Positive trend in consumer spending at a time of favourable economic conditions

Retail sector reports strong turnover growth in both bricks-and-mortar and online segments

Total sales area remains at the previous year’s level

Superstores and drugstores are the most expansive operation types

E-commerce is mainly a sales channel for the non-food sector

Improved letting market over the first half of 2018

Retail warehouses and retail parks are the most popular property types in the investment market

Significant scarcity of product results in further pressure on prime yields

Expert survey shows more optimistic view of bricks-and-mortar retail

Greater focus on value-add and opportunistic investments
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The upward trend in the German commercial real estate investment market continued unabated in 2017 and over the first half of 2018. German and international investors created significant excess demand resulting in record transaction volumes. The retail property sector contributed to this positive development as the second highest volume real estate segment.

The retail property sector’s good performance was no surprise to the experts, and the key economic and retail market indicators served to boost investor confidence. The robust economic growth, increasing employment figures in Germany and growth in disposable incomes resulted in a 3.6% increase in consumer spending in 2017 alone, which was the strongest growth since 1994 and created the best conditions for ringing tills in both the bricks-and-mortar and online retail trade.

Notwithstanding the positive development and the widely recognised less cyclical retail sector, there are also investors who are adopting more of a wait-and-see approach to the acquisition of further retail properties. They eschew the complexity of the retail sector, and the dynamism and heterogeneity which have been exacerbated by the effects of digitalisation for a number of years.

In particular, the online shopping sector has become an important alternative in the non-food retail segment and this must be taken into account when making investment decisions.

It is again our intention that this new edition of the HAHN Retail Real Estate Report will assist market participants by providing additional focus. What types of retail companies, segments and formats are successful? Which property types offer the best opportunities? How are the individual market players behaving and – based on our expert survey – what are investors and retailers up to right now? Where is digitalisation happening and what effect is it having? We will attempt to provide well-founded answers to all these questions.

This new report has been produced in collaboration with our partners CBRE and bulwiengesa. In the first section, bulwiengesa describes the overall economic trends and the current environment in the German retail sector.

This is followed by a presentation of the individual retail segments, focusing on the successes of the most important players and the development of sales formats. CBRE then analyses the transactions in the real estate investment market and identifies the sources of capital and the locations of investments. The analysis of the letting market and the assessment of investment locations in the form of a retail investment scoring model provides readers with further important insights into market activity.

The results are supported by the Hahn expert survey which is carried out on a regular basis by the Hahn Group, together with the EHI Retail Institute amongst others, to analyse both the retail market and institutional property investors. In two further chapters, CBRE and the Hahn Group investigate the digital age and discuss the technical changes in the real estate and retail economies. We find that for now, the potential and opportunities are huge.

We hope to provide you with many interesting suggestions for further research and profitable investment decisions!

Michael Hahn
Chief Executive Officer
HAHN-Immobilien-Beteiligungs AG

Thomas Kuhlmann
Member of the Management Board
German economy continues to grow strongly
Upswing in private consumer spending
Increased retail sales in both the bricks-and-mortar and online segments
Total sales area remains at the previous year’s level
E-commerce is the principal sales channel for the non-food segment
1.1 UPSWING IN THE ECONOMY AND CONSUMER SPENDING

The German economy continued to grow strongly during 2017. According to the Federal Statistical Office, the price-adjusted GDP at the end of 2017 was 2.2% higher than one year before. This pleasing continuation of the 8-year upswing was also the strongest growth for six years. The fact that there were fewer working days in 2017 meant a further 0.3% rise in calendar-adjusted GDP. The main impetus was again the domestic economy. Private consumer spending grew by 3.8% (2.0% price-adjusted). This was the strongest nominal year-on-year growth since 1994. There was also a significant upswing in foreign trade with a 4.7% increase in exports. However, the foreign trade balance – the difference between exports and imports – contributed just 0.2% to economic growth. At year-end 2017, the number of people in employment was at its highest level since German reunification. The annual average number of people in employment was just under 44.3 million, which is a rise of 1.5% or 638,000 people compared to 2016. It is also good to see that this increase is the result of a rise in the number in employment subject to social insurance contributions. The employment figures also rose thanks to the high level of population influx from other countries. The unemployment rate amongst people of working age fell from 6.1% in 2016 to 5.7% [see Figure 01].

The latest figures from the first quarter suggest a slightly more subdued German economy in 2018. The latest surveys of the current situation are rather more cautious. The Business Expectations Index published by the ZEW Centre for European Economic Research fell for the fourth month in succession. According to the European Commission, German retail sentiment is at −2.3 points and therefore below the EU average of 1.8 points. The ifo Business Climate Index has also fallen for five successive months. The HDE Business Barometer was well below 100 points in July, its lowest level since records began. There was a significant fall in the propensity to make investments. In particular, the increasingly protectionist trade policy in the USA and the retaliatory action by the EU and China have contributed to increasing uncertainty amongst consumers and economic players. Fortunately, there have been recent signs that the USA will relax this policy vis-à-vis the EU. But the topics such as the sluggish progress of the Brexit negotiations, the increasing strength of the Dollar in terms of financing conditions amongst the emerging economies and the debt crisis in southern European countries are all potential risks to economic growth in export-orientated Germany. It is therefore expected that the economic boom will slow down in 2018. According to the ifo-Institut’s summer forecast, the German economy is likely to grow by 1.8% in both 2018 and 2019. The favourable situation in the employment market will continue over the next few years; however, the growth in employment figures will be weaker than in the last few years. The estimated price-adjusted growth in private consumer spending in 2018 will be just 1.3% according to the ifo-Institut. Rising costs of living, high energy prices and increased proportions of income going into savings are limiting factors.

01. Economic Trends in Germany and the Eurozone

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018*</th>
<th>2019*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP Eurozone</td>
<td>1.8</td>
<td>2.6</td>
<td>2.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Real GDP Germany</td>
<td>1.9</td>
<td>2.2</td>
<td>1.8</td>
<td>1.8</td>
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<tr>
<td>CPI (Consumer Price Index) Eurozone</td>
<td>0.2</td>
<td>1.5</td>
<td>1.8</td>
<td>1.9</td>
</tr>
<tr>
<td>CPI (Consumer Price Index) Germany</td>
<td>0.5</td>
<td>1.8</td>
<td>2.0</td>
<td>2.1</td>
</tr>
<tr>
<td>Real private consumer spending Eurozone</td>
<td>1.9</td>
<td>1.7</td>
<td>1.5</td>
<td>1.4</td>
</tr>
<tr>
<td>Real private consumer spending Germany</td>
<td>2.1</td>
<td>2.0</td>
<td>1.3</td>
<td>1.8</td>
</tr>
<tr>
<td>Unemployment rate Germany</td>
<td>6.1</td>
<td>5.7</td>
<td>5.2</td>
<td>4.9</td>
</tr>
</tbody>
</table>

* Forecast
Source: Federal Statistical Office, ifo-Institut

The number of people in employment at the end of 2017 was the highest level since German reunification.
These are counteracted by expansive fiscal policy which will compensate for the decreasing momentum of the German economy. Child tax credit, child benefit and the Hartz IV rates were increased from the beginning of 2018 and tax allowances, the percentage contributions to many health insurance schemes and the contribution rate to state pensions were reduced. As at mid-year 2018, there had been an increase in state pensions and public subsidies to families with children for house-building had been introduced. The coming year will see a return to equal contributions between employers and employees towards the costs of state health insurance, the introduction of Mothers’ Pension Credit II, an increase in income support and a further increase in state pensions, child benefit and child tax credit. The total package of measures is intended to boost consumer spending by 1.8% in 2019.

UPSWING ACROSS EUROPE

The European economy also developed well in 2017 and the price-adjusted growth in the Eurozone was 2.6%. There was comparatively moderate growth in private consumer spending by a price-adjusted 1.7%. Consumer prices in the Eurozone remained below the European Central Bank target level despite rising energy costs. However, the inflation rate of 1.5% in 2017 was the highest level for five years.

The ifo-Institut expects the upswing to be more subdued in 2018. There will still be robust growth, but this will be affected by global trade disputes. The most dynamic economies will be in countries such as the Netherlands and Spain. There will still be weaker growth in the Italian economy. In a number of countries, the limited number of jobs will increasingly slow down economic growth, with the consequence that the Eurozone economy will grow by 2.1% in real terms. There will be real growth in consumer spending of 1.6% at an inflation rate of 1.8% in 2018.

Sentiment in the European retail markets remains positive. This is borne out by the European Commission’s Retail Sentiment Indicator (1.8 points in July 2018). The overall Economic Sentiment Indicator (ESI) – the indicator of economic confidence – currently shows a highly positive sentiment of 112.5 points.
The strongest relative growth in purchasing power over the last few years has been in the districts of Elbe-Elster (18.3%), Frankfurt an der Oder (18.0%) and Oberspreewald (17.5%). There was significantly weaker growth in districts in the state of Rheinland-Palatinate (Frankenthal (8.3%), Ludwigshafen (9.1%), Mainz-Bingen (9.9%)) and in the Ruhr region (Mülheim (9.5%) and Remscheid (10.1%)). The greatest factor affecting purchasing power is the employment situation: in 2017, the correlation between unemployment and purchasing power was -52.0%.

As an overall observation, purchasing powers in major cities and metropolitan regions are higher than those in rural regions despite the higher levels of unemployment in some areas.

According to a calculation by the Handelsverband Deutschland (HDE), nominal retail sales grew by 4.2% in 2017 to a total of €513.3 billion [see Figure 03]. This growth was due to increases in both the bricks-and-mortar and online retail segments. HDE expects lower growth of 2.0% in retail sales in 2018, to €523.6 billion. The proportion of private household consumption attributable to the retail sector fell back to 29.3% in 2018 after a short period of recovery over the past few years. This long-term trend is expected to continue over the next few years.

Sales in the individual retail segments have tended to develop at different rates in 2017, although the overall trend is positive. According to HDE calculations, there was particularly strong growth in retail sales of a price-adjusted 9.1% in the bicycle, bicycle parts and accessories segment. Sales in the consumer electronics segment rose by a similarly positive 7.9%. There was also growth in retail sales in the fashion segment with an increase of 6.6% in real terms. There was poorer performance in the watches and jewellery segment (-3.5%), books (-5.2%) and toys (-6.4%).

There was no change in the total sales area in Germany compared to the previous year: according to HDE, the total sales area was around 124.0 million sq m in both 2016 and 2017. This equates to a sales area of around 1.44 sq m per capita.

Average purchasing power per capita is around €23,320 across the whole of Germany.

Campus shopping centre in Lübeck, a property owned by the Hahn Group

03. Development of Turnover in German Retail
Figures in € billion

![Turnover chart]

Source: Federal Statistical Office, HDE
According to HDE, the online retail sales volume was €48.7 billion in 2017. This equates to an increase of around 10.2% compared to the previous year. According to forecasts by HDE, online retail will continue to develop positively. HDE forecasts a growth in turnover of 10.1% to €53.6 billion in 2018 [see Figure 04]. The turnover trend in this segment therefore remains intact, despite growth rates now tending to be in single figures.

While the proportion of the non-food retail segment has grown to 14%, the share in the food retail segment has remained at around 1% since 2017. This means that e-commerce is primarily a non-food sales channel.
CURRENT TRENDS IN THE PRINCIPAL RETAIL SEGMENTS

- Organic, convenience and fresh produce are driving food retail sales
- Superstores and drugstores are the most expansive operation types
- Significant increase in sales areas and turnovers in the drugstore segment
- Successful discount pricing strategy in the fashion segment
- Consumer electronics benefits from the high demand for smart phones

€229.7 BILLION spending in the food retail segment in 2017

3.5% more drugstores in 2017

4.7% nominal growth in turnover in the non-food sectors
2.1 INCREASED SPENDING ON FOOD AND DRUGSTORE PRODUCTS

Spending on food and drugstore products (including mail order spending) continued to grow in 2017, to reach €229.7 billion. According to information provided by the Federal Statistical Office, food retail sales in 2017 grew by a nominal 3.4% and 1.1% in real terms.

The growth in sales is due less to the amount of goods being purchased and more to the higher quality being demanded by consumers. The main reason for the positive trend was the growth in spending on organic and convenience goods and fresh produce from the fresh food counters and fruit and vegetable departments. The range of goods in the food retail segment is increasing consistently and becoming more specialised, and is increasingly complemented by new market segments such as superfoods, vegetarian and gluten and lactose-free products, which have been driving sales. At the same time, the consumer appears to be prepared to pay more for high-quality products.

ONLINE TRADE IS NOT GAINING MOMENTUM

According to statistics provided by HDE, online trade in the food and delicatessen segment was just 0.9% in 2017. In the drugstore product segment, at least 1.6% of sales were generated online [see Figure 05]. Compared to the non-food segment in which around 14% of sales are now generated online, e-commerce in the food segment remains marginalised.

05. Online Shares of Total Turnover in the Food and Drugstore Segments 2015 – 2017

Source: HDE

Reasons for this niche status include the fact that Germany has a very good infrastructure of high performance bricks-and-mortar retailers in the food and drugstore segments. The closest superstore with fresh produce is often right next to places of residence, work or on the way to or from work. The potential for online retail to gain market share with delivery services in the convenience sector is limited, and the higher costs of home deliveries of fresh produce (especially outside the major conurbations) is a disadvantage to online traders. There is also customer preference for a bricks-and-mortar retail experience and personal product selection, which is regularly confirmed by customer surveys.

Nonetheless, most of the important food and drugstore retailers are working on the digitalisation and development of their online stores. This trend was boosted by the market entry of AmazonFresh last year. However, Amazon is only operating its food delivery service in four cities at present (Potsdam, Berlin, Hamburg and Munich) and there is limited pressure to expand. The current focus is on the expansion of the existing locations and less on the establishment of new delivery zones.

Of the German food retailers, REWE operates the most highly developed delivery service across Germany and now offers the service in 75 towns and cities. According to research by the Lebensmittel Zeitung newspaper, the retailer makes annual online sales of around €130 million. In order to make the online business profitable, the minimum order was recently raised to €50 and future cost savings will be achieved by automated warehousing. EDEKA has entered the market in Berlin and Munich, inter alia via its Bringmeister delivery service which it acquired from Tengelmann, and real, delivers products ordered online in the metropolitan regions around the major cities. By contrast, Kaufland discontinued its online shop over the last year due to economic reasons. Globus has intended to enter the food delivery business in Leipzig in co-operation with the online platform food.de, but has delayed this for organisational reasons.

The food and drugstore retailers have also made progress with the development and testing of pick-up points. REWE now has 70 stores and real, around 13 stores with pick-up counters for products ordered online. EDEKA is also testing pick-up points at major railway stations in co-operation with Deutsche Bahn. dm is now testing pick-up points in three stores in Hamburg operated by the co-operation partner ParcelLoc and serviced by various logistics companies such as Hermes, DPD and GLS. Müller drugstore is improving its online shop and is planning to further develop its Click & Collect service in Germany. Plans for direct home delivery have been cancelled due to cost.
Superstores and Drugstores on Course for Further Expansion

The number of food and drugstores remained fairly consistent in 2017 compared to the previous year, at 41,750 properties (+ 0.1%), but the various operational formats have developed in different ways. Drugstores and superstores continued the trend from recent years and further expanded their market positioning. Supermarkets and hypermarkets remained on course for further consolidation and reduced the total number of stores, whilst remaining focused on opening new stores across Germany.

The expansion in the drugstore segment has been impressive: there has been significant growth of around 3.5% in the number of stores since 2016 to 4,785 [see Figure 06], which is also reflected in an increase to 8.4% of total sales area attributable to the food sector. The market coverage of the individual operators will tend to increase in future and competition for good locations will continue to intensify. Drugstore sales increased by around 8.1% in 2017, boosting their share of total sales in the segment to 9.4%. By contrast, the full-assortment food stores have experienced greater challenges, losing sales in this assortment category partly because they have been unable to compete with the pricing policy of the drugstore operators. By contrast, the discounters – chiefly ALDI and Lidl – have included more branded drugstore products in their assortments and are engaging in highly aggressive pricing promotions. They have also been able to increase their sales in this assortment category.

There was a similar highly positive growth in the number of stores in the large-format superstore segment over the past year. There are now around 3,991 stores (+ 1.9%) and the proportion of total sales area attributable to these has grown steadily to its current level of 25.6%. By contrast, the number of supermarkets is decreasing (- 1.2%, 0.4% of total sales area), as these are often being converted into larger properties and therefore move into an incrementally larger operation category to become superstores. Stores with sales areas of 1,500 to 5,000 sq m registered a slight increase in sales of around 1.3%, giving the category the second highest share of total food sales of 22.4% [see Figure 07]. Although the aggregate supermarket sales area fell between 2016 and 2017, their combined turnover increased (+4.6%) and their proportion of total sales increased slightly to 16%. It is likely that this is due to the positive effect of the takeover of the Tengelmann stores by EDEKA and REWE.

In 2017 there was a slight fall in the absolute number of stores in the largest sales area format, hypermarkets, to 642 stores, partly due to the resizing of the stores and subsequent recategorization as superstores, similar to the resizing of supermarkets. The share of total sales area in the food sector has also fallen to around 12.6%. Planning law restrictions have released little potential for new stores for a number of years, so most projects are restricted to the refurbishment of existing stores. The sales achieved by hypermarkets fell marginally by 0.1% between 2016 and 2017, reducing their share of total sales to 11.0%. However, there was a generally positive development in the case of operators such as Globus, Kaufland and large-format operator E-Center.

Discounter operators are still attempting to optimize their properties and sales areas. The number of stores rose again marginally by 0.2% to around 16,005. The share of total sales area remained stable at 34.2% [see Figure 08]. Sales in this segment grew by around 2.7% between 2016 and 2017, and their share of total sales remains the highest at 41.2%. This positive trend is partly due to the fact that discounters have adjusted their store concepts as a reaction to increasing competition from full-assortment retailers, and they have broadened the range of their assortments in particular in the areas of branded products, organic and convenience products and the fresh produce in order to target new customer groups.

Over 16,000 discounters achieve the highest aggregate sales in the sector

Source: bulwiengesa based on Tradedimensions
As market leader in the discounter segment, ALDI SÜD has adjusted over half of its store network of around 1,889 to its new store concept. The number of products has been increased by around 20% over the last few years and now also comprises branded and organic products and natural cosmetics. The fresh food and convenience assortment was extended and a new higher quality bakery concept introduced. This also requires a larger area: the optimal store now has a sales area of 1,400 sq m. These adjustments have contributed to ALDI SÜD’s increased turnover to around €16.7 billion (+ 4.1%) in 2017, which makes the Mühlheim-based company the undisputed best performing operator of all German food retailers with a space productivity of around €10,350/sq m of sales area. Press releases suggest that the company is considering the development of a small-format inner urban to go concept similar to REWE To Go. The idea is to offer primarily take-away products.

ALDI NORD achieved an increase in space productivity of 6.4% to around €6,650/sq m of sales area over the past year. The alteration and comprehensive refurbishment of the store network is still under way. The result is a slight decrease in the number of stores to 2,285. The significant investments in the store network, concept and staff has resulted in significantly increased costs, and ALDI NORD is currently also focusing on leveraging potential to increase space efficiency.

Lidl has also significantly refurbished and extended its stores over the past few years. The number of stores fell slightly to 3,178 in 2017, whilst the average sales area rose moderately by 1.4% year-on-year. With an average space productivity of €7,400/sq m of sales area, the Neckarsulm-based discounter was ahead of ALDI NORD and a significantly ahead of Netto, PENNY and NORMA. After the excellent positioning of ALDI with its extended assortment and store alterations, Lidl is planning a further significant increase in its assortment. In addition to organic and convenience products and drugstore articles, it also intends to add lactose-free and gluten-free foods to its total range of 3,500 individual products. This will mean that Lidl can better compete with full-assortment stores and even increase its turnover of around €20.4 billion from last year.
Lidl is also pursuing its expansion into the large, densely populated metropolitan regions with flexible store concepts, some of which comprise residential space constructed above. In Frankfurt, Lidl is constructing a store with a 1st floor sales area of around 1,700 sq m over a ground floor garage on a site half the size of that usually required. This new trend towards mixed-use properties is also being pursued by ALDI SÜD in Munich and Cologne, ALDI NORD in Berlin and NORMA in Nuremberg.

Following the successful integration of 51 Tengelmann stores, the Netto Marken-Discount chain belonging to EDEKA is the largest food discounter chain with around 4,188 stores [see Figure 09] and in 2017 was in third place in terms of turnover in this segment with around €13.9 billion. The space productivity of around €4,250/sq m of sales area is somewhat below that of PENNY. The new concept introduced around 18 months ago involves changes to a structured store format and state-of-the-art image. It is currently being attempted to improve the quality of the non-food assortment which accounts for just 3% of the operator’s total turnover and to leverage synergies with EDEKA.

**PENNY RE-ORGANISES REGIONAL STRUCTURE**

In 2017, the number of PENNY stores in Germany rose for the second successive year to around 2,188, and the REWE group’s discount channel achieved a turnover growth of 2.9% to around €7.97 billion. Space productivity also rose slightly to around €5,090/sq m of sales area. The rollout of the PENNY 2020 concept continued in 2017, involving the complete alteration of 850 stores to improve, for example, the fresh food assortment by the extension of cooled areas and the expansion of the company’s convenience brands PENNY to go and PENNY heat & eat. The reorganisation of the regional structures involving the reduction of the number of regional offices from 8 to 5 is expected to result in higher synergy effects and greater efficiency at their Cologne headquarters.

NORMA operates 1,310 stores across Germany, and both its turnover and average space productivity grew slightly (by 2.1%, and to €3,570/sq m of sales area, respectively). The discounter is pursuing its existing strategy as a hard pricing discounter and intends to make continual improvements to its store network, logistics structures and assortment.

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### 09. Business Development of Food Retailers 2017

<table>
<thead>
<tr>
<th>Company</th>
<th>Sales Channel (selection)</th>
<th>Stores</th>
<th>Sales Area</th>
<th>Space Productivity (gross)</th>
<th>Turnover</th>
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<tr>
<td></td>
<td>No.</td>
<td>Change since 2016</td>
<td>Ave. per store in sq m</td>
<td>Change since 2016</td>
<td>€/sq m</td>
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<tr>
<td>ALDI</td>
<td>ALDI NORD</td>
<td>2,285</td>
<td>-1.3 %</td>
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<td>0.7 %</td>
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<tr>
<td></td>
<td>ALDI SÜD</td>
<td>1,889</td>
<td>0.9 %</td>
<td>850</td>
<td>2.3 %</td>
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<tr>
<td>EDEKA</td>
<td>NETTO</td>
<td>4,188</td>
<td>1.0 %</td>
<td>780</td>
<td>0.6 %</td>
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<td>EDEKA</td>
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<td>E-Center</td>
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<td>MARKTKAUF</td>
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<td>METRO Group</td>
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<td>6,930</td>
<td>-0.7 %</td>
</tr>
<tr>
<td>REWE Group</td>
<td>PENNY</td>
<td>2,188</td>
<td>1.4 %</td>
<td>720</td>
<td>0.5 %</td>
</tr>
<tr>
<td></td>
<td>REWE</td>
<td>3,445</td>
<td>2.1 %</td>
<td>1,490</td>
<td>0.8 %</td>
</tr>
<tr>
<td></td>
<td>REWE Center*</td>
<td>36</td>
<td>-2.7 %</td>
<td>6,400</td>
<td>-0.1 %</td>
</tr>
<tr>
<td>Schwarz Group</td>
<td>Lidl</td>
<td>3,178</td>
<td>-0.2 %</td>
<td>870</td>
<td>1.4 %</td>
</tr>
<tr>
<td></td>
<td>Kaufland</td>
<td>658</td>
<td>0.3 %</td>
<td>4,340</td>
<td>0.2 %</td>
</tr>
<tr>
<td>Bartels-Langness</td>
<td>famila Nordost</td>
<td>86</td>
<td>2.4 %</td>
<td>3,630</td>
<td>0.3 %</td>
</tr>
<tr>
<td>Bünting</td>
<td>famila Nordwest</td>
<td>20</td>
<td>-4.8 %</td>
<td>4,810</td>
<td>-1.3 %</td>
</tr>
<tr>
<td>Globus</td>
<td>Globus</td>
<td>46</td>
<td>-2.1 %</td>
<td>11,710</td>
<td>0.3 %</td>
</tr>
<tr>
<td>NORMA</td>
<td>NORMA</td>
<td>1,310</td>
<td>0.7 %</td>
<td>720</td>
<td>0.7 %</td>
</tr>
</tbody>
</table>

Source: bulwiengesa, Tradedimensions

* Only selected hypermarkets with sales areas >5,000 sq m
The full-assortment segment was headed up by Hamburg-based EDEKA in 2017. The whole group of companies – in particular the independent retailers – achieved a turnover growth of 4.4% to around €38.6 billion between 2016 and 2017. This was due in part to the integration of 338 Kaiser’s and Tengelmann stores into the EDEKA store network over the past year. Both the regional company in southern Bavaria and EDEKA Rhein-Ruhr benefited from the takeover of 172 and 46 new stores respectively, resulting in a significant growth in turnover. The smaller Tengelmann stores with sales areas of between 500 sq m and 800 sq m were transformed into the new small-format concept EDEKA Express by EDEKA Südwest.

The co-operative will also carry out investment projects in Germany costing around €2 billion in 2018, in addition to the approx. €1.7 billion spent last year on improving store concepts and optimising logistics processes and production operations. The focus is on fresh foods such as meat, fish, cheese and fruit and vegetables in order to improve market positioning and differentiation against the discounters.

By contrast, the number of stores operating under the banners EDEKA, E-aktiv and E-Neukauf has fallen to a current network of around 3,708. This resulted in a marginal fall in space productivity to around €4,480/sq m of sales area. In 2017, EDEKA increased the number of superstores with an average area of around 3,190 sq m operating under the E-Center flag to 437 stores (+4.0%), and the turnover of this sales channel rose to €6.3 billion. The hypermarket format Marktkauf was not as successful as the other concepts over the last year, with six stores closing and its turnover falling by around 3%.

Despite the robust competition, REWE has also developed very well over the past year and continued to strengthen its position as the second largest full-assortment chain. Total turnover in Germany was around €21.5 billion in 2017 from all stores including REWE To Go, REWE City, Nahkauf, REWE, REWE Center and other wholesale partners (excluding the discounter, DIY and tourist segments). Focusing on the very large format REWE Center stores comprising sales areas in excess of 5,000 sq m, space productivity increased slightly by 1.4% to €4,020/sq m of sales area last year. REWE’s overall success factors include improved price positioning and an increased focus on regional and local products, from convenience and organic produce to own brands. The REWE Group’s concept also includes an improvement in overall quality with very high specification interior store design.

Furthermore, around half of the approx. 60 Kaiser’s-Tengelmann stores taken over in Berlin have been converted to REWE stores. Sales in these stores have risen significantly by between 15% and 30%, and in some cases by up to 40%, due to the more discounted pricing policy. It is impossible for the headquarters in Cologne to estimate when the remaining former Kaiser’s stores will be converted, as lease contract negotiations are still ongoing, and stores will have to be completely refurbished due to significant deferred investment in some cases.

However the REWE Group has had some problems with the takeover of Coop and the subsequent alterations and integration of the loss-making Sky stores in the state of Schleswig-Holstein. The newly formed co-operative company Supermärkte Nord made a loss in the state of Schleswig-Holstein. The newly formed co-operative company Supermärkte Nord made a loss in excess of €10 million in 2017, which was due to high alteration costs and logistic and supply problems.

The Schwarz Group improved its turnover to around €38.6 billion (including Lidl) last year, which included a turnover of around €14.1 billion (+0.7%) generated by the large-format Kaufland stores. Average space productivity in its 658 German stores rose slightly to €4,940/sq m of sales area, the second highest of all hypermarket chains. Kaufland has also carried out a major refurbishment programme in around 350 stores over the past two years, with a further 100 to follow. The focus is on the improvement of the meat counter to improve customer numbers and generate sales, and the optimisation of the assortment, whereby the company’s own brand segment will be improved and extended.

Turnovers in the real, – stores operated by the Metro Group fell by 1.3% in 2017 and space productivity in the 284 stores also fell but only by 0.2% to around €4,240/sq m of sales area. The store network was solidified by one store last year. Similar to the pilot store in Krefeld which was converted to the market hall concept in 2016, other stores will be rolled out in future, for example in Braunschweig and Bielefeld. The planned investments will focus on reducing the non-food areas and increasing the fresh foods and restaurant areas.

350 KAUFLAND STORES REFURBISHED IN THE LAST TWO YEARS

The Schwarz Group improved its turnover to around €38.6 billion (including Lidl) last year, which included a turnover of around €14.1 billion (+0.7%) generated by the large-format Kaufland stores. Average space productivity in its 658 German stores rose slightly to €4,940/sq m of sales area, the second highest of all hypermarket chains. Kaufland has also carried out a major refurbishment programme in around 350 stores over the past two years, with a further 100 to follow. The focus is on the improvement of the meat counter to improve customer numbers and generate sales, and the optimisation of the assortment, whereby the company’s own brand segment will be improved and extended.

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10. Top 5 Food Retailers in Germany 2017

<table>
<thead>
<tr>
<th>Turner</th>
<th>Turnover growth since 2016 in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDEKA</td>
<td>57.16 4.4</td>
</tr>
<tr>
<td>Schwarz Group</td>
<td>38.61 4.5</td>
</tr>
<tr>
<td>REWE Group</td>
<td>34.84 3.2</td>
</tr>
<tr>
<td>ALDI Group incl. C&amp;C</td>
<td>29.55 4.2</td>
</tr>
<tr>
<td>METRO Group incl. C&amp;C</td>
<td>13.62 -2.6</td>
</tr>
</tbody>
</table>

Source: bulwiengesa, Tradedimensions
The company Globus, which operates the largest hypermarkets in Germany with an average sales area of 11,710 sq m, again generated turnover of around €3.3 billion in 2017 despite a reduction in the number of stores (-2.1%). It also achieved the highest space productivity in this sector with around €6,160/sq m of sales area, proving that it is also possible to operate large areas of non-food assortments very successfully.

Meanwhile, food retailers in particular have made great progress in integrating this aspect into and around their sales space, with the intention of improving customer numbers and their length of stay in the stores, and to demonstrate their fresh food capabilities. A recent study by the EHI Retail Institute shows that around €5.2 billion were generated last year by the restaurants located in food stores alone. The range comprises take-away products, fresh convenience foods to meals in bakery cafes and show-cooking eateries in the sales area itself. The high-quality and state-of-the-art ambience offers the feel-good factor. The best-known examples include the market hall concept introduced by real, – in Krefeld, the Globus store in Rüsselsheim and the Italian restaurant Eataly in Munich, and the Foodtempel food court operated by EDEKA Zurheide im Crown in Düsseldorf city centre with 11 eateries and seating for a total of 380.

The restaurant sector is becoming ever more important, not only in shopping centres and city centre retail destinations, but also in convenience retail centres and retail parks. Many operators are reacting to the overall trend in Germany towards eating out and the fact that regular meal times are becoming a thing of the past.

Restaurants are becoming increasingly important in convenience retail centres and retail parks.
NO END TO THE BOOM IN THE DRUGSTORE SEGMENT

According to calculations by bulwiengesa and Trade­dimensions, turnover in the German drugstore segment continued to grow to around €17.7 billion in 2017, of which most was generated by the Big 4 chains dm, ROSSMANN, Müller and BUDNIKOWSKY.

The operator dm remained No. 1 amongst the German drugstore chains with turnover of around €7.75 billion in 2017, followed by ROSSMANN with around €6.4 billion [see Figure 11]. dm’s turnover grew by around 3.4% over the last year and ROSSMANN’s turnover grew even more strongly by around 4.6%. The third largest chain Müller is much smaller than the two market leaders and generated turnover of around €3.0 billion in 2017. Its 0.2% year-on-year growth in turnover was also lower than the Big 2. The much smaller Hamburg-based drugstore chain BUDNIKOWSKY generated a turnover of around €493 million in 2017, equating to +1.3% year-on-year.

There are currently around 4,785 drugstores across Germany, of which ROSSMANN operates the largest store network with around 2,100 shops. dm operates 1,916 stores and expanded its network by the addition of 65 further stores in 2017, which is stronger growth than ROSSMANN with 55 new openings. Müller added just three new stores to its network, whilst BUDNIKOWSKY operates one store fewer compared to the previous year.

ROSSMANN and dm have increased their average store size slightly compared to the previous year, whereby the average dm store size of around 600 sq m is larger than ROSSMANN’s with just 570 sq m. However, ROSSMANN is moving ever closer to the market leader dm. Furthermore, ROSSMANN is planning to open around 105 new stores in Germany and to continue to roll out a new sales concept. The objective is, with few exceptions, to operate stores with sales areas in excess of 750 sq m in future.

11. Top 4 Drugstore Companies in Germany 2017

<table>
<thead>
<tr>
<th>No. of stores</th>
<th>Turnover in € billion</th>
<th>Turnover growth since 2016 in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>dm</td>
<td>1,916</td>
<td>7.75</td>
</tr>
<tr>
<td>ROSSMANN</td>
<td>2,104</td>
<td>6.41</td>
</tr>
<tr>
<td>Müller</td>
<td>529</td>
<td>3.02</td>
</tr>
<tr>
<td>BUDNIKOWSKY</td>
<td>182</td>
<td>0.49</td>
</tr>
</tbody>
</table>

Source: bulwiengesa, Tradedimensions

DM ACHIEVES THE HIGHEST SPACE PRODUCTIVITY

By far the best performing drugstore chain in terms of space productivity (turnover in €/sq m sales area) is again dm with around €6,720/sq m of sales area [see Figure 12], albeit this is a slight fall compared to 2016. This is followed by ROSSMANN with space productivity of around €5,390/sq m. Budnikowsky’s 182 stores achieved space productivity of around €5,260/sq m in 2017.
Last placed Müller achieved €4,490/sq m, but it should be pointed out that its average store size is a much larger format (average of 1,270 sq m sales area per store) than the other drugstores.

Competitive pressure amongst drugstore operators and also in the food retail segment has significantly intensified and this situation is expected to worsen. In contrast to ROSSMANN with its discount pricing policy, dm consistently adjusts its assortment to improve its positioning against the competition. Amongst other things, the organic assortment is being extended by the inclusion of well-known brands and own brands. Its own brand Balea, comprising exclusive items and design-orientated product lines, is intended to make the chain independent of industry brands and secure greater margins. Since the summer of 2018, the market leading drugstore has also started to test fresh baby foods manufactured by the start-up Yamo in a number of stores, and for the first time offers cooled food products in its assortment. dm is also planning to sell uncooled charcuterie and dairy products.

The strategy of second-placed drugstore chain ROSSMANN is to offer more exclusive goods, and its marketing activities with new sales campaigns, events and influencers is intended to attract more young customers. The organic sector is being expanded by its own brand enerBio and the sale of Alnatura products, although it should be pointed out that its main competitor dm has discontinued sales of this brand.

The founding of the joint venture between BUDNIKOWSKY and EDEKA Minden-Hannover in May 2018 is intended to generate improved procurement terms and it is hoped that the Hamburg-based family-operated company can position itself better at a time of increasing competitive pressure from dm and ROSSMANN. It is planned to open the first shops under the name Budni in locations outside the company’s core area. This year’s new openings are planned in Berlin, where the stores will still be operated and managed by BUDNIKOWSKY itself. There are confirmed plans to expand with the retail warehouse format in Minden-Hannover, one of the seven EDEKA regions. The Minden office is currently focusing on around six stores, but the first store is likely to be opened in Bremerhaven.

2.2 TURNOVER GROWTH IN NON-FOOD RETAIL

According to calculations by bulwiengesa, retail sales in the non-food segment (including mail order sales) was around €295 billion in 2017 [see Figure 13]. According to information from the Federal Statistical Office, the non-food retail segment achieved nominal turnover growth of 4.7% and real growth of 3.2% in 2017.

ONLINE SHARE OF 14% IN THE NON-FOOD SEGMENT IN 2017

According to calculations by HDE, the share of turnover in the non-food segment attributable to online sales was 14.0% in 2017 compared to 13.3% in 2016. There was a particularly high proportion of online sales in the consumer electronics and fashion sectors, with 28.7% and 25.6% respectively. Online sales were also above the 20% mark in the leisure & hobby and office & stationery segments at 24.3% and 21.5% respectively. Meanwhile, there appears to be limits to the growth in share of turnover generated by online sales. This has fallen significantly especially in the pioneer segments of the e-commerce age over the past few years.

![13. Shares of Assortment-Related Turnovers in the Non-Food Segment in 2017](chart.png)

<table>
<thead>
<tr>
<th>Category</th>
<th>Share of Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothing/textiles</td>
<td>20.9%</td>
</tr>
<tr>
<td>Shoes/leather goods</td>
<td>15.9%</td>
</tr>
<tr>
<td>Watches/jewellery</td>
<td>4.0%</td>
</tr>
<tr>
<td>Electronics/entertainment</td>
<td>1.8%</td>
</tr>
<tr>
<td>Multi-media/photo-</td>
<td>14.4%</td>
</tr>
<tr>
<td>graphic/opticians</td>
<td></td>
</tr>
<tr>
<td>Books/stationery</td>
<td>4.8%</td>
</tr>
<tr>
<td>Toys/sports/camping</td>
<td>3.6%</td>
</tr>
<tr>
<td>DIY stores/garden centres</td>
<td></td>
</tr>
<tr>
<td>Car supplies/pet supplies</td>
<td></td>
</tr>
<tr>
<td>Furniture/household goods</td>
<td></td>
</tr>
<tr>
<td>and home textiles</td>
<td></td>
</tr>
<tr>
<td>Household appliances</td>
<td>11.9%</td>
</tr>
</tbody>
</table>

Source: bulwiengesa
The lowest proportion of turnover generated online with 11.9% is in the household goods and furniture sector and 5.2% in DIY & garden centres [see Figure 14]. This is partly due to these assortments being less suitable for reasonably priced parcel distribution. Furniture, household goods, garden supplies and small hardware products are not typically goods which customers order online, as the goods can generally be well displayed and offered in both local stores and retail warehouses.

14. Shares of Total Turnover Generated Online by Segment in 2016 and 2017
Figures in %

<table>
<thead>
<tr>
<th>Segment</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer electronics &amp; electronics</td>
<td>28.7</td>
<td>26.1</td>
</tr>
<tr>
<td>Fashion &amp; accessories</td>
<td>25.6</td>
<td>23.5</td>
</tr>
<tr>
<td>Jewellery &amp; watches</td>
<td>16.4</td>
<td>14.8</td>
</tr>
<tr>
<td>Leisure &amp; hobby</td>
<td>24.3</td>
<td>22.7</td>
</tr>
<tr>
<td>Office &amp; stationery</td>
<td>21.5</td>
<td>19.8</td>
</tr>
<tr>
<td>Health &amp; wellness</td>
<td>12.3</td>
<td>11.6</td>
</tr>
<tr>
<td>Household goods &amp; furniture</td>
<td>11.9</td>
<td>10.7</td>
</tr>
<tr>
<td>DIY &amp; garden centres</td>
<td>5.2</td>
<td>4.6</td>
</tr>
</tbody>
</table>

Source: HDE

FASHION RETAIL DEFIES ADVERSE WEATHER CONDITIONS

According to calculations by bulwiengesa, there was a slight increase in turnover of 0.8% in the German fashion retail segment in 2017, which closed the year with a total market volume of €61.7 billion. With a share of turnover of almost 21%, the textile segment was the most important business sector in non-food retail. The sector generally describes 2017 as a difficult year: the warm, unstable and severe weather conditions meant that there was less seasonal trade and retailers were increasingly forced to reduce prices. This also resulted in four out of every 10 fashion articles being sold at reduced prices. Fewer customers were visiting town centres in 2017. Possible reasons include the increase in online sales or customers researching goods online then making targeted purchases at particular shops. Online sales appeared to be an important driver of growth in the textile segment.

The business year was ambivalent for bricks-and-mortar retailers: vertically-organised fashion retailers (amongst others Inditex, H&M and Primark) achieved average turnover growth of up to 2%, thanks to investments in their online businesses. Independent boutiques and outfitters increased their average turnover by just 1%.

Basler, René Lezard and Biba were three more well-known German fashion names to register for insolvency during 2017. Following a number of attempts to save the company, Biba is expected to cease operation of all its 130 stores at the end of 2018. Meanwhile, the outfitter Wöhrl has reported initial profits around one year after its relaunch subsequent to insolvency. After the recent closure of four stores, the new owner Christian Greiner has focused on the operation of the 30 remaining outfitters and is also introducing new assortments and own brands.

There are a number of new concepts entering the German market. For example, the lifestyle concept Anthropologie opened its first shop at Königsallee 78 in Düsseldorf in May 2018. The main focus of the Urban Outfitters subsidiary is designer homeware, ladies’ fashion and shoes. Anthropologie places great importance on the shopping experience: aspects such as shop fit-out and assortment compilation are tailored individually to the precise location. Themed display islands serve to offer inspiration. According to information provided by the company, it is considering opening stores in Hamburg and Munich in addition to Düsseldorf.
OTTO CEASES PRODUCTION OF ITS PRINTED CATALOGUE AFTER 68 YEARS

The market leading online and mail order retailer Otto (including the sales channels Frankonia, Sportscheck and Bonprix) exceeded its target turnover and closed the 2017 business year with a turnover growth of 6.7%. In July 2018, the company announced that it would cease production of its printed Otto catalogue at the end of the year after 68 years. 95% of all Otto orders are already made online, which means that the mail order business by which the Otto family made its billion-Euro fortune will soon be history. The Hamburg-based company will now concentrate on the multi-channel segment, including the important growth driver About You. The online platform benefits greatly from its level of personalisation and emotionality and has been making significant turnover growth since it was founded in 2014. Furthermore, the company is also investing in the expansion of its e-commerce platform About You Cloud. Retailers can integrate the online infrastructure developed by About You into their online shop systems as a service.

The Swedish chain store operator H&M closed the business year with a fall in turnover of 3% and an annual turnover of around €3.8 billion. Compared with the company’s turnover in other countries, the German network produced the worst performance after the Netherlands (-7%), which according to the company was mainly due to the bricks-and-mortar business generated by the main brand H&M. The growing spectrum of own brands including COS, & Other Stories, Monki, Weekday and more recently Arket, has been developing well and will be complemented in future by the off-price concept Afound. Afound will offer other well-known premium brands in addition to the company’s own brands. In terms of the store portfolio, including the 463 shops located in Germany mainly operated as principal brand H&M, the company announced the review and possible closure of unprofitable stores. The first quarter will see three store closures in addition to one new opening. It is also intended to negotiate new leases with terms of three years or at least a break option after three years.

C&A ACHIEVES GROWTH IN TURNOVER UNDER NEW EUROPEAN DIRECTOR

The restructuring projects carried out by fashion retail chain C&A under its new head of Europe Alain Caparros are delivering initial successes after the end of the last business year: the company’s European turnover grew by around 4% compared to 2016, including growth of 3.3% in the German market. Furthermore, the retailer expanded its online presence which is now available in 11 countries. C&A now operates stores in four countries where it had no presence previously: Denmark, Sweden, Finland and Greece. It is proposed to refurbish around 10% of its European store network by the end of 2018, including a general optimisation of the assortment.

Whilst the fashion segment generally views the last year as difficult, not least because of the weather conditions, the Spanish retailer Inditex benefited from increased demand for parkas and knit products. As the fashion retailer produces a large proportion of its collection in Europe, it benefits from very short reaction times to weather conditions and fashion trends. The effective company turnover was €25.33 billion, which equates to growth of 8.7% compared to 2016.

The company does not publish turnover figures on a country-by-country basis. Estimates show that the German turnover in the business year 2017/18 was €870 million. The principal contributor to this with a turnover of around €700 million is again the brand Zara. It can be seen that the company tends to focus on large-format stores. Projects for the last business year included the refurbishment and extension of a total of 266 stores.
According to information provided by the company, the brand Miller&Monroe is targeted at ladies and gents in the 40+ age group and will offer designer fashion by Cecil, Street One and Tom Tailor in addition to the company’s own brands. This is also a market entry into Germany for the Dutch group.

Charles Vögele
- Semipone Retail AG takes over the Swiss chain store operator in 2016
- German shops sold to Victory and Dreams Holding in April 2018
- Rebranding of around 200 stores to Miller&Monroe
- Target group: ladies and gents in the 40+ age group

STRONG GROWTH IN THE DISCOUNT SEGMENT

The popularity of fashion discounters continued to grow over the past year: according to an analysis of the fashion sector, turnovers grew by around 23% in the discount segment in the period 2011 to 2016 and are developing faster than the market as a whole. Their vertical operation structure means that companies such as Primark can manage the entire value creation chain from production to sales. In addition to cost benefits, they benefit from their short reaction times, are able to adjust quickly to fashion trends and can bring the products into the shops promptly. At the end of the last business year at the end of January, the textile discounter Takko was highly satisfied with its turnover growth of 1.7% (space-adjusted) to €1.12 billion. The retailer is thereby one of the most successful discounters in the European fashion sector. The company is focusing on expanding its store network in the business year 2018 and is planning to open 80 new stores in Germany and abroad in the period until the end of the year. Takko is successively rolling out its new small-format concept Takko Express during 2018, and the sales areas of between 150 sq m and 500 sq m are much smaller than the existing stores to date. The concept is highly suited to urban district locations and in towns with populations of between 5,000 and 15,000.

In addition to the well-known fashion discounters, the classic food discounters have been rolling out their own fashion collections over the last few years and are pushing their previously lesser known own brands, including via designer co-operations and branded collections. One example is Lidl’s premium label Esmera which was rolled out in Hamburg’s luxury goods location Neuer Wall in the form of a pop-up store as early as 2016, and the company is now testing a new sportswear collection. The discounter is reacting to its rival ALDI, which is testing a children’s clothing range at the same time. For the first time, both companies ALDI NORD and ALDI SÜD are working together on a fashion line and are attempting to take advantage of the synergies relating to procurement and marketing.

DECATHLON IS EXPANDING AND EXPERIMENTING WITH NEW FORMATS

The French sports chain store retailer Decathlon is continuing its growth trajectory and achieved a turnover growth of 29% to around €333.2 million in Germany in 2017. The retailer also opened 15 new stores in Germany over the past year, and eight further openings are planned for 2018. Decathlon also operates with smaller areas in city centres and no longer exclusively in retail warehouse locations. For example, it will roll out its city concept Connect Store at Berlin central railway station in the summer of 2018, offering a compact branded shopping experience over an area of around 300 sq m. Tablets offer access to the online shop, and customers can pick up their online orders at the “Daily Pick-Up Zones”. The Berlin Connect Store is already the third shop under this banner, following stores in Munich (around 220 sq m) and Stuttgart (around 50 sq m).
also continuing to expand their online presence and are
additional footwear sector. Large chain store operators are
acceleration of the consolidation process in the tradi -
mark, H&M and Zara) are also factors resulting in the
offered by international fashion chains (including Pri -
regular sales and the overall rise in the volume of shoes
pansion activity amongst large chain store operators,
competitive pressure within the sector. The strong ex -
was driven by online sales, which the Bundesverband
des deutschen Schuheinzelhandels e.V. (BDSE e. V. – As-
sociation of the German Footwear Retail Trade) estima-
tes has risen by around 7% compared to the previous
year. However, the proportion of shoes sold online has
not risen as rapidly as over the past few years. Bricks-
and-mortar retail is still the most important sales
channel, with four out of every five pairs of shoes still
purchased in-store.

Zalando is the leading retailer amongst the so-cal-
ded pure online players and is not alone in generating
competitive pressure within the sector. The strong ex-
pansion activity amongst large chain store operators,
regular sales and the overall rise in the volume of shoes
offered by international fashion chains (including Pri-
mark, H&EM and Zara) are also factors resulting in the
acceleration of the consolidation process in the tradi-
tional footwear sector. Large chain store operators are
also continuing to expand their online presence and are
investing in omni-channel strategies.

The German footwear sector achieved a slight turnover
growth of 1.5% in 2017. According to calculations by
bulwiengesa, turnover was around €11.7 billion. This

With a staff of just under 16,000 and 1,463 stores,
DEICHMANN produced a turnover of around €2.3 bil-
lion in 2017 (+5.1% year-on-year). According to infor-
mation provided by the company, the omni-channel
business operated by the shoe retail pioneer contribu-
ted significantly to this performance and DEICHMANN
has continually invested in this channel since its roll
out in 2000. Also, the new store fit-out concepts and
the fair weather have contributed to the year-on-year
growth in shoe sales of around 1.5% in 2017. The com-
pany plans to open 33 more stores in 2018. Furthemo-
re, 128 stores will be refurbished to the current shop
design over the course of the year.

The Osnabrück-based HR group is active in a number
of business lines: in addition to footwear retail with
around 400 shops in Germany, the family-operated
company is also involved in the management of system
space as shop-in-shop concepts and e-commerce. Its
online presence was expanded in 2018 by the acquisi-
tion of shares in Surf4shoes.de. Since September 2017,
the subsidiary Reno took over parts of C&A’s shoe re-
tail area in the form of a concession model. While
the focus is now on Reno own brands, the company will
also develop dedicated assortments for C&A in future.

In terms of shoe retail, Reno continues to concentrate
on realigned strategies, including the consolidation of
its store network and the streamlining of its logistics
operation with its relocation to Thaleischweiler-Fro-
schen in Rheinland-Palatinate.

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on realigned strategies, including the consolidation of
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schen in Rheinland-Palatinate.

The Polish footwear chain CCC achieved a growth in
German turnover to around €60.8 million in 2017. The
company operates over 70 shops in Germany and is
currently testing a new store concept including at-
tractive display islands and LED screens with a clear
focus on product staging in the higher priced category.
The concept was premiered in the Centro Oberhausen
shopping centre in 2017. It is planned to open more
stores including the newly opened flagship store in
Tautentienstrasse in Berlin, not far from the KaDeWe
department store in June 2018, offering its premium
concept over an area of around 1,700 sq m. CCC is also
currently reviewing the in-store roll out of its online
shop eobuwie, which was previously tested over an
area of around 300 sq m in the company’s home city
of Wroclaw (Magnolia Park shopping centre). The aim
of the concept is the transformation of the functionali-
ty of the online shop into the sales areas, which means
that no goods will be displayed but instead selected
via digital touch screens and the product is sent to the
sales point from the adjoining warehouse.

Schuhe24.de and Schuhe.de are niche platforms by
which smaller SME shoe retailers offer products via a
targeted online presence. Schuhe24.de sells shoes for
580 retailers and doubled its turnover to €26 million in
2017. Schuhe.de’s turnover was even higher at around
€30 million. The platform is part of the ANWR group
of companies which is a co-operative association with
around 6,000 member retailers from various sectors.
The group is currently evaluating a complete market
relaunch for its multi-label franchise concept Quick
Schuh, for which it intends a phased roll-out across the
German market in 2018. Quick Schuh will attempt to
regain customer attention with a new shop design and
an improvement of its brand portfolio. The first store
opened over an area of around 450 sq m in the City
Galerie Aschaffenbourg in early 2018. Some 40 stores
are due to be converted to the new concept by the end
of the first quarter of 2019.

**Marginal turnover growth in the footwear segment**

<table>
<thead>
<tr>
<th>Deichmann</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Turnover in 2017: around €2.3 billion</td>
</tr>
<tr>
<td>- 1,463 stores</td>
</tr>
<tr>
<td>- 16,000 staff</td>
</tr>
<tr>
<td>- 33 new stores planned to open in 2018</td>
</tr>
<tr>
<td>- Planned modernisation of 128 stores</td>
</tr>
</tbody>
</table>

**Polish CCC-group tests innovative store concept eobuwie**

Bricks-and-mortar footwear sales remain the most important sales
channel: 4 out of every 5 pairs of
shoes are purchased offline
DIY STORE OPERATORS BENEFIT FROM REFURBISHMENTS AND NEW-BUILD ACTIVITY

The gross turnover in the DIY sector was €18.45 billion in 2017. This equates to a slight year-on-year growth of 1.1% (space adjusted 0.7%), which fell short of the previous years’ growth rate. It is expected that turnover in the DIY segment in its wider sense, i.e. turnover from DIY stores, specialist retail, small retail formats and mail order with DIY core assortments will grow by 1.5% to around €19.9 billion in 2018. This growth is due to the continuing trend towards private refurbishment works and residential construction, which has been the driver of sales in building chemicals/building materials (€1.83 billion) and plumbing/heating (€1.78 billion) assortments since 2017. There was less demand in the garden furniture and decoration products segments, which suffered a year-on-year downturn in turnover of 7.1% between April and June 2017, due in part to the poor weather in the early part of the year (snow and late frost). Even if the sector is dependent upon in-store advice and is therefore deeply rooted in the bricks-and-mortar segment, online trade in the DIY segment has been developing positively. Turnover has recently been growing in double digit percentages and the turnover of €3.23 billion equates to a year-on-year growth of 14.9%. Investments in 2017 were in the optimisation of the existing store networks and the development of in-house online strategies.

The turnovers of the twenty largest German operators developed positively in 2017. Whist the total sales area grew to 14.13 million sq m, space productivity remained stable for most operators. The average sales area per DIY store rose slightly to 6,270 sq m (previous year: 6,255 sq m). OBI remained the undisputed market leader in 2017 with an increase in turnover of 1.2% to €3.81 billion of recognition, familiarity, satisfaction and loyalty, the DIY operator scores well with a branding index of 96 (by comparison, the No. 2 operator BAUHAUS scores 91), which shows that OBI is the best known DIY brand in Germany. In line with other developments in the sector, OBI has also been investing in its online store but has also been focusing on the development of its services. In addition to the traditional services such as the hire of equipment and trailers, there has been continual focus on new services such as drive-in sales offering the possibility to load up immediately with heavy building materials. The operator opened three new stores in 2017, leading to a fall in average space productivity across the store network to €1,377/sq m p.a. Three further new openings are planned for the business year 2018/19.

BAUHAUS reported an increase in turnover of 1.4% compared to 2016. The growth of its non-German business by 2.3% was significantly better than the marginal growth of 0.8% it is domestic market. With turnover of €3.68 billion, BAUHAUS remains the second largest German DIY retailer after OBI and its space productivity of €2,052/sq m p.a. [see Figure 15] places it amongst the Top 3 DIY operators after HORNBACK and Globus/Hela.
HAGEBAU INTEGRATES THE ENTIRE SUBSIDIARY ZEUS

As part of the structural optimisation of the company hagebau KG, the subsidiary ZEUS GmbH & Co. KG which had previously focused on procurement, marketing and sales etc, was fully integrated into hagebau KG at the beginning of 2018. The two sales channels hagebaumarkt and WERKERS WELT developed well in 2017, producing a turnover of around €2.70 billion, which equates to a year-on-year growth of 2.8% [see Figure 16]. The company appeared satisfied above all with the small-format concept WERKERS WELT, which achieved year-on-year net turnover growth of 5.6%. The retailer grew by 11 stores, not least due to the merger of four other companies into the hagebau group, and is now the largest network in Germany with 488 stores. The merger had a positive effect on total sales area, and hagebau’s current area of 2.16 billion sq m puts it in second place behind market leader OBI. Space productivity fell marginally to €1,249/sq m p.a.

The REWE Group’s DIY business closed 2017 with turnover growth of 1.5% and an annual gross turnover of around €2.65 billion. The recently modernised sales channel toom performed significantly better than its discounter subsidiary B1 which compensated for the latter’s slight fall in turnover. Space productivity across both DIY store types remained consistent at €1,231/sq m p.a. The refurbishment projects from the last few years continued into 2018. Store relocations continued, including the move of the store in Prisdorf to neighbouring Pinneberg in the state of Schleswig-Holstein. Three further new openings are planned for 2018.

With a turnover of around €2.43 billion for 2017, HORBACH also achieved a slight turnover growth of 1.3% compared to 2016. Due to the poor scope for an extension and refurbishment, the company closed one existing store in Hanau in October 2017 but opened a new store with a sales area of around 8,000 sq m in Halle (Saale) in November 2017. Consequently, the number of stores remained unchanged, whilst the sales area increased marginally. The DIY retailer again achieved the highest space productivity of €2,310/sq m p.a. In terms of new openings, HORBACH has a medium-term plan to replace closed existing stores with new ones, so the number of DIY stores in Germany is likely to remain largely consistent over the next few years. The company is also investing over €60 million in the development of its online sales channels. One example of a new concept is the ability to order online and collect the goods at the pick-up point in the chosen store within a period of two hours free of extra charge.

16. Top 5 DIY Firms in Germany in 2017

<table>
<thead>
<tr>
<th>No. of stores</th>
<th>Turnover € billion</th>
<th>Turnover growth since 2016 in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBI</td>
<td>352</td>
<td>3.81</td>
</tr>
<tr>
<td>BAUHAUS</td>
<td>154</td>
<td>3.68</td>
</tr>
<tr>
<td>hagebau</td>
<td>488</td>
<td>2.71</td>
</tr>
<tr>
<td>toom &amp; B1</td>
<td>331</td>
<td>2.65</td>
</tr>
<tr>
<td>HORBACH</td>
<td>98</td>
<td>2.43</td>
</tr>
</tbody>
</table>

Sources: bulwiengesa, Dähne Verlag
Consumer electronics was an important growth driver in the non-food segment in 2017. Although it had become more subdued, according to calculations by bul-wiengesa there was a significant growth in turnover of 4.3% compared to 2016 to around €42.59 billion. This was principally due to the continued high demand for smart phones and entertainment electronics.

According to the Bundesverband Technik des Einzelhandels e.V. (BVT – Federal Association of Technical Retailers), turnover in the traditional consumer electronics segment rose to around €10 billion (+8.2%) in 2017, while turnover in the private telecommunications segment rose to €10.9 billion (+5.2%) over the past year.

The market has changed significantly over the past few years due to digitalisation and the networking of electronic devices. The large number of new and trendy product groups and services appearing on the German market including wearables such as fitness wrist bands, electronic leisure equipment such as drones, virtual reality and streaming services are tending to supersede traditional products. In particular, smartphones have now replaced the functionality of other product groups.

Moreover, the implementation of new technologies drives demand for established products. Flat screen TVs and internet-compatible smart TVs currently contribute the largest proportion of turnover in the consumer electronics segment. According to BVT, the turnover generated by these devices increased significantly by 5.6% to around €4.2 billion in 2017. The use spectrum of the classic TV is extended by additional interfaces such as WiFi and USB connections.

In view of the dynamic growth mentioned above, it is expected that turnovers in the German consumer electronics segment will continue to grow in 2018/19.

The company CECONOMY is the former Metro Group’s consumer electronics division and since July 2017 has been a self-contained stock exchange-listed AG with its brands MediaMarkt and Saturn which produced a turnover of around €10.57 billion over the last business year (+1.9% compared to 2016 space-adjusted for Ceconomy). According to the company, the strong online businesses of MediaMarkt and Saturn contributed significantly to this positive overall performance. There was no improvement in the recently more subdued purely mail order retailer Redcoon despite restructuring in 2017; it was completely integrated into the platform mediamarkt.de in May 2018 and will be further developed over the course of 2018, including a larger assortment.

As part of its multi-channel strategy, MediaMarkt has now rolled out its former purely online rental model “Miet Mich” in its stores. Customers can now test out products in selected stores and take them home immediately for an agreed rental period. With a portfolio of 429 stores in Germany, the company is pursuing a targeted expansion policy but also operates smaller sales areas. In addition, MediaMarkt is currently testing two new store concepts in the Netherlands which are heavily targeted towards the retail experience. Products are displayed in themed clusters, such as show cooking events or a barista demonstrating coffee specialities. At the same time, the store becomes a play-ground for the customers, in which the newest technical applications can be tested to their fullest extent. It is already planned to roll out this concept in Germany.

Saturn recently opened a new flagship store on Hohe Strasse in Cologne in May 2018. The shop extends to a sales area of around 6,500 sq m over five storeys where the electronics retailer offers a retail experience in the form of 3D printers and robot staff on the one hand and the interconnection of online and offline sales channels on the other. This includes a Click & Collect service and an express service by which products are delivered from the shop to the home on the same day as purchase.

There will be further growth in the German consumer electronics segment in 2018/19.
Germany’s second largest consumer electronics retailer Expert is a co-operation of around 200 legally independent businesses purchasing and selling goods via the association, and achieved a turnover growth of 1.9% in the business year 2016/17 (31st March) to €2.12 billion. According to information provided by the company, the turnover growth was driven by various large-format marketing initiatives including the 50 year anniversary of Expert in Europe. The implementation of its decentralised online shop commenced in 2017 and had a positive effect. Expert built up its total sales area by 7,000 sq m to 455,000 sq m. Over the past year, takeovers of the group included six Telepoint stores with a staff of 130.

**EXPERT BENEFITS FROM ANNIVERSARY MARKETING**

One year after the repositioning under the campaign motto “For your best home in the world”, EURONICS had achieved turnover growth of 3.3% by the end of 2017. The long-term branding strategy focused on the extension of its core business and the further development of its cross-channel strategy. By contrast, in June 2018 EURONICS announced the re-closure of its traditional store in Cham in the Oberpfalz region which was only reopened in May 2017 after a period of poor business development and a lack of suitably qualified staff. Together with the central organisation, the specialist retailer EURONICS intends to develop further as a cross-channel pilot store.

**MEDIMAX PLANS CO-OPERATION WITH NOTEBOOKSBILLIGER.DE**

The EP Electronic Partner group of companies which comprises EP, MEDIMAX and comteam plus other smaller shareholdings achieved a group turnover growth of 2.6% in 2017 to €1.31 billion. Drivers of the positive development included the widely diversified quality initiative and the restructuring and rationalising of the sales operation. As part of this project, EP also split from a number of business partners. It is rumoured that there may be a collaboration between the MEDIMAX brand and the former purely online retailer notebooksbilliger.de during 2018. The further development of its MEDIMAX online business has proven that the reservation function is an attractive footfall generator for its 130 stores.

**17. Top 4 Consumer Electronics Companies in Germany 2017**

<table>
<thead>
<tr>
<th>No. of stores</th>
<th>Turnover in € billion</th>
<th>Turnover growth since 2016 in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>CECONOMY (Media Markt / Saturn)</td>
<td>1,053</td>
<td>10.57</td>
</tr>
<tr>
<td>Expert</td>
<td>432</td>
<td>2.12*</td>
</tr>
<tr>
<td>Euronics **</td>
<td>1,498</td>
<td>1.47</td>
</tr>
<tr>
<td>EP Partner</td>
<td>1,330</td>
<td>1.31*</td>
</tr>
</tbody>
</table>

Sources: bulwiengesa, company reports

* Group turnover
** Centrally compiled turnover figures
An established location in the prime retail pitch, the anchor on many pedestrian zones, the principal retailer in the district, large-format shopping magnet in the high street – these are just some of the features which made department stores attractive investment properties for many long-hold investors. But the decades of falling turnovers and loss of importance of the established department store operators beginning with the takeovers of Hertie by Karstadt and of Horten by Kaufhof in the early 1990s followed by the takeover of Karstadt by the Signa group and the sale of Galeria Kaufhof to the Canadian company HBC have resulted in more critical opinions of department stores as retail properties.

The latest data on the two remaining department store operators in Germany show an ambivalent picture. Since the takeover by the Canadian company HBC in 2015, Galeria Kaufhof has been in transformation. In addition to the closure of a number of stores, the company has announced that it will not extend the leases on the properties in Hof and Solingen when they expire in early 2019. The optimistic start to the expansion phase with the designer outlet concept Saks off 5th is currently on the back burner. The parent company HBC is currently concentrating on adjusting the assortment and the display of products in eight stores.

By contrast, Karstadt has developed positively of late and posted a marginal increase in turnover of €1.4 million for the first time since 2006, even if this is actually generated from lettings of space. In addition to the stabilisation of turnover, the company intends to develop its online business to produce around 10% of turnover by 2020. Karstadt has taken the first steps with the opening of a digital store in the Tegel district of Berlin (pedestrian zone on Gorkistrasse). According to information provided by the company, the pilot concept will combine the bricks-and-mortar and online stores over an area of around 8,000 sq m. A similar concept is planned for Berlin’s Gropius Passagen shopping centre. With the takeover of the insolvent Berlin-based start-up Kisura, Karstadt now also offers an in-house online style consultancy. The possible merger of Karstadt and Galeria Kaufhof into a German department store plc under discussion for many years may be a step closer after the signing of a declaration of intent between the Signa group and HBC in July 2018. To what extent the joint venture between the two companies will materialise remains to be seen. There will be intensive discussions regarding the department stores operated by the two groups which are likely to reconsider the city centres where both companies operate stores in order to review options for the re-use of those multi-storey high street properties.
The crisis involving the previously dominant German department store companies has been continuing for over 20 years and clouds the view of the successful transformation of the department store as a retail segment to the profitably managed multi-label stores now present in many German city centres from Flensburg to Passau and Aachen to Dresden. These stores were often started as retail properties or department stores and have developed into current local heroes in their respective cities by a high degree of customer focus, deeper rather than broader assortment compilation concentrating on fashion, positioned with fashion-related complementary sectors such as shoes and leather goods, bags, perfumes, stationery, household accessories and decorative goods as well as (fine) foods and various eateries. Instead of the regional or national chain store format, these often succeed by concentrating on local presence with the fit-out of the main store and possibly via other complementary city centre shops. The presentation of the products and the creation of attractive shopping experiences, including the addition of customer services by qualified sales staff, the creation of break out zones, regular customer events and customer information, are the core focus of the business model for these concepts.

Breuninger in Stuttgart is one of the best-known examples of this and the company has pursued a targeted expansion in the major German cities such as its latest new opening in the Kö-Bogen in Düsseldorf in 2013. It is also regularly in discussion as the possible operator of attractive city centre stores in Hamburg. Since the beginning of 2018, L+T has shown that bricks-and-mortar retail can motivate customer footfall with extraordinary concepts and special features with the opening of its new city centre sports equipment store in Osnabrück, including an experience in the main store in the form of a surfing wave, and is thereby able to counteract the trend towards online retail in the highly competitive fashion and sports segments. Other examples of successful multi-label formats include Reischmann in Ravensburg and Ulm, Engelhorn in Mannheim, Konen, Lodenfrey and Beck in Munich, Hagemeyer in Minden, Kaiser in Freiburg, CJ Schmidt in Husum and Bantl in Schorndorf.
Innovative technologies are everywhere and now affect the bricks-and-mortar retail segment more than ever. Artificial intelligence, virtual reality and robotics are just some of the digital topics which will bolster bricks-and-mortar shop concepts, further develop omni-channel concepts and even create totally new retail business models in-store. Forward-looking retailers in particular are focusing on solutions to make their bricks-and-mortar business smarter, i.e. to combine it with digital technologies whereby the improved networking results in significant and potentially sustainable added value, particularly for the customers. The customers must not only be assisted by in-store digitalisation, but actually fascinated by it.

Nowadays, retailers are faced with the challenge of examining a range of potential technologies for their businesses, to assess them and to implement them as appropriate. The purpose of this article is to introduce selected technologies which are particularly relevant to the digital customer experience in the sales area. This will be supported by practical examples showing the successful integration in the bricks-and-mortar retail segment.

In addition to the traditional retail companies, the central innovation drivers in the bricks-and-mortar retail segment of the future are the specialised start-ups which are dynamically, and in some cases totally rethinking retail with their technical solutions. In co-operation with the established market players, these newcomers are helping to redefine bricks-and-mortar retail (for a comprehensive overview of the bricks-and-mortar retail tech start-ups see pages 54/55 in the HAHN Retail Real Estate Report 2017 / 2018).

// DIGITAL EXPERIENCE ALONG THE CUSTOMER JOURNEY

The digital customer experience in the sales area comprises the customer’s route from the first point of contact with the sales area, via the check-out, to the last point of contact; the complete customer journey. Figure 18 shows the relevant digital innovations at the customer’s individual points of contact along the customer journey from the book “Innovationen im Handel. Innovationstechnologien und digitale Strategien für Einzelhändler” (Innovations in retail. Innovative technologies and digital strategies for retailers) written by the innovation profiler Alexander Pinker.
SPECIAL ARTICLE: DIGITALISATION IN THE BRICKS-AND-MORTAR RETAIL SEGMENT

CAR PARKS CAN DO MORE! MOBILITY POTENTIAL FOR THE FUTURE

The customer’s first contact with the sales area is mostly in the car park. This is not always a pleasant experience as the search for a parking space and possibly also the payment method can be time-consuming. There are a number of digital solutions here: for example, the start-up SO NAH integrates sensors into the existing infrastructure and directs customers to the nearest available parking space. By contrast, Evo-park offers a cash-free parking experience involving a car parking card with RFID chip which is kept in the car and allows the customer to drive in and out of participating car parks. The length of stay is computed digitally and the customer pays the parking charges at the end of the month.

In the past, the car park at the retail destination played no other role than simply parking a car, but this will change over the next few years as the car park becomes the platform for new mobility solutions from car-sharing models to autonomous cars and electric cars. The car park will become the “electric filling station of the future”, used by e-bikes, e-motorcycles and e-scooters to electric cars. This enables retailers to attract customers by offering a shopping experience starting in the car park, as the charging process then offers the driver sufficient time to go shopping. Charging stations are not only used for charging vehicles but can also be used innovatively in conjunction with digital technologies as shown by the two start-ups Spark Horizon and Volta Charging.

In addition to the individual technological solutions outlined below there are already wide-ranging concepts aimed to serve the entire retail process. Many innovative retail concepts, some of which are still at an early stage such as Amazon Go, wanzl connect and Smart Retail, and young start-ups such as AiFi and Checkout Technologies reveal the potential opening up to the bricks-and-mortar retail segment in connection with digital technologies – even if many concepts still need to establish their potential in practice.

Source: Pinker 2018, adapted by the Hahn Group
Augmented reality/virtual reality (AR & VR) allows the customer to experience products interactively on their mobile device and thereby gather inspiration for further purchases, above all in the fashion sector. In the bricks-and-mortar segment, AR supports for example omni-channel concepts by which customers can experience additional digital information in-store via devices such as smartphones, tablets, smart glasses and AR headsets. The customers receive similar comparable information, evaluations and information as they would online but are also in the position to examine, test and try out the products in the traditional way. This means that items of clothing can be combined using data glasses or a virtual changing room and can be tried out with other clothes. For example, Intersport offers corresponding VR experiences in its Future Stores, where it is possible to try out sports products such as rowing machines and other equipment in a virtual environment and obtain an immediate impression of using the real products.

From Classic Shopping Trolley to Intelligent Smart Cart

In the past, the shopping trolley has served only one purpose, to transport the goods to the check-out and then to the car. The first fully functioning prototypes of so-called smart carts are already available in the market, and these are able to perform tasks such as scanning products, navigating aisles and self-check-out for the customer. It is already possible to transform shopping trolleys to smart carts via simple adjustments as the start-up Pickeru has already demonstrated. This involves the installation of a mobile device on the trolley. A mobile app automatically recognises products when they are placed in the trolley. This technology enables self-check-out and the purchases are paid for digitally via the Pickeru app.

The Journey Itself is the Reward – Location-Based Services and Interactive Advertising

Bricks-and-mortar retailers can provide their customers with more information channels with the help of digital technologies. It is possible to offer customers location-based services via their mobile device, by which they can interact with their immediate environment. OSRAM Einstone’s intelligent beacon technology offers location-based services such as digital customer cards, presenting the consumers with individually tailored and positioned offers along the customer journey. Favendo helps customers with a solution directing the shopper from the current position to the location of particular products in-store. Indoor navigation such as those offered by start-ups indoo.rs, Oriient and WEGZWEI help the customer with precise directions and orientation within the stores and buildings. The start-up Advertima is working with the help of its Advertima Engine artificial intelligence model, which analyses the location and the person as a human does, and decides which offers and advertising to present to the shopper.

In addition, interactive advertising space can be used for direct selling purposes. The start-up POSeidon has developed a 24/7 shopping window, whereby products can be advertised and purchased by customers outside normal shopping hours. The interactive display window works via a touch screen which becomes the point-of-sale. This enables the customer to select the required products which are scanned via individual QR codes and collected in the smart phone shopping basket. Payment is made via the mobile check-out.

Product Experience and Advice in a New World

Augmented reality/virtual reality (AR & VR) allows the customer to experience products interactively on their mobile device and thereby gather inspiration for further purchases, above all in the fashion sector. In the bricks-and-mortar segment, AR supports for example omni-channel concepts by which customers can experience additional digital information in-store via devices such as smart phones, tablets, smart glasses and AR headsets. The customers receive similar comparable information, evaluations and information as they would online but are also in the position to examine, test and try out the products in the traditional way.

This means that items of clothing can be combined using data glasses or a virtual changing room and can be tried out with other clothes. For example, Intersport offers corresponding VR experiences in its Future Stores, where it is possible to try out sports products such as rowing machines and other equipment in a virtual environment and obtain an immediate impression of using the real products.
Retailers are also making greater use of robotics, i.e. humanoid robots called Pepper, Paul or NAO. They assume the customer service role in the store, e.g. in stores operated by MediaSaturn, EDEKA and the Stuttgart shopping centre Das Gerber. First experiences show that these advisors are generally accepted by customers in the case of simple tasks. By contrast, the start-up LiSA combines the bricks-and-mortar and digital world via a so-called live video shopping advisory assistant. This solution comprises a physical portable platform which is fitted with a camera and monitor and can be directed to all points on the sales floor. The customer can use the retailer’s website to contact the in-store advisor and become familiar with the entire in-store assortment.

The start-up Phizzard combines a smart changing room with a virtual racking system. The changing room features an intuitively operated mirror which shows the customer product information and enables enquiries into stock, other sizes and cross-selling products. The added value of this solution means that potential customers do not have to search for the right size in-store, which may not be in stock in any case. Moreover, the customer can remain in the changing room and view the assortment from there in peace. Any items not in stock can be ordered directly from there.

// IN-STORE CHECK-OUT 4.0

A central function of these digital solutions is the method of check-out and payment. Recent check-out concepts allow customers to check out and scan and pay for goods themselves. Such terminals are at an early stage: the development shows that the payment process has become more digital in many areas over the last few years. The principal aim is a smooth and quick conclusion to the purchase to avoid waiting times, if possible contactless and without using cash and after automatic scanning of products.

Innovative start-up solutions can shorten the in-store check-out process by combining traditional and new technologies and combine a number of functions in one solution. For example, the start-up Rapitag has developed and patented product security tags for clothing which provide classic theft protection, but with check-out and payment functions. The result is that the smart phone becomes the individual point-of-sale by which the customer pays for the products by mobile phone and is thereafter allowed to remove the security tag. Similar solutions are also offered by start-ups such as Mishipay and NoQ.

“Do you collect loyalty points?” – this question brings up the issue of the optimisation of the traditional process of selecting, presenting and manually scanning innumerable customer loyalty cards for the customer. A so-called mobile wallet app called Stocard stores all loyalty cards digitally, so the purchase itself is sufficient to recognise the cards and collect points offered by the various retailers. In future, it will also be possible to pay for goods directly via Stocard. Google is also looking at an innovation for the processing of payments: Google Pay. The added value of this solution means that products can be paid for directly via the smartphone without the customer having to enter payment details. Bank cards can be saved down in Google Pay for the purposes of making payments. It also offers the possibility to save and pay with customer loyalty cards and gift cards. Similar to the Stocard system, customer loyalty cards can be used when paying by Google Pay and can also be used in conjunction with special offers.
Google Pay means that products can be paid for directly via the smartphone without the customer having to enter payment details in-store.

Digital Click & Collect solutions make it possible to order goods online and to pick them up in-store or at a central pick-up point. Online shops such as Amazon and the logistics company DHL have already recognised the potential to create package stations at popular retail destinations. This means that customers can combine in-store shopping with the collection of online purchases. Start-ups such as Emmasbox offer cooled collection points for groceries purchased online, which can be positioned in supermarkets and other highly frequented places such as railway stations. Above all, these offer customers flexibility in terms of timing: they can collect any time, even outside normal shopping hours. And any customer unable to transport purchases can have these delivered home via digital delivery services such as Fliit and tiramizoo. For example, customers can purchase products in-store and then order a courier to deliver the purchases to their homes on the same day.

The technologies and practical examples shown here highlight the many applications and added value offered by digital innovations in the bricks-and-mortar retail segment. New technologies mean that the customer can experience the purchase of products in-store by way of new dimensions along the entire customer journey. Even if digital solutions still have to establish themselves over the long term in the bricks-and-mortar retail segment, they show the great potential to position the processes in a future-proof manner in reaction to ever accelerating changes in customer preferences and to improve the customer experience. In the bricks-and-mortar retail segment of the future it will become necessary to combine the human factor and physical proximity with value-added digital solutions in-store – a combination which offers the customer an unrivalled and unique retail experience – today and in the decades to come.
03 RETAIL REAL ESTATE INVESTMENT MARKET

- High transaction volume on the retail investment market
- High demand at a time of scarce supply
- Increasing scarcity of product – even in the retail warehouse segment
- German investors increase activity in their home market
- Yield compression continues across the board
The German retail investment market is one of the world’s most important target markets amongst institutional investors because of its size, in combination with the superb key economic indicators. Warehouses and logistics properties were in third place with a share of almost 15%. This investment volume rose to a new record level of over €8.3 billion. In addition to the increasing importance of retail logistics due to online shopping, the asset class has benefited above all from the restructuring of the supply chain in the Industry 4.0 sector. Favourable performance indicators in the hotel sector have resulted in high demand and high transaction volume in this asset class. Around €4 billion or approx. 7% of total volume was attributable to hotel properties, which were in fourth place in the German commercial property investment market. This was followed by alternative investment products such as healthcare and social properties, student housing and data centres, which are attracting increasing attention from investors.

Office properties remained the most sought-after real estate segment amongst investors in 2017. The transaction volume of €28.1 billion in this asset class equated to almost half the total volume (49%). The moderate level of new-build completions, rising rents and falling vacancies have had a positive effect on the office market. As in previous years, the retail segment was in second place with a volume of just under €14.1 billion or around 25% of total German investment volume.

The high transaction volume from 2017 continued during the first half of 2018. There was a total investment volume of around €25.3 billion in the German commercial property investment market during the first six months of the year, which is almost at the same level as the previous year’s strong performance of €25.9 billion. However, the marginal decrease of 2% compared to the same period the previous year does not herald a downturn. Investor interest in commercial property in Germany remains high and will be confirmed by the high transaction volume and yield compression. Office properties were again the most popular real estate segment with an investment volume of €12.1 billion and a share of 48% of the total German commercial property investment market, followed by retail properties in second place with an investment volume of €4.3 billion and a share of 17%.

The German retail investment market is still benefiting from the excellent overall indicators in the real estate economy. Robust economic growth, low unemployment, increases in household incomes and the upbeat consumer sentiment continue to be supported by the relatively low interest rate environment. Germany is also very popular with globally active real estate investors as a secure and stable investment destination, thanks to the many large investment markets and affluent second-tier cities and regional centres. This trend is supported by the general increase in geopolitical uncertainty in many regions of the world.

Around €14.1 billion was invested in German retail properties during 2017 and is the third best performance since records began in 2005 after the two exceptional years 2006 with an investment volume of around €18 billion and 2015 with €18.1 billion. This equates to an increase of around 10% above the previous year’s total of €12.8 billion and is well above the 10-year average of €9.7 billion. It also indicates extremely dynamic growth over the last year. In addition to the excellent start to the year with an investment volume of €3.6 billion in the first quarter alone, the very strong final quarter with a transaction volume of almost €5 billion contributed much to this superb overall performance.

Around €25.3 billion was invested in commercial properties in the first half of 2018.
The German retail investment market was not quite able to live up to the previous year’s good performance over the first six months of 2018. After a transaction volume of almost €2.1 billion in the first quarter, the second quarter volume of €2.3 billion consolidated at around the same level [see Figure 19]. The total amount invested in German retail property at mid-year was therefore around €4.3 billion, which equates to 17% of the total commercial real estate investment market. This is a decrease of 28% compared to the previous year’s very good performance of €6.1 billion and is 9% below the long-term average of first half years of €4.8 billion. Although the German retail investment market was unable to match the figures of the preceding years at mid-year, there is still a high level of activity. Retail properties are still very popular with investors. The lack of supply of Core properties and the more extensive sale processes in the case of properties with value enhancement potential are currently tending to limit higher levels of transaction volume.

The share of total transaction volume attributable to portfolio transactions rose significantly over the full year 2017 compared to the previous year. While a total of just under €4.8 billion or 38% was attributable to portfolios in 2016, this had grown to €7.1 billion or 51% of retail transaction volume in 2017. Just under €3.1 billion or 62% was attributable to portfolio transactions in the particularly strong final quarter. Three high-volume portfolio sales each contributed well above €0.5 billion to the high portfolio balance in the final quarter of 2017 including the Primus Portfolio, a package of premium properties in major German cities, the Castello Portfolio comprising 13 Karstadt department stores and the takeover of WCM by TLG Immobilien. While international investors had been particularly active in the portfolio transaction segment of the German retail investment market in the past, domestic investors dominated the market in 2017 with increased purchases of retail properties in the form of portfolio transactions.

By contrast, over the first half of 2018 retail properties were predominantly purchased by way of single asset transactions, which is reflected in the low overall portfolio share of 33% at mid-year compared to 45% over the same period the previous year. Many purchases were completed in the final quarter of last year, which contributed to the dynamic year-end rally in 2017, while the placement and investor approach in the case of new and attractive retail property portfolios tends to take time. However, the number of projects currently in the pipeline means it is likely that the share attributable to portfolios will tend to rise during the course of the year. In addition to the various smaller retail warehouse packages which are typically traded in the form of portfolios, the first half of 2018 was characterised by the increased trade in portfolios of high street retail properties such as the 18-property Boulevard Portfolio by BMO Real Estate Partner and the Pure Portfolio comprising 15 retail properties purchased by Switzerland-based Swiss Life from DIC – Deutsche Immobilien Chancen.
RETAIL REAL ESTATE INVESTMENT MARKET

MUNICH IS THE TOP INVESTMENT DESTINATION AMONGST THE BIG 5 CITIES

In terms of the spatial distribution of investment activity, the continual shift of the share attributable to the Top 5 cities Berlin, Düsseldorf, Frankfurt, Hamburg and Munich towards the regional centres and second-tier cities was halted in 2017. After a continual downturn from 35% in 2013 to 25% in 2014, 19% in 2015 and 17% in 2016, their combined share settled at 18% in 2017 (€2.6 billion), which is a similar level to the previous year. Amongst the Top 5 cities, the bulk of the retail property transaction volume was attributable to the investment markets in Munich with €918 million, Hamburg with €778 million and Berlin with €565 million. At almost €1.4 billion, over half of all investment volume in the Top 5 cities was invested in city centre retail properties, followed by retail warehouses and retail parks which contributed €630 million or a share of 24%.

The principal investor focus was Berlin. The investment volume of €479 million in what is by far Germany’s largest city is more than half the total combined volume of all Top 5 cities. In terms of the retail use types, the preferred investment sector in the Top 5 cities was high street retail properties with a total transaction volume of €413 million. Despite the increase in both share of total volume and the absolute transaction volume, these figures do not necessarily point to an overall trend reversal. As before, the supply of highly sought-after Core properties is extremely limited. Despite the high demand and the increase in prices, property owners have been less inclined to sell their well-positioned retail properties even in view of such high pressure to invest.

The very limited availability of products in the Core segment in Germany’s top locations and the hike in prices in those cities meant that the other locations – above all the attractive regional centres and second-tier cities with more appealing yield profiles – contributed a large proportion of total investment volume. In absolute terms, €11.5 billion or 82% was invested outside the top cities, which is an increase of €843 million compared to the previous year [see Figure 20]. Almost half of all investment volume was invested in the retail warehouse and retail park segment with over €5.5 billion or 48% of total volume. This was followed by shopping centres and city centre retail properties with an investment volume of around €2.5 billion each and shares of 22%.

The share of national transaction volume attributable to the Top 5 investment centres was against trend in the first two quarters of 2018. In the first half of 2018, the majority of the total retail transaction volume of €3.4 billion or 78% was invested outside the major investment centres. The most sought-after sector amongst investors was again the retail warehouse and retail park segment with a total investment volume of €1.7 billion and a share of 50%, followed by prime located retail properties with €1.2 billion and a share of 36%. The majority of investment volume amounting to over €2 billion or 60% was in the form of single asset transactions. The largest single asset transactions were in attractive regional centres and second-tier cities such as the purchase of the Maximilian Center at Bonn central railway station which is currently under construction by the Bayerische Versorgungskammer, the purchase of the Allee-Center in Leipzig-Grünau by EQT Real Estate and the Florentinum in the central retail street in Dresden by Swiss Life.

The share of national transaction volume attributable to the Top 5 investment centres over the first two quarters of 2018 reversed the long-term downward trend. €955 million was invested in retail properties in the Top 5 German cities during the first six months of the year, which equates to a share of 22% of total volume. The volume invested in the Top 5 locations was 69% or €389 million higher than the same period the previous year, although the national transaction volume was below the same period the previous year.

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20. Retail Property Transaction Volume by Location

Figures in %

Source: CBRE

Top 5
Rest of Germany

2017 2018
18.5 22.0
81.5 78.0

The share of national transaction volume attributable to the Top 5 investment centres was against trend in the first two quarters of 2018.
3.2 RETAIL WAREHOUSES AND RETAIL PARKS ARE THE MOST POPULAR RETAIL ASSET CLASSES

The retail warehouse and retail park segment was the most highly sought-after asset class in the German retail real estate market in 2017. The investment volume in this sector rose by a significant 17% to €6.2 billion, and its share of total retail transaction volume of 44% was a marginal increase on the 41% share from 2016 [see Figure 21]. In addition to the retail parks and convenience retail centres, which are characterised by an agglomeration of a number of shops, this asset class also includes various stand-alone property types from the food and non-food sectors such as hypermarkets, superstores and supermarkets and discounters, as well as DIY stores, furniture stores, specialist stores and cash & carry stores. A detailed examination of the investment volumes shows that food anchored retail parks and convenience retail centres are the most sought-after property type. A total of €4.1 billion or around two-thirds of all investment volume was invested in these two sectors.

Food discounters and DIY stores followed in second and third places with volumes of €490 million and €470 million respectively and equal shares of around 8%. The various retail warehouse and retail park properties were mostly purchased in the form of portfolio transactions. The share of this segment attributable to portfolio deals was 65%, significantly higher than the proportion of just 51% of all German retail properties. There were around a dozen large-scale portfolio sales with volumes in excess of €100 million, including a portfolio of 85 properties purchased by Patrizia comprising mostly convenience retail centres and the pan-European portfolio of Homeparks sold by IKEA to Pradera Limited which contributed significantly to the good overall performance in this segment. It was mostly German investors, with a share of 80%, which purchased retail warehouses and retail parks.

The trade in retail warehouses and retail parks continued to dominate the retail investment market in the first six months of 2018 with a volume of just under €1.8 billion and a share of 41% of total volume. Despite the low overall transaction volume, the share attributable to this segment fell only slightly compared to the share of 43% in the same period the previous year. A detailed analysis shows that it was particularly the retail park sector which contributed most to the good performance in this asset class with a volume of over €1.1 billion and a share of around 62%. The generally smaller-scale convenience retail centres with an investment volume of €187 million and a share of around 10%. It is worth noting that the share attributable to portfolios was relatively low at around 40% over the first six months of 2018.

Deals included the purchases of the Erft Karree in Kerpen near Cologne by Momentum Real Estate and the Warnow Park in Rostock by Corestate Capital [see Figure 22]. It was still mainly German investors who purchased retail warehouses and retail parks. They accounted for €1.3 billion or three quarters (75%) of the total transaction volume.
## 22. Selected Retail Investments in 2017 and H1 2018

<table>
<thead>
<tr>
<th>Name</th>
<th>Investment type</th>
<th>No. of properties</th>
<th>Property type</th>
<th>Location</th>
<th>Half year</th>
<th>Purchase price in € million (approximate, part estimated)</th>
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<th>Seller</th>
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<td>H2 2017</td>
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<td>Habona Invest</td>
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<td>15</td>
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Source: CBRE, * purchase price for the entire portfolio, otherwise German assets only, ** Assets located abroad

** Assets located abroad

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**Half year**

- H2 2017
- H1 2017
- H2 2017
- H1 2018
- H2 2017
- H1 2018
- H2 2017
- H2 2017
- H2 2017
- H2 2017
- H2 2017
- H2 2017
- H2 2017
- H2 2017
- H2 2017
- H2 2017
- H1 2018
- H1 2018
- H1 2018
- H1 2018
- H1 2018
- H1 2018
Increasing Scarcity of Retail Parks

The great popularity of retail warehouse properties is increasingly limiting the availability of suitable products. The scarcity observed for a long period in the shopping centre and high street retail property segments is now also noticeable in the retail park segment and is resulting in excess demand and available capital in the sector. While the number of new shopping centre developments has been at a low level for many years, there are now far fewer new retail park developments. Planning law restrictions and residents’ petitions are making the development of new projects more difficult. The fact that the retail warehouse segment is the most traded asset class is due not least to the availability of segment products, from DIY stores to discounters and hybrid retail parks.

The city centre retail property segment is in second place in the first half of 2018. With a transaction volume of €1.6 billion and a share of 38%, the trade in prime located retail properties grew both in absolute (+€680 million) and relative terms (+22%) compared to the previous year. Properties worth over €1 billion or around two-thirds of all high street retail properties were purchased in the form of single asset transactions, including the Salamander Haus in Stuttgart purchased by LaSalle Investment Management for around €73 million and the Karstadt department store in Bad Homburg vor der Höhe purchased by BMO Real Estate.

By contrast, the volume invested in shopping centres across Germany fell significantly from €3.9 billion in 2016 to €2.9 billion in 2017. A total of 20% of all transaction volume was attributable to this property type, which is in third place amongst the German retail property sectors.

Four shopping centres changed hands in Germany’s top locations in 2017 including the Neukölln Arcaden in Berlin, the MIRA in Munich and the DuMont-Carré in Cologne, while the bulk of shopping centre deals took place outside the major investment centres. A total of just under €2.5 billion was invested in shopping centres outside Germany’s top locations, including the Nova Eventis centre near Leipzig, the RheinRuhrZentrum in Mülheim an der Ruhr and the Luisenforum in Wiesbaden. The properties were mostly purchased in the form of single asset transactions. It is evident in the shopping centre segment that well-established Core shopping centres rarely come onto the market nowadays and that investors are increasingly looking at opportunities offering value enhancement potential.

Just €2.9 billion was invested in shopping centres in 2017

Domestic Investors Dominate The German Market

Domestic investors remain highly active in their home market. Over the full year 2017, German investors accounted for €8.9 billion which equates to around 63% [see Figure 23] of total volume in the German retail investment market and is a marginal increase year-on-year (61%). Despite the high demand from international investors, these were less successful because of the lack of particularly suitable Core properties on the market and the increasing numbers of German investors who are under pressure to invest and are now prepared to compete on pricing to secure what properties are available.

23. Retail Property Investment Volume by Purchaser Nationality

![Figure 23: Retail Property Investment Volume by Purchaser Nationality](source: CBRE)
As expected, foreign investors preferred to purchase higher volume retail properties. International purchasers invested an average volume of around €22 million per German retail property, while the average purchase by German investors was only around €12 million. Of the foreign investors which purchased German retail properties, Austrian investors were the most active group. They purchased properties worth just under €1.3 billion or almost 10% of total volume, which was due to a large extent to the purchase of the Primus portfolio by Signa Holding in the fourth quarter of 2017. Notable are the €1.2 billion or 8% of transactions by UK-based investors and the approx. €1 billion or 7% purchased by US-based investors. By contrast, the ratio between national and international investors is more balanced on the sell side. German investors disposed of retail properties worth €6.6 billion over the past year, equating to a share of 47%. The most active sellers of German retail properties were UK-based investors (17%), followed by US-based investors (11%) and Israeli and Swedish investors (6% each).

Increased activity amongst German investors in the first half of 2018

German investors became more active over the first half of 2018, purchasing retail properties with a total volume of €3.2 billion, which equates to a share of 74%. This is a 13% increase compared to the same period the previous year. US-based investors were the most active foreign group with a share of 9%, followed by UK-based and Swedish investors with shares of 5% each. On the sell side, the market was dominated by international investors with €2.4 billion or a share of 55%. The most active group on the sell side were UK-based investors who sold properties worth over €1 billion or just under one quarter of total volume (24%). Trailing some way behind were Israeli investors who sold properties worth just under €400 million (9%).

3.3 NET INITIAL YIELDS CONTINUE TO FALL

The continued high demand for German retail properties has resulted in a noticeable fall in yields in almost all sectors of the German retail investment market. In particular, yields for retail warehouse and retail park properties – which continue to be highly popular with investors who are otherwise faced with limited availability of suitable products – have fallen significantly over the past few months. Yields for high street retail properties have also fallen significantly [see Figure 24].

In the city centre retail property segment, the average prime yield in the Top 5 cities continued to fall to a level of 3.00% at mid-year 2018, which is 31 bps lower than the same period the previous year. There are significant variances of up to 60 bps between the top locations. As the most expensive location for top class prime located retail properties, the yield in Munich was 2.6%, whilst the net initial yield for similar properties in Düsseldorf’s principal retail pitch was 3.2%. Between these are Berlin and Frankfurt with yields of 3.1% and Hamburg with a prime yield of 3.0%.

24. Development of Prime Yields for Retail Properties

Figures in %

Source: CBRE, "Average net initial yields for Berlin, Düsseldorf, Frankfurt, Hamburg und Munich"
Due to the increasing scarcity of supply, net initial yields for top class retail parks with long-term leases fell to 4.5% at mid-year 2018, which equates to a fall of 50 bps compared to the same period the previous year. Yields for retail warehouses also fell, but to a lesser extent than for retail parks, which are highly popular with investors. The net initial yield of 5.4% was 10 bps lower than at mid-year 2017. There was a different development in the case of shopping centres, depending on location. While the prime yield for shopping centres in the top investment centres fell from 4.0% to 3.8% year-on-year, the net initial yield for shopping centres in affluent second-tier cities remained stable at 4.5% year-on-year.

Despite the falls in yield mentioned above, there remains an attractive yield spread between the prime yields for the various property types and risk-free alternative investments such as 10-year government bonds [see Figure 25].

While the high level of investment activity in the retail property market in 2017 resulted in one of the best performances since records began, the first half of 2018 was unable to match the dynamism of the previous year.

The German retail investment market remained one of the most important target destinations for institutional investors. There are two reasons for Germany’s position as a sustainably secure investment location. Firstly, there are excellent overall economic indicators such as a rise in real incomes and favourable consumer sentiment amongst German customers. Secondly, Germany has a reputation as a safe haven despite current developments such as the sluggish Brexit negotiations, smouldering global trade disputes and the continual re-emergence of discussions regarding the future of the EU. Therefore, well-let and income-producing German retail properties remain a highly sought-after asset class.

On top of this is a limited and increasingly scarce supply of available products. In addition to the lack of projects in the pipeline – not only of shopping centres but increasingly also retail parks – investors are tending to hold on to their properties in their portfolio despite rising purchase prices, thereby limiting the supply of suitable retail properties in the investment market.

However, CBRE’s experts are of the opinion that the dynamism in the German retail investment market will increase significantly over the second half of the year. But the continuing challenge to sustainably invest the huge amount of available investment capital will become noticeably more complex.
After the general fall in total project development volume across all German retail real estate segments in the period between 2009 and 2016 [see Figure 26], bulwiengesa has observed a renewed rise in the number of planned projects over the past two years. The reasons for the overall fall in project development volume since 2009 included the lack of potential space for the development of large-format retail projects and the resulting planning law situation regarding such properties. Project developers have now adopted an alternative locational and overall framework, and have increasingly shifted their focus to smaller towns and cities.

26. Project Development Volumes in Germany between 2009 and 2018 by Region
Figures in sq m of lettable area

Sources: RIWIS, bulwiengesa
The recently observed upswing in project development volume is attributable to city centre shopping centres and prime located retail properties and in particular, to retail warehouse and retail park development projects which contributed a share of 58% in 2017 and 45% in 2018 [see Figure 27] based on lettable area. Major developments in 2018 such as the opening of the East Side Mall with an area of around 38,700 sq m and the Schultheiss Quartier with around 26,600 sq m of lettable area in Berlin have had a positive effect on overall performance. In the retail park segment, the new opening of the NeisPark in Görlitz with around 34,100 sq m has contributed significantly to the increase in development volume.

Due to their overall convenience retail character, retail parks are relatively resilient to crises and resistant to online trade, which has resulted in continually high investment demand, making the revitalisation and extension of existing properties and the new development of retail warehouse properties outside Germany’s higher regional centres and metropolitan regions an attractive prospect. The development of retail space is proportional to the level of population growth forecast and the rise in incomes. For this reason, most new project developments have commenced in Germany’s southern federal states.

Level of project development activity responds to population and income growth forecasts

27. Project Development Volume in Germany in 2017 and 2018 by Property Typ
Figures in sq m of lettable area

2017
- Shopping centre: 10
- City centre retail property: 14
- Retail park: 44
- Retail warehouse: 12
- Food retail: 2

2018
- Shopping centre: 11
- City centre retail property: 2
- Retail park: 40
- Retail warehouse: 13

Sources: RIWIS, bulwiengesa

// Method

The data analysed comprises project developments with a sales area in excess of 5,000 sq m. The survey includes communities with populations in excess of 5,000 which are also the location of survey-relevant project developments, whereby the final survey includes around 4,000 to 5,000 communities which were systematically analysed based on available information. The analysis includes projects with (planned) completion expected by 31st December 2018.
Germany offers a stable long-term investment environment

Most Top 7 investment centres strengthen their positions

Hamburg is the poorest performer amongst the Top 7 investment centres

Ingolstadt is in third place as the best performing second-tier city

Leipzig and Dresden are the leading eastern German locations
4.1 HIGH LEVEL OF DYNAMISM IN SECOND-TIER LOCATIONS AND STRONG PERFORMANCE IN THE MAJOR INVESTMENT CENTRES

When making investments, investors try to obtain the best possible security for their expected profit. The important factors include the sustainability of the investment and whether a sufficient level of profit can be made upon eventual resale. In addition to a property’s building quality, the tenant mix and other property-related factors, the locational context of a retail property plays a decisive role. In order to give investors the best possible level of security in their decisions, CBRE has produced an analysis of 13 key indicators in the areas of socio-demographics, the regional economies and the retail sector since 2010, which is used to compile the CBRE Retail Investment Scoring (CBRE RIS). The score thus calculated enables the comparison of towns and cities and regions and – more importantly – makes it possible to understand their development on a time series basis. The scoring model compares the locations with each other and with the overall trend within Germany, and in some cases there are disproportionately high weightings given to individual results.

This data helps to identify regions which are characterised by particularly stable environments or markets which are attracting investor focus due to positive trend developments. Due to the historical development of a polycentric population structure, Germany comprises many locations which are of potential interest to investors in addition to the Top 7 investment centres. Amongst the 401 administrative districts and autonomous towns and cities analysed as part of the RIS study, 18 are regional centres with high supraregional importance and 101 are second-tier cities, which assume an important supply function within their respective regions.

On a long-term comparison, the rankings and average scores have been largely stable. Germany is characterised by a stable market environment which also serves to increase the level of security for investors. However, the developments within the location categories shown by the RIS offer exciting insights into the market environment. For years, the No. 1 placed city in the RIS ranking with a score of 7.7 out of a maximum of 10 points has been the Bavarian state capital Munich [see Figure 28]. A high quality of life, strong internationally active companies such as BMW, Allianz and Siemens and the superb socio-demographic environment make Munich one of the top investment destinations, even on an international comparison.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Administrative district/town</th>
<th>Location category</th>
<th>Sub-score: socio-demographics</th>
<th>Sub-score: regional economies</th>
<th>Sub-score: retail economy</th>
<th>Weighted total score</th>
<th>Change since last year</th>
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<tr>
<td>1</td>
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<td>105.4</td>
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<td>66.9</td>
<td>7.7</td>
<td>→</td>
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<td>70.0</td>
<td>55.5</td>
<td>5.5</td>
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Source: CBRE
Alongside Munich, the other Top 7 cities also improved their positions, although a divergent picture emerges. With the exception of Hamburg, all other Top 7 investment centres improved their scores, so five of these seven locations are now in the Top 10. Continued positive signals from the employment market and rising household incomes have contributed to Berlin’s catch up campaign, putting it at second place in the ranking with a score of 7.1, its most significant improvement over the period since 2010. The Rhein cities Cologne and Düsseldorf both improved their positions. The former rose by 14 places compared to the previous year and is now at 8th position behind Stuttgart and has now overtaken Düsseldorf, which is in 14th place. This good performance is due to the highly positive developments in the regional economy. The port city of Hamburg fell to 17th place and for the first time was the lowest placed Top 7 city. Hamburg was unable to keep pace with the other cities, above all in terms of regional economic indicators and particularly the development of per capita GDP.

Changes in the regional economies were also responsible for the dynamics within the group of 18 regional centres. There was a significant growth in these indicators in the Brandenburg state capital Potsdam, which jumped 51 places to No. 71. Potsdam benefited not only from its proximity to Berlin, but its stable household incomes and continual growth in tourist numbers have resulted in a sustainable positive growth in the state’s most populous city. Other eastern German regional centres have also fared well. Dresden continued its positive trend of the last few years and reached 12th place for the first time with a very good score of 6.1. The best placed regional centre is also a city in the state of Saxony.

Although Leipzig fell by three places compared to the previous year and now occupies 6th place, the city is still one of the top climbers of the last few years. Leipzig has improved continually since 2010, not least due to the superb socio-demographic indicators and forecasts and has gained a total of 68 places, more than any other regional centre.

The analysis of the 102 second-tier locations makes it clear that Germany’s polycentric population structure makes it a highly diverse investment destination. This group comprises administrative districts and autonomous towns and cities which are more of regional importance because of their relatively lower economic strength and smaller populations. However, a number of these locations are remarkably dynamic making them interesting destinations for long-term investments. It is noticeable that 31 of the 50 most successful second-tier locations are in Bavaria and Baden-Württemberg. The sometimes rural medium-sized towns benefit from their favourable economic conditions and their supply function within their respective regions, which results in top scores for retail centrality and retail turnovers. One example from this group is the “Audi city” of Ingolstadt, which has headed up the second-tier cities for years and which improved its ranking by one place compared to the previous year to 3rd position.

The most successful second-tier locations are in the states of Bavaria and Baden-Württemberg.

4.2 REGION OF CONTRADICTIONS – THE RHEIN-RUHR METROPOLITAN REGION IN FOCUS

How the regional situations change over time, which cities and districts are the focus for investors and how these circumstances affect local retail trade are exemplified in this year’s CBRE RIS analysis of the Rhein-Ruhr metropolitan region. There are total of 11 metropolitan regions in Germany in their geographical sense which are characterised by their economic, cultural and social significance. Metropolitan regions are therefore also interesting for the retail sector – these are where consumer demand combines with purchasing power and competition for suitable locations.

The Rhein-Ruhr metropolitan region in the state of North Rhein-Westphalia comprises a total of 20 autonomous towns and cities and 11 administrative districts with an aggregate population of over 10 million, making this region the largest conurbation in Germany. The high population density of almost 1,500 persons/sq km (Germany: 230/sq km) makes the region between Bonn and Bochum a particularly dynamic market for retail property investments. CBRE estimates the total retail property investment volume is over €100 million in five districts and autonomous towns and cities alone in the full-year 2017 and the first half of 2018 [see Figure 29].
According to the CBRE RIS analysis, a number of districts and autonomous towns and cities have sustainably improved their position since 2010. The city of Wuppertal was a particularly strong climber during this period, having jumped 198 places to position 109, due to the significant growth in regional economic indicators. The large-scale Döppersberg project is located between the central railway station and the city centre in the district of Elberfeld, comprising a new retail location and city centre outlet mall with a sales area of over 30,000 sq m and 150 shops.

Wuppertal’s neighbouring city of Solingen jumped an impressive 116 places since 2010. The “City of Blades” improved in all categories and stands out with its highly positive regional economic and retail indicators. Solingen benefits from positive population growth and above-average per capita purchasing power. The city centre Clemens-Galerie offers a sales area of around 16,000 sq m and is currently being refurbished with Intersport as its new anchor tenant. The purchase of the Bachtor-Center in the middle of this year is an indication of the trust in the location shown by Düsseldorf-based investor Nova. The city centre retail arcade offers 17 shops and is also being revitalised.

The Ruhr city of Oberhausen has been through a period of structural transformation. The retail centrality index of 133.0 (German average = 100) is proof of the city’s supply function within a competitive environment. The CentrO shopping centre is one of Germany’s largest with a sales area of around 125,000 sq m and attracts a high footfall from within the region and nearby areas of the Netherlands. The extension of the Bero sales area, almost doubling its size, shows the investors’ trust in the location. Oberhausen has jumped 62 places since 2010 due amongst other things to the improvement in retail indicators [see Figure 30].

In the south of the metropolitan region is the former German capital Bonn, which has seen positive developments over a number of years and has settled at 50th place. The city scored particularly well in retail economic indicators compared to the previous year and is further establishing itself as a retail location. The lack of large-format stores in the aperiodic retail segment outside the city boundary is a great advantage, particularly to Bonn city centre which is characterised by a healthy mix of chain stores and owner-operated shops.

30. Changes in Ranking in the Rhein-Ruhr Metropolitan Region

Solingen jumps 116 places since 2010
The fourth industrial revolution is an unprecedented digital networking between people, places and buildings, driven by the highly dynamic use of ever increasing data volumes and the opening up of new data sources.

Despite the high level of digital potential, the real estate economy has so far reacted cautiously to new technologies. As digital solutions in the real estate context are neither standardised nor protected and therefore there are few barriers to market entry and there is still room for evolution amongst young IT companies and start-ups. This development is supported by reasonably priced financing terms and investors who recognise that the real estate sector is well placed for further development.

The 2018 edition of CBRE’s European occupier survey (EMEA Occupier Survey 2018) shows a number of these changes. An important finding from the results is that the real estate sector must develop new expertise in terms of the increasing digitalisation. In the foreground of the survey is the creation of jobs focused on IT: almost half of all respondents replied that digital scientists (47%) and digital transformation officers (46%) should be employed. The survey also forecasted a significant refocus of investments in real estate technologies, away from tactical building operation and energy management solutions to tools for the analysis of user experience (wayfinding, predictive analytics, building sensors, IoT). The increasing demand for user experience experts – the third most important recruitment target (38%) – confirms this trend.

These changes do not just involve the technology itself but also its use to create value. For example, an important added value of digital technologies for companies is when staff are able to analyse large quantities of data automatically and quickly solve problems and for particular purposes. Digital technologies can really only be effective in gaining traction within companies to the same extent of the quality and quantity of the data stored by them, in combination with the necessary expertise and processes which can be developed and extended as required.

If it is correctly utilised, digitalisation supports companies, their staff and the real estate economy in their daily routine. The following article will introduce the central technologies by showing examples of practical applications which form the basis for the further development of existing, and the implementation of new, digital and even disruptive products, services and business models.
Technologies with potential for the real estate economy

// BIG DATA / BUSINESS ANALYTICS

Big data is the term used to describe large and complex quantities of data which can be generated in both the real estate economy and the retail sector. The data can be collected using special sensors, e.g. WiFi, beacons, RFID and cameras. Business analytic solutions process and evaluate the stored information, so that previous developments and future trends can be recognised at an early stage. Large quantities of data may be collected for the purposes of market research, building management and evaluation. These technologies may be used by start-up 21st Real Estate, which enables real estate online trading with all the necessary data. The platform compiles and processes large amounts of data into indicators relating to real estate acquisition for the whole of Germany.

// ARTIFICIAL INTELLIGENCE (AI)

Programmes/software based on self-learning algorithms – so-called artificial intelligence – make it possible to assess risks more quickly and to organise and process large amounts of data (big data) more efficiently. The objective is to give real estate experts a well-founded basis for management decision-making. In practice, AI can be used for digital property management such as that developed by HIH Real Estate, together with the data room provider EVANA for the purposes of an intelligent and adaptive database for its portfolio. Another example of an AI application is the automatic reading, understanding and evaluation of lease contracts, such as the system developed by Leverton.

// SENSOR TECHNOLOGY / IOT

Sensor technology is based on the networking of objects within the property and building sections with the internet – the internet of things (IoT) – in such a way that these objects generate data, communicate autonomously and carry out various tasks on behalf of the building manager. The area of application extends from general information gathering via automatic sensors to warning and emergency functions in buildings. Sensor technology can be used in property management to control access to a building. Kiwi offers a solution for smart “access-as-a-service” based on transponders and door sensors.

// BUILDING INFORMATION MODELING (BIM)

BIM stands for the digital, 3-dimensional copy of the physical and functional characteristics of a building which can be used as a data and decision-making basis over the entire life cycle (from planning to the construction and operation to eventual demolition of a building). This type of model is created using appropriate BIM software. Other data and decision-making components such as drones can be integrated. Drones survey entire building sites from the air so that the resulting information can be integrated into the model using the BIM software.
// AUGMENTED REALITY (AR) / VIRTUAL REALITY (VR)

Augmented reality (AR) includes the use of computer technologies to create an effect that virtual properties are part of the real world and to allow a limited level of interaction with them. AR extends the real environment with digital information. The applications of AR in the real estate economy include project planning and the maintenance and marketing of space. Real properties and space can be adjusted to include digital functional objects, forms and structures.

Virtual reality (VR) offers the user the ability to experience a virtual and interactive 3D environment which is coupled to the experience of the real environment and its physical features in real time. Start-ups such as ALLVR, Innoactive and VRnow are developing VR solutions which can support the real estate economy with building planning and virtual property visualisations. Commercial and residential space which is currently in planning stage or under construction can be visualised, presented and inspected at any time and at any location as 3D models using VR glasses.

// 3D PRINTING

Additive production models (e.g. 3D printers) allow the printing of all types of objects, from individual parts to elements required for local mass production (e.g. in the construction sector). Layer after layer is printed and applied and dried, then stuck or fused together. The objective is the creation of a printed property. The new technology enables architects to experiment with new geometric structures and to create these flexibly at the required location. Building elements can be created in this way as required. The first totally printed buildings and prefabricated houses for occupation and operation are already in existence.

Printed buildings for occupation and operation are already in existence

// ROBOTICS

Automated processes using robotics are at the absolute forefront of futuristic human-computer interaction. A robot is taught how to use the application and then carries out certain repetitive tasks in the same way as a worker. Robotics thus enables automation at all levels. It is possible to imagine robots fulfilling all kinds of functions in everyday life, e.g. for window cleaning such as the two-armed robot known as Rollin’ Justin developed by the Deutsches Zentrum für Luft- und Raumfahrt (German Aerospace Centre). In addition, the start-up Built Robotics develops robot vehicles for building sites with the intention of making the whole construction process more efficient and safer. In addition to physical robots, there are also software robots which carry out human work based on software systems. This type of robot is part of the process known as Robotic Process Automation (RPA).
According to the market research institute Gartner, a blockchain is an ever expanding list of cryptographically signed, irreversible transactional records which is shared decentrally by all participants in a network and in their entirety comprise a "distributed cash ledger". In the real estate sector, blockchain offers the possibility to ensure the transparency of agreements, e.g. lease contracts, verify building information or update and decentralise relevant records. In addition, transaction processes can be digitalised and ownership documents can be recorded, followed up and transferred.

Such technologies already exist in the case of other applications which are particularly relevant and current within the real estate economy. In this way, big data or business analytics technology can be entered into the CBRE Calibrate analysis tool, which is explained in more detail below.

// CBRE CALIBRATE ANALYSIS TOOL

The important issue of the right location is becoming ever more important in the context of changes in bricks-and-mortar retail resulting from the growth in e-commerce. An important indicator for the assessment of the attractiveness of a location is the number of persons passing a particular spot, as this represents potential customers from the viewpoint of the retailer. Footfall surveys are often carried out in practice based on a manual head count. However, for a long time this type of footfall count could only be carried out on a sample basis, but it is now possible to make a permanent count thanks to fixed laser beams on Germany’s most important shopping streets. This means that the quantity of available data has increased, as it had not been possible to produce a qualitative footfall count to date. Digitalisation can provide the solution with a quantum leap in data volume and depth of analysis.

Calibrate collects over 100 million pieces of mobile phone data

There are now entirely new possibilities thanks to the increased networking of different data sources. This can now produce revealing conclusions which can be used productively in the evaluation of a location, something which CBRE has developed using its own dedicated tool known as Calibrate.

Calibrate makes it possible to evaluate locations, particularly for the bricks-and-mortar retail and outdoor advertising segments. The networking of mobile phone, statistical and socio-demographic data combined with CBRE’s many years of expertise in the sector enables totally new insights and knowledge relating to the actual quality of the micro location and to customer behaviour. Irrespective of whether this is required for the purchase of a property, a new lease for the purposes of company expansion or the valuation of a property already in the portfolio, Calibrate delivers results tailored to individual requirements which are extremely important for the strategic positioning of the recipient (e.g. a retailer).
Calibrate has access to a pool of more than 100 million pieces of mobile phone information in the EMEA region, of which 25 million are in Germany. The collated mobile phone data is totally anonymous and their use complies with the current European data protection regulation. The precise location of the individual mobile device within a 5 m x 5 m grid allows the detailed analysis of every part of a street. It is possible to produce a detailed analysis of the pedestrian flow around a location and the flow between a number of locations. At the same time, the number of times and at what time a person visits a particular location can be analysed and how long they stay. On this basis, it is possible to derive conclusions on spatial purchasing behaviour. On the basis of socio-demographic characteristics, it is possible to break down the consumers into defined customer groups and types, so that the retailer can examine whether its target group is present at a particular location.

// FOOTFALL ANALYSIS

The detection of the precise physical location enables the differentiated analysis of pedestrian flows. Visualised in the form of a heat map, it is possible to analyse which parts of the street are the focus for the recorded visits, and this allows the retailers to carry out a targeted positioning of their own businesses.

In addition, the system also records the exact time at which the data is collected. The examination of the actual time and day when the visit took place makes it possible to optimise a shop’s opening times or type of in-store advice. Information can be consolidated on the basis of the year, month, calendar week, day, and time. Comparative footfall analyses of various locations based on days and times assist with investment decisions [see Figure 31]. In addition, the tool enables year-on-year comparisons which indicate whether a particular location has changed in terms of visitor numbers, and the analysis of monthly and weekly statistics indicates the influence of seasonal effects. This allows the efficient planning and implementation of targeted campaigns and offers.

31. Comparative Footfall Analysis of Five Different Shopping Centres

Average footfall in %,
Effect of the opening (18th October 2017) of a new shopping centre on visitor numbers

// SEGMENTATION OF VISITORS

On the basis of the various lengths of stay, Calibrate can identify the workplace and place of residence of the individual visitor anonymously. The latter is used as a basis for the segmentation of the visitors for which CBRE utilises accepted international methods. Depending on the occurrence of established socio-demographic characteristics based on the place of residence, the visitors can be allocated into one of 10 defined groups. This provides an indication of wealth, purchasing power and lifestyle, and draws conclusions on the purchasing behaviour of the respective groups, which in turn is used as a basis for the assessment of turnover potential. In addition, it is possible to analyse tourist flows separately which provides an analysis of the ratio of potential regular customers compared to one-off visitors.
Knowledge of how the various locations interact with each other is highly relevant to the retail sector for decision-making purposes when it comes to the expansion and optimisation of the existing portfolio. For a particular location, the analysis of the pedestrian flows compared to competitor locations provides conclusions as to where the customers have spent time before and after the visit to the selected position. The result provides an indicator for the assessment of the potential to attract more customers and the risk of a possible cannibalisation of existing locations. This knowledge is equally useful if a planned closure of a store for the purposes of portfolio rationalisation is being considered and an estimate is required of the potential loss of customers and the diversion of pedestrian flows.

Figure 32 shows the interaction of selected shopping centres with each other in terms of one particular shopping centre. The higher the level of interaction, the greater the risk of cannibalisation.

Retailers are benefiting from target group-orientated location planning

32. Interaction of Visitors to Various Shopping Centres in the City of Parma in Italy

Interaction data in %

Source: CBRE, Map data: open street map, mapz.com

The decisive added value for retailers is target group-orientated location planning. In the case of existing locations, the comparison of the actual visitor groups with the target group enables the targeted planning of both location and assortment-related optimisation projects. The success of such projects is measured by the level of customer loyalty.
1,376 new lettings in the first half of 2018

63.1% share attributable to city centre locations

21.1% of new tenants are international retailers

Increased focus on size category between 1,000 sq m and 3,000 sq m

Increased share of letting market attributable to retail parks

Decreased share of letting market attributable to managed properties

Berlin, Hamburg and Düsseldorf are the most sought-after retail destinations

Letting statistics led by food retail segment

Decreased share of letting market attributable to retail parks

Increased share of letting market attributable to retail parks

Increased focus on size category between 1,000 sq m and 3,000 sq m
5.1 UPSWING IN ACTIVITY IN THE FIRST HALF OF 2018

CBRE has systematically recorded and analysed all published retail lettings since 2008 in terms of the criteria city, location, tenant, sector, size and other characteristics. The database comprises around 27,000 letting transactions of over 6,300 different concepts in more than 1,800 towns and cities and communities in Germany. It is important to note that the date of the notification does not necessarily have to coincide with the actual lease commencement date. Company takeovers (M&A) and lease extensions are not considered as they have no impact in terms of area. In addition, it is assumed that there will be a grey area of unpublished lettings. Whilst lettings by domestic or international retail chains are regularly published, the information on regional chains or owner-operated specialist shops is significantly poorer. There are also variations because lettings in prominent high street locations or shopping centres tend to be better reported compared to leases concluded in secondary locations or convenience retail centres. Despite these limitations, CBRE’s lettings database makes an important contribution towards improving transparency in the retail sector. It not only serves as an indicator of sentiment in the German bricks-and-mortar retail market, but also allows a wide range of analyses and conclusions to be drawn on trends and developments, both in summary and in relation to individual retail concepts.

The German retail letting market is tending to show divergent trends. The total of 2,724 lettings of retail and restaurant space – around 17% fewer than in 2016 – was unable to match the previous year’s very good performance [see Figure 33]. By contrast, the first half of 2018 was characterised by a welcome upswing in letting activity. The total of 1,376 letting transactions in the first six months of 2018 was slightly higher than the 8-year average of 1,339 deals.

In terms of the location categories, it is evident that retail space in city centre locations was in particularly high demand both in 2017 and in the first half of 2018. Of all new leases registered, around 60% (2017) and 63% (H1 2018) were in prime, off-prime, inner urban and city district locations where there were significantly greater numbers of lettings than the average of the preceding few years (51%). While the proportion of lettings in prime and off-prime locations remained consistent with the long-term average over the last 18 months, the share of lettings in inner urban and city district locations has grown significantly. While the long-term average proportion of lettings attributable to inner urban and city district locations had been around 21%, these accounted for 32% in the first half of 2018. In addition to the typical food retailers such as REWE and EDEKA, which as convenience retailers prefer to occupy this type of location, there are now also local restaurant concepts leasing space in city district locations.
In contrast, the proportion of lettings attributable to managed properties decreased. The share of around 28% attributable to retail parks, shopping centres, factory outlet centres and convenience retail centres in the first half of 2018 was well below the long-term average of 41% and below the 2017 share of just under 33% [see Figure 35]. However, there are significantly divergent trends within this group. While the share of total registered lettings attributable to retail parks of 12% in the first half of 2018 [see Figure 34] was slightly above the previous year’s performance and the long-term average of just under 11%, the share of lettings attributable to shopping centres in the first half of 2018 continued to fall. The share of 11% is significantly below the previous year’s share of 16% and below the average of 25% since 2010. The downturn in the number of shopping centre lettings is mainly due to the low number of new shopping centre openings. The lack of project developments means that the proportion of lettings attributable to this sector will not return to the earlier peaks of up to 38% for the foreseeable future.

5.2 FEW SURPRISES IN THE TOP LOCATIONS

Germany’s top locations are still in very high demand in the retail letting market. Due to its size, Berlin is again the leading market in the current ranking of the most active German retail locations in the first half of 2018, followed by Hamburg [see Figure 36]. There was an improvement in third placed Düsseldorf compared to the long-term average. These were followed by Frankfurt, Cologne and Munich. Irrespective of current discussions relating to the development of the retail sector, the top cities continued to dominate activity in the German letting market. The established regional centres such as Dortmund and Dresden consolidated their positions as attractive retail destinations. The two cities again saw large numbers of new lettings. The cities of Wiesbaden and Hannover were also placed in the Top 10. With a share of around 32%, there was a significant upswing in chain store operators’ focus on city district locations in the 10 most important retail centres in the first half of 2018. Nevertheless, the principal retail locations (prime and off-prime) still achieved a share of 31% of all lettings.

36. Principal Retail Locations by the Number of Lettings

<table>
<thead>
<tr>
<th>Rank</th>
<th>Location</th>
<th>H1 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Berlin</td>
<td>58.0</td>
</tr>
<tr>
<td>2</td>
<td>Hamburg</td>
<td>52.4</td>
</tr>
<tr>
<td>3</td>
<td>Düsseldorf</td>
<td>50.2</td>
</tr>
<tr>
<td>4</td>
<td>Frankfurt am Main</td>
<td>47.7</td>
</tr>
<tr>
<td>5</td>
<td>Cologne</td>
<td>47.1</td>
</tr>
<tr>
<td>6</td>
<td>Munich</td>
<td>45.1</td>
</tr>
<tr>
<td>7</td>
<td>Dortmund</td>
<td>44.2</td>
</tr>
<tr>
<td>8</td>
<td>Wiesbaden</td>
<td>42.1</td>
</tr>
<tr>
<td>9</td>
<td>Dresden</td>
<td>38.3</td>
</tr>
<tr>
<td>10</td>
<td>Hannover</td>
<td>31.8</td>
</tr>
</tbody>
</table>

Source: CBRE
The analysis of lettings by size category shows clearly that the trend of the last few years towards larger lettable areas of over 500 sq m did not continue. Their share of lettings on the German market fell by around 8% compared to 2016 [see Figure 37]. There was a corresponding rise in lettings in the small size category of >149 sq m to 17% over the last 18 months, compared to 12% in 2016. There was similar growth in the size category 150 sq m - 349 sq m. However, the share of lettings of around 18% in 2017 and in the first half of 2018 in this size category was well below the average of 20% over the past few years. The share of lettings in the size category 500 sq m - 999 sq m, which is traditionally in high demand from drugstores, non-food discounters and food retailers (even if the trend is typically downwards) of 24% in the first half of 2018 was below the share of 26% in 2017. The share of lettings in this size category is still well above the long-term average of 21%. There has been an upward trend in the share of lettings in the size category 1,000 sq m - 1,499 sq m from 13% in 2017 to 14% in the first half of 2018. The average of the last few years was just 10%. By contrast, the current share of 19% and 18% in 2017 show demand for space in the >1,500 sq m size category is tending to fall.

**SHARE ATTRIBUTABLE TO INTERNATIONAL RETAILERS STABILISES AT A HIGH LEVEL**

The attractiveness of the German retail market is reflected in the high level of letting activity attributable to international retailers. While around 20.9% of all lettings were to international concepts in 2017, this had grown to 21.4% of all lettings in the first half of 2018, which is slightly above the average of 20.7% over the past few years. While a large proportion of lettings to international concepts were attributable to US-based chain store operators over the last few years, there was increased activity from Dutch concepts over the first half of 2018. The particularly expansive market participants include the non-food discounter Action, the fashion chain Hunkemöller – including both its eponymous underwear stores and its new sports concept HKMX – and the fashion chain Miller&Monroe, which is opening stores gradually in the units taken over from Charles Vögele.

### 37. Development of Retail Lettings by Size Category between 2010 and H1 2018

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 149 sq m</td>
<td>11.9</td>
<td>10.1</td>
<td>10.2</td>
<td>10.0</td>
<td>10.9</td>
<td>11.0</td>
<td>8.9</td>
<td>9.3</td>
<td>11.7</td>
</tr>
<tr>
<td>150 - 349 sq m</td>
<td>2.2</td>
<td>2.2</td>
<td>3.8</td>
<td>4.8</td>
<td>5.4</td>
<td>6.2</td>
<td>8.3</td>
<td>6.2</td>
<td>5.1</td>
</tr>
<tr>
<td>350 - 499 sq m</td>
<td>7.0</td>
<td>8.7</td>
<td>8.7</td>
<td>8.7</td>
<td>8.5</td>
<td>8.7</td>
<td>9.0</td>
<td>8.7</td>
<td>8.4</td>
</tr>
<tr>
<td>500 - 999 sq m</td>
<td>19.0</td>
<td>23.0</td>
<td>22.5</td>
<td>22.2</td>
<td>21.9</td>
<td>21.9</td>
<td>21.3</td>
<td>21.3</td>
<td>21.3</td>
</tr>
<tr>
<td>1,000 - 1,499 sq m</td>
<td>9.9</td>
<td>9.9</td>
<td>9.9</td>
<td>9.9</td>
<td>9.9</td>
<td>9.9</td>
<td>9.9</td>
<td>9.9</td>
<td>10.0</td>
</tr>
<tr>
<td>1,500 - 2,999 sq m</td>
<td>16.6</td>
<td>17.7</td>
<td>17.7</td>
<td>17.7</td>
<td>17.7</td>
<td>17.7</td>
<td>17.7</td>
<td>17.7</td>
<td>17.7</td>
</tr>
<tr>
<td>über 3,000 sq m</td>
<td>14.0</td>
<td>14.0</td>
<td>14.0</td>
<td>14.0</td>
<td>14.0</td>
<td>14.0</td>
<td>14.0</td>
<td>14.0</td>
<td>14.0</td>
</tr>
</tbody>
</table>

Source: CBRE

In second place are the traditionally strong US-based retail companies, followed by chain stores from neighbouring European countries such as Denmark and France, which have also accounted for a large number of new lettings. For example, the sports equipment manufacturer Decathlon has continued to expand its market presence. The French company leased space in its traditional out of town stores and units in retail parks and now increasingly leases space in shopping centres. At the beginning of 2018, Decathlon had continued its expansion with new stores at the NordWestZentrum in Frankfurt, the Petersbogen in Leipzig and the Marstall-Center in Ludwigsburg. Throughout last year, the sports retailer opened a branch in the DuMont-Carré in Cologne and the Mercaden Böblingen, and has leased space in the Rée Carreé in Offenburg which is currently at the pre-letting stage.
The high level of activity attributable to Scandinavian concepts also continued in the first half of 2018. This was due above all to the established Danish labels Jack&Jones/ Vero Moda and Only, and Swedish companies such as the H&M fashion concepts Monki and Weekday were also expanding. By contrast, there was a downturn in lettings to Spanish chains such as the most expansive brands of the last few years, Desigual and Zara.

**BERLIN IS THE MARKET ENTRY POINT FOR NEW BRANDS AND CONCEPTS**

The high level of activity amongst international retailers is also clear from the large number of market entries into the German retail sector. There was another spike of 54 new retail and restaurant concepts in 2017 (2016: 55). As expected, international retailers concentrated on the Top 7 locations for their market entry. The leading location for new openings is Germany’s largest city Berlin with 15 new international retail and restaurant concepts, well ahead of the two Rhein cities Cologne (7) and Düsseldorf (6) and the Bavarian state capital Munich (also 6). High street locations were in particularly high demand, as they were with German concepts. With a share of around 61%, the international chains tended to focus to a greater extent on prime retail locations for their market entry. Top locations are essential for the purposes of brand recognition for many international retailers and therefore play an important role in their expansion strategy. At the same time, there was a downturn in the share of new lettings in shopping centres attributable to international retail concepts. 24% of all recorded new market entries in 2017 by retail concepts were in shopping centres. This shows that a shopping centre lease is now less important for international retailers in terms of market entry and building market presence than over the past few years.

As before, most demand on the German market comes from fashion concepts. 185 new international fashion concepts entered the market in 2017, including Arket, Park Lane, Luisa Cerano, Love Stories and Eton. The second most expansive sector was restaurants with 12 market entries over the course of 2017. The most obvious trend over the past few years is in burger restaurants with four new concepts Five Guys, Friends & Brgrs, Holy Cow! and B.Good testing their business models in the attractive German market.
## 5.3 CONVENIENCE RETAIL AND DISCOUNT CONCEPTS CONTINUE TO EXPAND

Similar to the last few years, the nationally active food retailers REWE and EDEKA with their various store formats (supermarkets, superstores, drinks outlets etc.) and the discounter chain ALDI were particularly active in the German retail letting market in the first six months of 2018. The two drugstore chains ROSSMANN and dm were also on course for further expansion [see Figure 38]. There was also continued expansion in the aggressively priced non-food discounter sector. In addition to TEDi, the Dutch discounter Action continued to gain market share in Germany. The retail chain Woolworth accounted for a large number of new lettings, followed by Decathlon, Ernsting’s family, Hunkemöller, KiK and Sonderpreis Baumarkt. Woolworth’s long-term objective is to build up its German store network to 800 units and the company tends to prefer traditional high-street locations but is increasingly leasing stores in retail parks, which puts the retail chain in third place of the most expansive concepts in the retail park sector. The food retail chain REWE heads up the ranking of the most expansive companies in the retail park sector, followed by the drugstore chain dm.

### 38. Most Expansive Retailers in All Locations Compared to Retail Parks between 2010–2017 and H1 2018

<table>
<thead>
<tr>
<th>All Locations</th>
<th>Retail parks</th>
</tr>
</thead>
<tbody>
<tr>
<td>REWE 1</td>
<td>REWE 1</td>
</tr>
<tr>
<td>dm 2</td>
<td>dm 2</td>
</tr>
<tr>
<td>ROSSMANN 3</td>
<td>ROSSMANN 3</td>
</tr>
<tr>
<td>EDEKA 4</td>
<td>EDEKA 4</td>
</tr>
<tr>
<td>Netto 6</td>
<td>Netto 6</td>
</tr>
<tr>
<td>Woolworth 8</td>
<td>Woolworth 8</td>
</tr>
<tr>
<td>Das Depot 9</td>
<td>Das Depot 9</td>
</tr>
<tr>
<td>Ernsting’s family 10</td>
<td>Ernsting’s family 8</td>
</tr>
</tbody>
</table>

| REWE 1                 | REWE 1                |
| EDEKA 2                | EDEKA 2               |
| ALDI 3                 | ALDI 3                |
| Netto 4                | Netto 4               |
| Lidl 5                 | Lidl 5                |

### 39. Most Expansive Retailers by Sector in H1 2018

<table>
<thead>
<tr>
<th>Food, tobacco Rank</th>
<th>Health &amp; beauty Rank</th>
<th>Household goods, furniture, home accessories Rank</th>
<th>Sports Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>REWE 1</td>
<td>ROSSMANN 1</td>
<td>TEDi 1</td>
<td>Decathlon 1</td>
</tr>
<tr>
<td>dm 2</td>
<td>Müller 2</td>
<td>Action 2</td>
<td>Krämer Pferdesport 2</td>
</tr>
<tr>
<td>ALDI 3</td>
<td>Rituals 4</td>
<td>Sonderpreis Baumarkt 3</td>
<td>Hammer Store 3</td>
</tr>
<tr>
<td>Lidl 5</td>
<td>Viu 5</td>
<td>Das Depot 4</td>
<td>Intersport 4</td>
</tr>
<tr>
<td>Only 2</td>
<td>CCC 3</td>
<td>Mäc-deiz 5</td>
<td>lululemon athletica 5</td>
</tr>
<tr>
<td>Takko 2</td>
<td>KKi Schuh-Center 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### GREATEST EXPANSION IN THE FOOD SECTOR

The most expansive sector in the first half of 2018 was the food sector with 21% of all new lettings. As mentioned above, the most active tenants were the food retailers REWE and EDEKA. But the discounters ALDI, Netto, Lidl and PENNY were also on course for further expansion [see Figure 39]. They were followed in second place by the clothing sector with a share of 19% of all lettings. The greatest number of new lettings registered in this sector was attributable to Ernsting’s family, the Dutch fashion chain Hunkemöller and the non-food discounter KiK. The third placed restaurant sector remained expansive with around 16% of all lettings. Most new lettings were to the Italian food concept L’OSTERIA and Subway, followed by Vapiano and the fast food restaurant Burger King, which is on expansion course to challenge the market leadership of McDonald’s. Non-food discounters TEDi and Action and the Sonderpreis Baumarkt DIY chain were the most active concepts in the household goods, furniture and home accessories sector, which accounted for 12% of all new lettings in the first half of 2018.

The large number of lettings in the first half of 2018 heralds overall growth for the full year. Germany will undoubtedly continue to be a popular expansion destination offering a high level of potential in the market, in which both national and international concepts will wish to have a market presence.
// Greater optimism and positive turnover expectations in the bricks-and-mortar retail segment

// Retailers rely on advice and shopping ambience as competitive advantages

// Retail parks show highest growth in visitor numbers

// Most investors expect stabilised yields

// Greater focus on value-add and opportunistic investments

64% of retailers wish to expand their store network

68% of investors want to make further purchases in 2018

75% of investors see potential for the digitalisation of building management
6.1 RETAILERS’ EXPANSION PLANS AND PROSPECTS FOR THE FUTURE

The survey of respondents responsible for the expansion of store networks in Germany has been carried out again by the EHI Retail Institute and the Hahn Group. The results of the 2018 summer survey reflect current sentiment and the expectations in terms of future trends in the German retail sector.

A total of 66 experts responsible for a sales channel have taken part in the survey. The participants are grouped into over 10 categories, of which the food retail segment is the most represented group with 24%, followed by the fashion segment with 17% [see Figure 40]. In terms of the average sales area of the stores, 29% are in the 101 sq m - 500 sq m size category and 23% are in the 1,001 sq m - 5,000 sq m category [see Figure 41]. 52% of the participant companies operate a German store network of over 100 units. 26% operate over 500 stores.

POSITIVE TURNOVER EXPECTATIONS AND INCREASING OPTIMISM

The business climate amongst German retailers is the best it has been for four years. Over half of the respondents (52%) expect turnovers in the bricks-and-mortar retail sector to increase over the second half of 2018. Only 43% had indicated this in last year’s survey [see Figure 42]. Around 11% of the retailers expect turnovers to fall in their sector (2017: 8%). 37% of the respondents expect stable growth (previous year: 49%). In particular, respondents from the shoes & accessories, DIY stores & garden centres and consumer electronics segments are of the opinion that turnovers will tend to stabilise (75% and 67% respectively). The respondents from the restaurant, food and drugstore segments expect their companies’ turnover to rise (80%, 69% and 67% respectively) over the remaining course of 2018.
CONSISTENT DEMAND FOR SPACE

In terms of their expansion plans, almost half of the respondents (49%) [see Figure 43] expect demand for space to stabilise over the coming 12 months (2017 forecast: 47%). Almost 29% of the respondents in the current survey expect demand to increase and 22% expect demand to fall (2017 forecasts 34% and 19% respectively). The respondents from the hobbies & leisure segment and the restaurant sector expect greater demand in future, while respondents from the shoes & accessories sector expect demand to fall.

In terms of the planned number of stores, the respondents are generally very keen to expand. Around two-thirds (64%) responded that they wish to open more stores by the end of 2018 than they did in the same period the previous year (-4% compared to 2017). This development is being driven in particular by retailers in the drugstore, DIY & garden centres, shoes & accessories and restaurant sectors. 20% of this year’s respondents expect their number of stores to stabilise (-1% compared to 2017). The number of respondents who expect their number of stores to fall remains low at 16% (+5% compared to 2017). Only in the consumer electronics and telecommunications segment do most participants (67%) indicate that they wish to reduce the number of stores by the end of the year [see Figure 44].

A large number of the respondents (44%) expect their average sales area to remain the same (2017: 47%). Approx. 29% (+1% compared to 2017) would like to operate smaller stores and most of the respondents (75%) from the shoes & accessories segment tend towards smaller sales areas. The reasons for this are multi-channel retailing (63%), an improvement in profitability (58%) or an increase in the number of stores with smaller areas (21%). Around 27% (previous year: 23%) indicate they are planning to increase their average sales area in 2018; these come predominantly from the food and drugstore segments (56% and 67% respectively). The reason for the retailers’ planned increase in average sales area is to offer customers a higher level of comfort (61%) and a better shopping experience (50%).

The signals point towards expansion
In order to make their sales channel generally attractive to customers, 67% of the respondents wished to score points with competent personal advice in their stores [see Figure 46]. This competitive advantage is named predominantly by the respondents from the health & beauty, clothing and shoes & accessories segments.

61% pursue a strategy to provide a good retail ambience, particularly in the food, drugstore and consumer electronics & telecommunications segments. Special services and a wide assortment are also named by the participating bricks-and-mortar retailers (37% and 32% respectively). Aggressive pricing as a competitive advantage plays a subordinate role at 14%.

### 45. Development in Lease Contract Conditions Compared to the Previous Year

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree standard lease</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>Break options</td>
<td>40%</td>
<td>47%</td>
</tr>
<tr>
<td>Rental price</td>
<td>30%</td>
<td>24%</td>
</tr>
<tr>
<td>Service charges</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Lease terms</td>
<td>15%</td>
<td>8%</td>
</tr>
</tbody>
</table>

### Results of the Hahn Expert Survey

**32**

**RETAILERS BENEFIT FROM MORE FAVOURABLE LEASE CONDITIONS**

The analysis of the assessments relating to the development in lease conditions indicates that tenants view these in a similar way to the previous year’s survey, but marginally less positively. The respondents indicated the following conditions had changed to their advantage over the last year: break options (46%), lease terms (40%), rental prices (7%) and the agreement of standard lease contracts (26%) [see Figure 45]. There is a somewhat divergent picture in terms of the individual sectors: just 6% of respondents in the food segment indicated that lease terms had changed to their advantage. This is completely different from the clothing and shoes & accessories segments which indicated they enjoyed improved lease terms (82% and 100% respectively).

### 46. Competitive Advantages to Generate Customers

<table>
<thead>
<tr>
<th>Competitive Advantage</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive pricing</td>
<td>15%</td>
<td>14%</td>
</tr>
<tr>
<td>Space and comfort in-store</td>
<td>40%</td>
<td>32%</td>
</tr>
<tr>
<td>Wide assortment</td>
<td>30%</td>
<td>22%</td>
</tr>
<tr>
<td>Special services</td>
<td>14%</td>
<td>37%</td>
</tr>
<tr>
<td>Good retail ambience</td>
<td>12%</td>
<td>61%</td>
</tr>
<tr>
<td>Competent personal advice</td>
<td>12%</td>
<td>67%</td>
</tr>
</tbody>
</table>

Source: EHI Retail Institute, Hahn Group
BIGGEST GROWTH IN FOOTFALL IN THE RETAIL PARK SECTOR

In terms of the growth in footfall, the response to the current survey is similar to the previous two years. In the managed shopping centre category, a large proportion of the respondents (41%) indicated a fall in customer numbers (2017: 47%) (see Figure 47). A large proportion of the respondents in the high street retail category (35%) indicated a negative trend (previous year: 32%), while just 5% of the respondents in the retail park category indicated a fall in footfall (2017: 8%). 17% of the respondents in the shopping centre category, 32% in the city centre category and 36% in the retail park category indicated that footfall had remained stable (2017: 30%/34%/30% respectively). The most positive responses came from the retail park category in which 14% indicated footfall had risen (previous year: 17%), compared to 8% in the shopping centre category (2017: 2%) and 9% in the city centre pedestrian zone category (2017: 11%).

47. Development of Footfall over the Past 12 months
Figures in %

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stores in city centre retail streets</td>
<td>12%</td>
<td>23%</td>
<td>24%</td>
</tr>
<tr>
<td></td>
<td>32%</td>
<td>35%</td>
<td>32%</td>
</tr>
<tr>
<td></td>
<td>45%</td>
<td>34%</td>
<td>11%</td>
</tr>
</tbody>
</table>

48. Footfall Counts and their Technology
Figures in %, Multiple responses possible

- WiFi: 5%
- Mobile phones: 5%
- Surveys: 15%
- Manual counts: 17%
- Laser technology: 23%
- Point-of-sale receipts: 64%

Source: EHI Retail Institute, Hahn Group

Most respondents (97%) in the bricks-and-mortar segment indicated that they carried out footfall counts and just a few respondents (3%) in the restaurant segment indicated that they did not count customers. 64% of the respondents indicated that they made the count via till receipts, a technique employed mainly by the food and drugstore segments. Around one-third – mainly the respondents from the shoes & accessories and consumer electronics & telecommunications segments – indicated they used laser technology. 17% carry out traditional manual counts and 15% carry out customer surveys. The minority (6%) of retailers use other methods or analysed WiFi signals and mobile phone data (5% each) (see Figure 48).
In terms of the assessment of future digitalisation potential for the German retail sector, there is one particularly hot topic: three quarters of the respondents indicate they see great opportunities for innovations and increases in efficiency by the use of multi-channel sales such as digital malls and pick-up points. This is a popular view mainly in the food, health & beauty and clothing sectors (63%, 71% and 100% respectively). From market and location analyses, the respondents (26%) see less potential for the use of improved mobile geo-information systems over the next few years. There were even lower scores for the use of digitalisation in the case of building management and smart buildings (23%), planning and property management and themes such as data rooms, building planning and property management (20%) and the visualisation and navigation of retail properties for example using augmented reality and building navigation systems (17%).

The change in consumer behaviour, which retail specialists find almost impossible to influence, is named by over half the respondents as the greatest economic risk over the next 12 months. This is being taken seriously by the clothing, shoes & accessories and consumer electronics & telecommunications segments whilst food and drugstore retailers foresee very little change in consumer behaviour in the future. The latter two and the DIY & garden centres segment feel that their stores are well placed vis-à-vis online retail, as only 13%, 33% and 75% of these view this as a potential risk factor. Overall, around 47% view e-commerce as a risk. A further 38% see increases in property-related costs as critical.
6.2 INVESTMENT PLANS OF RETAIL PROPERTY INVESTORS

This survey has been conducted regularly by the Hahn Group over many years to determine the current assessment of the German retail property market and the investment intentions of the German and foreign institutional real estate investors. As in the previous year, the survey comprised telephone interviews with 40 participants.

CONTINUED FEAR OF OVERHEATING

The experts are still of the opinion that there are early signs of overheating in the German investment market. In the 2017 survey, around 68% of the respondents indicated they recognised the early signs of overheating, this has now grown to 73% [see Figure 53]. Overheating is recognised above all by the respondents from listed property companies, real estate funds and private equity/asset managers. However the proportion of respondents which see significant signs of overheating has fallen from 13% to 5%. 78% of the respondents indicated they recognise the signs of overheating in the market (previous year: 81%). The proportion of respondents who see no signs of overheating has remained steady at 17%.

51. Participating Investors

Respondents from investment funds (40%) were the largest participant group amongst the various investor types. Private equity and asset managers contributed 35% of responses and listed property companies made up 15% [see Figure 51]. 58% of the respondents indicated they managed assets in excess of €3 billion, 30% managed up to €0.5 billion, and 10% managed between €0.5 and €1 billion [see Figure 52].

52. Assets under Management by Participating Investors

53. Assessment of the Current Investment Market Situation
GERMANY – FIRST CHOICE AS AN INVESTMENT DESTINATION IN EUROPE

In an international comparison, the German retail property investment market is viewed as exceedingly attractive compared to other European markets by a large proportion of the respondents (2018: 53% vs. 2017: 68%). Around one-third view Germany as equally attractive to other European markets (2018: 35% vs. 2017: 27%) and around one-eighth (2018: 13% vs. 2017: 5%) view the German market as generally below average.

Investor interest in making purchases has risen by 5% in the 2018 survey relating to investment strategy. Over two-thirds (2018: 68%) of institutional investors would like to purchase further properties over the next 12 months (previous year: 63%); this is the highest proportion since 2010. In particular, real estate funds, listed property companies and private equity/asset managers are pursuing this strategy. Just 17% (mainly project developers) tend towards the sale of retail properties (previous year: 15%), and 15% plan to stabilise their portfolio (previous year: 22%) [see Figure 54].

Retail parks remained the most popular property type amongst the investors in 2018, and 63% of the respondents indicated they plan to make further acquisitions in this sector (2017: 68%) [see Figure 55]. These are top of the shopping list particularly for the real estate funds and listed property companies. In second place this year are prime located retail properties with 56% (+20% points compared to 2017). In third place with 41% (previous year: 40%) are the food stores in the form of supermarkets and discounters. Hypermarket and superstore properties are on the shopping list for around 30% of the respondents, which equates to a significant upswing of 10% points. The big loser with investors is the shopping centre segment, where just 8% (-20% points) of the respondents wish to make investments. Also low on the shopping list is the DIY segment which is mentioned by just 4% of the respondents (previous year: 8%).

Focus on retail parks and prime located retail properties
**OPPORTUNISTIC INVESTMENTS GAINING ACCEPTANCE**

At 73% (previous year: 68%), the majority of the respondents indicated that low risk Core investments were an important component of their investment strategy [see Figure 56]. Core-plus and value-add investments are gaining in importance with the investors. In 2018, between 45% and 55% (multiple responses are possible) indicated they were pursuing this risk profile compared with just 35% to 38% in 2017.

The proportion of opportunistic investors has grown in the current survey; 40% of investors are pursuing this strategy in 2018 compared to 13% in 2017. Investors are looking at properties outside the Core segment more in 2018 than at any point since the surveys began in 2010.

The trend of the last few years that most investors (68%) indicate that yields will remain stable over the next 6 to 12 months continued in 2018. In particular, banks and listed property companies are of this opinion. However, 5% more of the investors had expected this development in the previous year [see Figure 57]. The proportion of respondents which indicated that they expected property yields to rise again has now risen to 17% (2017: 5%). The proportion which expected yields to fall has fallen to 15% (previous year: 22%).

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**56. Risk Profile of Investment Strategies**

Figures in %, multiple responses possible

<table>
<thead>
<tr>
<th>Year</th>
<th>Core</th>
<th>Core Plus</th>
<th>Value Add</th>
<th>Opportunistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>95</td>
<td>13</td>
<td></td>
<td>68</td>
</tr>
<tr>
<td>2018</td>
<td>55</td>
<td>45</td>
<td></td>
<td>73</td>
</tr>
</tbody>
</table>

Source: Hahn Group

**57. Expected Development of Yields for Retail Properties**

Figures in %

- Yields will stabilise at their current level
- Yields will fall
- Yields will rise

<table>
<thead>
<tr>
<th>Year</th>
<th>Yields will stabilise</th>
<th>Yields will fall</th>
<th>Yields will rise</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>27</td>
<td>44</td>
<td>30</td>
</tr>
<tr>
<td>2014</td>
<td>16</td>
<td>60</td>
<td>23</td>
</tr>
<tr>
<td>2015</td>
<td>12</td>
<td>28</td>
<td>60</td>
</tr>
<tr>
<td>2016</td>
<td>10</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>2017</td>
<td>5</td>
<td>70</td>
<td>15</td>
</tr>
<tr>
<td>2018</td>
<td>17</td>
<td>68</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: Hahn Group
USE TYPES – MIXED USES GAINING ACCEPTANCE

In addition to the classic tenants from the food, drugstore, fashion and DIY segments, other use types can serve to enhance a retail location and generate the desired cash flow. All the respondents view mixing uses by the addition of medical practices, offices, residential apartments and leisure and entertainment as highly appropriate. Offices are viewed by 83% of the respondents (2017: 80%), medical practices by 78% (2017: 83%), residential by 75% (2017: 70%) and leisure and entertainment amenities by 70% (2017: 63%) as good to very good additional occupiers in the tenant mix. Similar to the 2017 survey, an adjoining hotel was viewed as a good addition by over half of the respondents (58%). The overall tendency has remained largely unchanged from the previous year’s survey [see Figure 58].

58. Estimate of Potential Additional Uses for Retail Properties
Figures in %

- **Medical practice**
  - 2017: 15%
  - 2018: 22%
- **Office**
  - 2017: 20%
  - 2018: 20%
- **Residential**
  - 2017: 17%
  - 2018: 17%
- **Leisure & entertainment**
  - 2017: 5%
  - 2018: 5%
- **Hotel**
  - 2017: 5%
  - 2018: 5%

Increasing retail property management costs are viewed as an economic risk factor by just under one-fifth of the investors. By contrast, over half of the respondents indicated that changes in consumer behaviour (50% vs. previous year: 53%), the possible effects of a more subdued economy (53% vs. previous year: 33%) and a possible increase in interest rates (53%) presented a risk for retail property investments over the next 12 months. The most important risk factor for investors with 88% is the effect of online trade on the bricks-and-mortar retail segment [see Figure 59]. This is almost double the proportion of respondents indicated by the retailer survey.

59. Economic Risk Factors for Retail Investments
Over the next 12 months
Figures in %, multiple responses possible

- **Online retail**
- **Competition from e-commerce**
- **Change in consumer behaviour**
- **More subdued economic situation**
- **Significant rise in interest rates**

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Online retail is seen as the most important risk factor
FOOD AND DISCOUNTER STORES OFFER STABILITY

There is general agreement (93%) amongst the institutional investors that food retailers are the perfect anchor tenants for retail properties as they promise stability by generating high levels of footfall, even over the medium term [see Figure 60]. There is also a unified view in terms of the issue of resilience to online trade: 83% of the respondents see discount retail warehouses as less affected by competition from e-commerce than fashion and shoe stores in the medium to higher price categories. Two-thirds are also of the view that DIY stores & garden centres tend to be more resistant to online trade than other non-food retailers because of their high levels of in-store advice and less transportable goods. 20% and 15% of the respondents disagree or completely disagree with this statement.

60. Statements Relating to Food Retailers, Discount Retail Warehouses and DIY Stores

Food retailers are ideal anchor tenants in a retail property, as they promise stability by generating high levels of footfall, even over the medium term.

Fashion and shoe stores in the medium to higher price categories are more affected by online trade than, for example, discount retail warehouses.

DIY stores & garden centres are more resistant to online trade than other non-food retailers because of their high levels of in-store advice and less transportable goods.

BUILDING MANAGEMENT, PLANNING AND PROPERTY MANAGEMENT OFFER THE BEST POTENTIAL FOR INNOVATION

There is now much discussion in the real estate economy relating to digitalisation and many players are attempting to integrate the ideas of start-up PropTech companies into their businesses. The investors interviewed appear to be highly receptive to new ideas and 75% believe that innovations in building management and smart buildings offer the best potential for the future [see Figure 61]. 70% see chances to increase efficiency in planning and property management and 60% see opportunities for visualisations and navigation solutions (e.g. augmented reality, building navigation systems). As described in the previous section, retailers are much more reserved when it comes to the potential for digitalisation. By contrast, one-third (33%) of investors expect significant potential for digitalisation over the next few years in the areas of investment and financing (e.g. crowd funding and the letting and sale of commercial properties).

61. Future Potential Offered by Digitalisation in the Real Estate Economy

Figures in %, multiple responses possible
SLIGHTLY ABOVE THE CLASSIC CORE INVESTMENTS

YIELDS ACHIEVED AND THE LEVEL OF RISK INVOLVED ARE BOTH

MENT POTENTIAL IN AN OTHERWISE CORE PORTFOLIO. THE

EXAMPLE BY THE INCLUSION OF PROPERTIES WITH DEVELOP-

ENHANCING THE VALUE OF PROPERTIES. THIS IS ACHIEVED FOR

OBJECTIVE IS TO ACHIEVE SOME OF THE RENTAL INCOME FROM

THIS DESCRIBES AN INVESTMENT STRATEGY IN WHICH THE

CORe PLUS

This describes an investment strategy in which the objective is to achieve some of the rental income from enhancing the value of properties. This is achieved for example by the inclusion of properties with development potential in an otherwise Core portfolio. The yields achieved and the level of risk involved are both slightly above the classic Core investments.

CONVENIENCE RETAIL CENTRE

Uniformly planned or organically developed smaller-scale retail agglomeration serving a clearly defined core area. The magnets are typically convenience retailers (supermarkets, small food discounters, drugstores and pharmacies). In the case of the non-periodic sector, they focus on goods required over the medium term (clothing and shoes) sold in small retail units.

CORE

This describes a risk-averse investment strategy. Investment is principally in high-specification properties which are let long-term and generate stable rental income. Core investments focus on established stores in good locations with highly creditworthy tenants.

CORE PLUS

This describes an investment strategy in which the objective is to achieve some of the rental income from enhancing the value of properties. This is achieved for example by the inclusion of properties with development potential in an otherwise Core portfolio. The process is used across a number of segments.

CROSS-CHANNEL

Cross-channel describes multi-channel retailing involving the integration of a number of sales channels. Click & Collect is one example of cross-channel retailing.

DEPARTMENT STORE

Large-format retail store offering various operating and service concepts, in which the wide and varied assortments in different segments are offered mostly in city centre locations or shopping centres. An example of a department store is Galeria Kaufhof.

DISCOUNTER

Retail format characterised by a high turnover of goods in a limited mass-market product assortment with an aggressive pricing model. They tend to be self-service and have basic store fit-outs and sales areas of between around 400 sq m and 1,200 sq m. In the case of food discounters, the share of turnover attributable to non-food is around 10% – 13%.

FAMILY OFFICE

Organisation which assists wealthy families in their general family business affairs and wealth management.

FAST MOVING CONSUMER GOODS (FMCG)

Fast moving consumer goods are convenience goods required on a daily basis, the so-called quick turnaround products in retail terms. They particularly include food, but also washing and cleaning products and personal hygiene products. FMCG are reasonably-priced and easily substituted by similar quality goods (compared to investment and luxury goods). FMCG is a highly competitive market.

HYPERMARKET

Large-format, mainly self-service retail store with a sales area of more than 5,000 sq m, offering a comprehensive assortment with a focus on food, and mostly occupying a location which is easily accessible by car. In the case of hypermarkets, the non-food turnover element is typically around 35% – 50%.

MULTI-CHANNEL

Multi-channel describes retailers which use at least two sales channels to sell their products to customers. For example, they may operate a shop but also have their own online store.

OFF-PRIME LOCATION

Area of a city centre retail pitch which has a medium footfall (75% – 100%), the highest density of magnet retail stores and (inter)nationally active chain stores. Assortments offered in prime locations are typically "shopping goods" and "luxury goods" in the medium to higher priced segments. This is also where the highest rental prices are achieved for ground floor sales areas.

OMNI-CHANNEL

Omni-channel describes retailers which use more than two sales channels (in addition to online and bricks-and-mortar retail stores, they may also use social media or a catalogue).

OPPORTUNISTIC

This describes a particularly high-risk investment strategy. It involves investment in project developments or existing properties which are significantly undervalued in terms of their potential. This potential is typically released as part of a repositioning process. The hold period tends to be short and is based on a quick resale. Although there are potentially high yields, there are also inherent speculative risks.

PRIME LOCATION

Area in the city centre retail pitch which has the highest footfall (75% – 100%), the highest density of magnet retail stores and (inter)nationally active chain stores. Assortments offered in prime locations are typically "shopping goods" and "luxury goods" in the medium to higher priced segments. This is also where the highest rental prices are achieved for ground floor sales areas.

PRIME YIELD

The prime yield (net initial yield) shows the relationship between the initial annual net rental income (contractual rental income less non-recoverable operating costs) and the total investment sum (purchase price plus purchaser's costs = gross purchase price), expressed in terms of %. This is achieved in the respective top location for a building with first class fit-out, let long-term at market rental level.

GLOSSARY

CLICK & COLLECT

Click & Collect is a sales channel by which the customer orders a particular product online and then picks it up mostly free-of-charge in the retailer's own store. The process is used across a number of segments.

CONVENIENCE RETAIL CENTRE

Uniformly planned or organically developed smaller-scale retail agglomeration serving a clearly defined core area. The magnets are typically convenience retailers (supermarkets, small food discounters, drugstores and pharmacies). In the case of the non-periodic sector, they focus on goods required over the medium term (clothing and shoes) sold in small retail units.

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OFF-PRIME LOCATION

Area of a city centre retail pitch which has a medium footfall (50% – 75%), a dense coverage of small to medium-sized stores and some (inter)nationally active chain stores. In addition to "shopping goods", these typically offer convenience retail assortments. Rental prices here are significantly below the prime locations because of the plentiful supply of retail space.

OMNI-CHANNEL

Omni-channel describes retailers which use more than two sales channels (in addition to online and bricks-and-mortar retail stores, they may also use social media or a catalogue).

OPPORTUNISTIC

This describes a particularly high-risk investment strategy. It involves investment in project developments or existing properties which are significantly undervalued in terms of their potential. This potential is typically released as part of a repositioning process. The hold period tends to be short and is based on a quick resale. Although there are potentially high yields, there are also inherent speculative risks.

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REGIONAL CENTRES
Regional centres are large cities of regional, and in some cases, national importance due to their function as administrative, socio-political and economic centres. They comprise the cities with the highest absolute retail sales in Germany. From a regional economic and retail economic perspective, these tend to offer long-term stability and a positive effect on the attractiveness of the cities as real estate investment and retail locations.

REITs
Real estate investment trusts are stock exchange listed public limited companies which achieve their turnover predominantly from the operation of real estate. They benefit from special structural and tax conditions.

RETAIL PARK
Typically, a single-storey retail park in locations which are easily accessible by car and are planned and managed centrally. Their uniform building design and shared car parking give the retail park the appearance of an integrated retail complex. Anchor tenants include medium to larger-scale retail warehouses, which are often connected by a covered mall area. The total sales area in these parks is at least 5,000 sq m.

RETAIL STORE
Large-format retail store with various operating and service concepts and a varied and segment-specific assortment, typically occupying a high street or shopping centre location. One example of a textile retail store is a branch of C&A.

RETAIL WAREHOUSE
Large-scale self-service retail store offering mainly a wide and varied assortment of reasonably priced goods in a specific sector, or targeted at a specific customer group and typically occupying a location which is easily accessible by car.

RETAIL WAREHOUSE AGGLOMERATION
Typically, a single-storey shopping centre comprising a group of retail warehouses in locations which are easily accessible by car, but without a collective Centre Management and with no recognisable uniform planning policy. Some have shared customer car parking, but these are the exception to the rule.

SECONDARY LOCATIONS
Secondary locations are districts, towns and cities which exhibit above-average index scores in the factors social demography, regional economy and retail economy in the CBRE Retail Investment Scoring Model. At the same time, the development tendencies here are more positive within the defined categories, compared to other locations. Secondary/second-tier locations may therefore be categorised as attractive macro locations over the longer-term.

SHOPPING CENTRE
A shopping centre (also known as an Einkaufszentrum in Germany) is a centrally planned, constructed and managed supply facility offering goods targeted at short, medium and long-term requirements. In contrast to retail parks, the stores are smaller and there is a greater variety but less in the way of specialist retail warehouse style assortments. The variously sized shops, restaurants and service providers are typically arranged over several floors, and are connected to each other by a covered mall area. The minimum total sales areas are typically between 5,000 sq m and 10,000 sq m.

SPACE PRODUCTIVITY
The space productivity factor of sales areas is measured in turnover per annum. Space productivity therefore is defined as:

\[
\text{turnover p.a.} = \frac{\text{turnover}}{\text{sales area in sq}}
\]

The turnover includes VAT (gross turnover).

SUPERMARKET
Self-service retail store offering mostly food and luxury food items including fresh produce over a sales area of up to 1,500 sq m in locations which are easily accessible by car or in city district locations.

SUPERSTORE
Large-format, mainly self-service retail store with a sales area of between around 1,500 sq m – 5,000 sq m offering a wide and varied assortment of food and luxury food items and other consumer goods in the short-to medium-term requirement segments in locations which are easily accessible by car. In the case of superstores, the non-food turnover element is typically around 20% – 30%.

TOP 7 LOCATIONS
The cities of Berlin, Hamburg, Munich, Frankfurt, Stuttgart, Cologne and Düsseldorf are the most attractive real estate locations in Germany due to their size and economy. Strong interest from both German and international market players means that rents and investment volumes are at an above average level in these cities.

VALUE-ADD
This describes an investment strategy involving significantly undervalued properties. The objective is to release value enhancement potential by implementing asset management programmes. This can, for example, involve the repositioning of a property in the market through extensive revitalisation and a change of tenant.

turnover p.a.
sales area in sq

The turnover includes VAT (gross turnover).