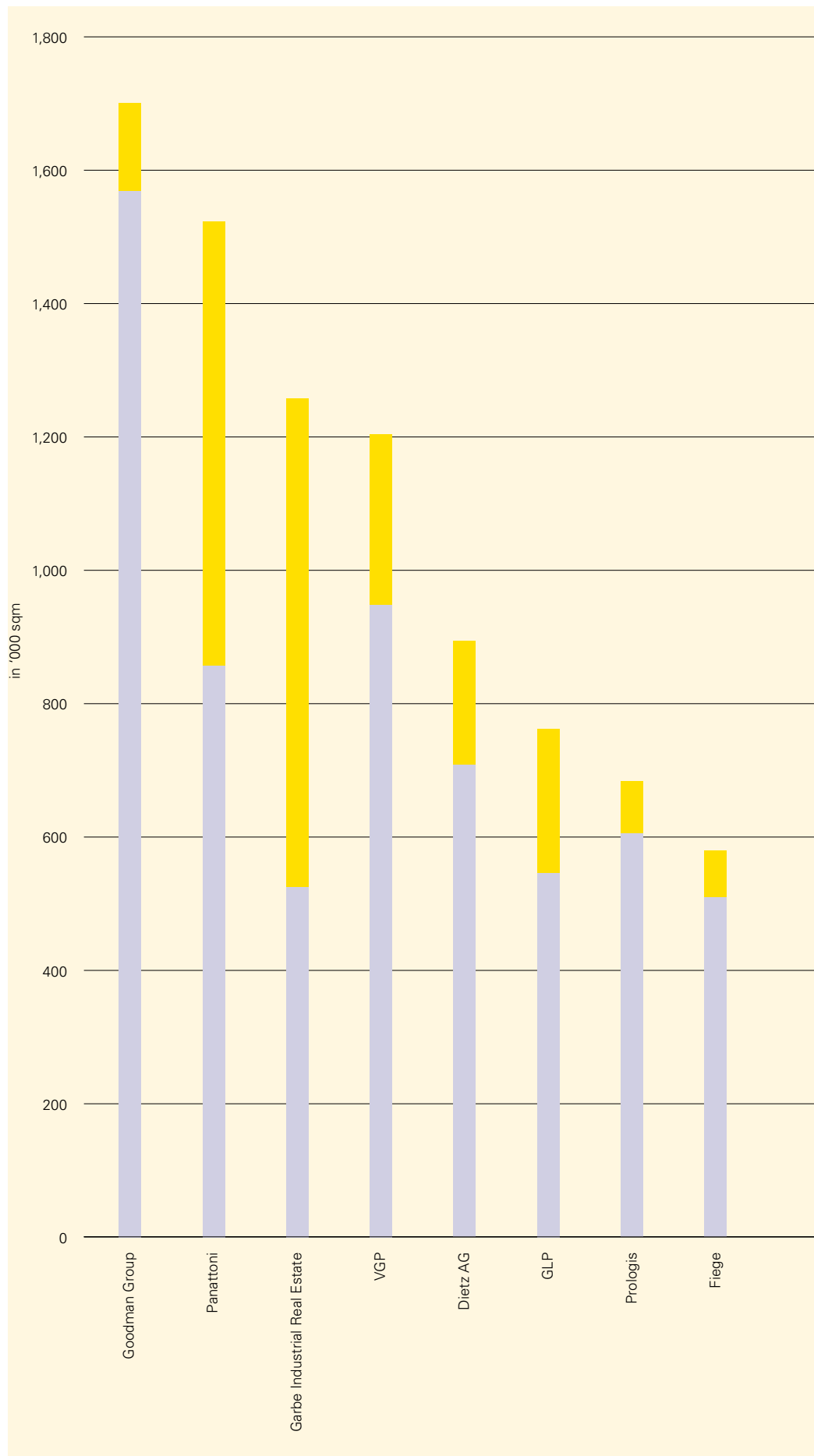
The Deutsche Post DHL Group Place, a CEP service provider, claimed 11th place in the ranking, which is otherwise dominated by property developers. It developed around 452,000 sqm of logistics space between 2016 and 2021. The only other player in the ranking not actually a property developer is the Edeka Group. With a completions volume of about 237,000 sqm, this retail logistics operator made 17th place on the list, having still placed outside the top 20 in the last ranking. Meanwhile, Verdion move closer toward a top-ten placement this year with a new-build completions total of 413,000 sqm. The Hanover-based developer bauwo dropped out of the top ten list this year, ending up in rank 13 with a completions volume of 403,000 sqm. Otherwise, the ranking showed only minor changes. For example, greenfield development and Ixocon swapped places.

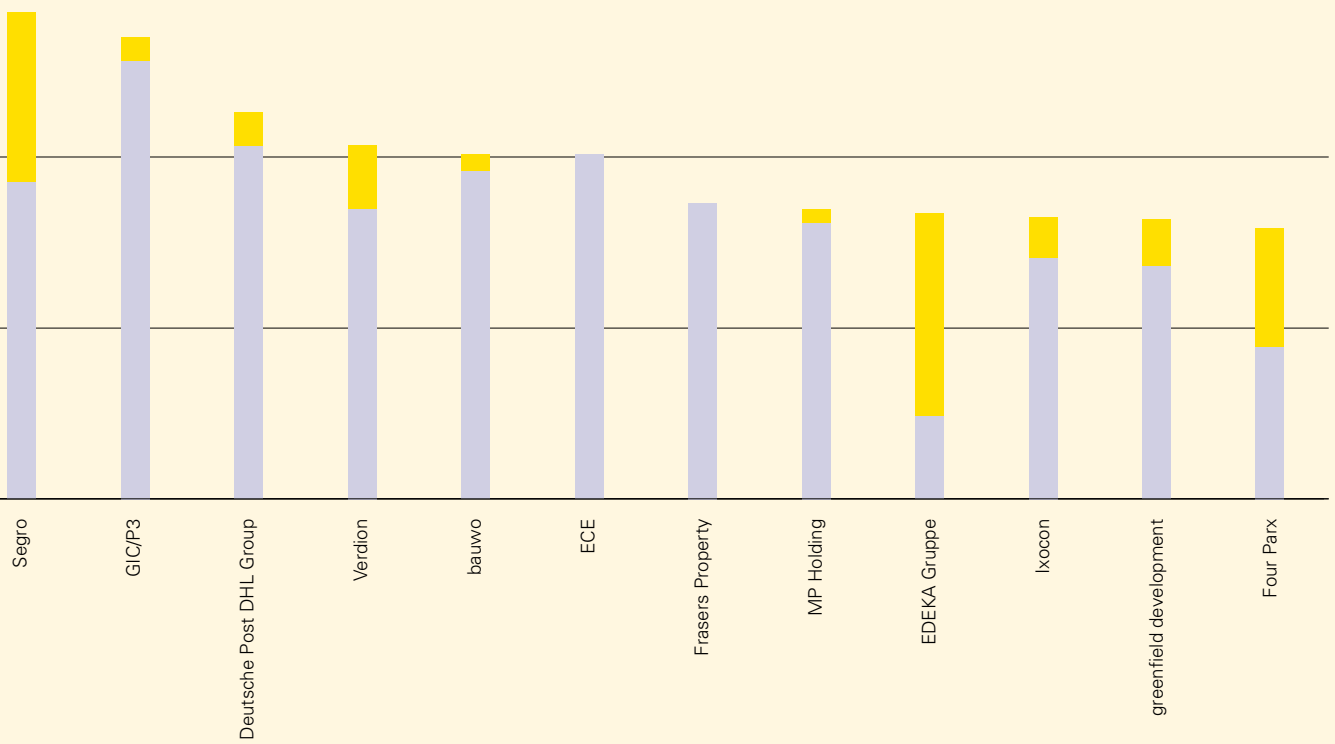
>

Top 20 developers of logistics facilities, 2016–2021*

2016–2020
2021

*The evaluation includes all completions up to the key date of 30/06/2021 plus floor space still in the pipeline (projects under construction or in planning, scheduled for completion before the end of 2021 or in 2022).





New-build comple-
tions of around

5.4

sqm expected



Source: GARBE Industrial Real Estate GmbH



Source: GARBE Industrial Real Estate GmbH



Source: GARBE Industrial Real Estate GmbH

Top developers also take the lead in pipeline ranking

Considering to the large completions volumes predicted for 2021 and 2022, it is particularly rewarding to take a closer look at the leading developers of these years. It should be bear in mind that the exact completions volume depends, of course, on the anticipated end of construction work and cannot be quantified with certainty before that. With this in mind, the ranking differentiates between the developments by their progressive states of completion. The top-ranking developer in terms of pipeline projects is Panattoni, which is expected to complete a new construction volume of just over 1.5 million sqm. This is trailed by Garbe Industrial Real Estate, which with a total volume of around 1 million sqm, takes second place. Also among the top three

is GLP, another developer that has reliably made the top segment of the ranking over a lengthy period of time. Conversely, Goodman Group does not appear in the pipeline ranking at all.

Overview of developers and typologies

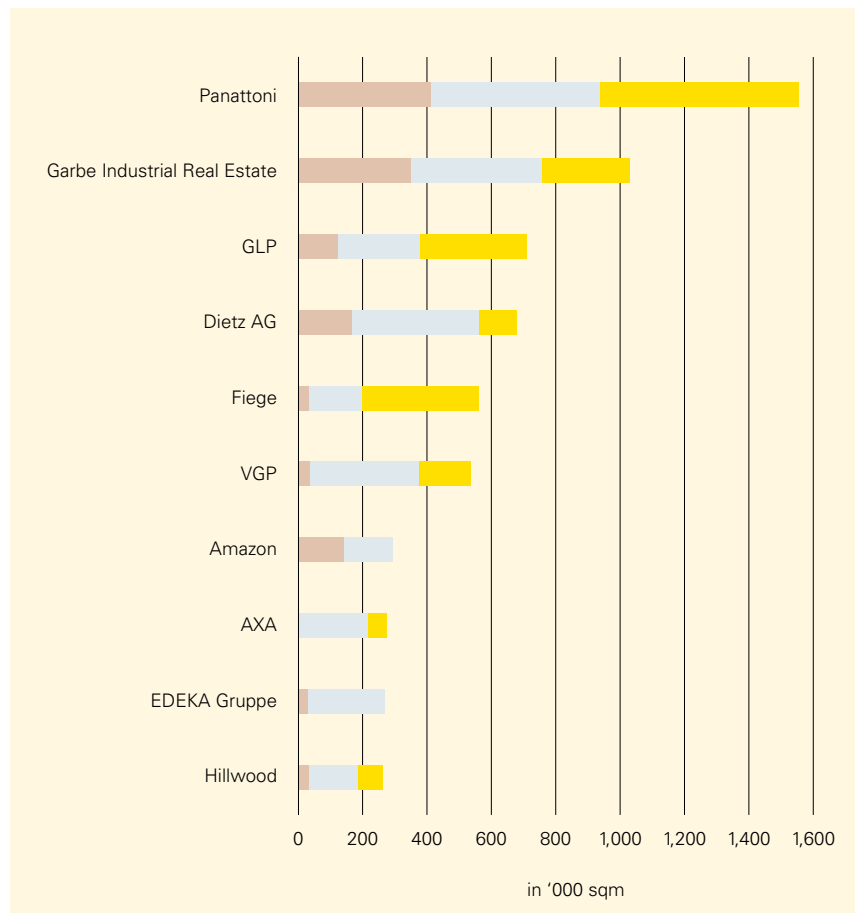
Logistics real estate is developed by various types of operators. Some of the developments for owner-occupancy are attributable to the industrial and retail sectors, but there are also logistics operators who develop facilities for owner-occupancy in their own right. You will find large enterprises and conglomerates as well as regionally focused market players among the owner-occupiers. Yet property developers that raise buildings on a large scale, either demand-based for clients or on speculation, represent the most

prominent group among the developers. The service spectrum of property developers ranges from international to national, to regional and even local orientation of the properties built. Moreover, these developers cover all size categories, from big box logistics assets built on speculation all the way to small-scale owner-occupier solutions. Among the various types of developers, actual property developers dominate the list throughout the entire observation period. Their average share across the years approximates 64 % of the floor space completed. In fact, property developers make up virtually the entire top-ten list of logistics real estate developers for the current observation period. Fiege is the only player on the list who is both a logistics operator and property developer.

Top 10 developers of logistics facilities, 2021–2022*

- Completed
- Under construction
- Detailed planning

*The evaluation includes all completions up to the key date of 30/06/2021 plus floor space still in the pipeline (projects under construction or in planning, scheduled for completion before the end of 2021 or in 2022).



4.4

Modest increase in pro-rata building activity in established logistics regions

7.3 m. sqm

Completions of the Top-5 logistics regions (2016-2021)

29%

Share of total new-build completions in Germany

As far as regional focus goes, logistics real estate developments continue to concentrate on the established logistics regions. For what it's worth, the share of logistics facilities raised there increased slightly to 76.5% during the period of 2016 through 2020, up from a 75.8% share during the prior period. But they failed to reclaim the shares seen in previous years. Peripheral locations are increasingly chosen as viable alternative in response to the land shortage and rising land prices in the established logistics regions.

Berlin takes the lead for the first time

Last year, the Berlin logistics region had already closed in on the Rhine-Main/Frankfurt region, which topped the list for the longest time. It was therefore unsurprising when the analysis for the current observation period showed that Berlin had overtaken the Rhine-Main/Frankfurt region for the first time. Buoyed by the large completions volume of 2021, which adds up to about 528,000 sqm, Berlin's total construction volume rose to around 1.7 million sqm. When looking only at the already completed new-build completions of the years 2016 – 2020, the Rhine-Main/Frankfurt region remains in the lead with about 1.4 million sqm. The building activities reported from the Berlin logistics region took place mainly in areas surrounding the city proper and in the integrated conurbation. Sites suitable for logistics developments are hard to find directly within the city limits. Rather, the hot spot within this logistics region is the southern periphery of Berlin, which has excellent transport links to the inter-regional road and rail networks.

Second place in this year's ranking was claimed by the Rhine-Ruhr logistics region with a total completions volume of more than 1.6 million sqm. This means that the region lags behind the new-build completions total of the Berlin logistics region by barely 66,000 sqm. Considering that a very high level of construction activity is expected for the Rhine-Ruhr logistics region, it may very well defend its second place in next year's ranking.

During the current evaluation period, the Düsseldorf logistics region dropped back several ranks, down from third place last year to sixth place this year, with around 1.1 million sqm in completed logistics space. Conversely, the Dortmund logistics region moved up two spots in the ranking year on year. Being the second logistics region in the Ruhr that made the top five, it reported a completions total of nearly 1.2 million sqm. The logistics region around the port city of Hamburg retained its fifth place with a completions total of around 1.2 million sqm.

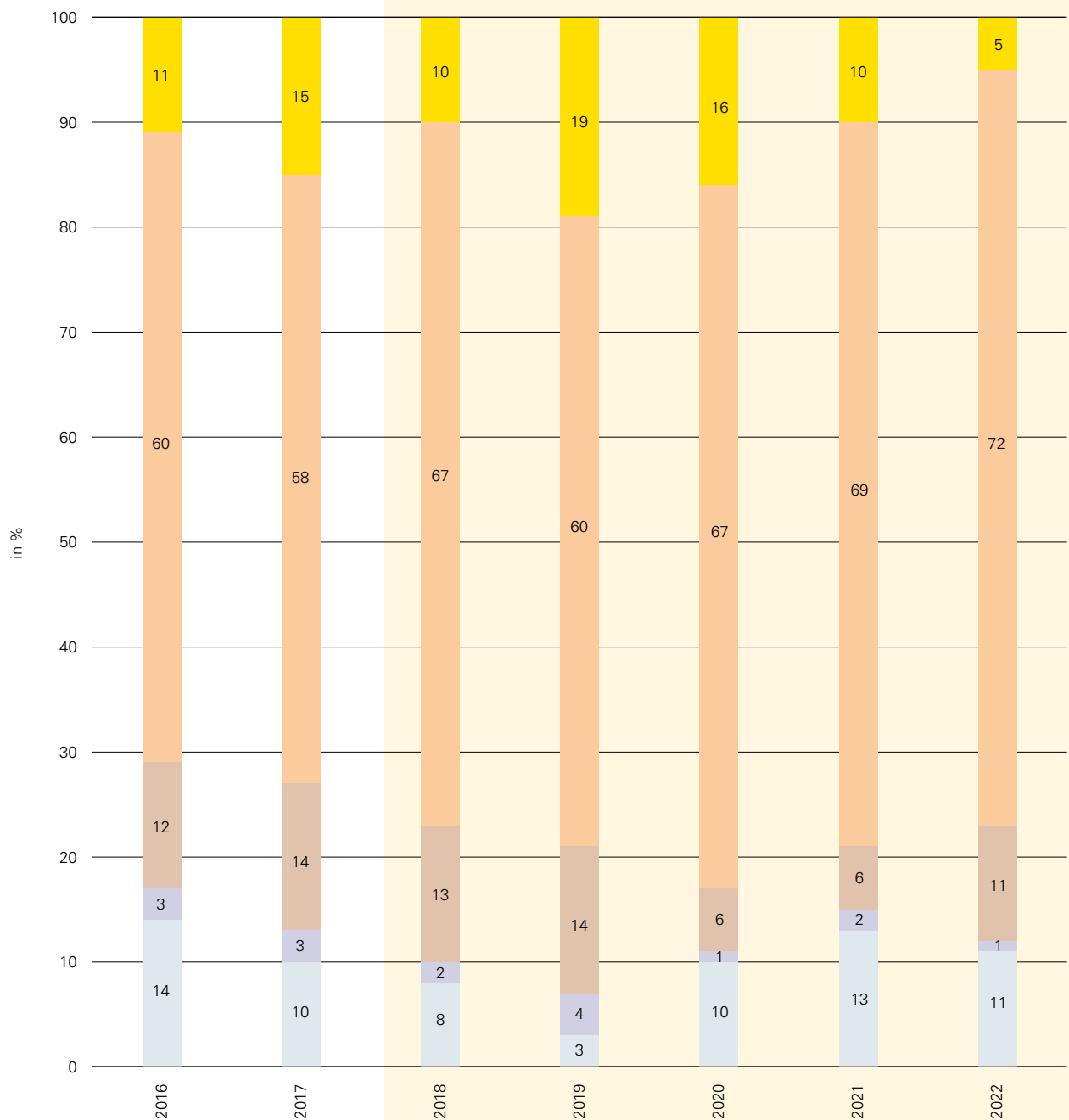
Taken together, Germany's five leading logistics regions shows a completions volume of about 7.3 million sqm for the period 2016 through 2021. This means they account for a 29% share of the entire new-build logistics units completed nationwide.

>

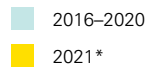
Shares in the annual completions volume by developer type

- Retail logistics
- Property developers
- CEP service providers
- Other owner-occupiers
- Logistic operators

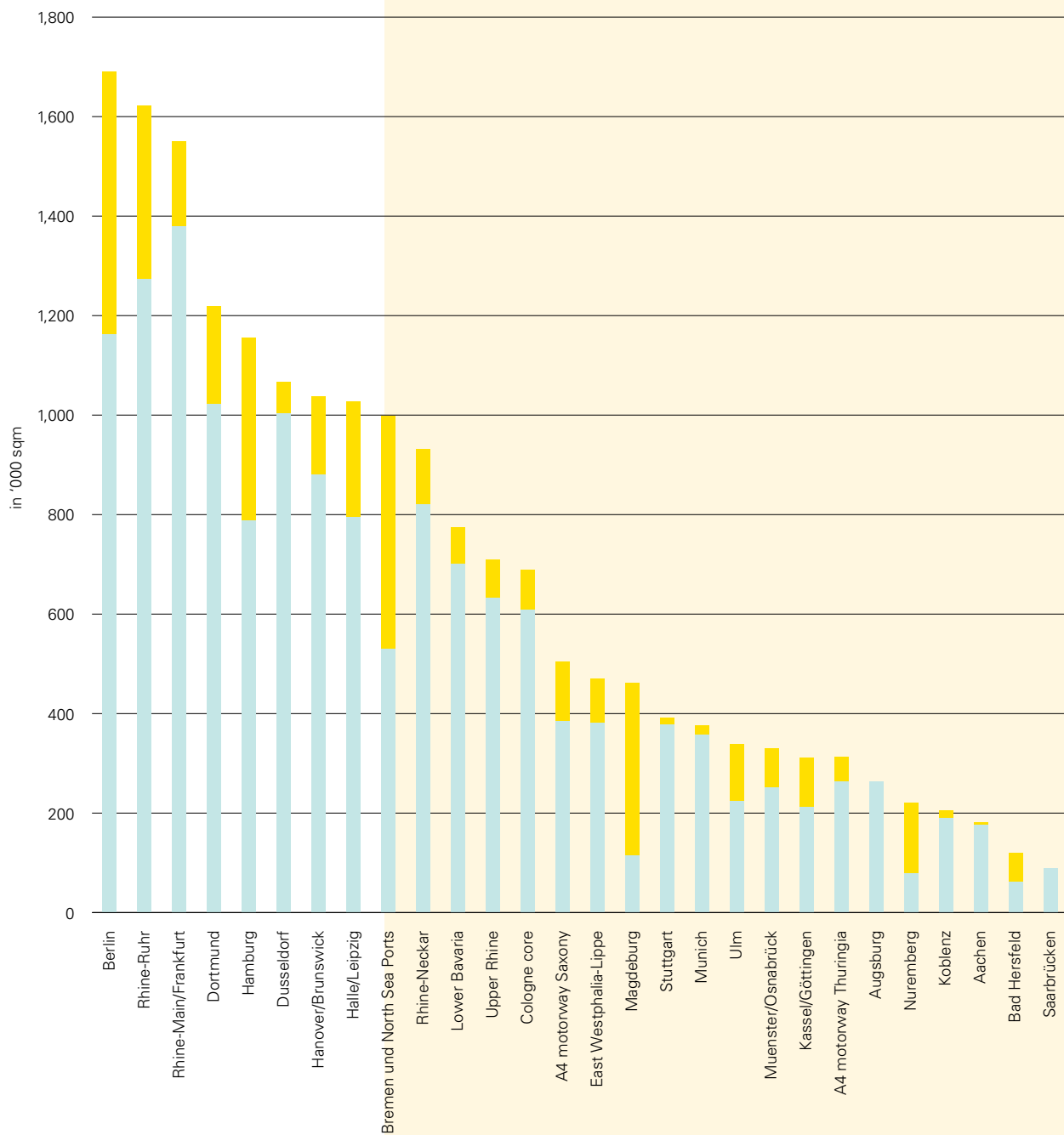
*The evaluation includes all completions up to the key date of 30/06/2021 plus floor space still in the pipeline (projects under construction or in planning, scheduled for completion before the end of 2021 or in 2022).



New-build completions by logistics region, in '000 sqm, 2016–2021*



*The evaluation includes all completions up to the key date of 30/06/2021 plus floor space still in the pipeline (projects under construction or in planning, scheduled for completion before the end of 2021 or in 2022).



Bremen and North Sea Ports Logistics Region the Outperformer among the Top 10

The Bremen and North Sea ports logistics region advanced two notches in the ranking as a completions volume of 1.1 million sqm pushed it from eleventh up to ninth place. The ongoing year played a key role in this performance because a new-build completions volume of about 467,000 sqm is expected for this logistics region. By contrast, the Upper Rhine logistics region exited from the top ten, dropping back to twelfth place with a total completions volume of about 708,000 sqm.

The other ranks registered only minor shifts, as if to confirm their trends of the past few years. Cases in point are the logistics regions of the Class A cities of Stuttgart and Munich, among others, which retained their rankings at the bottom of the list. They lingered in places 17 and 18 with completions volumes of

around 391,000 sqm and barely 377,000 sqm, respectively. The obvious reason for this development is the persistent shortage of development land both in and around these metropolises.

Kassel/Göttingen, another logistics region at the back of the list, advanced several ranks, from 25th to 21st place, on the strength of 312,000 sqm in new construction volume. In the logistics region of Magdeburg, roughly 347,000 sqm of new-build floor space will come on-stream in 2021, which would almost triple the region's new-build completions total of the period of 2016 through 2020. Another logistics region for which 2021 will be a year of massive completions is Nuremberg with an anticipated 142,000 sqm in new-build facilities. In fact, all of the logistics regions expect more logistics facilities to be completed before the end of this year, with the exception Saarbrücken and Augsburg, the regions last on the list.



completions (Logistics region
Bremen and North Sea Ports)

the 1990s, the number of people in the UK who are employed in the public sector has increased from 10.5 million to 12.5 million, and the number of people in the public sector who are employed in health care has increased from 2.5 million to 3.5 million (Department of Health 2000).

There are a number of reasons for this increase. One of the main reasons is the increasing demand for health care services. The population of the UK is increasing, and the number of people who are aged 65 and over is increasing rapidly. This has led to an increase in the number of people who are in need of health care services. Another reason is the increasing demand for health care services from people who are in need of long-term care. This is due to the increasing number of people who are living with long-term conditions, such as dementia, Parkinson's disease, and multiple sclerosis.

There are a number of ways in which the health care system can meet this increasing demand. One way is to increase the number of health care workers. This can be done by increasing the number of people who are trained to become health care workers. Another way is to improve the efficiency of the health care system. This can be done by using technology to improve the way in which health care services are delivered. For example, the use of telemedicine can allow health care workers to provide services to people who are in remote areas.

There are a number of challenges that the health care system faces in meeting this increasing demand. One of the main challenges is the shortage of health care workers. This is due to a number of factors, including the fact that many people who are trained to become health care workers do not stay in the profession. Another challenge is the increasing cost of health care services. This is due to a number of factors, including the increasing cost of drugs and medical equipment.

There are a number of ways in which the health care system can overcome these challenges. One way is to improve the way in which health care workers are trained. This can be done by providing them with more opportunities for continuing education. Another way is to improve the way in which health care services are delivered. This can be done by using technology to improve the way in which health care services are delivered. For example, the use of telemedicine can allow health care workers to provide services to people who are in remote areas.

There are a number of ways in which the health care system can improve the efficiency of the way in which health care services are delivered. One way is to use technology to improve the way in which health care services are delivered. For example, the use of telemedicine can allow health care workers to provide services to people who are in remote areas. Another way is to improve the way in which health care services are organized. This can be done by using a patient-centred approach to care.

There are a number of ways in which the health care system can improve the way in which health care services are organized. One way is to use a patient-centred approach to care. This means that the patient is at the centre of the care process, and the health care worker works with the patient to develop a care plan that meets the patient's needs. Another way is to improve the way in which health care services are funded. This can be done by increasing the amount of money that is spent on health care services.

There are a number of ways in which the health care system can improve the way in which health care services are funded. One way is to increase the amount of money that is spent on health care services. This can be done by increasing the amount of money that is raised through taxation. Another way is to improve the way in which health care services are funded. This can be done by using a patient-centred approach to care. This means that the patient is at the centre of the care process, and the health care worker works with the patient to develop a care plan that meets the patient's needs.

5

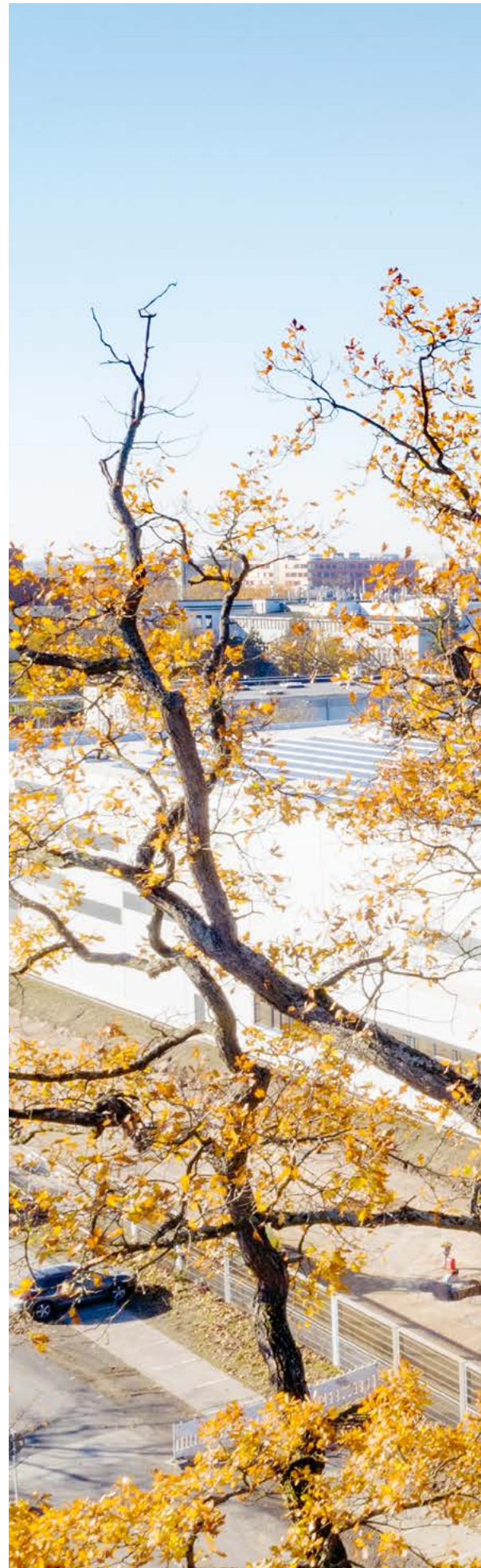
Investment market for logistics property



5.1

Turbulent times boost logistics real estate as asset class

The prior-year investment total was not matched in 2020. Yet despite the coronavirus crisis, quite a number of foreign investment companies acquired German logistics assets during the second half-year. Single transactions continue to make up the bulk of the investment volume. The coronavirus pandemic ultimately did not have an adverse effect on the investment market for logistics real estate despite the fact that it froze briefly during spring. On the contrary: Logistics real estate actually gained in attractiveness. The one thing holding the market back at the moment is the short supply in investment-grade property stock. It could also be the reason why the mark of 5 billion euros in total logistics real estate transactions was not cleared in 2020.





5.2

Investment volume maintains high level in crisis-stricken 2020

62%

Share of single-asset deals (Full year 2020)

79%

Share of single-asset deals (1st half year 2021)

The years 2020 did not disrupt the continuity of sales on the investment market. Between 2016 and 2020, more than 26.2 billion euros worth of logistics real estate was traded on the German market. When including multi-use/multi-let properties of the “Unternehmensimmobilien” type and industrial real estate, the transaction total goes up to c. 43.2 billion euros. This means that logistics real estate accounted for more than 60 % of the total transaction volume on the industrial market during the time under review. Next in line were Unternehmensimmobilien assets, which claimed a transaction volume of c. 3.4 billion euros or one third of the transactions total. Although business during the second half of 2020 was slower, possibly due to reticence among the market players over the coronavirus crisis, it still became the second-highest half-year performance during the period examined. The brisk market action continued into the first half-year of 2021 with 2.9 billion euros worth of logistics real estate traded, reflecting persistently strong demand. The sum is only 5 % lower than the mid-year total of 2020, and significantly exceeds the half-year average of the past five years.

Popularity of logistics real estate as asset class further enhanced by the pandemic

Logistics real estate investments during the crisis year of 2020 have turned out to be spot on. The mood among professional real estate players with regard to logistics, which is surveyed monthly as part of the Deutsche Hypo real estate climate survey had merely suffered minor dips at the start of the first and again at the start of the second lockdown. During the year of 2020 as a whole, however, it remained very stable. The logistics infrastructure in Germany remained intact, and logistics as an asset class actually emerged strengthened from the volatile year of 2020. No other asset class showed the same level of resilience

during the pandemic. Unlike other asset classes, logistics real estate still offers relatively high rates of return while demand for logistics facilities remains as strong as ever.

Investment volumes rather constant in recent years

The volumes invested in logistics real estate over the past years reliably approximated 5 billion euros annually. For the years 2021 and 2022, a huge development volume is in the pipeline. There is reason to expect a number of developments to be put on the market and traded yet. But even if they were, they would be unlikely to relieve the general product shortage on the market.

Number of portfolio transactions on german logistics market declining steadily

The past three years have seen a sustained trend toward single transactions, which now represent the majority. In 2020, single transactions accounted for 62 % of the total. The product shortage on the market outlined above has also made it harder to pick up large-volume portfolios. During the first six months of 2021, single transactions claimed a new record share of the market as they accounted for 79 % of the total. The trend is likely to continue in the years to come.

>

In the 1st half of 2021, Unternehmensimmobilien will also be in strong demand alongside logistics real estate



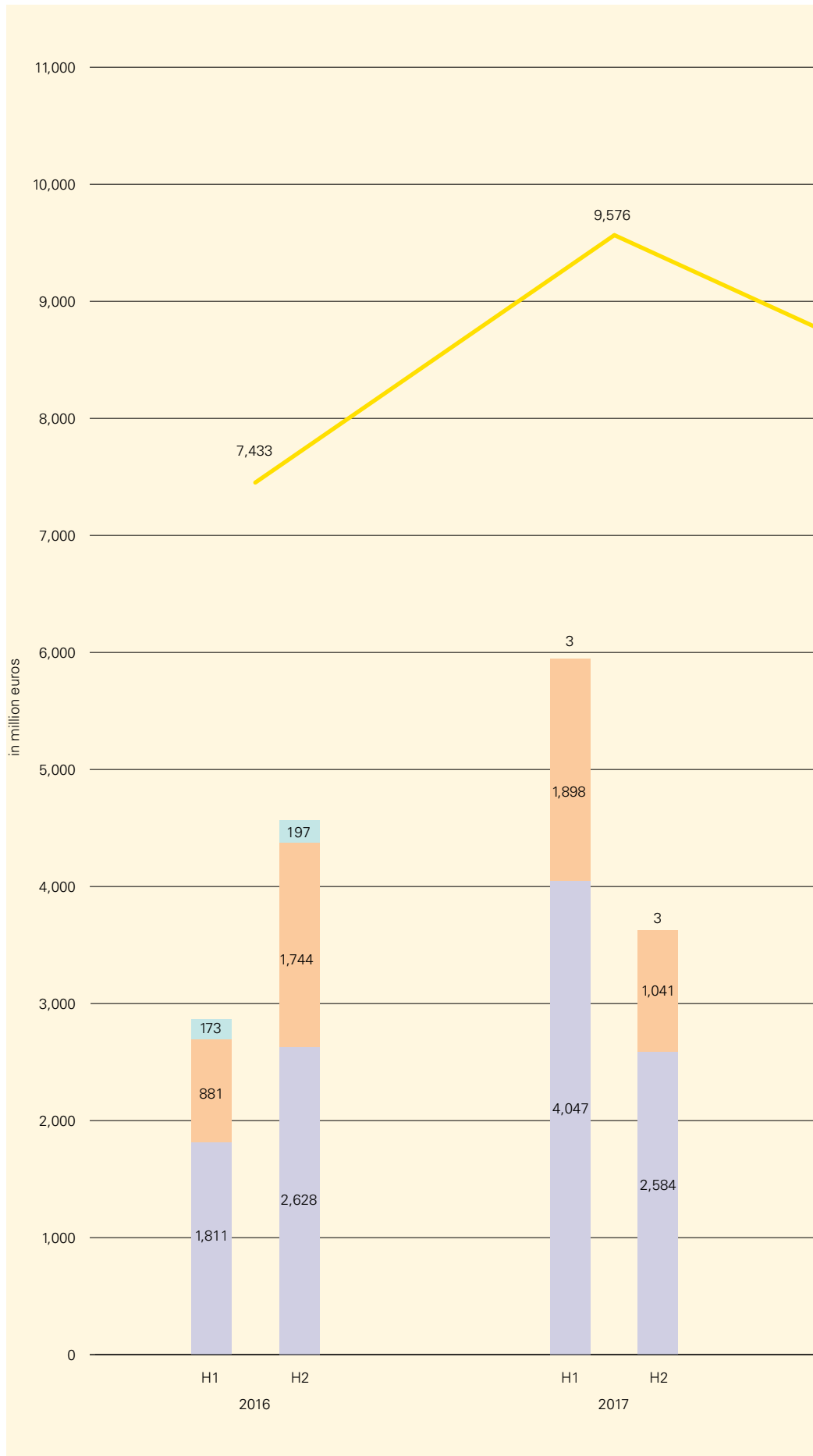
Source: GARBE Industrial Real Estate

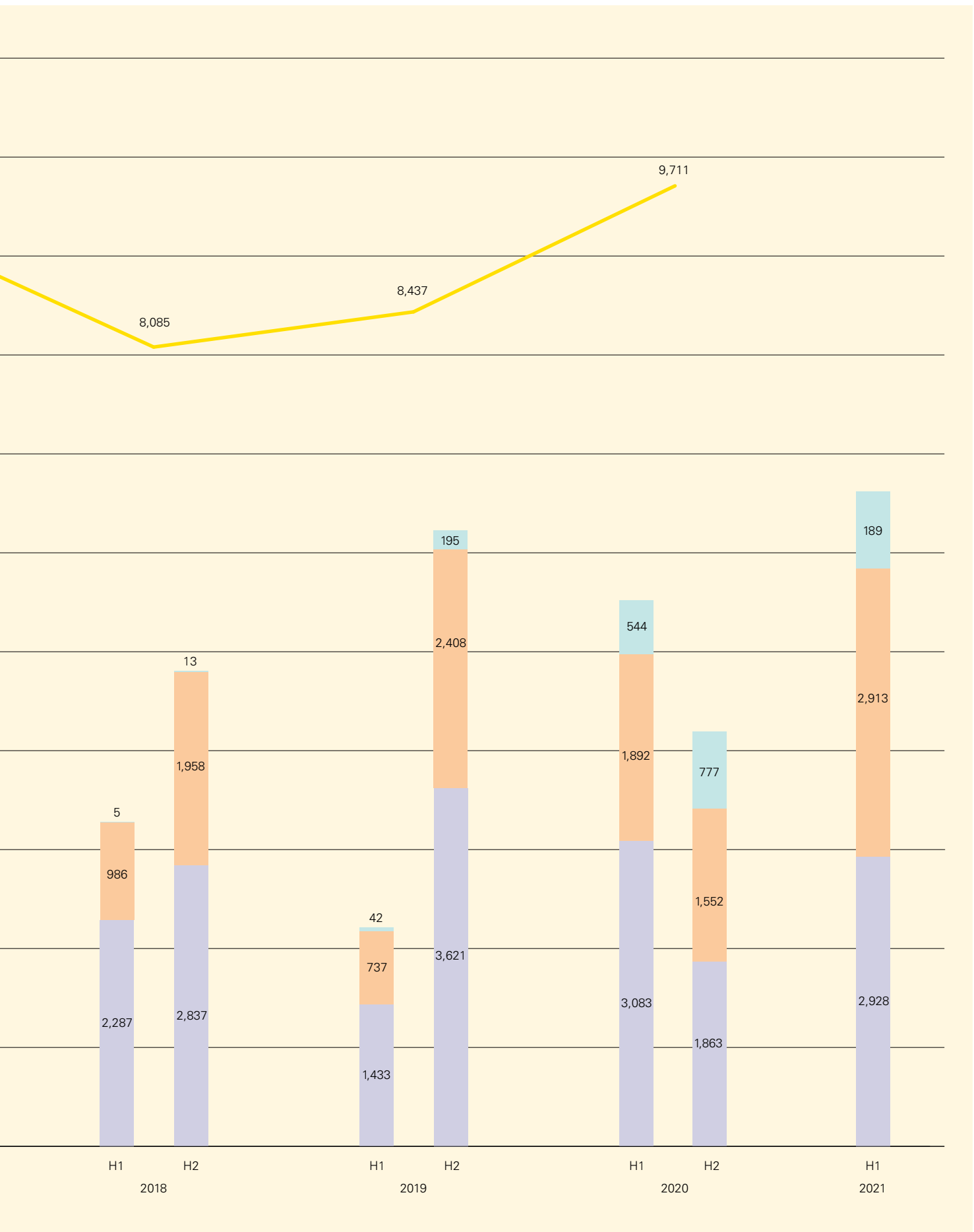


Source: GARBE Industrial Real Estate GmbH

Investment volumes over time

- Logistics real estate
- Unternehmensimmobilien
- Full year
- Industry, others





Market action paced by a lot of established and a few new players

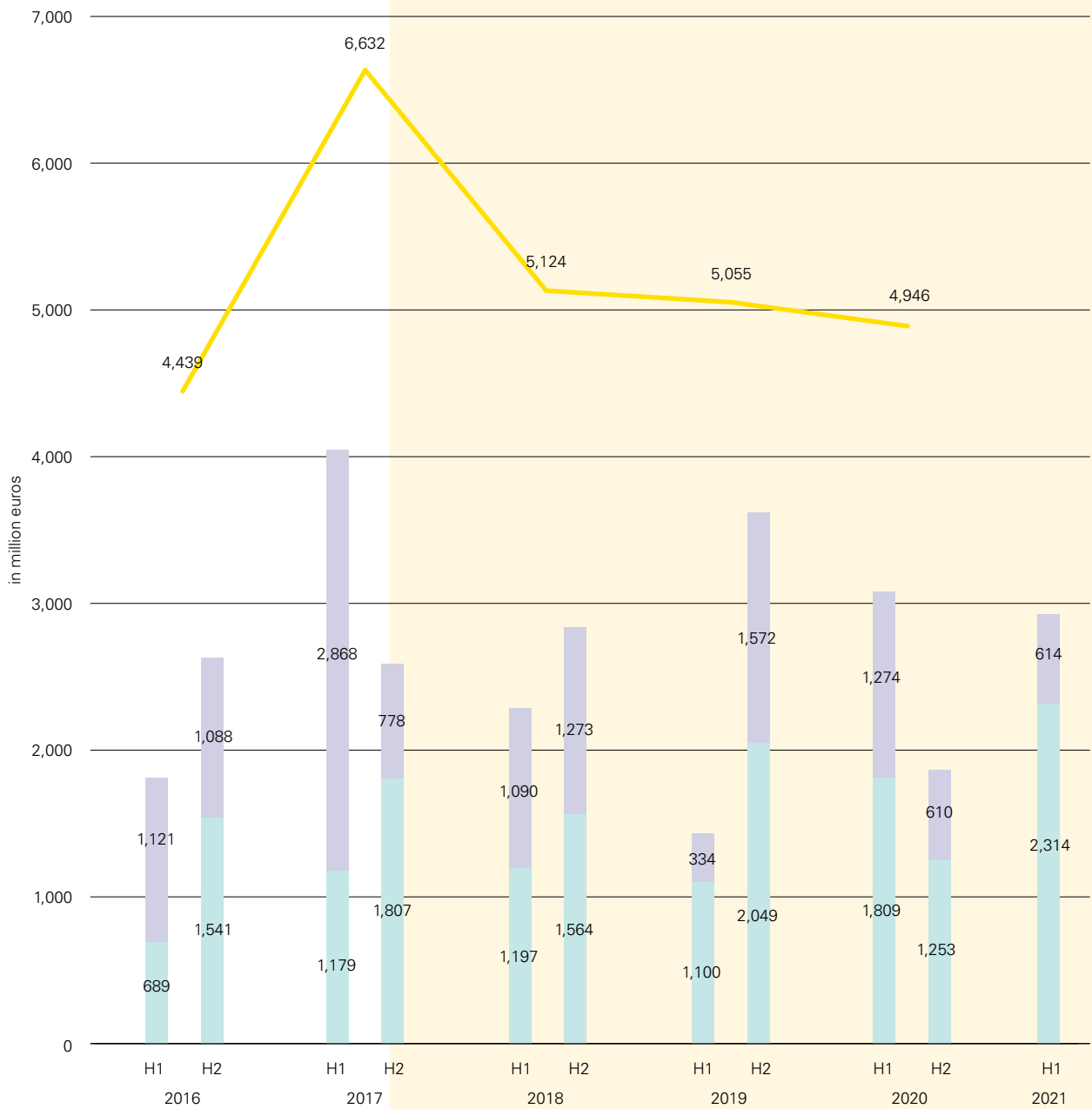
Garbe Industrial Real Estate once again took the lead among the top 20 investors during the period of 2016 through 2020.* With c. 2.6 billion euros in transacted investments, the Hamburg-based logistics specialist expanded its lead over Frasers Property in second place. The latter, having dropped back to third place last year, reclaimed its position as runner-up with acquisition worth c. 1.8 billion euros. After Blackstone, which had been the top dog for years, vacated its lead position, China Investment Corporation (CIC) was able to increase its share of the market due to the large-volume purchase of the Logikor platform in 2017 and moved up into third place with c. 1.8 billion euros in transaction volume. Another investor who spent heavily on logistics real estate in recent years is Union Investment, now in fourth place with an investment volume of c. 1.2 billion euros.

It is closely trailed with just under 1.2 billion euros by LIP Invest, now in fifth place after years of busy investment activities. Next in line is Blackstone, having dropped from second down to sixth place. The deals closed by the US investor came to only 1.1 billion euros during this year's observation period after completing 1.8 billion euros worth of transactions and placing second in last year's ranking. RLI Investors placed seventh with c. 970 million euros. P3, an up-and-coming investor backed by Singapore's sovereign wealth fund, kept buying logistics properties and advanced from 18th up to eighth place. By contrast, the formerly very dominant Goodman Group retired to the midfield for the time being with a transaction volume of c. 700 million. Deka Investment GmbH conversely worked its way up to tenth place over the past years, not least with acquisitions worth c. 280 million euros during the first half of 2020. Next in line with less than 600 million euros are CBRE (590 million) in eleventh place, followed by Patrizia (590 million), AEW (550 million), BEOS/Swiss Life Holding AG (540 million), Savills Investment Management (530 million), Janus Henderson Investors (520 million) and AXA Group, also with c. 520 million euros. A newcomer among the top investors is the HIH Group, placing 18th with a total investment volume of c. 480 million euros, thereof over 290 million euros during the first half of 2021.

2.6 bn. euros >

Investment volume by transaction type

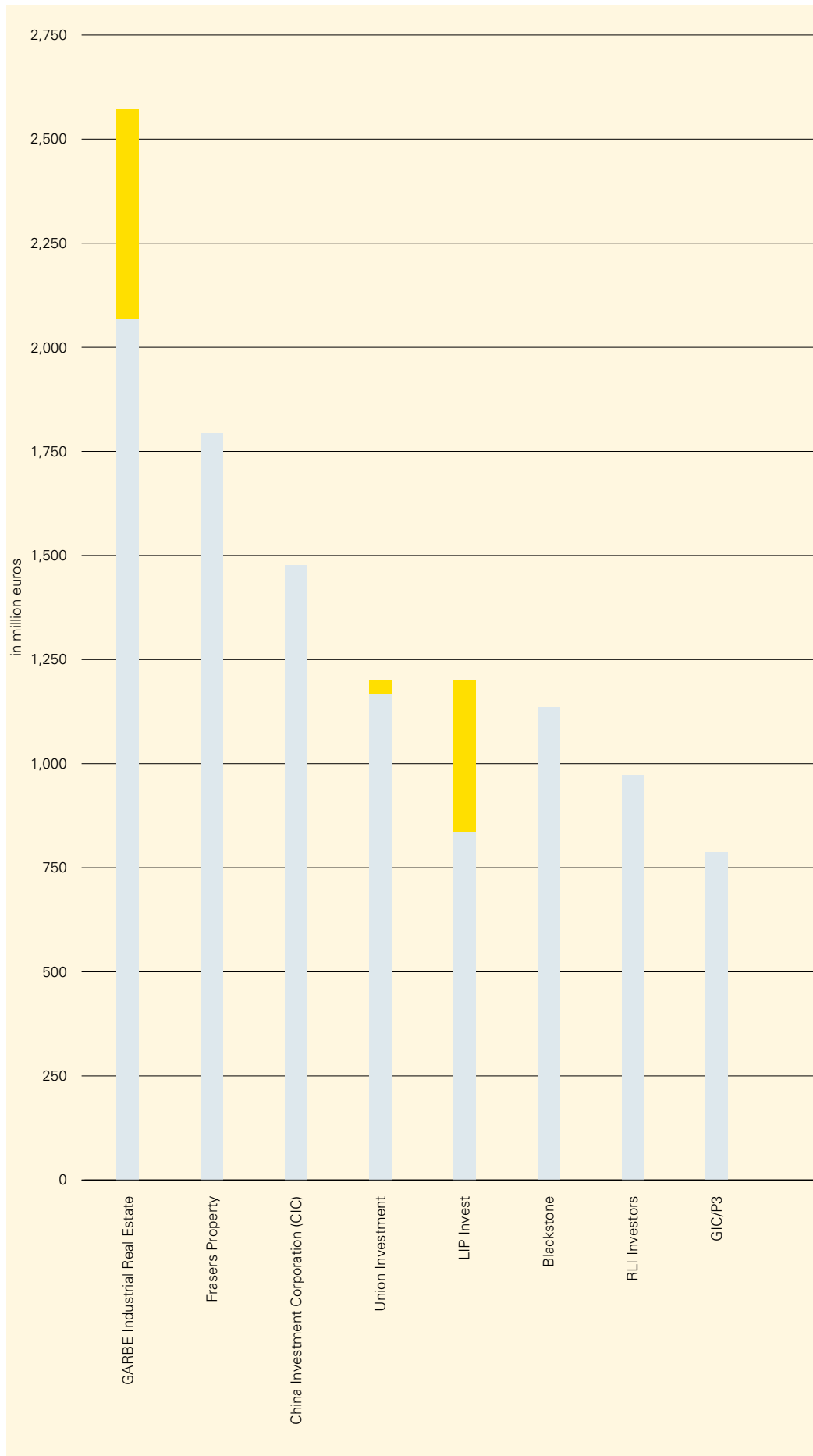
- Single-asset deals
- Portfolios
- Full year

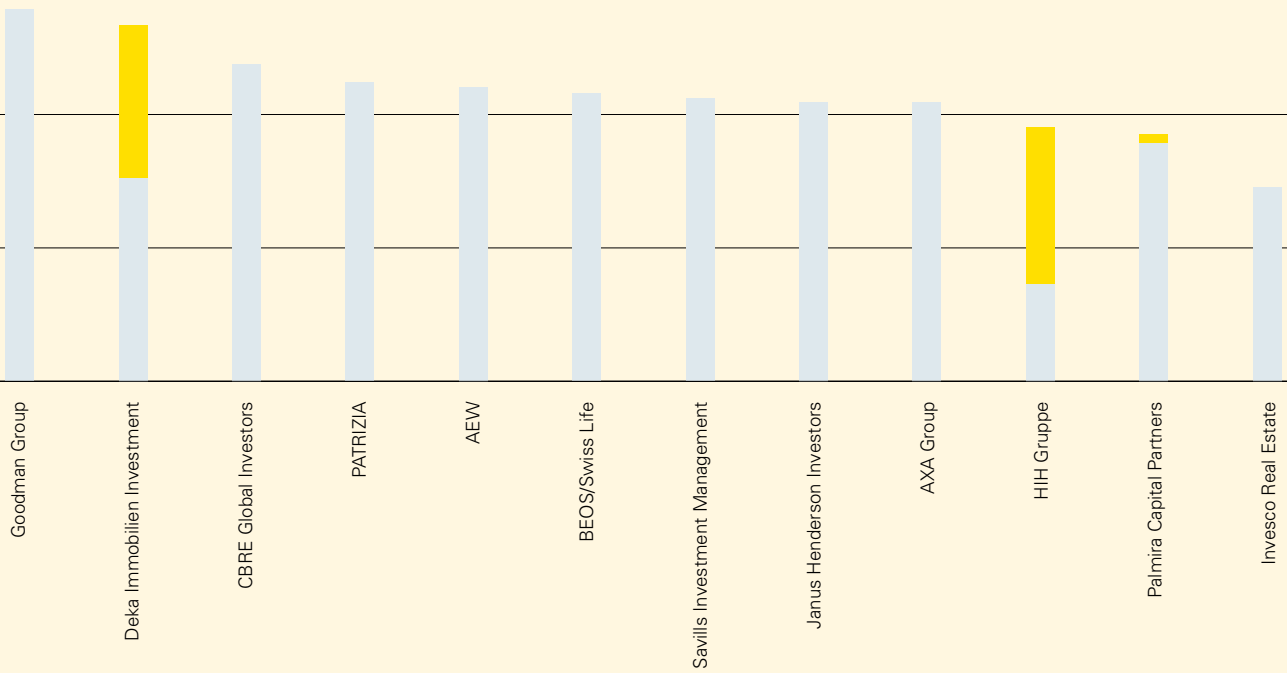


Top-20 logistics real estate investors, 2016–2021*

2016–2020
2021*

*The evaluation covers all transactions up to the key date of 30/06/2021.







Top investors 2021

Strong 1st half year

Garbe Industrial Real Estate remained one of the top investors on Germany's logistics real estate market during the first half of 2021. The company invested approximately half a billion euros, with c. 290 million euros spent on properties already completed and the rest on projects still in the planning stage. Another company that completed substantial investments worth c. 360 million euros during the first half of 2021 was LIP Invest. In this case, too, a major share of the investment total (270 million euros) represents developments either under construction or in planning.

British investor Tritax Eurobox made third place with two major transactions involving large-scale logistics centres. Moreover, the HIH Group placed fourth with a volume of over 293 million euros, this being a player who never before ascended into the top twenty. Fifth place

with nearly 287 million euros was claimed by Deka Immobilien Investment GmbH, a logistics real estate market actor with a steady track record of many years.

>

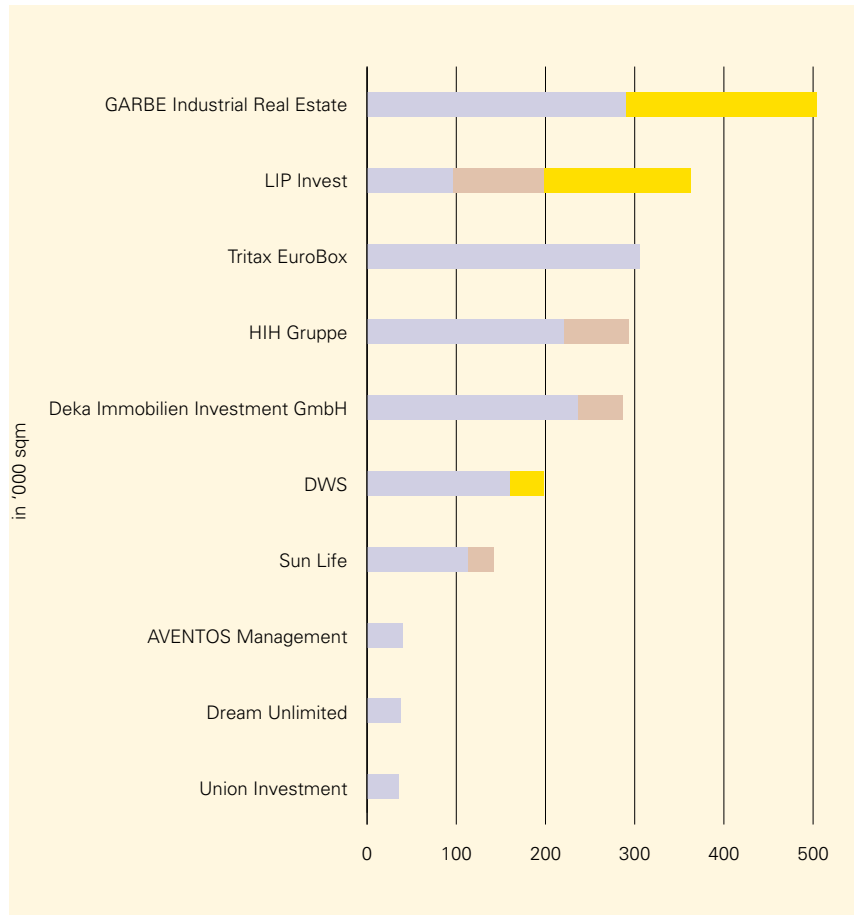


Source: GARBE Industrial Real Estate GmbH

Top 10 logistics real estate investors, 2021*

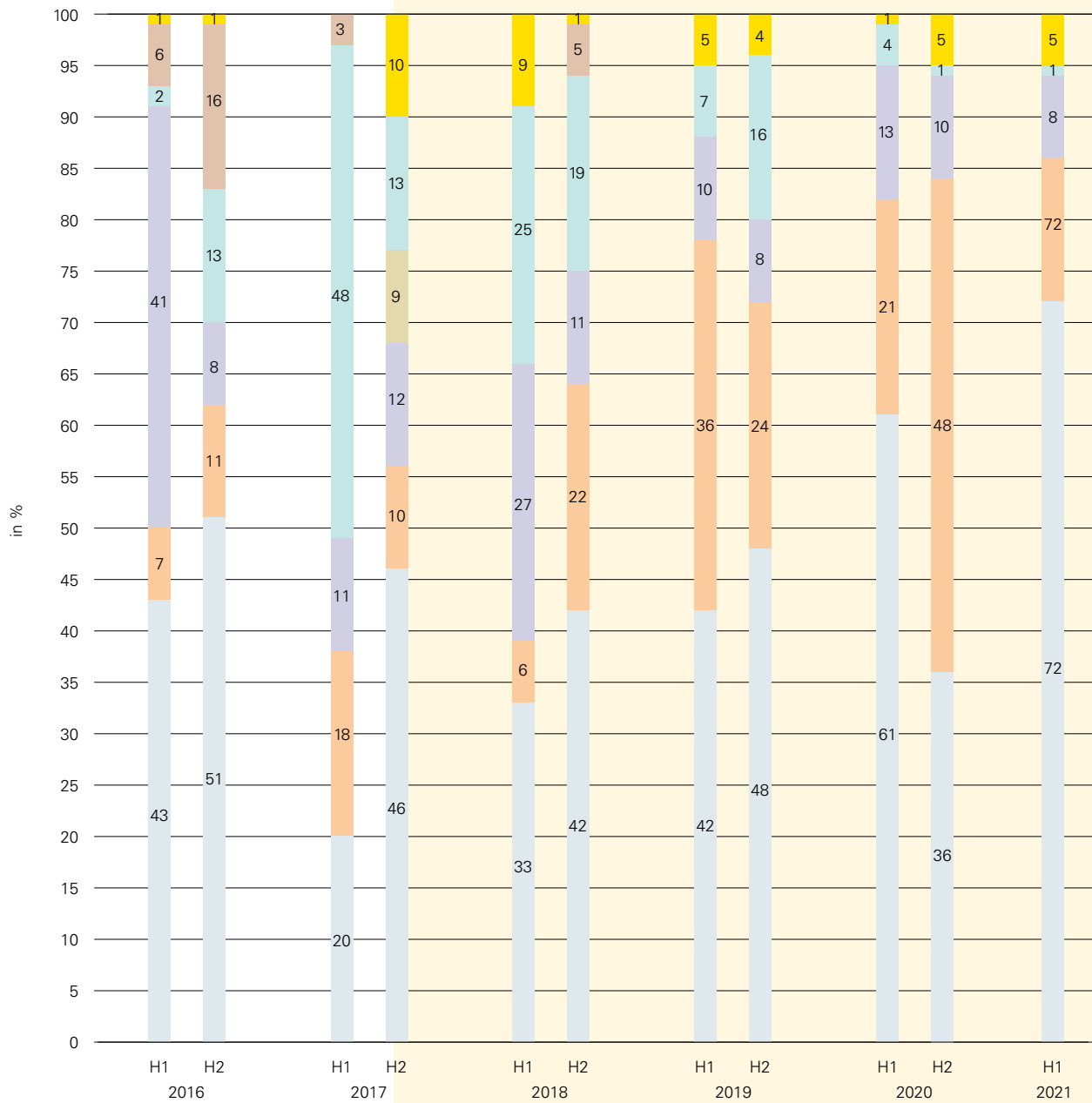
- Completed
- In Planning
- Under construction

*The evaluation covers all transactions up to the key date of 30/06/2021.



Investment volume by origin

- Germany
- Europe
- Asia
- Australia
- North America
- Other
- Middle East



German investment companies remain in the majority among active market players

For some years now, investors from Germany have made up the largest group of actors on the logistics real estate market subject to this survey. The German logistics real estate market has increasingly become an established market with investment companies specialising in this asset class. Players like Garbe Industrial Real Estate, Frasers Property, CIC or, more recently, Union Investment have picked up in-depth market know-how over the years. Especially in times of product shortage on the investment market, current investment opportunities tend to be found beyond the established locations and to be exposed to higher market risks. To invest in such properties requires adequate expertise and know-how. This kind of market know-how is particularly hard to acquire for foreign investment entities that wish to expand on the German logistics real estate market.

During the first six months of 2020, German players accounted for the bulk of the transaction volume on the market with a share of 60 %. Whether this should be rated as a corona-related effect, with foreign players adopting a wait-and-see-attitude, is anybody's guess. During the second half of 2020, the ratio reversed itself in any case, as established investment entities from outside Germany made up 60 % of the market investments. Again, one can only guess whether the massive investments from abroad during the second half-year are attributable to the smooth experience of the first lockdown in spring and the swift recovery of the German economy in summer. It contrasts, in any case, with the 72 % share in the transaction volume that German investment companies scored during the first half of 2021, thereby setting a new record. What the situation will look like by year-end of 2021 remains to be seen.



72%

of the investment volume
2021 comes from Germany

5.3

Investment activity by logistics region

14.7

bn. euros

Investment volume in the Top-10 logistics regions (2016 - 2021)

1.6

bn. euros

Investment Volume of the Top-10 logistics regions (1st half year 2021)

Germany's economy handled the coronavirus crisis better than was initially feared at the onset of the first lockdown. Specifically the dreaded rise in the number of corporate insolvencies failed to materialise after the temporary waiver of the obligation to file for insolvency had expired. The German economy is booming, and the gross domestic product has rebounded. Even the export business, after a brief slump, resumed quickly as early as summer of 2020 when demand from Asia bounced back. Accordingly, the fundamental data on the German logistics market remained attractive for investors even in 2020.

Rhine-main/frankfurt retains its uncontested lead

With a total volume of more than 2 billion euros invested during the current reporting period (start of 2016 through mid-year 2021), Rhine-Main/Frankfurt retained its accustomed top spot in the investment ranking of logistics regions. The runner-up is somewhat surprising, as Berlin jumped up from seventh place last year to second place now. Its conurbation with its large urban consumer constituency is particularly lucrative for retail and e-commerce distribution facilities. Hamburg matched the performance by moving up by three spots into third place.

Dortmund surrendered its second place, claimed last year, and dropped to rank four. The Hanover/Braunschweig region remains unchanged in fifth place. Next comes the Rhine-Ruhr region, which moved down two notches into place six. Similarly, Düsseldorf had to vacate its spot among the top three (3rd in 2020) and now ranks seventh. Two newcomers made the top ten, as the Upper Rhine region placed ninth and A4 motorway Thuringia placed tenth, pushing Stuttgart (rank 11) and Munich (rank 12) out of the top ten. Collectively, Germany's ten leading logistics regions generated an investment volume of c. 14.7 billion euros during the period 2016-2021.*

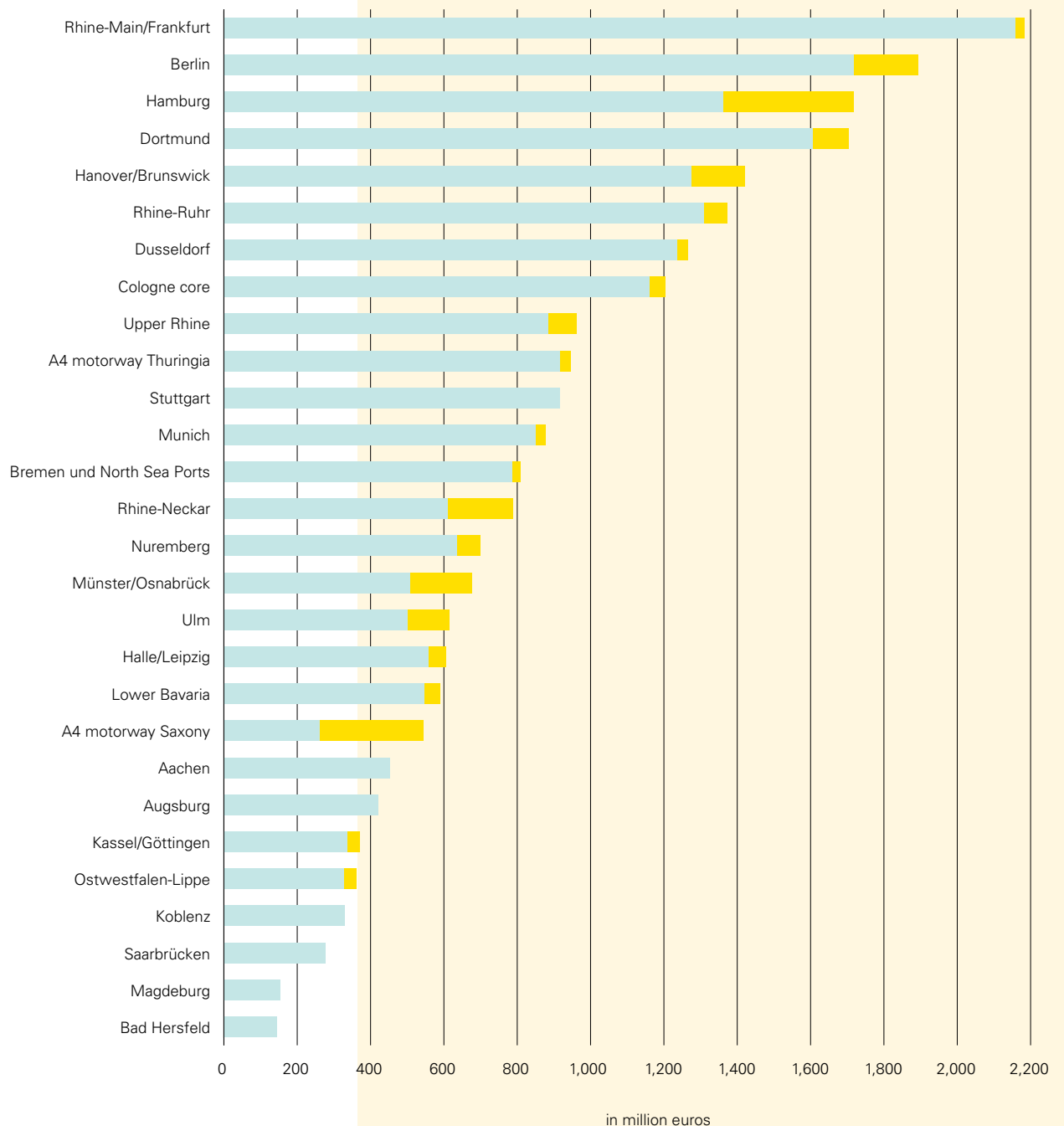
Hamburg comes out on top in the mid-year evaluation of transactions to date

Germany's ten leading logistics regions registered more than 1.6 billion euros worth of transactions during the first half of 2021. Hamburg leads the ranking with a transaction volume of c. 360 million euros. It is trailed by the A4 motorway Saxony region (280 million euros), a logistics region that used to linger in the bottom third of the annual rankings. With a transaction volume of c. 180 million euros, the Rhine-Neckar region made third place during the first half-year of 2021. Close behind at mid-year with nearly 180 million euros is the Berlin logistics region in place four. The usually rather inconspicuous if stable regions of Münster/Osnabrück and Hanover/Braunschweig reported transaction volumes of 170 million and 150 million euros, respectively. Surprising to see is that Rhine-Main/Frankfurt, usually at the top of its class, was second to last with less than 30 million euros. Whether the figure signals a trend reversal, and whether transaction volumes in the Rhine-Main/Frankfurt logistics region will keep going down, remains to be seen.

Investment volume by logistics region, 2016–2021*

2016–2020
2021*

*The evaluation covers all transactions up to the key date of 30/06/2021.



the 1990s, the number of people in the UK who are aged 65 and over has increased from 10.5 million to 13.5 million, and the number of people aged 75 and over has increased from 4.5 million to 6.5 million (Office for National Statistics 2000). The number of people aged 85 and over has increased from 1.5 million to 2.5 million in the same period.

There is a growing awareness of the need to address the needs of the elderly population, and the need to ensure that they are able to live independently and safely in their own homes. This has led to a number of initiatives, including the development of home care services, and the establishment of local authority housing departments. The aim of this paper is to review the current state of research on the needs of the elderly population, and to identify areas where further research is needed.

The paper is organized as follows. Section 2 discusses the current state of research on the needs of the elderly population. Section 3 identifies areas where further research is needed. Section 4 concludes the paper.

2. Current state of research

The current state of research on the needs of the elderly population is reviewed in this section. The review is organized into three main areas: physical health, mental health, and social needs.

2.1. Physical health. The current state of research on the physical health of the elderly population is reviewed in this section. The review is organized into three main areas: chronic disease, functional status, and quality of life.

2.1.1. Chronic disease. The current state of research on the physical health of the elderly population is reviewed in this section. The review is organized into three main areas: chronic disease, functional status, and quality of life.

2.1.2. Functional status. The current state of research on the physical health of the elderly population is reviewed in this section. The review is organized into three main areas: chronic disease, functional status, and quality of life.

2.1.3. Quality of life. The current state of research on the physical health of the elderly population is reviewed in this section. The review is organized into three main areas: chronic disease, functional status, and quality of life.

2.2. Mental health

The current state of research on the mental health of the elderly population is reviewed in this section. The review is organized into three main areas: depression, dementia, and anxiety.

2.2.1. Depression. The current state of research on the mental health of the elderly population is reviewed in this section. The review is organized into three main areas: depression, dementia, and anxiety.

2.2.2. Dementia. The current state of research on the mental health of the elderly population is reviewed in this section. The review is organized into three main areas: depression, dementia, and anxiety.

2.2.3. Anxiety. The current state of research on the mental health of the elderly population is reviewed in this section. The review is organized into three main areas: depression, dementia, and anxiety.

2.3. Social needs

The current state of research on the social needs of the elderly population is reviewed in this section. The review is organized into three main areas: isolation, loneliness, and social support.

2.3.1. Isolation. The current state of research on the social needs of the elderly population is reviewed in this section. The review is organized into three main areas: isolation, loneliness, and social support.

2.3.2. Loneliness. The current state of research on the social needs of the elderly population is reviewed in this section. The review is organized into three main areas: isolation, loneliness, and social support.

2.3.3. Social support. The current state of research on the social needs of the elderly population is reviewed in this section. The review is organized into three main areas: isolation, loneliness, and social support.

3. Areas for further research

The current state of research on the needs of the elderly population is reviewed in this section. The review is organized into three main areas: physical health, mental health, and social needs.

3.1. Physical health. The current state of research on the needs of the elderly population is reviewed in this section. The review is organized into three main areas: physical health, mental health, and social needs.

3.2. Mental health. The current state of research on the needs of the elderly population is reviewed in this section. The review is organized into three main areas: physical health, mental health, and social needs.

3.3. Social needs. The current state of research on the needs of the elderly population is reviewed in this section. The review is organized into three main areas: physical health, mental health, and social needs.

6

Value depending
on type of use





DER LKW BRINGT,
WAS SIE TÄGLICH BRAUCHEN.

LKW
NDS

partnerschaftlicher Wirtschaft

6.1

Public awareness of logistics much improved

Logistics real estate is arguably a great textbook example of a property type focused primarily on fitness for purpose. Logistics properties tend to be plain structures that fulfil their function unadorned by arches and frills, as uncompromising straight lines set the scene for purposeful use.

In architectonic terms, this makes the structures rather inconspicuous in appearance. And for the longest time, their economic function for society was just as inconspicuous. Logistics, while having been around and having functioned properly for a long time, never used to figure prominently on the public mind. But following the outbreak of the coronavirus pandemic, public awareness shifted, especially in the media. Time and again, logistics has been labelled as an essential industry. Thankfully, initial worries that supply chains could collapse and supermarkets run out of stock proved unfounded, but despite or because of it, logistics has gained enormously in the mind of the general public, being appreciated as the backbone of a well-functioning economic system. It is not least because of the massive media exposure that the asset class of logistics real estate has also moved more into focus for investors. The mechanism that triggered this gain in significance could be outlined

as follows: The increased significance of logistics for the economy and society at large in the wake of the pandemic caused its benefits to be held in higher esteem, which in turn stimulated demand for logistics assets among investors. The rise in demand is reflected in the upward trend of selling prices for logistics properties. Worth noting is that, while real estate market players had begun to shift their focus to the logistics sector well before the onset of the coronavirus pandemic, the sector has now moved centre stage for them.

In this chapter, the focus will be on the benefits of logistics real estate. The benefits of a given property are found in various levels. On the one hand, a property provides intrinsic benefits to its tenant or owner-occupier, but on the other hand, a logistics property is part of a functional fabric that delivers macroeconomic and societal benefits and value (added).



6.2

The macro-economic value-added of the logistics business

Logistics networks are optimised end to end, and respond sensitively to any change within the system. Then again, these networks are also constantly evolving and expanding.

A good way to pinpoint the benefits of logistics real estate is by putting it into its macroeconomic perspective in a first step. Unlike other asset classes, such as the residential one, individual logistics properties hardly figure as stand-alone buildings from a macroeconomic point of view. A look at the map will show the geographic fabric of logistics assets from a bird's eye perspective (see Fig. 7.1). In most cases, such properties have a relational function, being part of a network. Each property serves a specific purpose within its logistics chain. It may, for instance, be part of a differentiated network of transshipment properties or a distribution property in direct proximity to a conurbation. Each logistics property represents a node within a network that is geographically optimised to ensure security of supply. The location of a logistics asset is strongly defined by the function it serves within its network system. With its central location in Continental Europe, Germany is particularly well suited to host a large number of nodes (logistics properties). For this reason, the logistics industry has grown into the third-largest economic sector in Germany, claiming a turnover of 280 billion euros per year. Another aspect could be more significant yet: The sophisticated logistics networks form the backbone of a modern economy characterised by the division of labour. In the absence of this infrastructure, many other business areas could not even function.

Just what can happen if the carefully calibrated system is disrupted was impressively illustrated by the grounding of the "Ever Given" in the Suez Canal. The congestion caused by the container ship resulted in an estimated 400 million US dollars in economic damage – per hour. A single container ship ultimately pulled the plug on all supply chains. As goods were no longer transhipped in time at intermediate stations, many ports temporarily operated above or below capacity,

for instance. As a result, a lot of manufacturing materials were not delivered on time, stalling assembly lines or slowing production output in some manufacturing sites. Like a falling row of dominoes, the systemic knock-on effects of the accident gradually filtered down through the networks of "just-in-time" logistics.

Logistics networks are optimised end to end, and respond sensitively to any change within the system. Then again, these networks are also constantly evolving and expanding. Societal changes, such as the trend toward e-commerce, will directly impact the logistics infrastructure and prompt shifting requirements in the use of logistics properties.

280 bn. euros

Revenue per year. This makes the logistics sector the third-largest economic sector in Germany

Logistics networks exemplified by the cascading system of urban logistics



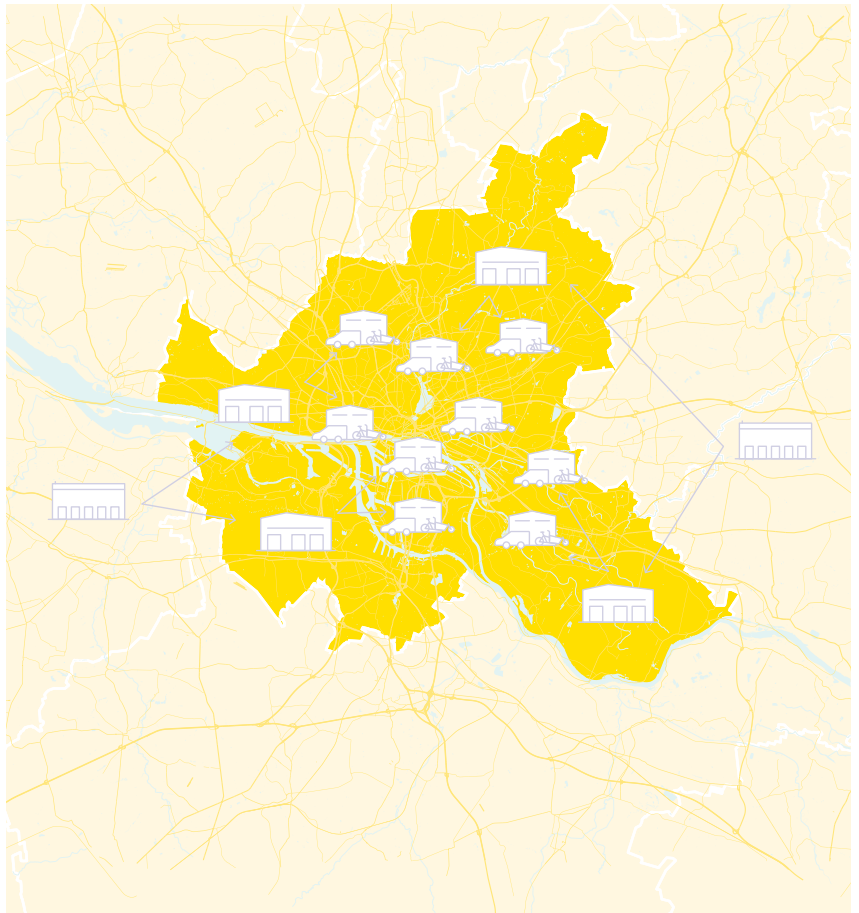
E-Fulfillmentcenter



Urban Fulfillmentcenter

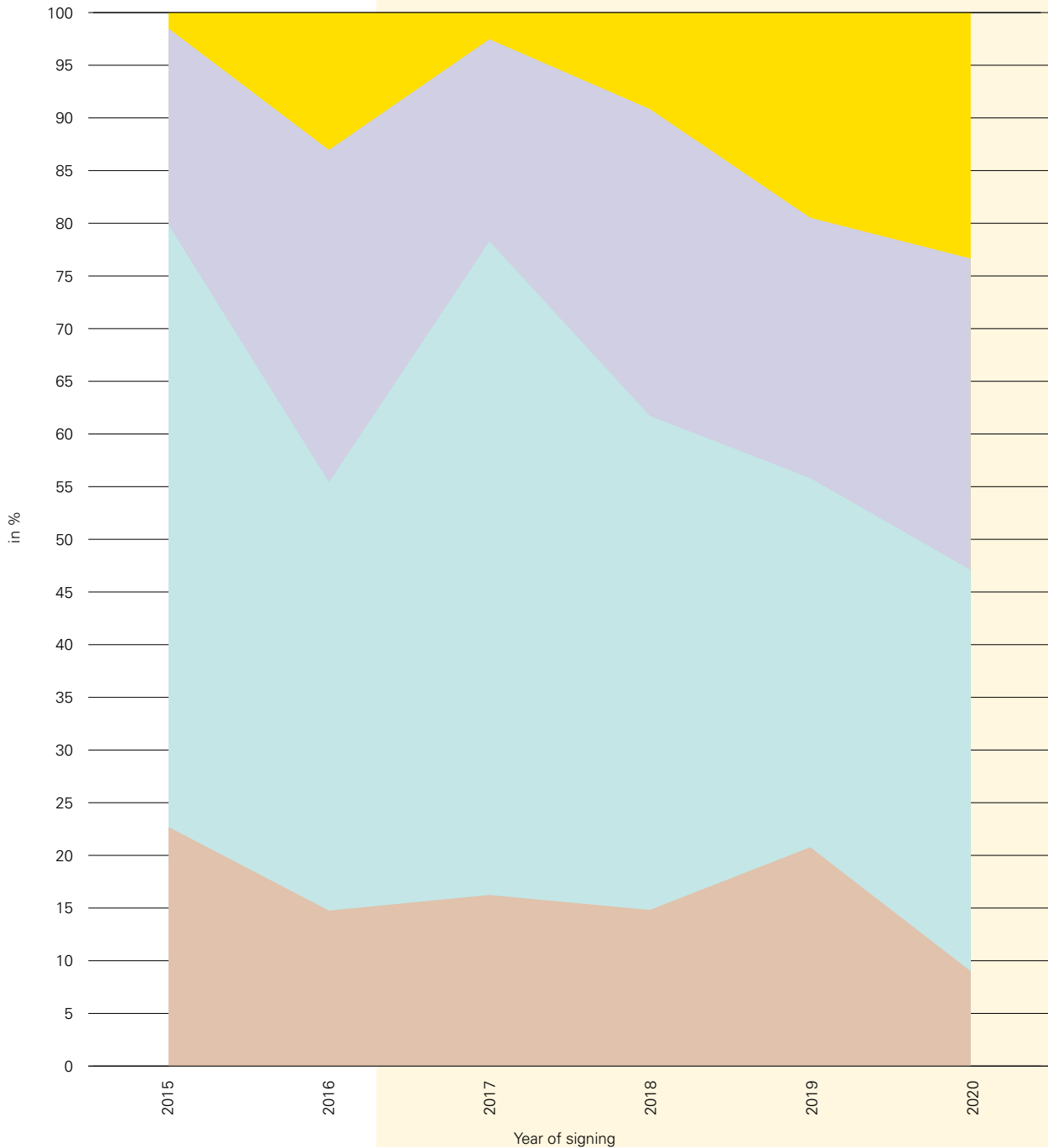


Micro Fulfillmentcenter



Demand for space among the leading groups of logistics property occupiers by take-up nationwide

- E-Commerce
- Retail
- Logistics & transport
- Manufacturing industry



6.3

Direct benefits of logistics properties

Even in retail logistics and in the logistics & transport sector, demand for space did not decline during the pandemic year of 2020, but actually increased.

As suggested in the section above, logistics real estate is strictly purpose-built and use-optimised, more so than virtually any other property type. The structural requirements for an optimal use of such properties were already elaborated in the building quality context in Chapter 4, above. This section now will take a closer look at the direct benefits of these properties.

Of course, logistics properties are the places where logistics core processes within supply chains are carried out. Accordingly, the position of a given logistics property within a supply chain matters much more than the nature of that property's occupier. For instance, an occupier from the automotive industry will not generally specify identical requirements for every logistics property used but strongly differentiate them, depending on the part of the supply chain that a given site serves. Tracing the largest groups of occupiers is necessary only to identify the greatest future demand for floor space. The chart depicts a breakdown of the demand for logistics real estate by logistics industry over time. It shows, for instance, that e-commerce has a growing need for space to handle its workflows. Even in retail logistics and in the logistics & transport sector, demand for space did not decline during the pandemic year of 2020, but actually increased. The only sector that registered a drop in demand for logistics floor space in 2020 is the manufacturing industry.

A key criterion for the valuation of a logistics property is the presence of an occupier, be it owner or tenant. After all, what good is a property for which there is no occupier demand on the market? Such a property would be of no interest to investors either. The weighted average lease term (WALT) is used as one of the most important parameters when looking to buy a property. Another question, aside from WALT, that comes up when buying a commercial property concerns its marketability or suitability for alternative use. A high-rated logistics property has to be eligible for as many types of use as possible in order to engage a large number of tenant leads or buyers, and thereby to vindicate a high rent level. Built-to-suit assets that were originally developed for owner-occupancy get lower ratings in this regard whenever the spectrum of potential occupiers is limited by its one-off structural specifications.

6.4

The societal value added of logistics developments and its costs

The logistics industry acts as an important lifeline of the economy and thus of society at large, as already suggested above. It ensures a smooth flow of materials on a day-to-day basis. The permanent functioning of the logistics system was seen as a given for the longest time, and its integrity was never questioned until the outbreak of COVID-19, when the security of supply suddenly seemed under threat.

Logistics certainly serve as an important foundation for the functioning of our modern society with its division of labour. On the municipal level, it creates jobs and generates tax revenues. Worth mentioning in this context is that the logistics business tends to deliver secondary effects: The jobs in companies operating upstream or downstream from logistics within the supply chain, such as retailers and post offices, often depend on the logistics business. Due to this intricate causal fabric, it is never easy to quantify just how many jobs a logistics development may create.

External costs of logistics to be minimised

While the logistics sector provides significant benefits to society, it is a service that comes with certain (external) costs. Meant by this are the costs that society as a whole shoulders. Prime examples would be soil sealing or noise and air pollution, among others. The construction of logistics properties as greenfield development, for instance, seals tracts of land and consumes enormous quantities of material and energy. In the course of its life cycle, the property generates further pollution and noise. One of the logistics industry's biggest challenges ahead will be to minimise these external costs. The EU sustainability taxonomy, for one thing,

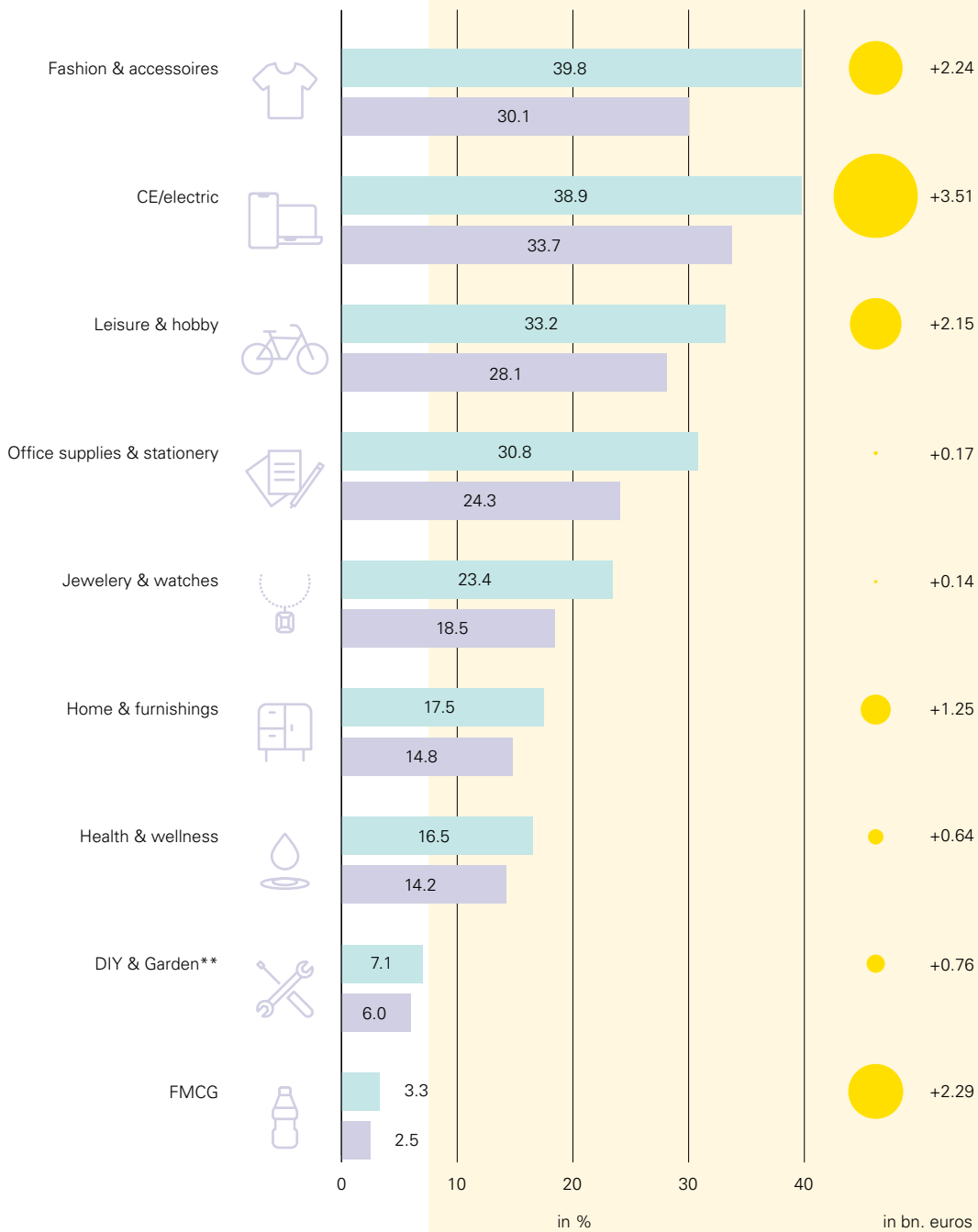
creates new legal parameters to stimulate efforts to achieve the set climate change mitigation targets.

There are a number of approaches for improving the sustainability of logistics real estate. An obvious choice because of the large roof surfaces of logistics properties is the sustainable generation of energy via roof-mounted photovoltaic systems. Another option much discussed at present is the stacking of logistics facilities to reduce the high space consumption. Some multi-storey logistics pilots have already been implemented, for instance by Four Parx in Hamburg. Meanwhile, logistics properties as such have undergone changes, as previously suggested. They are gradually moving away from their plain design as they need to satisfy ever higher standards. Exactly where the train is heading and which model will eventually carry the day is impossible to say at this time. E-mobility in goods delivery will become an important means to reduce noise pollution and the carbon footprint, at least in urban areas. But on the whole, the logistics sector is facing many other changes as well. The coronavirus pandemic has increased public awareness of the need for logistics. Now is therefore the perfect time to discuss the way forward for logistics and to embrace fresh approaches to achieve optimal (societal) benefits from the logistics business.

Breakdown of pro-rata online share in the overall market, by industry

■ 2019 ■ Increase in 2020 compared to 2019
■ 2020

Source: German Retail Federation (HDE)



“The outbreak of the coronavirus pandemic has shown how important the functioning of the logistics sector is for the economy and for society.”

6.5

The logistics sector is of extraordinary significance for Germany



Bertrand Ehm, Director Industrial Investment, Savills Immobilien Beratungs-GmbH

Just think of the distribution of the vaccines that were developed to fight COVID-19. What made it possible to vaccinate people by the millions in a matter of months in Germany is the fact that the logistics infrastructure needed for doing so was already in place. In many countries around the globe, it would be inconceivable to maintain such a vaccination pace because they lack the logistics infrastructure, among other reasons. It is not least because of its central location in Europe that the logistics sector is of such extraordinary significance for Germany. With c. 280 billion euros in annual revenues and well over 3 million people employed by more than 70,000 logistics companies, it is the third largest economic sector, after the automobile industry and the retail sector.

The pandemic has further boosted the importance of e-commerce. Now, as then, online retailers count among the fastest-growing groups of occupiers of logistics real estate. Especially important is the e-food segment, which has gained particular prominence since the outbreak of the coronavirus pandemic, and which is represented by players like Gorillas and Picnic. Demand for space in micro-depots or dark stores from this segment has skyrocketed lately. The retail and food logistics sector has been thriving on the brisk growth of so-called fast moving consumer goods (FMCG), as the HDE German Retail Federation determined on the basis of concrete figures. But the textiles, consumer electronics and leisure segments also expanded their share in online sales, and significantly so.

Worth mentioning in addition to e-commerce occupiers are logistics service providers and industrial players. Although the outbreak of the COVID-19 pandemic precipitated a brief economic slump, the latest signs point toward growth again, so that future demand

for space in these segments will remain stable as well. But the growth in online retailing will dominate the future demand for space more than anything else. Savills UK determined that demand for logistics facilities begins to surge once the share of e-commerce in total retailing exceeds 10.7%. In Germany, the online share already totalled 12.6% in 2020, or 18% when excluding food, according to the HDE German Retail Federation.

This development necessitates the construction of additional logistics facilities. Municipal zoning policy plays a key role in this context. Some city halls in Germany are much more open to logistics developments today than they used to be just years ago because they have realised their importance for the local economy. On top of that, one needs to consider knock-on effects that can play a particularly prominent role in the case of logistics developments. Many jobs in companies operating upstream or downstream within the supply chain, such as retail businesses or local post offices, depend on the logistics facilities on the city's periphery. Then again, there is still a lot of work to be done raising awareness among local residents: Well-stocked supermarket shelves, next-day delivery of clothes purchased online, or having a pizza brought to your doorstep within 30 minutes of ordering – none of this is possible without goods delivery traffic and a dense network of logistics facilities. No doubt, the pandemic has already prompted a shift in attitude toward the subject of logistics. What matters now is to carry the momentum over into the societal debate in order to ensure optimal security of supply for the future, too."

the 1990s, the number of people in the UK who are aged 65 and over has increased from 10.5 million to 13.5 million, and the number of people aged 75 and over has increased from 4.5 million to 6.5 million (Office for National Statistics 2000). The number of people aged 65 and over is projected to increase to 17.5 million by 2020, and the number of people aged 75 and over to 8.5 million (Office for National Statistics 2000).

There is a growing awareness of the need to address the needs of older people, and the need to ensure that they are able to live independently and actively in their own homes. This has led to a number of initiatives, including the development of the National Framework for Older People (Department of Health 1999) and the National Strategy for Older People (Department of Health 2000). The National Framework for Older People sets out the government's commitment to older people, and the National Strategy for Older People sets out the government's strategy for addressing the needs of older people.

The National Framework for Older People (Department of Health 1999) sets out the government's commitment to older people, and the National Strategy for Older People (Department of Health 2000) sets out the government's strategy for addressing the needs of older people. The National Framework for Older People sets out the government's commitment to older people, and the National Strategy for Older People sets out the government's strategy for addressing the needs of older people.

The National Framework for Older People (Department of Health 1999) sets out the government's commitment to older people, and the National Strategy for Older People (Department of Health 2000) sets out the government's strategy for addressing the needs of older people. The National Framework for Older People sets out the government's commitment to older people, and the National Strategy for Older People sets out the government's strategy for addressing the needs of older people.

The National Framework for Older People (Department of Health 1999) sets out the government's commitment to older people, and the National Strategy for Older People (Department of Health 2000) sets out the government's strategy for addressing the needs of older people. The National Framework for Older People sets out the government's commitment to older people, and the National Strategy for Older People sets out the government's strategy for addressing the needs of older people.

The National Framework for Older People (Department of Health 1999) sets out the government's commitment to older people, and the National Strategy for Older People (Department of Health 2000) sets out the government's strategy for addressing the needs of older people. The National Framework for Older People sets out the government's commitment to older people, and the National Strategy for Older People sets out the government's strategy for addressing the needs of older people.

The National Framework for Older People (Department of Health 1999) sets out the government's commitment to older people, and the National Strategy for Older People (Department of Health 2000) sets out the government's strategy for addressing the needs of older people. The National Framework for Older People sets out the government's commitment to older people, and the National Strategy for Older People sets out the government's strategy for addressing the needs of older people.

The National Framework for Older People (Department of Health 1999) sets out the government's commitment to older people, and the National Strategy for Older People (Department of Health 2000) sets out the government's strategy for addressing the needs of older people. The National Framework for Older People sets out the government's commitment to older people, and the National Strategy for Older People sets out the government's strategy for addressing the needs of older people.

7

On the valuation of logistics real estate



7.1

Effects of location on value

The foregoing chapters of the survey already detailed the three most important dimensions of value-creating factors: location, building and occupier. The discussion foregrounded the individual components of each factor that drive past and future capital growth trends. For instance, the chapter on location discussed an overflow movement, driven by land shortages, from the metro areas into Germany's secondary locations. Picking up on the subject, this section will take a closer look at price formation and price growth among these value-creating factors. It will conclude with a synopsis of the factors location, building and occupier to address the questions what is driving the sometimes brisk growth of selling prices, and whether such price levels are actually justified.

>





“Location is everything”— facilities close to metro areas wanted

In contradistinction to the early Zero Years, a time when e-commerce did not yet have the same attractive pull and penetration that it has today, the bulk of consumer-oriented logistics operators preferred to be based close to the metropolises. These logistics operators—meaning not those in production logistics—favour the geographic proximity to cities like Hamburg, Munich or Berlin as an efficient way to cover the last mile. Large central warehouses in the German heartland, such as those located in the Bad Hersfeld logistics region, no longer serve as benchmark. This trend, which began to pick up steam for good in the early 2010s, caused logistics players to compete for space with other types of use in the business areas of Germany. At the same time, large-scale logistics were increasingly rivalled by small and mid-size research and light industrial operations. The rapid price growth caused by the short supply in land is exacerbated by the macro-societal goal to reduce soil sealing.

Especially in Germany’s top locations close to the inter-regional motorway network and to metropolitan consumer markets, plot prices soared since 2016. Plot prices followed an average growth rate of 27.7 % between 2016 and 2021 – with outliers even higher, for example in Hamburg’s port area. During the time prior to the index year of 2016, meaning between 2011 and 2016, plot prices in these same top regions had increased only by about 17.1 %.

Second-tier regions and the periphery

Although plot prices far from the metropolises have embarked on a similar trend, they did not follow the same growth rates as in the keenly sought business areas of the conurbations. Striking about the analytic findings is that prices of plots on the periphery have followed virtually the same trend as plot prices in second-tier regions.

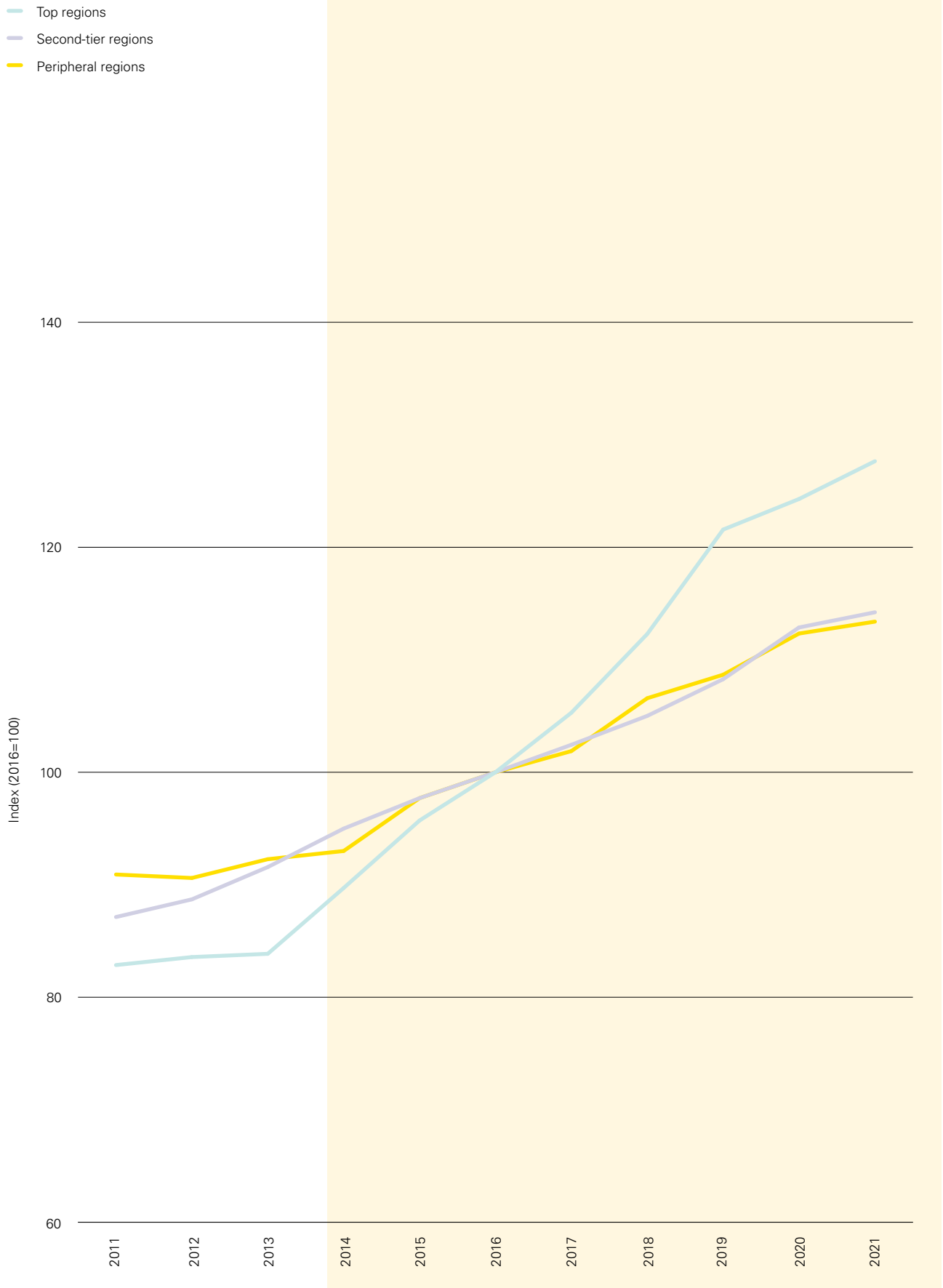
The subsequent evaluations use the term “second-tier regions” for those logistics regions that are not located in the greater areas of the “Big Seven” cities of Hamburg, Berlin, Düsseldorf, Cologne, Frankfurt am Main, Stuttgart and Munich. Instead, the other established logistics regions of Germany are considered second-tier regions, such as the logistics regions of Bremen and North Sea ports, Bad Hersfeld or Magdeburg. Peripheral regions are those locations that do not count among Germany’s established logistics regions. Cases in point would be the cities of Flensburg high up north and Freiburg all the way in the south of the country.

28%

Increase in land prices in the top
regions between 2016 and 2021

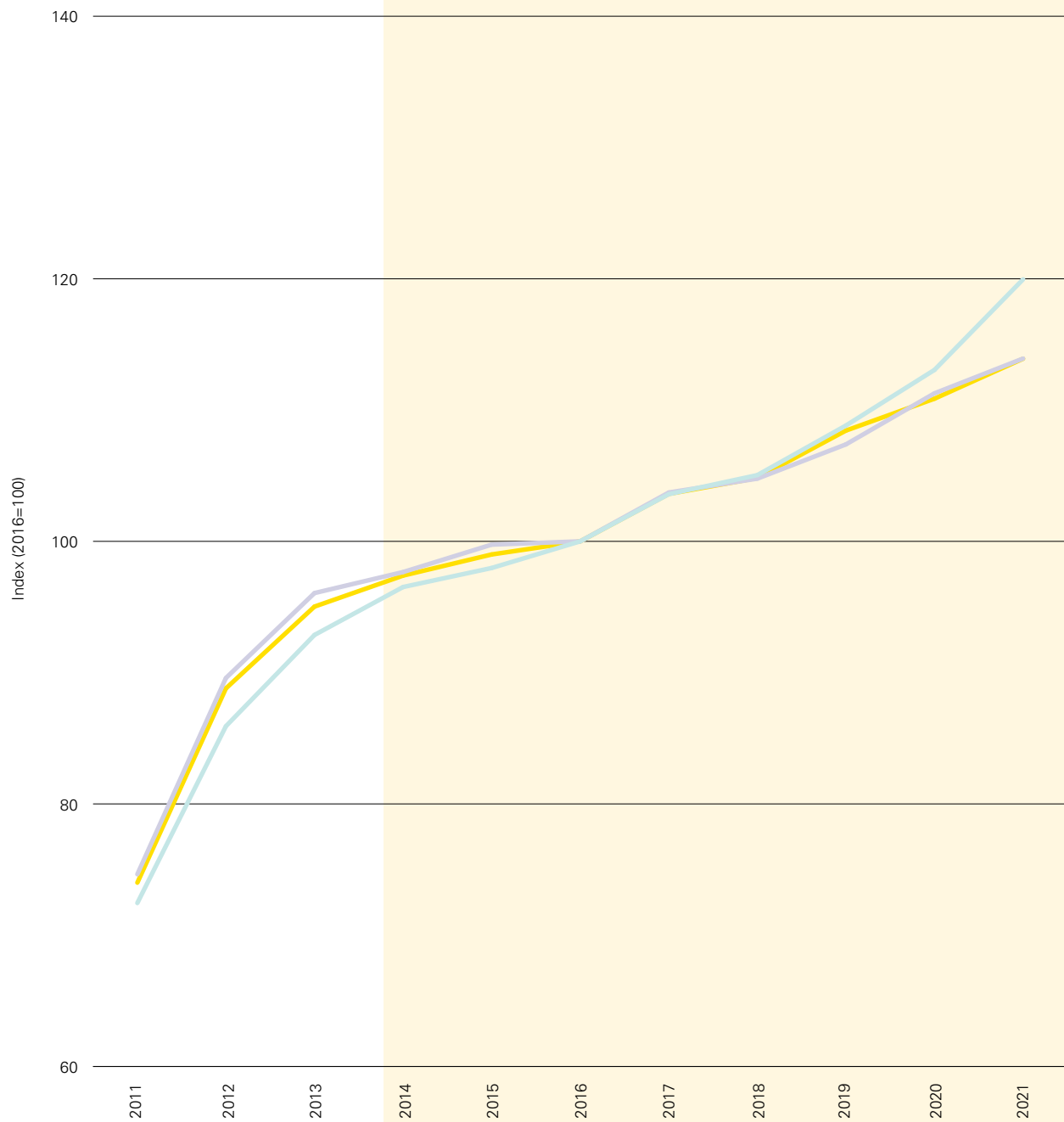
Trend in land prices

- Top regions
- Second-tier regions
- Peripheral regions



Trend in logistics real estate construction costs

- Top regions
- Second-tier regions
- Peripheral regions



7.2

Construction costs rising everywhere

28%

Increase in construction costs in the top regions between 2011 and 2016

20%

Increase in construction costs in the top regions between 2016 and 2021

As already elaborated in the chapter on building quality, the requirements for the construction of logistics real estate have increased in recent years. In addition to prioritising the objectives of climate change mitigation, it is of growing importance to ensure a high alternative use potential. Logistics real estate of the latest generation focuses strongly on a conceptual design of layout and fit-out features that will satisfy present and future occupiers of the property. As far as reletability goes, this clearly makes sense, and it lays the foundation for the long-term sustainability of the property's fitness for purpose. Apace with growing requirements and superior benefits, the investment volume, meaning the construction budget for logistics properties, also registered price hikes in recent years.

The trend in construction costs for logistics real estate has been subject to brisk growth everywhere in the country. Although regional differences do play a role in the cost structure of materials and especially of human resources, these differences are far less significant than the impact of the previous trend in land prices. In the years 2016 through 2021, the top regions of Germany registered a construction cost hike of about 20.0 % for modern logistics properties. During the same period of time, construction costs in second-tier regions increased by around 13.4 %. Remarkably, there is no place in Germany where construction costs grew by less than 25.0 % between 2011 and 2016.

Coping with volatile material prices

Whenever a lead contractor is called in to take charge of a property development, it remains common practice to agree on lump-sum prices for the materials used. Such arrangements will expose the lead contractor to a certain risk during volatile market cycles with surging costs of materials. The risk can be mitigated by writing index-linked price clauses into the contracts, and their use has become quite common lately in other trades and in public-sector contracting. However, since the time of the material order and the actual market prices represent key elements here, the specific time triggering such an escalator clause will often become subject to debate.

In response, the use of open-book procedures is becoming increasingly common in the development of logistics properties. Under this procedure, the lead contractor negotiated a budget for individual trades—such as steel construction or electrical installations—which, even though it may be undercut or exceeded, serves as basis of calculation for the project at hand. The lead contractor enters the tender process quoting this budget, and eventual cost savings, if any, are split pro rata between the client and the lead contractor. The same is deemed agreed, *mutatis mutandis*, for cost overruns.

7.3

The logistics sector as basis of success

2%

Increase in prime rents in the top regions between 2011 and 2016

14%

Increase in prime rents in the top regions between 2016 and 2021

On the side of logistics property occupiers, the demand for space is as high as ever and is further fuelled by the e-commerce mega trend. At the same time, the benefits of logistics have met with more public appreciation in the wake of the coronavirus pandemic. No doubt, the various aspects relevant for the value of logistics real estate have been subject to significant appreciation in their own right in recent years and specifically against the background of the coronavirus pandemic, as demand for attractive locations, high building quality standards, and simply for logistics services of various kind increased their value. The fact is also reflected in the rent growth for logistics facilities.

The aforementioned shift in preferences for certain logistics locations over others comes at a time when rents for logistics facilities in Germany's top regions are surging in sync with the growing demand for real estate in conurbations in general. Prime rents have been particularly quick to rise here, growing by about 14.1 % since 2016. To put the surge into perspective, it should be added that rents in these top regions had grown by a mere 1.7 % between 2011 and 2016. More than other logistics regions, Berlin acted as driver of this growth. Meanwhile, rent levels in the second-tier regions and on the country's periphery pushed up reliably by around 1-2 % annually in recent years.

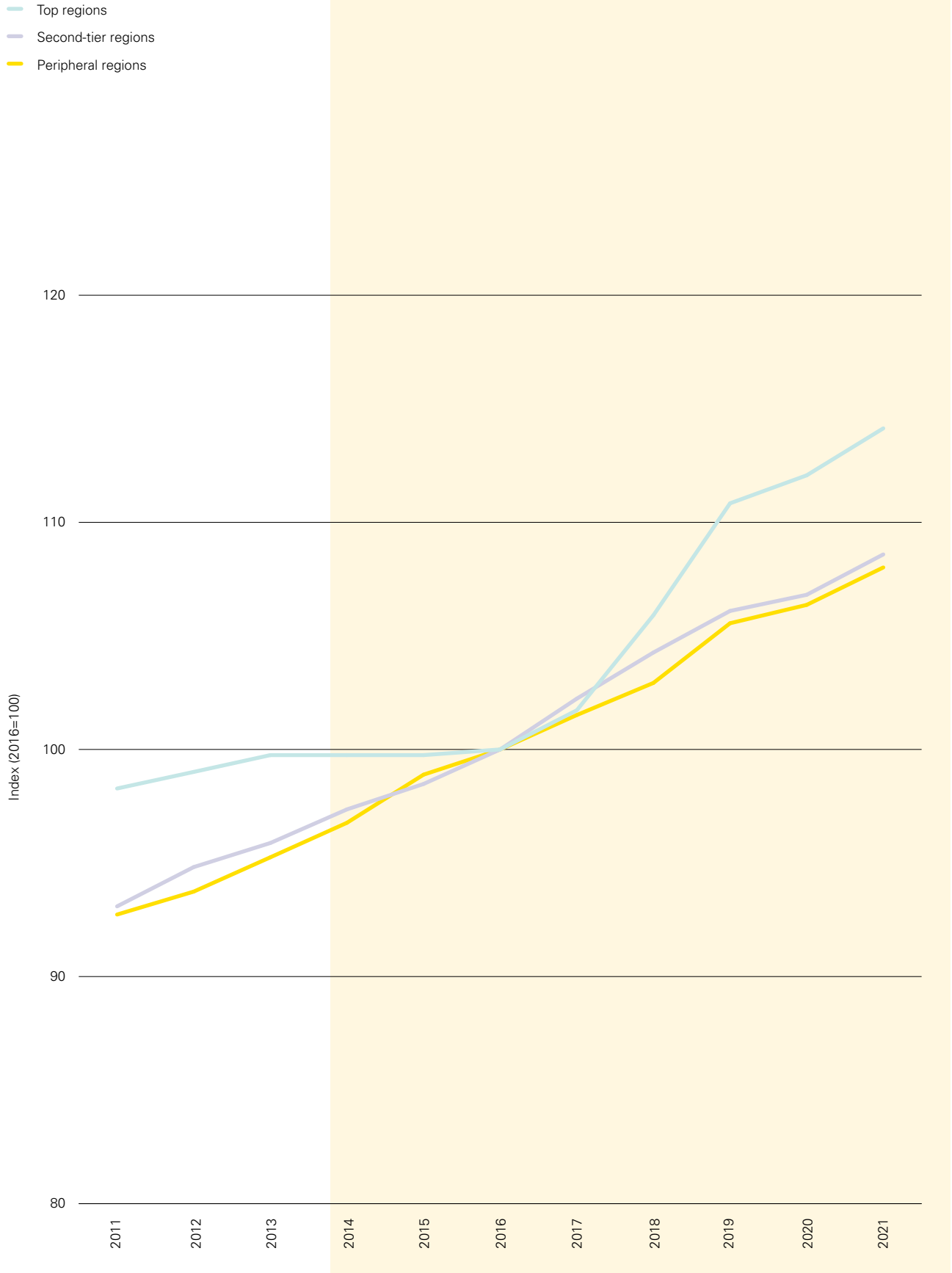
Demand-driven price hikes subject to visible regional differences

There are manifest differences in the pace of the rental dynamics across Germany. Unsurprisingly, the top-performing regions stand out here, too, either by reporting a significantly stronger momentum or by having attained a high rent level already. The logistics region of Munich, for instance, has the highest rent level nationwide. However, the dynamic of the market is but average, and failed to produce exorbitant rent surges of the sort seen in other regions in recent years.

At the other end of the scale are logistics regions like Hanover/Braunschweig where you will still find moderate rent levels of 5.00– 5.50 euros/sqm. Then again, these are the markets that have shown very dynamic rental trends and growth rates over the past years. They exemplify the rising relevance of, or demand for, second-tier locations where the key location parameters for logistic developments are up to par, where demand for space is therefore demonstrable, and where developable plots of land are still available.

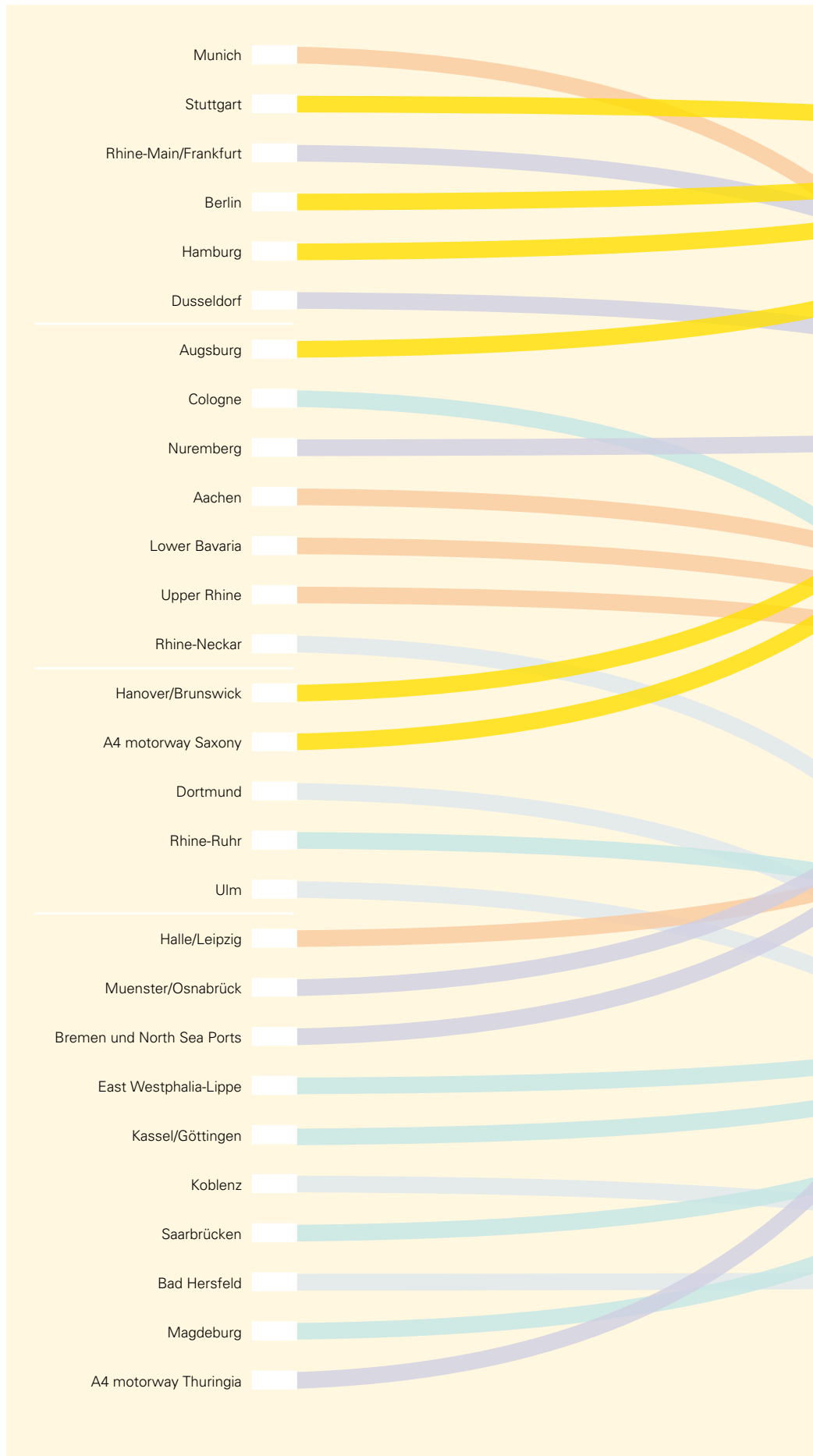
Trend in prime rents for logistics real estate

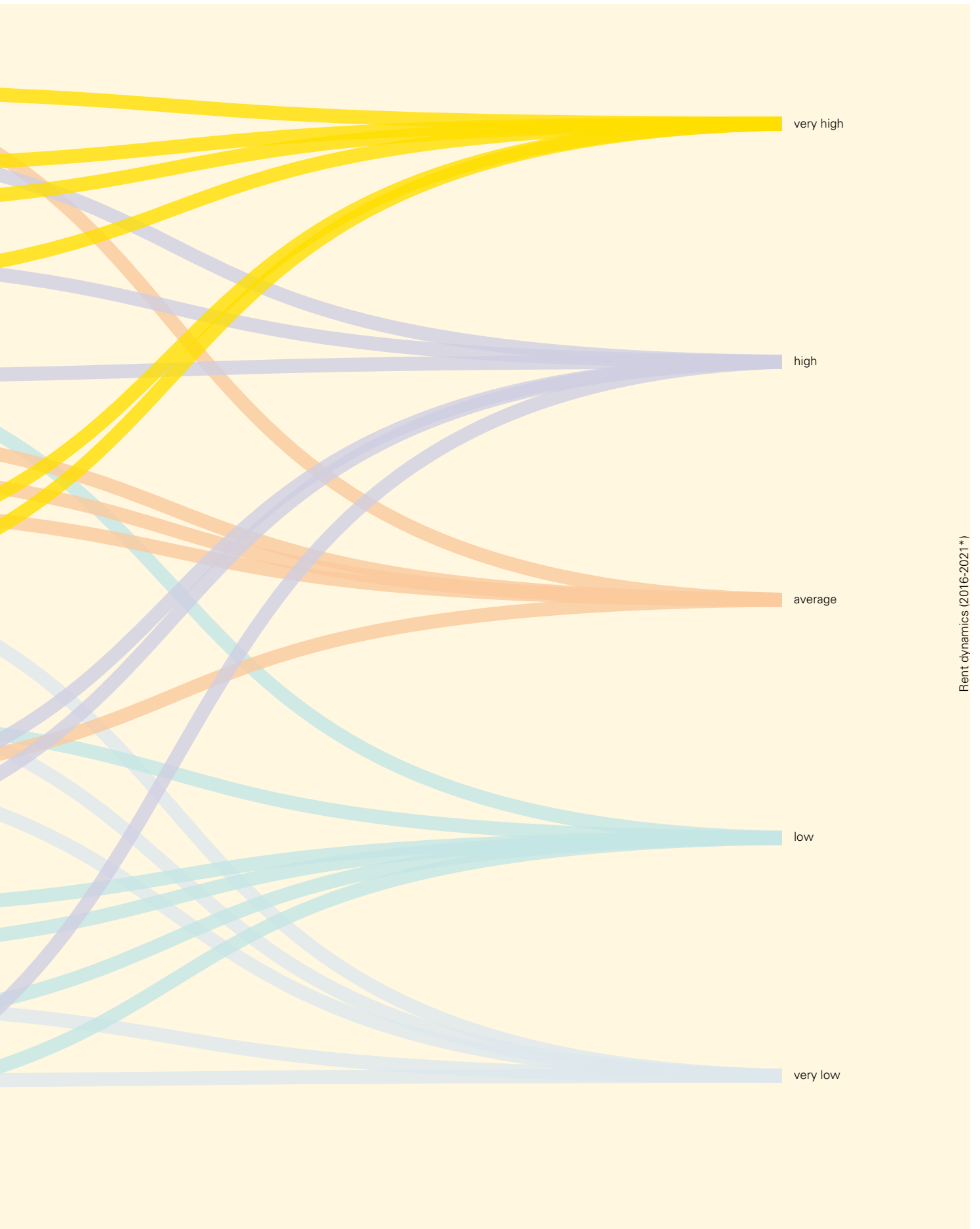
- Top regions
- Second-tier regions
- Peripheral regions



Rental dynamics in german logistics regions, 2016-2021*

*1st half year 2021





Rent dynamics (2016-2021*)

7.4

Value, while subjective, is not arbitrary

Growth rates have rapidly gathered momentum since the outbreak of the coronavirus pandemic, especially in the top logistics regions. The trend is driven primarily by the increased demand on an investment market of virtually unchanged supply (a developer's market). Among logistics space demanders, meaning among occupiers of logistics real estate, demand visibly increased over the past years. But for the appraisal of higher logistics property values, it is of the essence to take these differences in perspective into account.

A breakdown by regions shows that price-to-rent multiples have increased quickly since 2016. By 2021, the price-to-rent multiples quoted in the top regions were about 42.5% higher than they had been as recently as 2016. If you look further back in time and compare the price-to-rent multiples of 2016 with those of 2011, you will find a growth of barely 25.0% in the top regions. This means that the growth rate accelerated in recent years before increasing investor interest in the wake of the coronavirus pandemic added further momentum.

More and more investors venturing into secondary locations

If you look at the investor-driven demand, which generally has a direct influence on the yield performance within a given region, you will find that second-tier locations such as the Magdeburg logistics region have gained in significance over the past years. Here, the rates of return, along with the risk, are still higher than in the leading regions, such as Hamburg, Berlin or Munich. For the Magdeburg logistics region, increased investment demand prompted one of the highest yield dynamics seen anywhere during the observation period..

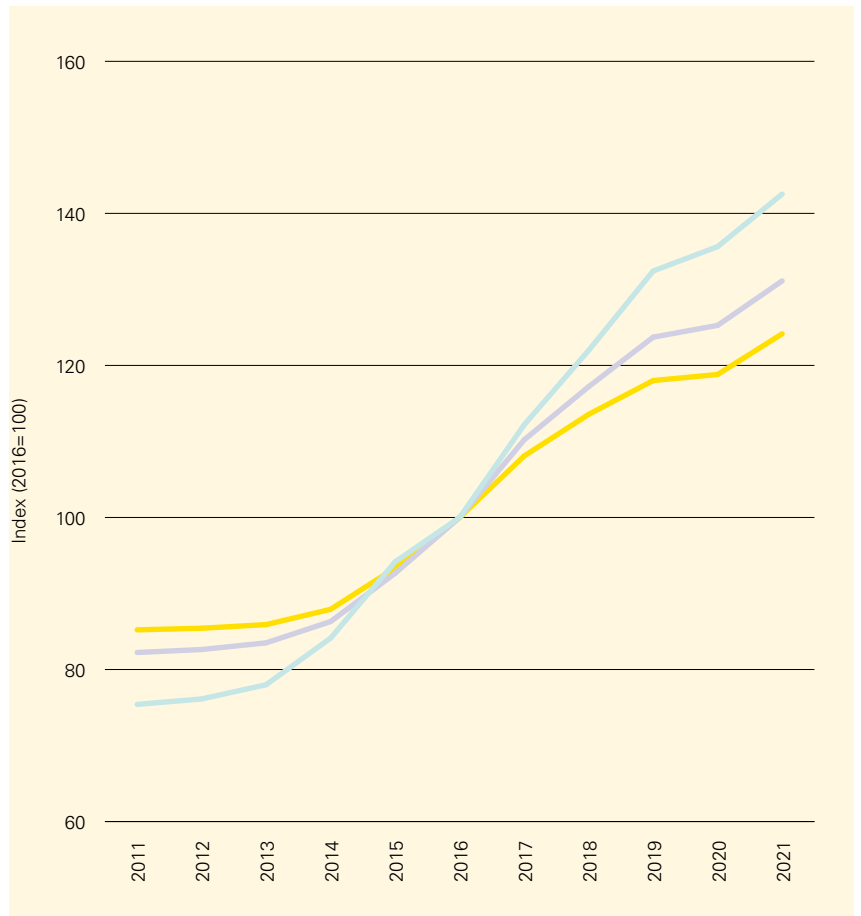
Are logistics assets more valuable now than they were before the crisis?

In the course of the past years, the various components that are factored into selling prices on the investment market rose at the same fast pace at which the complexity of the logistics landscape increased. The networks of logistics property sites multiplied in number and now extend across the entire country rather than being limited to the centre of Germany, so as to ensure that even the remote corners of the country are within reach of overnight transportation. Thus, the differentiation of Germany's location landscape of logistics real estate continues in response to the growing floor space shortage in the metropolises, soaring land prices there and the increasing attractiveness of second-tier locations. Generally speaking, the development has led to an appreciation of many locations – whether in the top regions, in second-tier locations or even on the periphery. It has now become possible to find the right kind of occupier for virtually any locations – as long as general characteristics are in place, such as proximity to a motorway or other transport modes.

But would things have developed differently without COVID-19? Would logistics real estate be less valuable here and now without the pandemic?

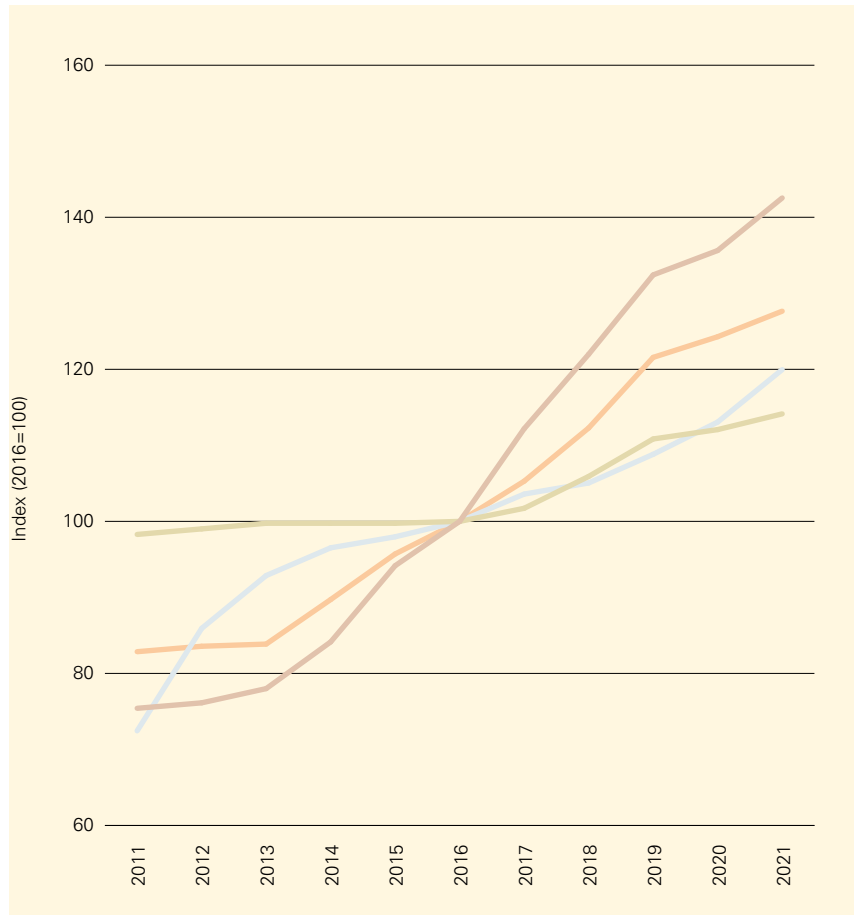
Evolving price-to-rent multiples for logistics real estate

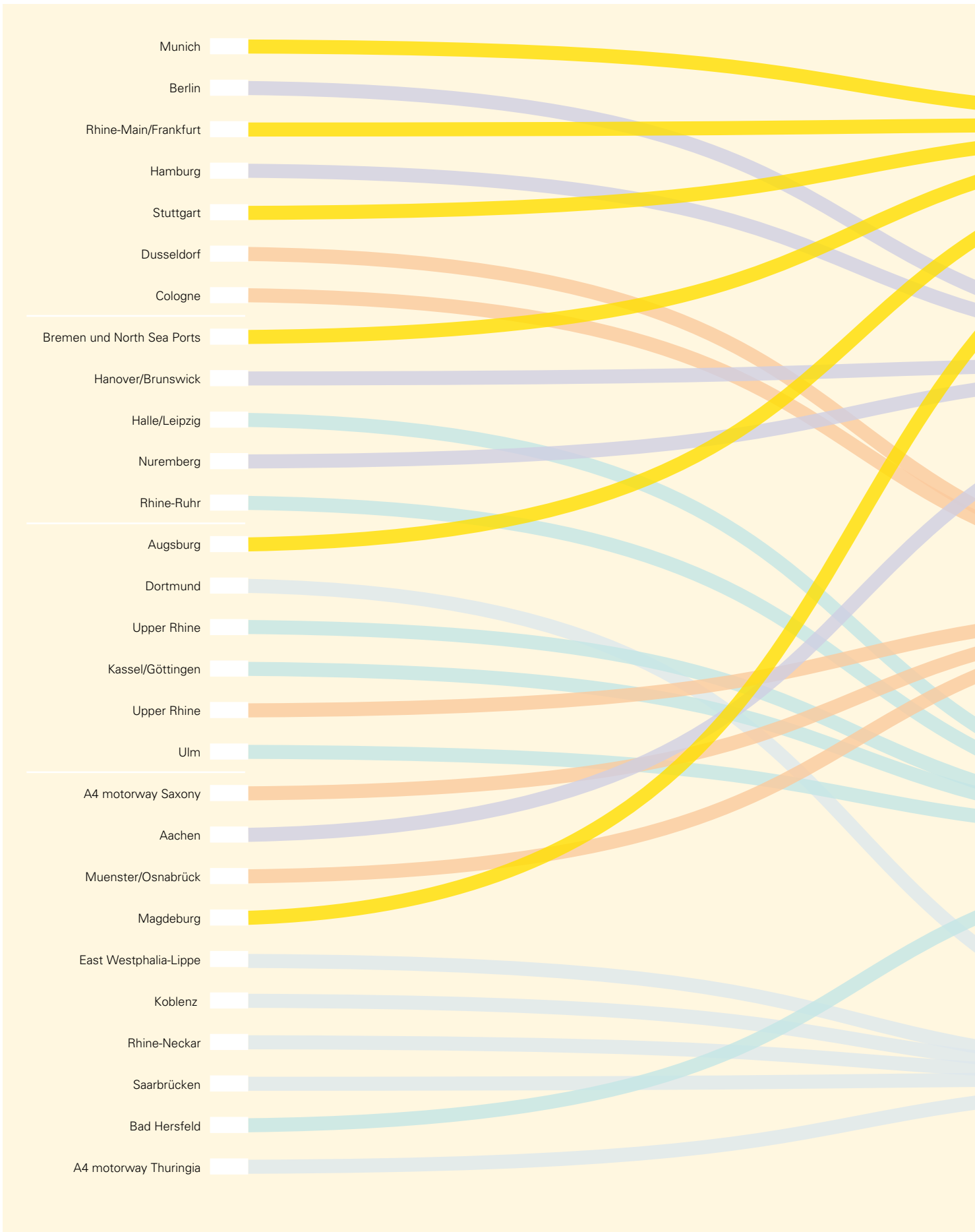
- Top regions
- Second-tier regions
- Peripheral regions



Development of the value-creating components in the top regions

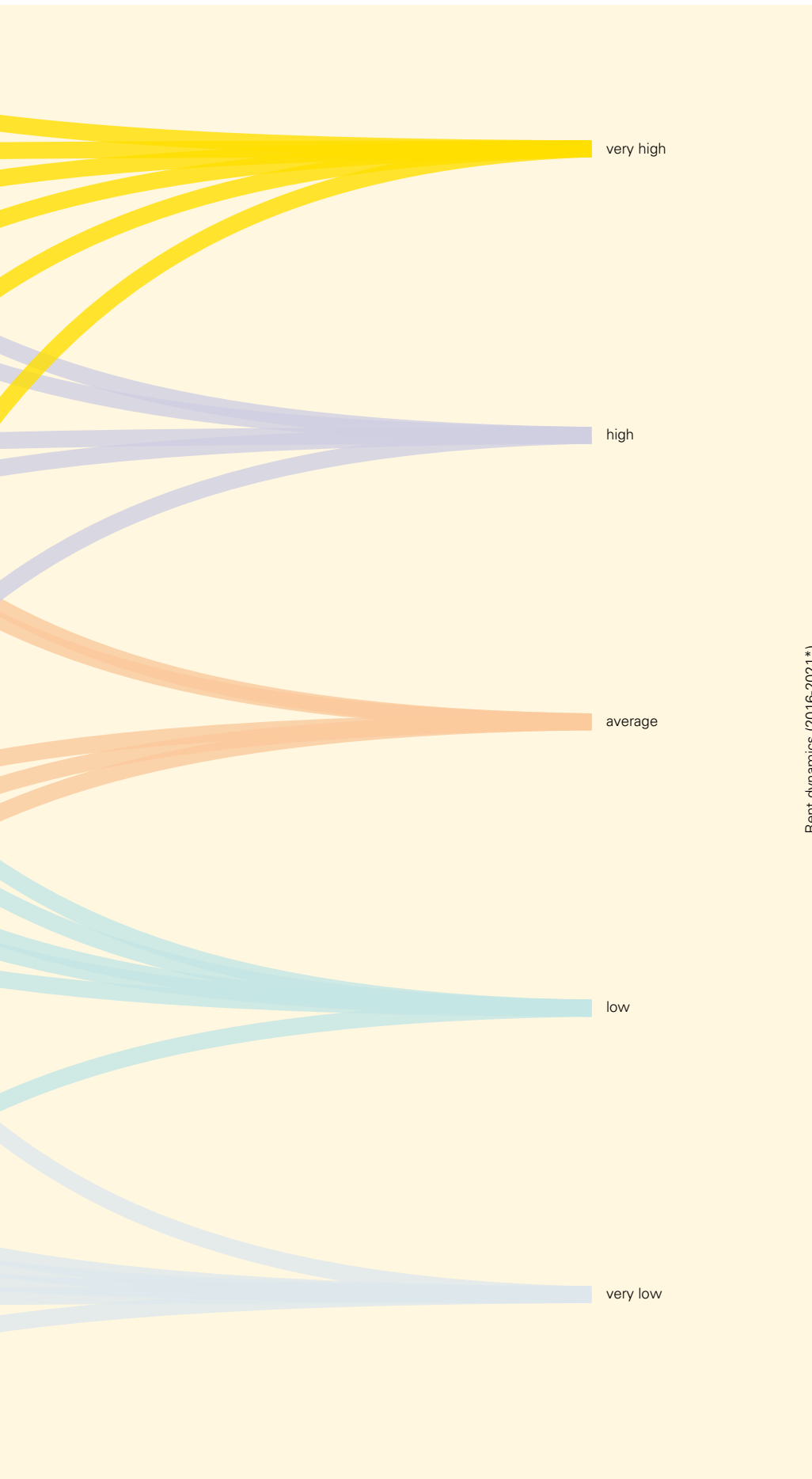
- land prices
- construction costs
- prime rents
- multiplier





Yield dynamics in German logistics regions, 2016-2021*

* 1st half year 2021



“The consequences of the coronavirus pandemic for property appraisals are attributable primarily to the additional demand for logistics services that the pandemic generated.”

7.5

Comparing capitalised earnings value with tangible value is becoming increasingly important



Maria Teresa Dreo-Tempsch, Head of Market, Member of the Board, Berlin Hyp

In terms of volume, the flows of goods have principally remained unchanged. People are not consuming more because of the pandemic, but consume in different ways. One consequence is surely that online retailing has become much more prominent. Whether the storage of essential goods, such as those for medical needs as proposed by the Federal Government, will trigger the development of new logistics properties remains to be seen. As far as the valuation of logistics real estate goes, the ramifications of the pandemic are already reflected in higher—sometimes extremely high—selling prices. In addition, some new-build assets have arguably been developed primarily to absorb overflow from the traditional logistics hotspots.

When it comes to the valuation of logistics properties, classic parameters like quality of location remain important aspects. Being based in a micro-environment inside a conurbation is particularly advantageous for the ability to deliver 24/7. Standalone sites, by contrast, should be avoided, and tend to have an adverse impact on valuations. The possible presence of service providers in the immediate vicinity of a logistics property is also taken into account. Naturally, aspects concerning the actual building are also of significance, and so are aspects like multiple occupancy capacity or the office concept within a given logistics property. Mezzanine offices tend to get a better rating than classic office wings. Creative and especially flexible office concepts are particularly welcome. Alternative use potential with a view to occupancy by several different tenants also plays a major role.

Especially against the background of rising prices, it is becoming increasingly important to take stock of the initial investment by comparing the capitalised earnings value with the tangible value. However, there simply are no systematic statistics on property rates as a key metric for determining the capitalised earnings value of logistics real estate. Instead, it is currently identified only as an influencing factor to map the situation on the market. It is much more helpful for appraisal purposes therefore to analyse net initial yields in combination with available data on comparable properties.

The latest trend in selling prices also brings real estate lenders face up with the question whether these are still justifiable. Indeed, some of the negotiated prices known to us cannot be explained by appraisals. Even when comparing such properties with other asset classes, such as office or residential, it can often be difficult to rationalise the price trend. However, against the background of the volatile market action, standard fair market value approaches need not be reviewed because they are principally variable enough to accommodate these shifts. The question that presents itself is rather whether some of the recent logistics real estate deals are perhaps out of touch with the market action. The ongoing surge in logistics real estate values is, in principle, nothing out of the ordinary, because every real estate asset class experiences certain fluctuations from time to time. Such fluctuations generally reflect the market conditions in general and the site and property specific characteristics in particular. As a rule, fluctuations in value tend to be balanced by the significantly lower mortgage lending values.



Contact Details and Credits



Syndicate Partners

Berlin Hyp AG

Nicole Richter
Corneliusstraße 7
10787 Berlin
Phone: + 49 30 2599 5022
E-Mail: nicole.richter@berlinhyp.de

Bremer AG

Michael Dufhues
Grüner Weg 28–48
33098 Paderborn
Phone: +49 52 51 770-0
E-Mail: m.dufhues@bremerbau.de

bulwiengesa AG

Patrik Völtz
Moorfuhrweg 13
22301 Hamburg
Phone: +49 40 42 32 22-31
E-Mail: voeltz@bulwiengesa.de

GARBE Industrial Real Estate GmbH

Tobias Kassner
Versmannstraße 2
20457 Hamburg
Phone: +49 40 356 13 1072
E-Mail: t.kassner@garbe.de

Savills Immobilien Beratungs-GmbH

Bertrand Ehm
Hopfenmarkt 33
20457 Hamburg
Phone: +49 40 309 977 140
E-Mail: behm@savills.de

Scientific Processing, Data Handling and Editing

Project Management

Patrik Völtz
Phone: +49 40 42 32 22-31
E-Mail: voeltz@bulwiengesa.de

Project Assistance

Daniel Sopka
Lisa Mecklenburg

Design & Konzept

elevenfifteen GmbH
Milchstraße 7–8
20148 Hamburg
Phone: +49 40 55 898 11-20
E-Mail: hallo@elevenfifteen.de
elevenfifteen.de



logistik-und-immobilien.de

**For the production
of the survey Logistics
and Real Estate 2021**

2.850 kg

**CO2 and
greenhouse gas emissions
were compensated
by additional
climate protection projects.**

Supported climate protection project

forest protection Pará, Brazil

climatepartner.com/10951-2109-1002

Disclaimer

The findings and calculations presented in this survey as well as the research conducted are based on evaluations by bulwiengesa AG. They were analysed to the best of our knowledge and using due diligence. No warranty is offered regarding the accuracy of the information and data, except for those researched and compiled by ourselves, this guarantee being limited to the standard duty of care. No warranty whatsoever is assumed for the technical accuracy of data or facts adopted from third parties. The findings were interpreted and evaluated against the background of the experience bulwiengesa AG has gathered through its research and advisory activities in Germany and elsewhere in Europe.

COPYRIGHT © 2021 bulwiengesa AG

All rights reserved. Excerpts may be used as long as bulwiengesa AG is cited as their source. More extensive reproductions, publications, and disclosures of contents to third parties in any form whatsoever are principally permitted subject to prior written authorisation by bulwiengesa AG only, and must cite the original source. Any quote must cite the survey title as source.

Logistics and Real Estate 2021

Focus on Values

logistik-und-immobilien.de

©2021 bulwiengesa AG



Source: Bremer



Source: GARBE Industrial Real Estate GmbH



Source: GARBE Industrial Real Estate GmbH