

EXECUTIVE SUMMARY

COVID-19 EFFECTS



The non-food retail/shopping center and hotel real estate segments were particularly hard hit by the COVID-19 pandemic. Revenues of real estate users collapsed, rent payments were deferred and decisions to rent or buy were frequently postponed. And the crisis has also left its mark in the office segment.



Pure-play trade show/congress hotels will face exceptional challenges in the future. The remaining hotel segments are expected to see a recovery in the medium term.



In the non-food retail and shopping center segments, the COVID-19 pandemic is accelerating the structural transformation. And capital-intensive repurposing of buildings in most cases only leads to reduced revenue estimates.



In the **office segment**, the effects resulting from lower demand due to more people working from home will only lead to a reduction in new project developments when current agreements run out in the medium to long term, also depending on the location. The pressure in the office market will ease.

IMPACT



- Transaction markets for shopping centers and hotels came to a virtual standstill, sales were only executed in distress situations. New project developments were put on hold.
- Short-term liquidity shortfalls could mostly be countered by equity contributions and/or the suspension of repayments by the financial partners.
- Due to the lack of alternatives and the high added value achieved in the past, there have not been any increases in loan terminations so far.



- In the medium and long term, investors and financial partners will be forced to
 adjust some of their revenue estimates with respect to rents and leases or debt
 service receivables.
- With investment pressure remaining high, all market participants are waiting for a recovery of the macroeconomic situation in the second half of 2021.
- Future financing structures should be designed to be even more resilient against cash flow fluctuations and robust enough to cushion negative deviations.

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ABOUT FTI-ANDERSCH: FTI-Andersch is a quality leader in corporate restructuring consulting in the German-speaking region.

FTI-Andersch supports its clients with the development and implementation of sustainable future/performance as well as restructuring concepts. FTI-Andersch actively supports companies that have to deal with operational or financial challenges – or even well before that, in order to align their business model, organization and processes for the future at an early stage. Special focus is placed on preparing independent decision-making bases for companies and investors.

Clients include medium-sized companies and corporate groups that operate internationally. FTI-Andersch is part of the internationally operating FTI Consulting Group (NYSE: FCN) with more than 5,500 employees.



Study concept

Based on interviews conducted between March and May 2021 with market participants from the areas of project development, asset management, investment companies, real estate financing as well as real estate agents, tenants and real estate lessors, and on the basis of publicly available market information and statistics, FTI-Andersch provides an analysis in this study of the effects of COVID-19 on the real estate segments retail, hotel and office as well as real estate financing.



EFFECTS OF COVID-19 ON SELECTED REAL ESTATE MARKETS



- Ongoing travel and contact restrictions due to the CO-VID-19 pandemic, which has spread globally from spring 2020. In the wake of the pandemic, fashion and other retail stores as well as hotels were temporarily closed, offices remained empty and employees worked from home.
- The subsequent revenue slump at individual user groups as well as the option of deferring rent payments and the postponement of leasing or purchasing decisions meant that the commercial real estate market has also been highly affected by the COVID-19 pandemic.
- With a view to an expected recovery from the COVID-19
 pandemic, owners and financial partners are now facing
 a significant transformation induced by the crisis. This
 creates challenges for the late-cycle real estate sector
 that will have to be resolved.
- Market participants have already started to evaluate spatial conversion measures and new utilization concepts.



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- The COVID-19 pandemic hit a booming office market, characterized by low vacancy rates and high rents.
- The future is expected to see hybrid working arrangements, where employees work some days in the office and some days at home. Offices will therefore have to be redesigned, including some reduction of office space.
- Given the substance of current lease agreements and a high share of pre-arranged rent agreements for new projects, the impact of COVID-19 is currently still rather limited. A decline in demand will only lead to a reduction in new project developments when current agreements run out. Co-working providers have been hit hard by the pandemic; they benefit from some advantages in the recovery phase as they are in a position to offer flexible lease arrangements, but the business resulting from covering peak demand for office space is likely to be rather low in the medium term.



Non-Food Retail

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- Structural changes in offline retail even before the pandemic; ongoing trends further accelerated by the pandemic. The trend towards e-commerce has therefore gained further momentum.
- Branch network closures and insolvencies in non-food retail led to lower demand for retail space and increase the risk for real estate lessors. Revenue-based rent agreements are on the rise.
- (Expensive) measures to repurpose existing retail space are implemented to bring the downward trend to a halt; however, they are risky and will lead to adjustments in revenue estimates.

Transaction Markets

- While the transaction market for office real estate only lost some of its steam, the retail and hotel markets largely came to a standstill during the crisis, with sales only taking place in distress situations.
- With investment pressure remaining high, all market participants are waiting for a recovery of the macroeconomic situation in the second half of 2021, while some adjustment to cash flow estimates will need to be taken into account when making investment decisions.



Hote

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- Travel restrictions led to a cancellation of trade shows, meetings being carried out online instead of in person and, with the exception of summer 2020, a lack of holiday tourism.
- Liquidity shortages force hotel operators to renegotiate rental and lease agreements and result in distress sales. The consolidation process is further intensified by the crisis.
- Most segments are expected to experience a fundamental recovery in 2022-24, while prospects are more uncertain in the MICE segment, especially for trade show hotels.
- Due to high investment costs, operators are still reluctant to repurpose.



Financing Operations

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- Uncertainty led to a decline in financing propensity, especially in the hotel and retail sectors, and an expansion of margin requirements.
- In case of liquidity problems regarding the financing structure, standstill agreements and/or the suspension of repayments as well as equity contributions are frequently observed.
- Even after the crisis has been overcome, repurposing measures, revenue-based rent agreements and lease adjustments will mean that owners will have to adapt their debt service payments.
- We expect that future financing structures will be designed to be even more resilient against cash flow fluctuations.

2

NON-FOOD RETAIL

THE GERMAN RETAIL MARKET – THE PANDEMIC AS A CATALYST FOR STRUCTURAL CHANGE IN THE RETAIL SECTOR

Counter to the macroeconomic crisis situation in the wake of the COVID-19 pandemic, the retail sector was able to achieve above-average growth rates in 2020 with a year-on-year increase of 5.1% (GDP -4.9%). The retail sector has evidently been benefiting from customers' budget shifts because of the pandemic, as they substituted lower spending on travel, eating out and culture/entertainment with food consumption at their own home and investments in the home environment. And even a recent sharp rise in the savings rate of private households (16.3% in 2020 compared to a long-term average of around 10.0%) could not prevent retail growth and is rather an indicator for catchup effects in consumption after the pandemic has been overcome. The individual trends observable in the different retail segments are diametrically opposed to one another: on the one hand, food retail achieved record growth rates (+8.1% vs. PY, cf. Fig. 1) and benefited from closed restaurants and canteens as it provided people with basic supplies during the lockdown. In the non-food sector, DIY and furniture stores enjoyed rising revenue trends, driven by the increased significance of people's own home as a place of retreat. Conventional retail stores in inner-city locations, on the other hand, suffered severe losses.



Fashion and other retail stores registered double-digit declines in revenues due to shop closures lasting many weeks

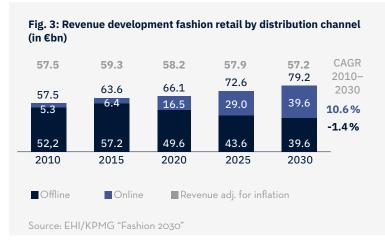
Even in the phases between the individual pandemic waves, consumers stayed away from the city centers - the footfall in German city centers after the end of the first lockdown was still 15-35% below the previous year's level (cf. Fig. 2). One of the reasons: because of the pandemic, there were hardly any occasions for people to wear special clothes, as parties/weddings/visits to the opera were cancelled and people worked from home rather than in the office.

Structural change in the fashion and other retail sectors

The crisis of brick-and-mortar fashion and textile retailers as the most prominent users of inner-city retail space is not only related to COVID-19, however. Adjusted for inflation, the German fashion trade has hardly seen any growth at all in the last decade (CAGR 2010-2020: 1.4%). At the same time, the share of online business is increasing rapidly (CAGR 2010-2020: 12.0 %) and will reach around 25% in 2020 (cf. Fig. 3).









According to estimates, around half of fashion revenues will be generated online by 2030, at the expense of brick-and-mortar retail

The IFH Cologne even expects a further acceleration of the transformation in the fashion market with the share of online business reaching 43-54% by 2024. This implies dwindling revenues in brick-and-mortar fashion stores and the associated cost pressure. Retailers are forced to adapt their store networks, which were still massively expanded at the beginning of the 2010s, to the lasting transformation in consumer behavior. Consequently, the demand for inner-city premises declines. Even traditional anchor tenants from the non-fashion sector such as MediaMarktSaturn and the Douglas perfume and cosmetics chain recently announced extensive store closures of up to 13 and 60 shops, respectively (cf. Fig. 4). The effect is reinforced by a series of insolvencies of fashion retailers including Esprit and HALLHUBER, as these often use restructuring options in insolvency proceedings to divest themselves of unprofitable stores (cf. Fig. 5). The slowed demand for floor-space is reflected in declining rents for retail properties since 2016: Peak rent in 2020 was on average 5.6% below the 2010-2019 peak in the Top 7 locations, and even 8.3% lower in the regional centers. In view of expected declines in revenue caused by temporary store closures prescribed by the authorities and low footfall, further rent reductions for retail properties of around 4.6% in the Top 7 locations and around 4.1% in the regional centers are expected for 2021 (cf. Fig. 6).

Impact on real estate lessors and investors

Some lessors of retail properties have already felt the effects of the COVID-19 pandemic during the first lockdown: tenants affected by shop closures stopped paying their rent, and at the same time the so-called rent moratorium ruled out rent payment defaults as the reason for termination if the default of the tenant was due to the COVID-19 crisis. While tenants are still obliged to pay rent, they have until 30 June 2022 to pay their rent arrears, while lessors are still obliged to pay their regular debt service. The economically threatening situation for many retailers led to a renegotiation of lease agreements.

Fig. 4: Retail chains shedding stores

Number of stores

Chain	before	after	
MediaMarkt, Saturn	419	406	
Depot	462	400	
Douglas	430	370	
Dielmann	48	35	
Runners Point	73	0	

Fig. 5: Insolvencies in the fashion sector

Number of sales areas

Chain	before	after	
Bonita GmbH	600	400	
Galeria Karstadt Kaufhof	172	130	
HALLHUBER GmbH	127	121	
Esprit	100	50	
Pimkie	71	40	
Karstadt Sports GmbH	30	10	
Escada SE	8	1	

Source: Media research

Fig. 6: Peak rent levels						
€/m²	2016	2017	2018	2019	2020	2021e
Berlin	310	310	310	300	285	275
Düsseldorf	275	280	282	285	280	265
Frankfurt	300	300	300	300	295	275
Hamburg	285	285	285	285	275	260
Köln	250	255	255	255	240	230
München	345	345	345	345	335	320
Stuttgart	250	250	245	235	215	210
Top 7	297	298	298	294	282	269
Regional centers	135	135	134	129	123	118

Source: DZ HYP, Bulwiengesa, Colliers

Source: DZ HYP, Federal Statistical Office, Statista, Crosscan, EHI/KMPG "Fashion 2030", Bulwiengesa, Colliers, ZIA, Handelsblatt

70% of shopping center managers surveyed by EHI say they have reduced rents during the COVID-19 pandemic. While each individual case is different, a new ruling has strengthened tenants' negotiating position. (1)



More and more revenue-based rent agreements transfer part of the retailers' business risk to their lessors

Real estate lessors have already demonstrated goodwill vis-à-vis store owners, especially those of retail properties, with rent reductions of up to 50%; however, they are nevertheless facing increasing vacancy ratios. According to EHI, the share of shopping centers with more than 5% vacant rental space has risen by 22 pp to 41% in 2021 compared to 2019 (cf. Fig. 8).

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Expected returns increase as risk increases

For the first time since the financial crisis, the initial rental yield for retail properties did not fall in 2020. While purchase price factors stagnated in the Top 7 locations, the regional centers post a decline (22.8x in 2020 vs. 23.4x in 2019). The Top 7 locations are also expected to see a downward trend in purchase price factors for the first time in 2021. So far, rising purchase price multiples were high enough to more than compensate for declining earnings power as a result of declining peak rents for retail properties in prime locations, and as a result, the valuations of the properties in terms of capitalized earnings value have risen steadily.

Fig. 7: Adjustments of existing agreements

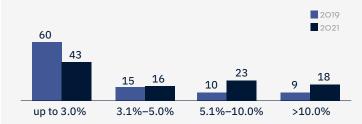
Results of survey among 142 shopping center managers (in %, multiple answers possible)



Source: EHI Centermanagement 2021 Report, Page 20

Fig. 8: Vacancies in shopping centers on the increase

Clustering of shopping centers taken from representative EHI survey according to vacancy rate (in % of survey participants)



Source: EHI Centermanagement 2021 Report, Page 13

(1) Section 313 German Civil Code (BGB) on cessation of the basis of the contract in the case of store closures prescribed by the authorities

Fig. 9: Increasing valuations previously compensated for falling rent levels – trend reversal accelerated by COVID-19



◆ Peak rent (€/sqm) Top 7

>> Calculation does not take distress sales due to COVID-19 into account

Declining rent levels together with falling purchase price factors weigh on balance sheets of real estate companies:

Value losses in the period 2018-2021e

-10.1% -14.9%

Assuming a financing ratio of 80%, the decline in value of 14.9% corresponds to a loss of three quarters of equity capital. Potential covenants (especially Loan-to-Value covenant) are at risk of being breached.

Source: DZ Hyp/ Bulwiengesa

■ Purchase price multiple Top 7

Source: DZ HYP, Federal Statistical Office, Statista, Crosscan, EHI/KMPG "Fashion 2030", Bulwiengesa, Colliers, ZIA, Handelsblatt

For investors who have acquired retail properties since 2018, the decline in rental yields and purchase price factors may well lead to valuation adjustments, depending on the external financing structure. As such, a decline in rents of around 11.9% compared to 2018 is expected for Germany's regional centers in 2021. Together with the decline in average purchase price factors of 2.6%, this leads to an arithmetical loss in value of the property of around 14.9% (based on earnings power and expected market prices in the period 2018-2021), extraordinary effects such as (temporary) vacancies not taken into account.



Increased vacancy rates, declining peak rents and falling purchase price multiples reduce the valuation of commercial properties

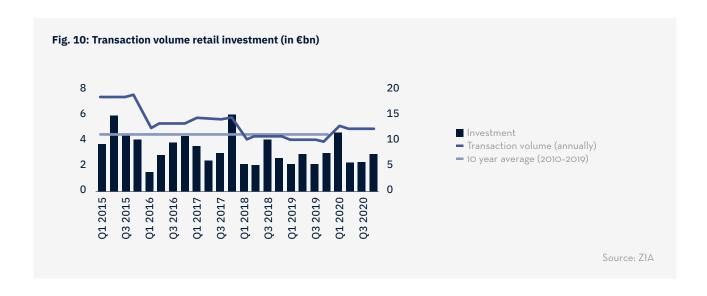
The declining forecast trend is also reflected on the transaction market. While more investments were made in 2020 (€bn 12.3) than in 2018 and 2019, a significant share of €bn 4.6 (around 37%) was made in the first quarter. In addition, the ten largest package deals alone (including the takeover of approx. 80 properties of Metro AG by a consortium of X+bricks and SCP Group; cf. Fig. 10), a total of €bn 5.9 (approx. 48%) was generated in 2020.

While some transactions are currently taking place in the food retail and specialist center sectors, deal activity in the retail and shopping center real estate market has virtually come to a halt. Shopping centers without food retail are currently receiving lower valuations. Similar to the hotel segment, nobody is selling at the moment who does not have to sell.



Since the second quarter 2020, market participants have been reluctant with transactions

With respect to the launch of new shopping centers, the trend that was visible over the last ten years has also come to a halt. In 2021, merely two projects are being realized. Many projects have been put on hold. 15 projects are known to be in the pipeline, but their development remains uncertain. This reflects a general reluctance to invest. It cannot be ruled out that the negative turn in this segment is irreversible.



Conclusion and repurposing in the retail sector

Due to the trend towards e-commerce, which has been picking up momentum for years, and the resulting decline in revenues of brick-and-mortar fashion and department stores, retail segments with larger shop floor spaces and high branch density are particularly affected by structural change. The restrictions introduced because of the COVID-19 pandemic act as a catalyst for change in brick-and-mortar retail. Lower profitability levels of dense branch networks and increased insolvencies of larger fashion chains (Esprit, Tom Taylor, Adler, HALLHUBER etc.) result in a pronounced reduction of space utilized by the branches.

The increase in supply of larger retail spaces while demand has fallen has an impact on both inner cities and shopping centers. In the meantime, 87% of center managers expect a reduction in the share of rental space for clothing and 67% for shoes and accessories in the next five years (cf. Fig. 11). In order to counter this trend and mitigate a future increase in vacancies, the vacant retail spaces in shopping centers will have to be repurposed. Shopping centers are increasingly asked to redesign their retail space and make it attractive for new tenants. In the future, shopping centers will therefore provide more service, entertainment, leisure and recreational offers. In the upper floors, offices or apartments could be created.



Because of high expenditures required and an expected lower rent level, repurposing measures will only partially offset the devaluation of the properties

In the inner cities, too, store spaces in conventional retail outlets will have to be repurposed. Initiatives to revitalize the city centers focus on attracting services, craft and smaller businesses as well as leisure, childcare and educational facilities. The need to repurpose vacant spaces in inner-city areas is already being recognized at local government level, and first cities have already initiated measures to promote or strengthen these areas. These programs have been set up to encourage new leases of vacant space by new retail and restaurant startups, service businesses, direct sellers of agricultural products etc. In addition, these programs are to support the build-up of own real-estate know-how and interim acquisitions of retail properties.



New trends shaping the cities

During the COVID-19 pandemic, food startups such as Gorillas and BurgerMe have already started using new leases of smaller spaces to drive their business growth. The prevailing rent trend and the current rent reductions create attractive conditions for startups to focus more on inner city areas, making their business model more profitable. In addition, specialty department stores are increasingly providing omni-channel shopping experiences where they combine offline and online offers. As such, Dänisches Bettenlager for instance wants to open nearly 200 new stores in Germany and expects the consumer market to recover after the crisis.

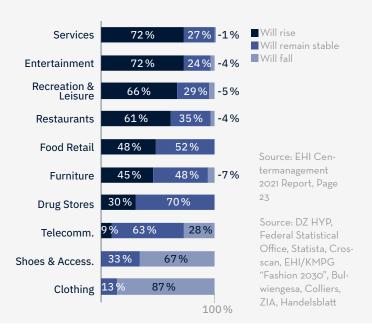


Will the crash be followed by a boom?

The subdued investment appetite of investors and real estate lessors at the moment is also due to their expectation that the retail sector will experience a recovery in Q3/2021 with the successful roll-out of COVID-19 vaccines and the pandemic gradually being tackled.

Whether or not this will materialize remains to be seen, especially in those segments particularly affected by structural change. In these segments, sustainable recovery is highly uncertain, with the corresponding effects on lessors and their properties.

Fig. 11: Estimate of the share of rental space in various sector In the shopping centers over the next five years



3 HOTEL

THE GERMAN HOTEL MARKET – IS THERE A WAY OUT OF THE CRISIS ON THE HORIZON?

REVIEW

In the ten years prior to the outbreak of the COVID-19 pandemic, the German accommodation industry was characterized by a dynamic upswing. With 496 million overnight stays (of which 41% in hotels; cf. Fig. 1), a historic high was reached in 2019. The continuous increase in demand was mainly driven by two factors. On the one hand, the economic upswing after the financial crisis led to a significant increase in business and trade show travel. As such, the number of participants at these events rose by 40% to 423 million in the last ten years, around 39% of which can be attributed to trade shows. On the other hand, holiday travel also increased as Germany became an increasingly popular holiday destination. In recent years, the share of international guests increased steadily (from 16% in 2010 to 18% in 2019).

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German hotels with a record year in 2019

In addition to the rise in demand, German accommodation operators also managed to introduce successive price increases, leading to an average revenue growth (CAGR 2010-2019) of 3.1% p.a. On average, the revenue per available room per night (Rev-PAR) was increased from € 63 in 2010 to € 74 in 2019 (cf. Fig. 2). At € 162 per person and per overnight stay in a hotel, business travelers have much greater financial impact than leisure travelers, who spend an average of € 83 (cf. Fig. 3).

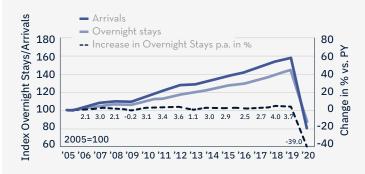
Thanks to this development, the sector has become increasingly interesting for investors. Between 2010 and 2019, the transaction volume rose by an average of 21% p.a. and reached €bn 5.0 at last count (2019). Peak returns for hotel properties declined over this period from 6.9% (2010) to 3.8% (2019).

STATUS QUO: COVID-19

With the outbreak of the COVID-19 pandemic in spring 2020 and the resulting contact and travel restrictions, both business and tourist travel activities dropped massively. As a result, the pandemic impacted the hotel industry more than almost any other sector in Germany. In the meantime, overnight hotel stays dropped by more than 90% in many places, also driven by the absence of foreign tourists (FY 2020 -69% vs. PY).

The decline in the number of infections during the summer months and the, at least temporary, easing of contact and travel restrictions kept the damage within limits. The number of overnight stays in the accommodation sector in the year 2020 as a whole amounted to around 302 million and was therefore

Fig. 1: Development of tourism demand in Germany 2005-2020



Source: Federal Statistical Office, Bulwiengesa

Fig. 2: Development of KPIs German accommodation operators 2010 to 2020



2010-19: 2.7%

Number of beds in accommodation businesses (million)
 Revenue development in the hospitality sector vs. PY

x RevPAR (€)

Source: Engel und Völkers, Page 8, Hotel Market Report 2021

Fig. 3: Daily spending per capita (in €)

	2015	2016	2017	2018	2019
Travel (holiday)	76	78	83	81	83
Travel (business)	153	155	157	162	162

Source: Statista, Bulwiengesa

almost 39% below the prior year level (see Fig. 2). According to a data survey carried out by Fairmas GmbH, the decline in hotel operations vs. 2019 amounted to just under 59%. However, the German economy has already seen another lockdown since then (as at July 2021).



Pan-European revenue slump of 70%

As demand collapsed, the average revenue to be generated per room also dropped. The international hospitality consultancy HVS reports that RevPAR plunged by an average of 70% year-on-year across Europe in 2020 (Germany: 67%).

As a result of the COVID-19 pandemic, German hotel companies slid deep into the red despite state aid measures in the form of short-time work arrangements, economic, bridging and liquidity aid; this was partly also due to the fact that the payment of state aid packages was slow. After having suffered revenue losses of 90% and a liquidity loss of €m 140, the Maritim hotel chain announced in April 2021 that distress sales of yet unspecified hotels would be initiated to secure the survival of the group.



80% of rental and lease agreements were renegotiated.

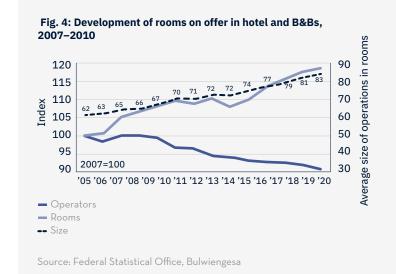
As lease costs usually stand for the largest share of fixed costs, in addition to personnel costs, hotel owners in their own properties who had no external debt fared much better during the crisis. As state aid packages were not high enough to close liquidity gaps and were sometimes also paid out with a delay, some hotel operators were forced to reduce their lease payments significantly or even suspend them altogether. A survey of 65 operating companies conducted in November 2020 by Treugast found that about 80% of all lease and rental agreements had been renegotiated, reducing annual rent by an average of 36%.



Consolidation of hotel operations and at the same time expansion of rooms on offer

Despite the COVID-19 pandemic and the fact that hotels are largely empty, the historic trend was continued in 2020 with the further gradual expansion of the number of rooms on offer. Since 2010, the average number of rooms per operation has increased from 66 to 83, and by year-end 2020, a new record was set with a grand total of approximately 880,000 hotel rooms. In the same period, the number of hotel operators in Germany fell by around 5% to 12,876 (in 2019; cf. Fig. 4). The development reflects the consolidation process in the market.

Due to the advanced stage of project developments, a further increase in capacities can still be expected. For the coming three years, around 82,000 new rooms are in the pipeline. It cannot be ruled out, however, that projects already initiated will be abandoned. Deutsche Pfandbriefbank announced in November 2020 that it would cease any new financing of hotel projects.



IMPACT OF COVID-19 ON THE BUSINESS, TRADE SHOW AND TOURIST HOTEL INDUSTRY



COVID-19 forces companies to change their way of thinking – physical meetings replaced by online conferences

With the outbreak of the COVID-19 pandemic and the subsequent contact and travel restrictions, companies have found alternatives to conventional business travel. This includes the relocation of the work place to the employee's own home and the introduction of digital rather than personal meetings. Travel activities of German professionals and managers were reduced to a minimum during the pandemic. As the European country with the highest number of international meetings in 2019, the German business hotel sector was therefore hit very hard by the COVID-19 pandemic. The number of business travel dropped from 195.4 million in 2019 to 19.5 million in 2020. The decline in demand for business accommodation affected the hotels located in the cities more than those located in the countryside.

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Most severe slump in trade show business for more than 70 years.

In addition to conventional business travel, the trade show business in Germany also came to a virtual halt in 2020 and Q1/2021. According to AUMA, the Association of the German Trade Fair Industry, only 114 (32%) of the 355 international, national and regional trade shows planned for 2020 were actually held. These were predominantly carried out online or as hybrid events. Around 43% of the trade shows originally planned were even cancelled completely (instead of being postponed).

Out of the original estimate of €bn 28 to be generated with trade shows, only around €bn 6 were realized in 2020. This figure comprises revenues generated by restaurants, retail and hotels. Revenues generated by trade show organizers also slumped by around 70% compared with the previous year.

As trade show revenues often compensate for the highly seasonal tourist hotel business, many hotel companies that are located at trade show locations saw a significant decline in business, aggravated by the fact that the trade shows also tend to bring in higher room rates and ancillary revenues. The main trade show cities, such as Frankfurt, Berlin or Hanover, which were previously considered to be the drivers of the robust growth rates, recorded around 60% fewer overnight stays in 2020 and were thus hit much harder than other cities (cf. Fig. 6). In Hanover,

Fig. 6: Development of overnight stays in selected major German cities in 2020 (in % year-on-year)



Source: ZIA Spring Expertise 2021, Page 125

for example, around 80% of hotel overnight stays are normally generated with trade show visitors. Along with the temporary shutdown of the trade show business, the average hotel room occupancy decreased from 65.7% in 2019 to 32.0% in 2020. The net room rate decreased by 75%, from €347 in 2019 to €87 (April 2020). In Berlin and Frankfurt, this development led to the closures of Maritim Kongresshotels (approx. 500 rooms) and the Hessischer Hof (approx. 121 rooms).



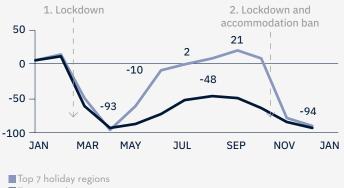
City tourism declined significantly more than tourism in typical holiday regions

The German vacation hotel industry experienced a similar development, while the impact varied depending on the vacation region. Urban regions such as Munich (-61%), Berlin (-64%) and Frankfurt (-62%) recorded significantly higher declines in the number of tourists visiting than more rural holiday destinations such as the lakes and hills of Mecklenburg-Western Pomerania (-11%) (cf. Fig.7 and 8).

Even though German tourists spent a total of 38% (€bn 45) less on vacation trips in 2020 compared to the previous year (€bn 73) (cf. Fig. 9), the decline in foreign tourists was still compensated for by increased demand from German vacationers. The number of vacation trips in Germany of more than five days rose by 22% year-on-year to 22.8 million. As a result, overnight stays in the vacation regions of Mecklenburg-Western Pomerania (+20%), the North Sea (+3%) and the Baltic Sea (+12%) were even higher in August 2020 than in the previous year, even though occupancy was capped at many locations to 50% or 60% in the summer of 2020, and wellness and sports facilities had to remain closed entirely.

As the second lockdown was only implemented in the fall of 2020 and thus after the end of the peak summer season, it had less of an impact on tourist hotels. Cumulatively over the year, the decline in overnight stays was therefore manageable in these regions.

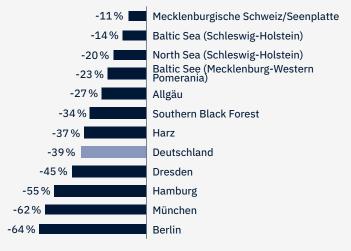
Fig. 7: Changes in overnight stays in 2020 vs. PY (%)



Top 7 city destinations

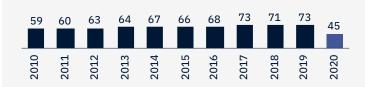
Source: Engel und Völkers, Page 9, Hotel Market Report 2021

Fig. 8: Overnight stays in selected vacation destinations in Germany compared with the previous year



Source: ZIA Spring Expertise 2021, Page 124

Fig. 9: Total spending on vacation trips by German tourists from 2010 to 2020 (in €bn)



Source: Statista, Bulwiengesa

INSIGHT INTO THE TRANSACTION MARKET

The collapse of the German hotel market also effected transactions with hotel properties. The volume of transactions fell by 60% year-on-year to around €bn 2 (see Fig. 10), with around half of this volume still relating to the first quarter of 2020. Around 90% of the overall volume can be attributed to 3 and 4 star hotels. Even though hotel property transactions with a total amount of €m 500 were down by about 50% in Q1/2021 compared to Q1/2020, the transaction volume including Q4/2020 has recovered by 44%.

After declining steadily over the past 5 years, returns remained stable during 2020. With an average return of 3.7%, Munich only reached the lower end of the spectrum, while Berlin exceeded the German average of 4.0% with a return value of 4.4% (cf. Fig. 11). However, because of the low number of transactions, the significance of these return figures is limited.



Sellers currently face considerable price discounts

Key valuation indicators for hotel properties, such as room occupancy rates, RevPAR and room rates, have declined sharply (cf. Fig. 12). At the same time, purchase prices have declined by up to 25% in 2020. The only exceptions to this are properties owned by solvent operators in prime locations. These so-called core properties represent the lowest risk class and are most sought after as availability is limited. So-called core-plus properties are associated with higher risks and there is a tendency to avoid them due to the tense macroeconomic situation. Value-add properties are currently increasingly being further developed into core or core-plus properties before they are brought to market.

Hardly any deals were struck in city locations as hotel owners were afraid of losses. The only exceptions were investors focused on distressed businesses ("distressed debt investors") and hotel operators who were forced to make distress sales because of severe liquidity shortfalls.

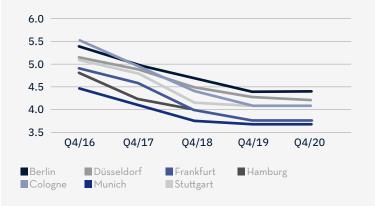
On the buyer side, international investors accounted for a large proportion of the remaining transaction volume (around 41%). The remainder was mainly attributed to real estate stock corporations (23%), asset and fund managers (18%) as well as open real estate and special funds (13%). The seller side was dominated by national players (81%), mainly project developers (36%), real estate stock corporations (18%) as well as family offices and private investors (14%).

Fig. 10: Development of the transaction volume in the German hotel investment market from 2010 to 2020 (in €bn)



Source: Colliers Research City Survey, Page 18

Fig. 11: Peak returns in % of hotel properties in German major cities 2016–2020



Source: Colliers Research City Survey, Page 20

Fig. 12: KPIs Hotel Chains 2019 and 2020



Source: ZIA Spring Expertise 2021, Page 129

OUTLOOK



The expected surge of insolvencies has not materialized so far.

The hotel sector is facing intense pressure. While the surge of insolvencies of hotel operators originally expected by the end of April 2021 has so far failed to materialize due to the suspension of the obligation to file for insolvency, it has not yet been averted, as the example of Star Inn, a Munich hotel chain which filed for insolvency in December 2020, shows. Hotel operators need capital to continue withstanding the pressures of the CO-VID-19 pandemic. As a result, further consolidation processes will follow, like for example Accor's merger with UK lifestyle hotel operator Ennismore, which was announced in November 2020.

Financially strong investors and hotel chains are poised to gain market share through the targeted acquisition of key hotel properties. The market and negotiating power of large hotel chains will continue to increase. Hotel chain operators such as B&B and Whitbread have already expressed their intention to continue their expansion path in Germany. This type of expansion planning strongly depends on the future recovery of the sector, however.

The recovery scenarios for the hotel sector are based on the assumption that demand for overnight stays in the trade show, business travel and holiday tourism segments will regenerate and depend on various factors that are all difficult to predict. On the one hand, the prevalence of an effective vaccine and the further course of the COVID-19 pandemic are considered key factors impacting the future of the hotel industry. Herd immunity, the end of travel warnings and the resumption of air travel will have a significant impact on the demand for hotel accommodation.



More than half of the DAX companies participating in the survey expect a 30% decline in business travel

On the other hand, it can be assumed that the severe economic losses suffered by many companies and the positive experiences made with virtual meetings and conferences could cause business travel and trade show-related hotel visits and the associated demand for overnight stays to remain below pre-crisis levels in the medium term. A survey of DAX-30 companies carried out by the German business newspaper Handelsblatt revealed that these companies are planning for a significantly lower tra-

vel volume, even in the long term. In the future, the focus will be on virtual solutions and business travel will become the exception. Nearly 61% of the DAX-30 companies participating in the survey expect a decline in travel activities of up to 30%. This will bring major cost savings for the companies. Deutsche Telekom, for example, has spent around €m 100 less on business travel in 2020 than originally planned. Bayer expects cost savings of up to €m 200 p.a.



"The demand for business travel in Europe and the U.S. may never return to pre-crisis levels." (Carsten Spohr, CEO Lufthansa)

According to the German Council of Real Estate Experts (Rat der Immobilienweisen), especially those cities and regions with a high proportion of business visitors and MICE (Meetings Incentives Conventions Exhibitions/Events) business and a high share of international guests from North America and Asia will probably not be able to recover from the effects of the CO-VID-19 pandemic until 2024 at the earliest.

According to a survey carried out by Kantar TNS, the significance of trade shows in the marketing mix of companies had already declined in the time period 2010-2019. This trend is further accelerated by the need arising from the COVID-19 pandemic and the consequent implementation of innovative alternatives to market products based on virtual and digital solutions.

High demand for vacation hotel rooms in Germany. If vou're not fast. vou're last.

However, the outlook is not quite as bleak throughout. Positive effects are expected in the vacation hotel industry in particular. A resumption of private travel and private consumption is expected as early as in Q3/2021. "We are seeing high demand in the summer [2021] for travel over land. It is possible that not everyone will get their desired hotel if they book late," according to Ingo Burmester, head of Central Europe at DER Touristik. However, industry leader Tui points out that "not all of the volume that would otherwise have been generated abroad can be absorbed here in Germany." It remains to be seen whether the effects of the COVID-19 crisis on German travel behavior will prove sustainable once travel restrictions to foreign vacation destinations are lifted. Foreign vacation regions will also make every effort to convince German tourists of their accommodation on offer. The perceived need of Germans for vacation and travelling is certainly high. At the same time, a broad section of the population suffered financial losses due to short-time work arrangements and wage cuts. Prices of hotel rooms and travel offers will therefore be a crucial factor in vacationers' booking behavior.

In view of the expected high demand for vacation offers, recovery is expected to be reached sooner by hotel operators in this segment than by those focusing on trade show and business travelers. This also applies to selected city hotels in Berlin, Hamburg, Munich etc. as frequent holiday destinations for city breaks and weekends away.

REPURPOSING AND NEW CONCEPTS

At the end of 2020, an increasing number of projects related to repurposing hotel properties into office and residential space emerged, for example in the form of so-called serviced apartments. These are residential units that offer similar services to hotel rooms, such as cleaning, wireless LAN and full furnishings. They are geared towards longer stays of up to six months.

Fig. 25: Major opportunities and risks on the hotel property

Opportunities



Prevalence of effective vaccines leads to widespread easing of travel restrictions



Fast recovery of holiday tourism in Q3 2021



Sustainable loyalty of German tourists to national holiday regions



Repurposing of hotel properties, e.g. as serviced apartments, offices or condominiums

Risks



Sustained critical course of COVID-19 pandemic



Lasting decline in business travel



Relocating trade shows to the digital and virtual sphere



Renegotiation of lease and rental agreements



High investment costs for the implementation of repurposing concepts



High price sensitivity of tourists due to economic losses because of the COVID-19 pandemic

Sources: dwif-Corona-kompass, Federal Statistical Office, Statista, Bulwiengesa, Colliers City Survey 2020/2021, ZIA, VDR, Deutscher Hotel- und Gaststättenverband (DEHOGA), Engel & Völkers, mrp-Hotels, Handelsblatt, Immobilien Zeitung, Forschungsgemeinschaft Urlaub und Reisen e.V.

Market growth is currently so dynamic here that an oversupply is expected in the near future. High investments are needed to convert a hotel property into a residential property due to the necessary installation of a kitchen in each unit etc. These projects are therefore fraught with risks for investors. However, with "The Collective" in Berlin and Frankfurt and the "R.evo" in Munich, major projects with over 600 rooms each have already been launched. Concepts such as that of the 5-star Villa Kennedy hotel in Frankfurt are also gaining importance for investors. In this case, concepts for third-party use as a luxury retirement home were also reviewed. However, due to the current lease contract, Villa Kennedy will continue to be operated as a hotel for the time being.

Those operators focusing on holiday tourism face the challenge of convincing and maintaining the loyalty of new guests acquired because of the pandemic. Given the increased level of price sensitivity on the part of tourists, we expect budget hotels to meet with higher demand on both the visitor and the investor side.

Conclusion

A recovery in demand and the return of visitors does not lead to an equal economic recovery for all hotel operations. Now more than ever, hotels require equity capital to invest in new concepts, digitalization, performance-related salaries and the reduction of debt. The turning point when many hotel operators will be able to achieve the financial results generated before the onset of the crisis may very well be far off. In addition, deferral of rent payments may have simply postponed liquidity problems of hotel operators to the future. It remains to be seen whether real estate lessors and tenants will be able to agree on splitting the losses suffered. However, it is not in the best interest of the property owners to lose current tenants or lessees, as re-leasing under current circumstances would prove very difficult and would also require rent concessions. Concepts in which real estate lessors get a share of unexpected profits could be a solution, just as it is already practiced in the retail sector, where rents can vary upward depending on store revenue.



Hotels with better opportunities than retail

As hotels, in contrast to retailers, do not have to deal with any large inventories of goods, Alexander Otto, CEO of the ECE Group, assumes that the chances of getting through the crisis are better for hotels than for retail companies. He also sees potential for innovative, digital hotel concepts. These also include various repurposing concepts for former hotel properties. The next few years will be challenging for hotel operators and investors alike. Especially those operators focusing on business travelers and trade show visitors feel an urgent need for action. New concept and investments are needed, despite the high level of uncertainty. Hotels in lucrative locations and with promising repurposing potential can probably hope for an increase in investor demand.

4 OFFICE

THE GERMAN OFFICE MARKET – TEMPORARY DENT OR LASTING TRANSFORMATION?

SITUATION AT THE OUTSET

Even the booming German office market was hit by the CO-VID-19 pandemic. In the Top 7 locations, office space take-up, which is considered an indicator of market attractiveness, fell by 37% year-on-year in 2020. Vacancy rates, peak rents and initial returns, on the other hand, changed only moderately. In addition to the dominating factor of COVID-19 and the macroeconomic development, the office market will be characterized in the future by changed working requirements (such as working from home, distancing rules), demographic change and new construction projects already initiated before the onset of the pandemic.

REVIEW

Measured in terms of gross domestic product, the economic output of the Federal Republic of Germany continued to rise strongly since the economic and financial crisis of 2008/2009. The macroeconomic upswing meant that the unemployment rate dropped from around 8% to the most recent level of 5% (as at 12/2019), and with the strong increase in (office) employment, the demand for office space was on an almost exponential growth course (cf. Fig. 1). Thanks to their leisure and cultural facilities and good transport connections, the major German cities such as Berlin, Munich, Hamburg and Frankfurt tended to be particularly popular destinations for both job seekers and investors.



Lack of office space led to low vacancy rates and high rents

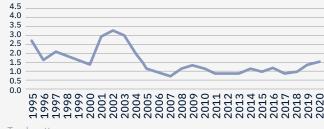
After the dotcom bubble had burst, investors favored the real estate sector, which led to a significant expansion in the construction of new office space (corresponding to approx. 2,000,000 sqm p.a. or approx. 3% of existing office space in the Top 7 locations, cf. Fig. 2) but also to an increase in vacancy rates in 2001-2004 (cf. Fig. 3). The resulting restraint in the subsequent years (new office construction 2005-2018 approx. 800,000 sqm p.a. or approx. 1% of existing office space), an additional conversion of office space into apartments, in combination with the abovementioned increase in demand resulted not only in an increasing shortage of office space. It also led to a situation where more than half of all office buildings available today are already more than thirty years old. It was not until 2019 that more and more new office space was added (approx. 1,700,000 sqm or approx. 1.5% of existing office space); furthermore, additional construction of the same magnitude had already been planned for 2021 and 2022 before the outbreak of the COVID-19 pandemic.

Fig. 1: Divergence office employment vs. office space



- Employees in thousand (left)
- Office space in million sqm (right)

Fig. 2: Development of new office space in thousand sqm (Top 7)



Top locations

Fig. 3: Development of vacancy rates (in %)



Fig. 4: Development of peak rents (in €/sqm)



The fact that demand for office space has exceeded supply is reflected in the increasing decline of vacancy rates since 2010, from over 10% to just under 3% in 2019 in the Top 7 locations and from 7.5% to 3.5% in the regional centers. At 6.5% and 6.2% respectively, Frankfurt and Leipzig stand out as negative outliers. However, both locations had already dramatically exceeded the vacancy rates of the other locations in 2010 with levels of more than 18% and have therefore since then been able to show the strongest declining trend. In Berlin and Munich, vacancy rates are below 2%.

The development of peak rents, which correlate with the vacancy rate and have been increasing since 2010 from an average of € 24/sqm to € 34/sqm in 2019 (approx. +40%) in top locations and from € 12/sqm to € 15/sqm (approx. +25%) in the regional centers (Fig. 4), follows a similar pattern. Only peak rent in Frankfurt am Main reached a level of more than €40/sqm in 2019, while the largest increase since 2010 was achieved in Berlin (+ €18/sqm). Due to the ongoing shortage of space, it has recently become increasingly difficult for prospective tenants to lease larger contiguous office space, especially in the prime locations of major cities. For larger deals in particular, this only leaves locations in the periphery or highly expensive new spaces that are still in the planning or construction phase.



Rising popularity of co-working solutions

In this environment, new arrangements like co-working solutions became interesting. While this was initially only used by startups and freelancers who appreciated the flexible, temporary use of space and networking opportunities offered by open-plan shared offices, with time, more and more established companies followed the trend in recent years, also as the supply side was expanded by so-called business centers. This means that more and more solutions with separate offices became available that offer higher levels of privacy than the open-plan spaces.



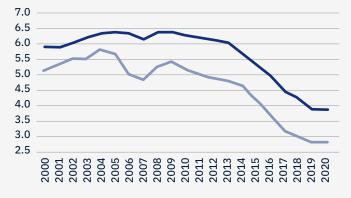
Rising investment pressure in recent years led to higher demand for office properties and falling returns

The high demand for office properties was also reflected in the investment market in the past. While the average initial rental yields in the Top 7 locations were still around 5% in 2020, they have recently fallen to below 3%, especially in Munich and Berlin (see Fig. 5). This trend was driven mainly by the negative real interest rate (10-year federal bond less inflation; -1.3% in 2019), the lack of alternative investment opportunities for institutional investors, the increasing transaction volume resulting from

the higher investment pressure (volume in 2019 €bn 40.5) and the disproportionate increase in purchase prices compared to rents (normalized divergence of prices per sqm of +30% since 2010). The shortage of available, exclusive properties in prime locations and the low returns led investors to increasingly turn to alternative locations (preferably in the east of the country) and peripheral locations. In the German regional centers, average returns of around 4% were still achievable in 2019, while we have also seen a downward trend since 2010, comparable to the development in the Top 7 locations.

Fig. 5: Development of initial rental yields vs. real interest rates

Initial rental yields in the Top 7 locations and regional centers



- Top locations
- Regional centers

Inflation (over 3 months) 10 year bond (over 3 months)



Source 1: DZ HYP Regional Study 2021, Page 13 (Primary source: Bulwiengesa)

Source 2: Wealthcap Market Overview Office Properties Germany, Edition No. 7, 2nd half-year 2020

STATUS QUO: COVID-19

In spring 2020, the outbreak of the COVID-19 pandemic also hit the previously booming office market. The resulting permanent uncertainty of tenants regarding the further course of the pandemic and the macroeconomic development led to a situation where in many cases previously planned expansions and rental decisions were put on hold or entirely abandoned. The decline in demand was particularly evident when looking at office space take-up and the reduction in large-volume deals. In the seven most important German cities, leased office space went down by 37% (2.6 million sqm) in 2020 compared to the previous year, and the regional centers saw a decline of 27%. In Stuttgart and Darmstadt, office space take-up even slumped by more than 50%. In many places, it was only public administration facilities that created some demand.

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COVID-19 caused office vacancies, while KPIs saw only moderate changes

So far, this has merely had a comparatively minor effect on vacancy rates and peak rents, particularly due to long-term rent agreements and the continuing shortage of supply, especially with regard to centrally located office space. The vacancy rate rose by 0.5 pp in 2020 vis-à-vis 2019 to an average of 3.4% in Germany's Top 7 locations and by 0.2 pp to 3.8% in the regional centers. This is still far off the critical 5% threshold, which is seen as an indicator of economic and structural problems. This trend continued in Q1/2021 (3.9% in Top 7 locations). The increase is also driven by the high new construction volume completed of around 1.7 million sqm.

As the vacancy rate continues to be very low, the average peak rent, which had risen sharply in recent years, remained at a high, stable level of \odot 33.7/sqm in the Top 7 locations and \odot 15.3/sqm in the regional centers. In isolated cases, rents even increased. Even though many tenants have become far more price-sensitive in the wake of the pandemic, there are evidently also tenants who are prepared to pay high prices for modern, centrally located office space.

The initial rental yields which can be achieved on the investment market showed a sideways movement in 2020. Yields in the Top 7 locations are still below 3% on average. This is mainly due to the declining transaction volume, which at €bn 20.4 in the office sector in 2020 is around 50% below the 2019 level. The share of international investors declined. Nevertheless, office properties were the most sought after asset class in the commercial property market in 2020.

Fig. 6: Impact of COVID-19 pandemic changes vs. 2019

		Office space take-up (in %)	Vacancy rate (in pp)	Peak rent (in %)
	Berlin	-28.7	0.5	0
	Düsseldorf	-47.8	-0.1	0
sı	Frankfurt	-40.1	0.3	0
Top locations	Hamburg	-37.6	0.6	3.4
Top lo	Cologne	-26.5	0.6	0
	Munich	-26.3	0.9	0
	Stuttgart	-55.3	1.1	4.3
	Total	-35.3%	0.5	0.9

	Augsburg		-0.3	0
	Bremen		0.1	-0.8
	Darmstadt		0.3	0
	Dresden		0.2	0
	Essen		0	1.9
Regional centers	Hanover		0.1	0
ional c	Karlsruhe		0.3	0
Reg	Leipzig		-0.1	0
	Mainz		0.3	-1.4
	Mannheim		0.9	0
	Münster		0.3	0
	Nuremberg		0.6	0
	Total	-27%	0.2	0.0

Source vacancy rates, peak rents: DZ HYP Regional Analysis 2021, Page 74 (Primary sources: Bulwiengesa, Scope, DZ Bank), Office space take-up Top 7: Colliers Research City Survey, Page 4

Properties in the Top 7 locations, in good locations and with solvent, long-term tenants continue to be preferred investment targets of investors.

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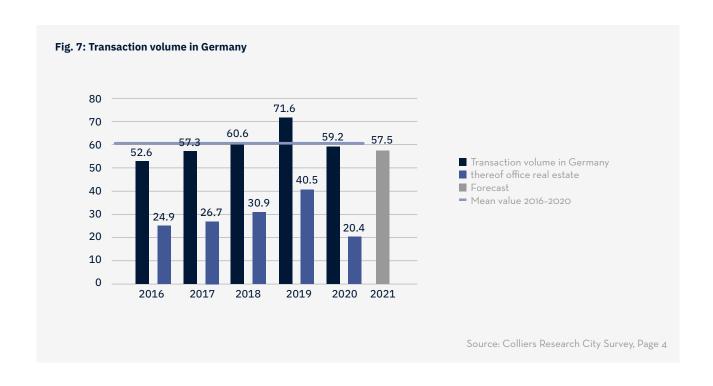
Advancing digitalization trend, working from home becomes the new normal

Even though this is not reflected by the KPIs, a significant amount of office space has not been actively used in 2020. This is due to flexible work arrangements such as working from home, which enabled companies to maintain operations despite the spread of COVID-19 and the resulting contact restrictions and curfews. The new German occupational health and safety regulations for SARS-CoV-2 passed in January 2021 mean that employers are now also legally obligated to offer the option of working from home wherever this is possible and there are no compelling operational reasons preventing this solution. New regulations also apply to employees whose physical presence is indispensable (e.g. minimum space of 10 sqm per person).

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Regional circumstances provide for varying degrees of impact of the pandemic

It should be noted that the impact of the COVID-19 pandemic varied across regions. Let us have a closer look at the two cities of Frankfurt am Main and Berlin. This selection is also based on the results on our Future Cities Volume 1 study. This study had revealed that Berlin was the city most affected by the immediate consequences of the pandemic. To provide an example, large parts of the 320,000 commuters shifted their workplace to their own homes. Frankfurt normally boasts a favorable macroeconomic environment but has suffered a particularly severe downturn due to the COVID-19 pandemic.





Location KPIs

Inhabitants:

753,056 (as at 2019; +12% vs. 2010)

Employees:

600,365 (as at 03/2019; +22% vs.2010)

Unemployment rate:

7.3% (as at 01/2021; +2,3 pp vs.2019 and -0,6 pp vs. 2010)

Frankfurt am Main

With a population of around 750,000 inhabitants, Frankfurt am Main is the fifth largest city in Germany. After Leipzig, Frankfurt has recorded the second-highest population growth (+12%) since 2010, and the number of people employed even increased by +22% to around 600,000 in the same period. The largest companies in the city are Deutsche Bank, Commerzbank and Fraport AG. However, with the outbreak of the COVID-19 pandemic, the unemployment rate increased from previously 5.0% to 7.3%.

The overall volume of office space has not expanded significantly since 2010 but has remained at a relatively constant level of between 11.4 and 11.8 million square meters (see Fig. 8). An average of around 137,000 sqm p.a. of office space were newly constructed and completed. In 2020, 226,000 sqm were added, while similar quantities are planned for 2021-2023, including a total of 34 large buildings, such as Four Frankfurt in the banking district (2 office and 2 residential towers), Tower One in the Europaviertel (hotel, offices for financial industry/co-working, sky bar) and Gateway Gardens at the airport.

Although the vacancy rate was reduced from an initial 17.8% in 2010 to 6.9% in 2019 due to increasing demand and the low volume of new projects, it is still well above average compared with other major German cities (Top 7 2020 3.5%). This applies in particular to locations in the periphery such as Heddernheim

(39.4%) or Sossenheim (25.2%). In expensive locations such as the banking district or Frankfurt Westend, supply of office space is comparatively scarce. Due to flexible working models introduced in the wake of the pandemic and restructuring in individual sectors (e.g. Deutsche Bank, Commerzbank) as well as the sharp rise in the share of new construction, the vacancy rate recently rose slightly to 7.1% (cf. Fig. 8). For the future, Colliers also forecasts increasing vacancy rates of 8-10%.

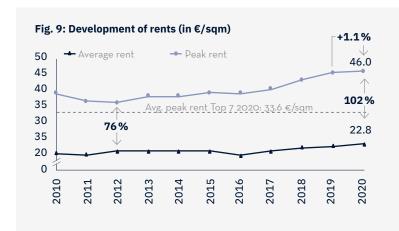
Office space take-up per available floor space increased to 5-6% p.a. before the pandemic, but then fell to 2.9% in 2020 (cf. Fig. 8; largest single deal was Deka). Compared with other Top 7 cities and regional centers, Frankfurt recorded one of the highest declines. The reduction in demand did not have an impact on the rent level. On the contrary, peak rent actually increased by 1.1% to 46 €/sqm compared to 2019 (cf. Fig. 9). This makes Frankfurt the most expensive German office market, driven among other things by deals with the Bundesbank and ECB as well as by relocations due to Brexit. Since around 2012, there has been an increasing disconnect between average rents (2020 at € 22.8/ sqm) and the peak rent level. There is no other city in Germany where the difference between peak and average rent is this high. The reason for this development is presumably the tenant structure, which consists in part of tenants from financially strong sectors. As such, banks and financial services account for about 26.0% of office space take-up in 2019, followed by consulting firms (13.2%) and public administration (12.0%). DZ Bank expected peak rent to drop in 2021.

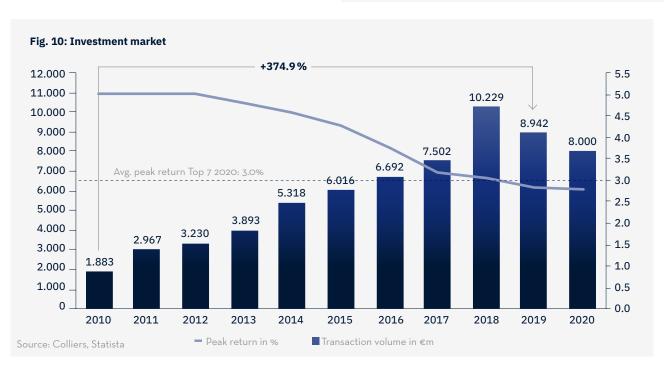
Before the pandemic, Frankfurt had been one of the centers of the investment boom in commercial real estate, while the market had increasingly been characterized by speculation on rising prices and short holding periods (e.g. Square/Blackstone). The transaction volume climbed by 375% to €bn 8.9 from 2010 to 2019 (cf. Fig. 10). As at 2019, the office market accounted for 75.3% of commercial real estate investments. Funds originated mainly from Germany (52.4%) and Europe (16.2%), in particular from special funds (21.6%), real estate AGs and REITs (14.5%), investment/asset managers (14.5%) and sovereign wealth funds (10.6%), focusing mainly on properties in 1B locations ranging between €m 50-100 (18.2%) and greater than €m 100 (56.4%). As a result of rising demand, purchase prices also continued to increase, leading to a gradual reduction in initial rental yields, which were kept relatively stable at 2.8% in recent counts.

2021 Forecast:

Office space take-up: ➤ Vacancy rate: ➤ Peak rent: → Rental yield: →









Location KPIs

Inhabitants:

3.6 million (as at 2019; +5.9% vs. 2010)

Employees:

2.1 million (as at 2019; +22% vs. 2010)

Unemployment rate:

9.7% (as at 2020; +1.9 pp vs. 2019 and -3.9 pp vs. 2010)

Berlin

With around 3.6 million inhabitants, the German capital Berlin is by far the largest city in Germany. While the number of inhabitants has increased by around 5.9% since 2010, the number of employees rose by as much as +22% to around 2.1 million. Largest employers in the city are Deutsche Bahn, the Charité and Vivantes. With the outbreak of the COVID-19 pandemic, the unemployment rate increased from 7.8% to 9.7%.

With 19.1 million sqm, Berlin boasts one of the largest office space volumes in Germany (+5.5% since 2010; cf. Fig. 11). Driven by the exceeding demand, the vacancy rate was nevertheless gradually reduced to 1.6% in 2019. In the course of the COVID-19 pandemic, however, it increased again slightly to 2.0%. Nevertheless, along with Münster Berlin continues to the be city with the lowest vacancy rate. Relatively high vacancy rates are recorded in the districts of Tempelhof/Neukölln/Steglitz (43,000 sqm) and Lichtenberg/ Marzahn (20,000 sqm). In central locations such as Berlin Mitte, Tiergarten or Prenzlauer Berg, vacancies are much lower at around 6,000 sqm each. Another reason for the slight increase in vacancy rates in 2020 is the relatively large volume of new office space entering the market. Collier forecasts three scenarios with an increase of vacancy rates to 2.5-4.5%.

In the past (2015-2019), an average of around 226,000 sqm p.a. of office space were completed. In 2020, 445,000 sqm were added (Munich comes second with 348,000 sqm) and even

larger volumes are planned for 2021/2022 with 612,000 sqm and 717,000 sqm respectively; out of this amount, two thirds have already been let. In addition, Siemensstadt 2.0, a site spanning 70 hectares is to be added by 2030. Compared to other German major cities, Berlin therefore shows higher dynamics.

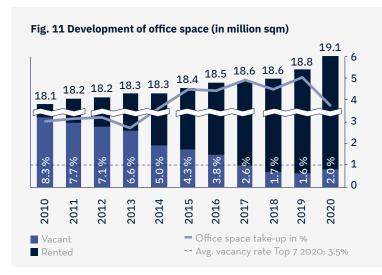
This is also reflected in office space take-up. Having declined by 1.2 pp to 3.8% in 2020, another pronounced increase was reached in Q1/2021. Similar to Frankfurt, the decline in demand does not have a negative effect on the rent level. On the contrary, peak rent increased by 3.0% compared to 2019. With a peak rent level of €41/sqm, Berlin is one of the most expensive office locations in Germany, together with Frankfurt and Munich, and the development in no other city has been as dynamic as in Berlin. Driven by an increasing number of employees working in offices, peak rent has almost doubled since 2010 (Top 7 average: 45%). In line with the increase of peak rent, the average rent level also increased and climbed by as much as 131% to € 28.7/sqm at last count. This development shows that Berlin has become a highly sought-after location for companies, not only for IT and e-commerce startups (25.9% of tenants) such as Zalando, but by now also established companies like Siemens. Since public administration also accounts for a large share of demand (20.6% of lessees), rent levels are not expected to drop significantly in the future either. Berlin as Germany's capital will continue to be an attractive location.

The transaction volume increased by 303% to €bn 12.8 between 2010 and 2019, but came to a standstill for the first time in 2020. The office market stood for 58.8% (as at 2019) of investments in commercial properties. Funds originated primarily from Germany (48.9%) and North America (24.2%), particularly from special funds (25.5%), investment/asset managers (19.0%) and equity real estate funds (11.3%), focusing mainly on properties ranging between €m 50-100 (23.3%) and greater than €m 100 (59.9%). As a result of the increase in demand, purchase prices also continued to increase, leading to a gradual reduction in initial rental yields, which most recently remained at 2.6%. This makes Berlin the city with the lowest yield, together with Munich.

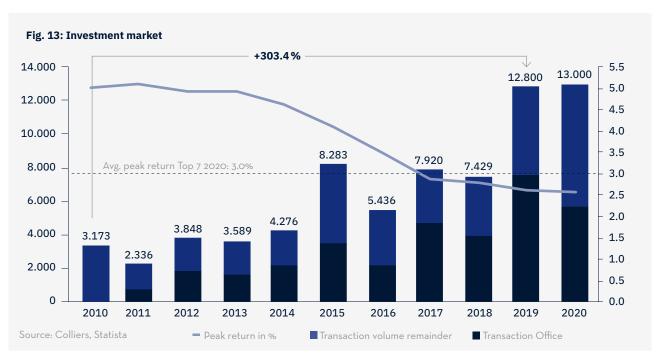
2021 Forecast:

Office space take-up: ➤ Vacancy rate: →

Peak rent: → Rental yield: →







OUTLOOK



COVID-19, digitalization and demographics as drivers of the future office market

The future development of the German economy hinges on the further course of the COVID-19 pandemic, in particular on the progress of the vaccination campaign and the possible emergence and spread of further mutations, as well as on the political response to these developments. To date, state aid measures such as subsidies, an expanded short-time work program and the suspension of the obligation to file for insolvency have counteracted a massive economic effect. This served to preserve jobs and prevent extensive downsizing, which would otherwise have led to a sharper rise in unemployment (January 2021 6.3% vs. January 2020 5.3%) and a significant change in demand for office space.



New ways of working: a combination of physical and digital attendance

However, the way we work has been changed quite a bit by the pandemic. Mobile, decentralized attendance has gained a boost in acceptance due to distance and contact restrictions and working from home has become a viable alternative to the office in many sectors. As a result, many large companies (e.g. Siemens or Allianz) have started to rethink their previous work organization and strive to establish working from home solutions, not least for financial reasons. Deutsche Bank has calculated related cost saving potential of around €bn 1.7. Many employees also appreciate working from home, if only because of the time they save commuting to work. We therefore expect that working from home will continue to be an integral element of work arrangements, even in a post-COVID-19 environment.



Office important for team spirit and training

In the future, the office will continue to be an important base for employees, but increasingly as a hub for social exchange, togetherness and creativity. Offices will take on a more representative character in order to remain attractive for employees, promote team spirit and maintain identification with the company. We therefore expect the emergence of a hybrid working environment that consists of modern offices in combination with working from home arrangements. According to a study by Ernst & Young, 76% of 20 to 30 year-olds prefer this transformation towards more flexibility and self-determination. According to a study carried out by Colliers, 82% of employees surveyed would prefer more than one day of working from home per week.



More room for interaction, fewer small offices

This changes the requirements regarding the office market. On the one hand, the increased share of working from home arrangements will reduce the demand for office space (DZ Hyp). According to a survey carried out by PwC, 55% of the participating companies stated that they intend to reduce their office space by more than 15% and according to a survey by German newspaper Handelsblatt, banks expect a 30-50% reduction of office space required. On the other hand, the concepts of how space is utilized need to be revised, with more common and social areas for communication and collaboration, fewer individual workspaces and more space per employee overall. New or remodeled office spaces will be about hot desking, intentional spacing and walkways, as well as ventilation/air purification concepts. Enough space must be available to allow for phases of presence. Digital infrastructure will also become even more important, while the corporate and management culture will have to adapt to the changed situation (less control more trust).



Co-working providers are losing out in the office market, but only for the short term

As a result of the COVID-19 crisis, tenants will be more interested in new lease agreements with shorter fixed terms or flexible rental concepts in the future. Owed to the flexible terms in their subletting agreements and the greatly expanded supply just prior to the pandemic, co-working space providers were the market participants hit hardest by the lockdown. However, the current uncertainty in the environment also holds opportunities, as the increasing attractiveness of flexibility and low fixed costs can quickly turn the tide in favor of co-working concepts again. Workthere and Savills already forecast record demand for the second half of 2021. JLL (July 2020) believes that 30% of office space will be used flexibly in the long-term future. Expanded concepts such as workspace on demand (daily passes) will also gain importance.



Demographic change vs. lack of skilled labor

At the same time, demographic change also plays a crucial role for the future development of demand for office workspace. On the one hand, the low birth rates in Germany are slowing down further employment growth, while on the other hand, a vast number of baby boomers (high birth rate cohorts 1950s, 1960s) will enter retirement age in the coming years. Both factors will weigh on the demand for office space.

CONCLUSION

In the short to medium term, the current uncertainty and the relatively large new project volumes for 2021/2022 (1.6 million sqm in 2021, 1.8 million sqm in 2022) could lead to a further but presumably rather moderate increase in vacancy rates due a high share already let (around 65% for 2021 and 35% for 2022). This could also lead to pressure on the peak rent potential, as real estate lessors might have to make concessions. This is also confirmed by a DZ Hyp forecast.

Although office space may very well be reduced, we do not expect that it will come to a sustained negative transformation of the market in the long term, but rather forecast a return to the level before the crisis as the vaccination program proceeds. The supply of space will continue to be relatively scarce, while the vacancy rate will remain at an overall low level. Instead, the divergence between cities and locations is likely to increase: top locations in major cities are expected to remain in high demand. Uncertainty regarding the further market development remains greater for less attractive areas or peripheral locations. This is also confirmed by a glance at the first quarter 2021. In the largest German cities, transactions spanning 715,000 sqm of office space were recorded, almost as much as in Q1/2020 (-1% acc. JLL, +5% acc. Colliers), while a significant proportion of this was attributed to the public sector (approx. 20%).

On the investor side, returns can be expected to remain stable for the time being due to a lack of alternatives. If the low interest rate level and the ECB's expansionary monetary policy were to be abandoned, this would have a massive impact on the valuation and yields of office properties. Until then, the German (office) property market continues to be highly attractive thanks to its economic and political stability. If the way people work were to develop more dramatically, which is not expected, but if the share of working from home arrangements were to be significantly higher, this would also have effects on other asset classes such as surrounding retailers, restaurants and the construction of residential apartments (with office rooms now having to be planned in).

Impetus for supply and demand as well as on KPIs such as vacancy rates, rents, space take-up and yields

	Short/medium term	Long term
Macroeconomic environment	*	→
New ways of working	>	→
Demographic change	→	*
Vacancy rate	>	→
Rents	>	→
Office space take-up	*	*
Yields	→	>
Development of flexible concepts	→	>

Source: Colliers, Statista, JLL, Bulwiengesa, FAZ, Immobilienzeitung

5 FINANCING

COMMERCIAL PROPERTY FINANCING

Furthermore, the COVID-19 pandemic has been showing a significant impact on real estate financing since Q2/2020. The high level of uncertainty regarding future economic developments led to massive reactions in terms of the propensity to provide financing and the terms under which financing is provided.

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Propensity to provide financing dropped significantly – margin requirements increased

According to the sentiment barometer for commercial real estate, the willingness to finance plummeted in Q2/2020 and recovered only slowly thereafter, but then improved significantly in Q2 2021 (cf. Fig. 2). As sentiment among the financial players in the real estate market brightens, the role risk departments play in credit decision-making processes will gradually decline. Therefore, the majority of financial backers participating in this survey now expect business to remain stable or to rise slightly again. Key decision-making criteria for new business include the minimization of risks, the sustainability of customer relationships and the expansion of margins.

Individual asset classes differ greatly here. Restrictions continue to be highly substantial, especially for hotels, retail properties and to some extent also in the office segment, as the impact of the pandemic in these areas is difficult to assess. The residential and logistics segments on the other hand are showing clearly positive trends.

Temporary uncertainty is also reflected in the data collected by bulwiengesa. The loan-to-value (LTV) for new commercial real estate financing for current properties had fallen from 71% in Q1/2019 to around 65% in Q1/2021. At the same time, margins increased by over 30 bp to an average of 158 bp. Between the segments, margins vary significantly between 127 and 191 bp. A similar pattern with higher margin requirements can be seen in the project finance business (cf. Fig. 3).

The bottom line is, however, that even during the COVID-19 pandemic, the financing side is influenced by the liquidity available in the market and the investment pressure of institutional investors in particular. In addition to banks, external financing is now also increasingly provided by debt funds.

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COVID-19 also affects ongoing financing arrangements

Typical problems with financing caused by the pandemic are a lack of cash flow, for instance in the case of unplanned vacancies and unsuccessful marketing activities, and on the other hand a revision of property valuations.

Fig. 1: Financing of real estate segments

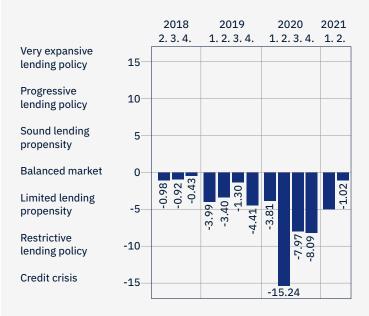
What types of real estate are currently being financed? * – Project development



* Multiple answers are possible; basis: sum of all answers

Source: BF Quartalsbarometer Q2 2021

Fig. 2: Development of financing propensity



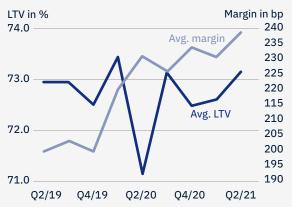
Source: BF Quartalsbarometer Q2 2021

Fig. 3: Margins & LTV

LTV (avg.) and margins (avg.) for commercial real estate financing in existing portfolio



LTV (avg.) and margins (avg.) for commercial real estate financing of project developments



Source: BF Quartalsbarometer Q2 2021



Financing providers have learned from the financial crisis

Market participants report that in the event of liquidity shortages on the part of real estate lessors, the only way for debt financiers is to stand still and/or suspend repayments and collect interest only. Given the currently very low interest rate level, this usually leads to a massive reduction in debt service on the properties and thus creates leeway for problem solving measures. In the absence of alternatives and in the hope that the crisis will soon be overcome, providers of external financing are currently prone to make concession. This affects in particular the segments retail and hotels.

The revision of valuations can lead to covenant breaches and depending on the contractual arrangements lead to additional securities or collateralization. As the increase in property values in recent years has frequently led to a significant improvement in the LTV ratios of existing financing arrangements entered a longer time ago, this problem usually occurs with recent financing arrangements or massive changes in valuation. Valuation adjustments do not usually lead to a termination of loans at the moment, as had been the case during the financial market crisis.

In addition, ongoing trends in the property financing sphere have also been accelerated by the pandemic. Property lessors are forced to increasingly accept revenue-based rent agreements and thus increasingly participate in the opportunities and risks of their tenants. This means for their financial backers that they move one step closer to the actual users. Those providing the funds now also need to look more closely at the future prospects for success of the respective tenants in order to assess the stability of future capital services. This cannot fully be covered by covenants alone.



How patient are the financial partners?

There are no real tools to indicate exogenous shocks like the COVID-19 pandemic with its respective impact on the individual market segments. We expect that future financing structures will be designed to be even more resilient against cash flow fluctuations. Because of regulatory conditions such as increased capital equity requirements, it can also be expected that financial backers of real estate transactions will continue to try resolving any restructuring cases as quickly as possible, possibly also by selling accounts receivable (factoring).

As things stand today, however, we do not necessarily see the further course of the COVID-19 pandemic as the biggest risk but focus on the potential increase in long-term interest rates. As commodity prices are already on the increase, such a scenario seems increasingly likely and would be very difficult for Europe to cope with due to the high level of sovereign debt. Rising interest rates would increase the debt service for many borrowers, while at the same time investors would turn away from the property market. Property values would then increasingly depend on the rent level.

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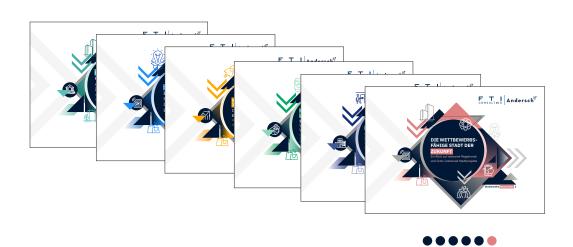
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What does the future bring?

As a result of the COVID-19 pandemic, the structural transformation of German cities has been accelerated by years. Key actors in inner cities such as the retail operators are thus forced to find a new direction. But what is the situation like outside of Germany? We have a closer look at the trends currently shaping the transformation of international cities. To what extent are they linked to local factors? How well do first project approaches work to meet the new requirements? To what extent can they be applied in German cities? Find out what German cities can learn from international examples to counter global trends and shape the cities of the future in the next issue of our "Future Cities" series.



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