

Real estate market shifts in the Retail sector in Germany – A Change of times and due to the COVID-19-Pandemic

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SUMMARY

On the German retail market, trends have already been apparent for some time, and the Corona pandemic has recently accelerated them. The Corona pandemic has contributed to the fact that the various industries in the retail sector are showing increasingly divergent developments. However, sales growth was also recorded in the entire retail sector in 2021.

Digitization, demographics, sustainability and (re)urbanization are trends that have been evident in the German retail market for some time. Due to more flexible working hours, the increase of home offices, and new demands for time and comfort, the requirement for needs to be met close to home is growing. On the other hand, the functional separation of living and working is increasingly reaching its limits, and real estate in locations that no longer meet the needs of users is losing foot traffic and thus sales, since the smartphone can satisfy the demand for products anytime and anywhere.

Sales in the retail market show a differentiated development. Sectors such as food retailing and online retailing recorded sales growth, while stationary fashion retailing had to contend with declining sales. Online retail in particular was able to benefit from the store closures in the course of the Corona pandemic, which led to a drop in sales for stationary retailers. Due to the trend towards high-end products and the increase in home offices, food retail also emerged as a winner in the pandemic.

The real estate market showed something similar. Food-anchored specialty stores and retail parks turned out to be popular with investors due to their system relevance and resistance to online retailing. The opposite trend was seen in inner-city commercial properties in prime locations and, especially, in shopping centers. Here, increasing yields and a declining share of the total investment volume were observed.

Overall, the German retail market shows very differentiated developments in the submarkets. Due to the Corona pandemic and the war in Ukraine, this trend is expected to intensify further.

1. INTRODUCTION

According to the German Federal Statistical Office, the retail sector once again generated a record revenue in 2021. [2] But this does not hold for all segments of the retail sector. For an appropriate evaluation of the opportunities and risks, a differentiation must be made according to the various user types, locations and utilization concepts. [6]

For Example, systemically relevant real estate, such as local supply properties, is considered a safe investment and is little affected by economic fluctuations and crises. In Addition, the E-Commerce revenue increased in the last few years, whereas the stationary retailing of clothing and footwear has seen sales drop. [6]

In this regard, the Covid-19-Pandemic is considered as an accelerator of this trend, which has been demonstrated before. [6] The pandemic related restrictions and regulatory closures of industries such as non-food and food service, have a high impact on the areas of life and economic sector in Germany. Winner of the pandemic is the food retailing due to the increasing consumer demand. The Corona pandemic has also reinforced previously identifiable trends in the retail investment sector. Most popular among investors are local supply centers and retail parks with food-anchored properties. The popularity of commercial properties in prime locations and shopping centers continues to decline. [7]

2. TRENDS IN THE GERMAN RETAIL MARKET

Trends that have been apparent in the retail sector for some time have been accelerated and thus made visible by the Corona pandemic. Therefore, it is essential for the continued existence of the locations to adapt the retail properties to the changing requirements and to identify the factors that determine consumer behavior. The four megatrends that are driving most of the change are digitalization, demographics, sustainability and (re-)urbanization. [9]

2.1. Digitization

Smartphones enable users to obtain information at any time and to select the most attractive products at fair conditions at a time of their own choosing. Properties in locations that no longer meet users' requirements become uninteresting and consequently lose foot traffic and sales. Smartphone users are on the move in digital marketplaces and are thus no longer influenced in their opinions only by shopping centers but much more by various social media platforms. [6] [9]

More flexible models of working hours and places lead to a decrease in pedestrian frequencies, thus to lower sales and consequently to a gradual reduction of retail space. On the other hand, time spent at home is increasing, which leads to an increase in demand for needs met close to home. [9]

For retail real estate, this means that in district or suburban locations, daily needs must be met via large retail spaces with a wide range of products, and proximity to other destinations for daily needs must be ensured. Retail properties gain in popularity the more use options they combine, since time is a limited resource due to challenges at work or balancing family and

career. Furthermore, retail space and concepts need to be differentiated more according to location in order to meet the different requirements. City centers should function as experiential spaces with smaller rental units in ground-floor locations and should benefit from pedestrian flows due to their proximity to, for example, restaurants and cultural institutions.[6][9]

2.2. Demographics

The aging of the population and the rising level of education in the generation results in an increased demand for higher-quality products and services.[6] The resource time becomes more available, which can lead to an increase in enjoyment and thus to a demand for higher-quality products. In addition, the demand for attractive and lively meeting places that can be visited on a daily basis increases due to the need for social exchange. The focus here is on the safety factor, which is why large city centers, shopping malls and public transportation are avoided. The spatial proximity of experience facilities such as restaurants as well as facilities for daily needs, like doctors and pharmacies, also play an important role. [9]

This means that retail properties should be accessible by car or on foot and should not have complicated access routes, especially by public transport. In addition, secure locations close to residential areas with a mixed-use concept that cover daily needs for groceries and healthcare services and have a high quality of stay offer great potential. [9]

2.3. (Re-)urbanization

As people want needs and desires met quickly and decide for themselves where and when to live and work, we see the development of new demands for time and convenience, a dissolution of traditional daytime schedules, an acceleration of life, and an increase in mobility rates. More errands are being done on smartphones, but store concepts that consumers use on the go, such as bakeries and kiosks, are also on the rise. A usual separation of functions for living and working is increasingly reaching its limits, as the population pursues a variety of activities on a daily basis and would therefore have to travel great distances. The "city of short distances", where facilities for work, shopping, doctor's appointments and childcare can be reached within 15 min, fulfills much more the expectations of politics and population of a city. [9]

This means for retail properties that the locations of these buildings should be as close as possible to residential locations so that they can be reached on foot or by bicycle. In addition to daily shopping, they should also enable other errands to be carried out to make everyday life easier for consumers and offer a high quality of stay. This poses major challenges in adapting existing pedestrian zones, department stores, shopping centers and retail parks to the changing demands of consumers. [9]

2.4. Sustainability

The EU climate targets are accelerating the adoption of sustainability aspects in the finance and real estate industry.[9] Through the European Green Deal program, a classification system has been provided to give investors clarity on the climate and environmental impact of investment properties.[6] The social aspect has also become increasingly important in the real estate industry in recent years, and with the pandemic, sustainability issues have come more and more

to the fore. The sustainability trend is already noticeable in commercial real estate. New buildings are now preferred on brownfield sites, rather than greenfield sites. In addition, flexible and technically simple building concepts are favored over more complex ones. Buildings should be integrated compactly into a city instead of developing them on a large scale..[9]

In terms of retail real estate development, this means that real estate sustainability requirements can be implemented particularly in district centers, town centers and residential areas, as there is greater flexibility in planning law. There is also a high potential for projects that implement local supply, district and neighborhood concepts. Furthermore, sales of regional food is preferred, which means that properties should attract tenants from this segment through creative ideas.[9]

3. DEVELOPMENT OF THE GERMAN RETAIL TRADE

In order to show the development of the German retail sector in recent years, two variables are of central importance: retail sales and purchasing power. Retail sales provide information on the economic strength of retailers in Germany. Here, it is important to distinguish between the different types of use, such as non-food retailers and food retailers, and to compare their developments. Purchasing power is a meaningful indicator of the economic strength of a region. It is taken into account, for example, in planning decisions for new sales areas. [10]

3.1. Retail Sales

Despite the corona pandemic, retail sales in Germany continue to rise. In 2016, sales of €493.2 billion were still generated, whereas €586.1 billion are forecast for 2021 [8]. In comparison to the previous year, the German Federal Statistical Office has published an increase of 0.70% in real terms for 2021.[12] This was lower than in the years before, but once again ensured record sales. The strongest increase in the past six years is reported for 2020 with an increase of 4.40% in real terms and sales of €577.4 billion.[6][12]

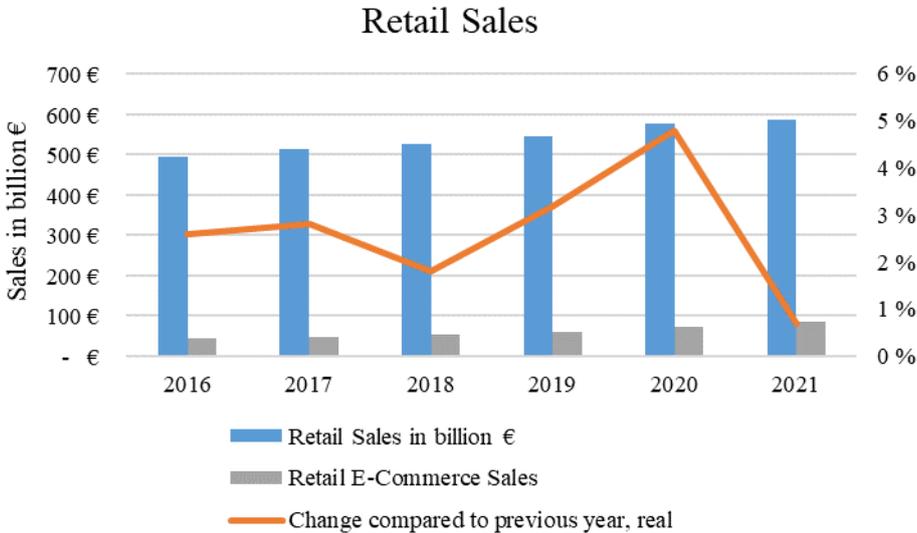


Fig. 1: Retail Sales (with data from [7] and destatis)

In the retail asset class, however, a distinction must be made between the various sectors and between online retail and stationary retail, because not all areas were able to benefit equally from the growth in sales. This was also related to the lockdowns that lasted several weeks in reaction to the Corona pandemic, from which the stationary non-food retail sector in particular suffered.[7]

Online retail in particular saw significant sales growth, with sales exceeding 30% in the months of restricted access in 2020 compared to the same months in 2019. [7] In 2016, sales generated by E-Commerce were still at €44.2 billion, whereas in 2020 they were already at €72.8 billion and are forecast to reach €87.1 billion in 2021.[8][7] This would represent an increase of almost 20% compared with 2020. The German Federal Statistical Office publishes a real year-on-year growth rate of 24.1% for internet and mail-order sales in the non-food sector for the period January 2020 to December 2020.[13] For 2021, growth of 12.4% in real terms is indicated for the same period.[12] Stationary retail has also contributed to this major growth spurt through concepts such as Click&Collect, Click&Meet and livestream shopping. In 2020, according to the Hahn Retail Real Estate Report 2021/2022, the average share of the various food and non-food sectors in the retail segment was 12.6% of retail sales.[7]

In the following, the food and non-food segments are considered separately due to the highly differentiated development of sales in the retail segment:[7]

According to the German Federal Statistical Office, sales in the non-food sector, including internet and distance selling, could increase by 2.0% in real terms in 2021. However, a distinction must also be made between different areas in this segment. Sales of textiles, clothing, shoes and leather goods, for example, fell by 5.9% in real terms compared with the previous year.[12] For 2020, the Hahn Retail Real Estate Report 2021/2022 indicates sales of €312 billion for the non-food segment, as well as a sales increase of 0.6% compared with the pre-crisis year 2019.[7] Even though there was an overall increase in sales in 2020, the fashion market did not benefit. For the period from January to December 2020, the textiles, clothing, footwear and leather goods segments are reported to have seen sales decline by 23.4% in real terms, whereas internet and mail order sales have seen a 24.1% increase over the same period.[13] In addition, almost 40% of sales in the fashion sector are generated by online retailing. The Hahn Retail Real Estate Report 2021/2022 reports the highest decline in sales of stationary fashion retailers in Germany for the year 2020. In addition, there were many store closures in the first Corona year, which could have appropriate consequences for the city centers.[7] However, this wave of insolvencies was averted in 2021 through Corona aid.[2]

In contrast to stationary non-food retailing, food retailing recorded strong sales growth of 5.1% in real terms in 2020.[13] Sales of food and drugstore products rose by €20 billion to €272 billion in the year.[7] This strong growth can be attributed, among other things, to the closure of the food service industry, the high proportion of employees working from home, and the trend toward higher-quality and therefore more expensive products. In addition, grocery stores and drugstores are considered systemically relevant, which is why they were not affected by store closures. However, a distinction must also be made between the various types of operation

in the food retail segment. The consumer market achieved the highest growth with an increase of 9% due to the pandemic trend of one-stop shopping, the growing organic product range and their fresh and value products. Discounters and supermarkets also posted strong sales growth of 6.5% and 6.3%. Due to their wide range of food and non-food articles, hypermarkets were partly affected by non-food store closures, depending on the federal state. Despite this, they achieved sales growth of 4.0%. Sales in the drugstore segment grew by 2.4% in 2020, although demand for cosmetic products was low due to the Corona-related discontinuation of a wide range of events. However, the one-stop shopping trend also increased purchases of drugstore products in grocery stores, whereas low footfall in pedestrian zones led to a decline in sales at the drugstores located there. Online retailing is not yet as well established in the food and discount sector as in the fashion sector, but it is becoming increasingly important. In 2019, around 1.1% of sales in the food sector were generated via E-Commerce, but by 2020 this had risen to 1.6%, an increase of around 45%. The drugstore sector also saw an increase from 1.7% in 2019 to 2.3% in 2020, but at a slightly lower rate of 35%. [7] For 2021, the German Federal Statistical Office indicates a decline in sales of around 1.1% in real terms compared with 2020.[12] The forecast that the sales growth of 2020 could not be repeated was thus confirmed. This is primarily due to the easing of Corona-related restrictions, such as the opening of restaurants and bars and the return from the home office.[7]

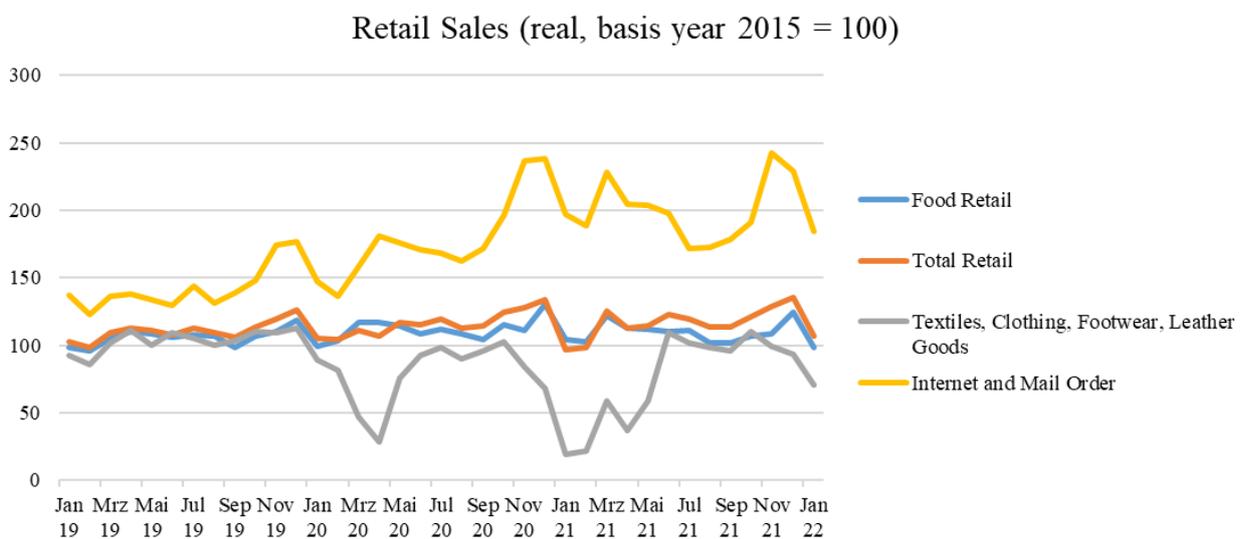


Fig. 2: Monthly retail sales, 2015 = 100 (with data from the destatis database)

Figure 2 summarizes the monthly retail sales trend from January 2019 to January 2022 relative to the 2015 base year. It can be seen that total retail sales remain relatively stable over the months, adopting a slight upward trend and only dropping to below the base value of 100 in January and February 2021. Something similar can be seen in the food retail sector. Since the beginning of the Corona period, retail sales fell below 100 for the first time in January 2022. The maximum sales in the observation period were around 130 in December 2020. However, internet and mail-order retailing as well as textiles, clothing, footwear and leather goods show stronger changes. While, as explained above, the fashion sector was forced to close due to store

lockdowns, E-Commerce was able to benefit from this and a clear upward trend can be seen. Retail sales of textiles, clothing, footwear and leather goods recovered in mid-2021, but they dropped to around 19 in January 2021 and 29 in April 2020 during the store closures.

According to CBRE GmbH, there are many positive developments that create good conditions for 2022, but the dynamic pandemic makes the future difficult to plan for many retailers.[2]

3.2. Purchasing Power

In 2020, purchasing power in Germany stagnated compared with the pre-crisis year 2019, although a decline of 1.2% was forecast.[7] As a result, Germans had €23,844 per capita available for consumer spending, housing, leisure or savings in 2020.[8][2] A differentiated analysis of purchasing power ratios by federal state conducted by the Handelsverband Deutschland shows that Hamburg, Hesse, Baden-Württemberg and Bavaria each recorded values above the German average for 2020. Saxony-Anhalt, Thuringia and Mecklenburg-Western Pomerania have significantly lower per capita purchasing power than the average, with values of between 86 and 87. [8]

A purchasing power of EUR 24,455 per inhabitant is indicated for 2021. Purchasing power has thus increased by 2.6% compared to 2020. The negative effects as a result of the Corona pandemic therefore did not occur statistically. This could be related to aids such as short-time allowances, the VAT reduction in the second half of 2020, and grants for small businesses. However, there were also major differences between the various federal states and districts in 2021. In Bavaria, 61 of 96 districts had a purchasing power index above the Germany-wide average in 2021. In eastern Germany, only one district had a value above 100. In addition, the 14 counties with the highest purchasing power are in Bavaria, Hesse or Brandenburg, with values of up to EUR 36,493. The last three places are taken by Bremerhaven, Duisburg and Gelsenkirchen.[7]

Purchasing power is again expected to increase by a nominal 4.3% to an average of €24,807 per capita in 2022. The reasons for this are rising wages and the increase in pensions. However, it is also assumed that there will be catch-up effects in production and the economy, as well as a reduction in logistics problems resulting from the restrictions caused by the pandemic. Overall, however, the level of real growth in purchasing power depends on the development of consumer prices.[5]

4. RECENT CHANGE IN THE RETAIL REAL ESTATE MARKET

Germany is considered a popular and sought-after investment location for both international and national investors. This can be seen especially in the development of the yields of the various retail properties as well as in the relatively constant high number of transactions. In the following, the key figures for yields and transaction volumes in the German retail market are presented and the most recent development of these is shown.[15]

4.1. Transaction Volume

Despite the Corona pandemic and the associated consequences for the retail market, the investment market in 2020 for retail-used real estate recorded an increase of 21% in transaction volume compared with the pre-crisis year 2019 and an increase of 16% compared with 2018. This means that around €12.3 billion was invested in retail real estate in 2020, whereas the volume in 2019 was only €10.1 billion and €10.5 billion in 2018. The high investment volume in the first corona year is due, among other things, to a strong first quarter. In this period alone, €4.6 billion was invested in German retail real estate. This was due to the fact that the lockdown, which began in mid-March, had not yet noticeably impacted transaction activity at that time and some transactions had been postponed from 2019 to 2020 which meant that they were made up for in the first quarter. In the following quarters, the transaction volume was therefore again significantly lower, but a positive development trend could be observed towards the end of the year, as the volumes of the individual quarters increased from the second to the fourth quarter.[7]

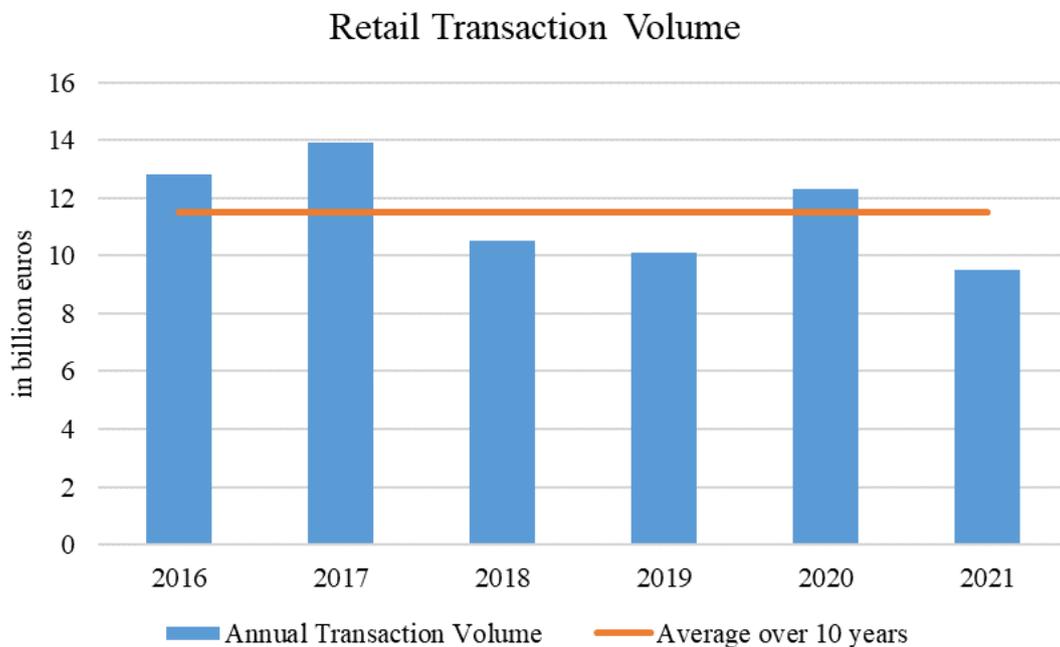


Fig. 3: Retail Transaction Volume (with data from [15])

In 2021, however, it was not possible to match the high result from the previous year. A transaction volume of €8.7 billion was achieved here. This is 21% below the ten-year average and 29% below the result of 2020.[1] However, it can be hoped for a recovery trend, as 64% of the transaction volume was achieved in the second half of the year, which indicates a positive trend.[11] Positive trends can also be seen in the first quarter of 2022. Here, the transaction volume doubled compared to the first quarter of 2021 and amounted to €2.3 billion. [3]

Significant differences can also be seen in the area of transaction activity with regard to the various types of property use. These are presented below:

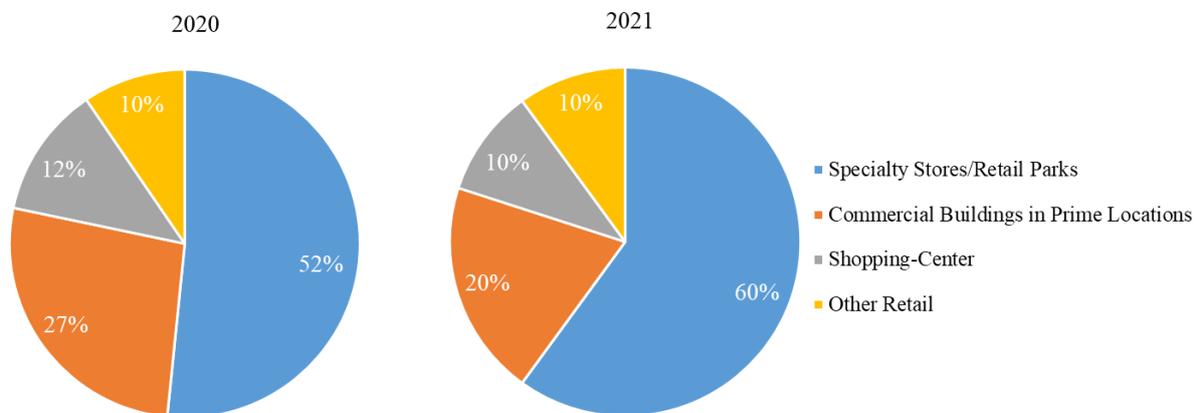


Fig. 4: Transaction volume of retail submarkets (with data from [7] and [15])

The highest-volume segment is represented by local supply centers and retail parks. This trend has been apparent for some time, as these types of properties are comparatively resistant to online retail, they are considered to be systemically relevant, and the general conditions, such as contract terms, are most in line with current investment requirements. In 2020, €6.3 billion was invested in these retail properties, which accounted for 51.6% of the total transaction volume in the retail segment. In 2019, the share was only 43.8%. Of the €6.3 billion in 2020, €4.8 billion was invested in a total of 57 portfolio transactions, with eight package transactions exceeding a volume of €100 million each. This contributed to the good result. International investors accounted for more than half of the investment volume in retail properties that year.[7] In 2021, specialty stores also accounted for a large share of the retail transaction volume. Here, the volume amounted to €5.3 billion, which corresponds to a share of 65%. Food-anchored properties accounted for €4 billion of this, about half of all retail investments in 2021. This represents an increase of more than 60% compared to the average of the last five years.[4] In the first quarter of 2022, around 57% of the transaction volume was attributable to the specialty store and retail park segment.[2]

The second most traded property in the retail segment is the asset class of inner-city commercial properties in prime locations. In 2020, around €3.3 billion was invested in such properties, which corresponds to a share of 27%. The good result despite the numerous restrictions due to the Covid-19 pandemic is attributable to a wide variety of portfolio purchases and share acquisitions of department stores.[7] In 2021, inner-city commercial properties in prime locations again ranked second with a share of 20% and a transaction volume of just under €1.9 billion. Compared with the previous year, the share has therefore fallen by seven percentage points.[15] In the first quarter of 2022, commercial buildings in prime locations accounted for a share of 27%. [3]

Shopping centers ranked third with a transaction volume of just under €1.5 billion and a share of 12.2% in 2020. This confirms the trend that had already emerged in previous years, that investor interest in real estate in this asset class is low, and is therefore only partly a reaction to the restrictions imposed by the Covid-19 pandemic. Approximately €1.7 billion was invested in such properties in 2019 and approximately €1.4 billion in 2018.[7] In 2021, the transaction volume for shopping centers decreased to just under €930 million and accounted for a share of 10%.[15] For the first quarter of 2022, a decline in the share of the total transaction volume can be recorded again at around 7%.[3]

4.2. Yields

The yields reflect the interest of investors in the corresponding properties. As the previously presented transaction volume shows, there are significant differences within the retail market with regard to the popularity of the various asset classes as investment properties. Consequently, differentiated returns are reported for the various segments in the retail sector.

Due to the Covid-19 pandemic and the associated restrictions, there was a threat of rent losses in some segments in 2020, resulting in value adjustments to the corresponding properties. Thus, an increase in yields was observed for inner-city commercial properties and, in particular, for shopping centers. For shopping centers, an increase in yield was recorded over the course of 2020, bringing it to around 5.00% for A locations and around 6.00% for B locations at the end of 2020. On the other hand, however, declining yields were observed in the local supply segment due to high demand from investors. The yield of discount store properties decreased by 0.2 percentage points from the third to the fourth quarter of 2020 to 4.60%. At 4.00% and 3.90%, the yields for supermarkets and retail parks with local supply character were even lower.[6][15]

In 2021, declining or constant yields could be observed for all retail properties.[15] This is related to the normalization of public life as a result of rising vaccination rates.[7] Due to the continued high demand from investors for food-anchored properties, a strong decline in net initial yields could be observed at the end of 2021. Yields for retail parks, supermarkets, and hypermarkets are each at 3.60%.[15] Shopping center yields have declined in 2021 and are reported at 4.85% for A locations and 5.90% for B locations. Yields for inner-city commercial properties in the top seven cities also fell by the end of 2021, with an average net initial yield across the seven cities of 3.19%, which is 0.1 percentage points lower than the previous year. [15]

From the end of 2021 to the first quarter of 2022, the general yield structure has hardly changed.[3] Grocery stores continue to be perceived as a safe investment with a yield of 3.50%.[2] Going forward, yields are forecast to continue to diverge between the different types of retail properties. This prediction is made especially with regard to the Ukraine war and the non-food segment properties, which are already burdened by the Covid-19 pandemic.[3]

5. CONCLUSION

In summary, it can be stated that the Corona pandemic has made visible the trends that had already emerged previously. However, the various subsectors of the retail market have developed differently. Over the past few years, the stationary retail trade with clothing articles has had to contend with declining sales, a situation that has been reinforced by store closures in the course of the Corona pandemic.

However, a positive development is being seen in online retailing and food retailing, which achieved a strong increase in sales during the periods with access restrictions. In food retail, this development is mainly due to the trend towards higher quality and therefore more expensive products, as well as the increase in the proportion of home office employees. For the future, it will be necessary to observe how the Corona pandemic develops and how a possible return of employees from the home office will affect the development of food retailing. It will also be important to see what impact new online retailers like “Gorillas” have on stationary grocery retailing.

A clear trend can also be seen on the investment market. The properties with the highest transaction volumes as well as falling yields are local supply centers and retail parks. In the case of inner-city commercial properties in prime locations and shopping centers, the share of the transaction volume in the total investment volume is falling. In addition, increasing yields have been observed here in recent years. This trend was already evident in shopping centers even before the Covid-19 pandemic and therefore cannot be fully attributed to the pandemic.

For the future, it is predicted that the development of the individual submarkets of the retail asset class will continue to diverge. The further course of the Corona pandemic and the Ukraine war may intensify the trend particularly in the non-food segment.

6. BIBLIOGRAPHY

- [1] BNP Paribas Real Estate GmbH. At a Glance Q4 2021 Retail-Investmentmarkt Deutschland. Frankfurt 2021
- [2] CBRE Research. Market Outlook 2022 Report Deutschland, 2022
- [3] Colliers International Deutschland GmbH. Einzelhandel Investment Deutschland Q1 2022. 2022
- [4] Colliers International Deutschland GmbH. Marktbericht Einzelhandel Investment Deutschland 2021/2022. 2022
- [5] Growth from Knowledge (GfK). Kaufkraft der Deutschen steigt 2022 auf 24.807 Euro. Nürnberg 2021. Available online at: <https://www.gfk.com/de/presse/kaufkraft-deutschland-2022>
- [6] Habona Invest GmbH. Habona Report 2021 – Assetklasse Nahversorgung: systemrelevant und krisenfest. Frankfurt 2021
- [7] HAHN-Immobilien-Beteiligungs AG. 16. Retail Reals Estate Report 2021|2022. Bergisch Gladbach 2021
- [8] Handelsverband Deutschland e.V. (HDE). Zahlenspiegel 2021. Berlin 2021
- [9] HypZert GmbH. Retail Properties during the Corona Crisis – one year after the start of the pandemic. Berlin 2021
- [10] IHK Köln. Merkblatt zu Kaufkraft und Umsatz. Köln o.J.
- [11] Jones Lang Lasalle SE (JLL). Investmentmarktüberblick: Deutscher Investmentmarkt stellt durch Fusionen Fabelrekord auf. 2022
- [12] Statistisches Bundesamt (destatis). Pressemitteilung Nr. 043 vom 1. Februar 2022. Available online at: https://www.destatis.de/DE/Presse/Pressemitteilungen/2022/02/PD22_043_45212.html
- [13] Statistisches Bundesamt (destatis). Pressemitteilung Nr. 045 vom 1. Februar 2021. Available online at: https://www.destatis.de/DE/Presse/Pressemitteilungen/2021/02/PD21_045_45212.html

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[14] Statistisches Bundesamt (destatis). Pressemitteilung Nr. 138 vom 31. März 2022. Available online https://www.destatis.de/DE/Presse/Pressemitteilungen/2022/03/PD22_138_45212.html at:

[15] Zentraler Immobilien Ausschuss e.V. (ZIA): Frühjahrsgutachten Immobilienwirtschaft 2022 des Rates der Immobilienweisen. Berlin 2022

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