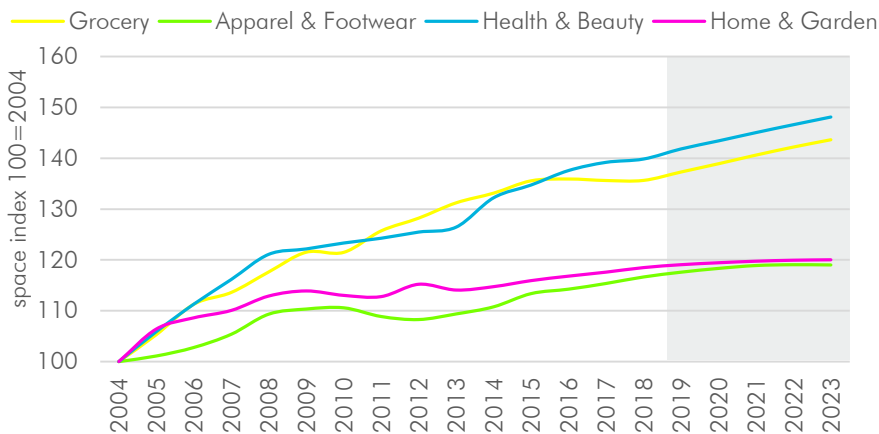


# CENTRAL EUROPE

## CATCHING UP





### Space Requirement Development



- Double digit growth in disposable income over the next 5 years translates into double digit sales growth in three of the four analysed categories despite a substantial growth in the share of e-sales.
- Growing sales densities will further improve retailers bottom-line and maintain the CEE region as a successful area of their store-expansion.
- Space requirements for Health & Beauty and Grocery will have the most dynamic growth. The overall growth of the Grocery segment is strongly driven by further growth in both sales and space requirements in Poland. In Health & Beauty, the space per capita in CEE is still approx. 40% behind that of Austria and Germany. Growth is expected in all CEE countries, however the highest should be in Slovakia, Romania and Hungary.
- In Apparel (fashion & footwear), substantial growth in the share of e-sales as a proportion of the total is expected. The trend to grow sales densities in connection with a limited project pipeline will lead to relatively stable space requirements. In Romania, the current situation of an extremely low space per capita will lead to an almost 10 % growth in space requirements.
- In the Home category it is expected that substantial growth in sales will be mainly translated into higher store efficiency and thus there will be a proportional growth in space.

## Major Indicators

### Growth 2018-2023

	Sales	Space	E-sales
 Grocery	12.6%	5.9%	61%
 Apparel	9.7%	2.0%	178%
 Health	14.2%	5.9%	24%
 Home	12.3%	1.3%	46%

### Growth 2018-2023

Income, personal disposable, real, EUR	14.3%
Population Growth	-1.0%

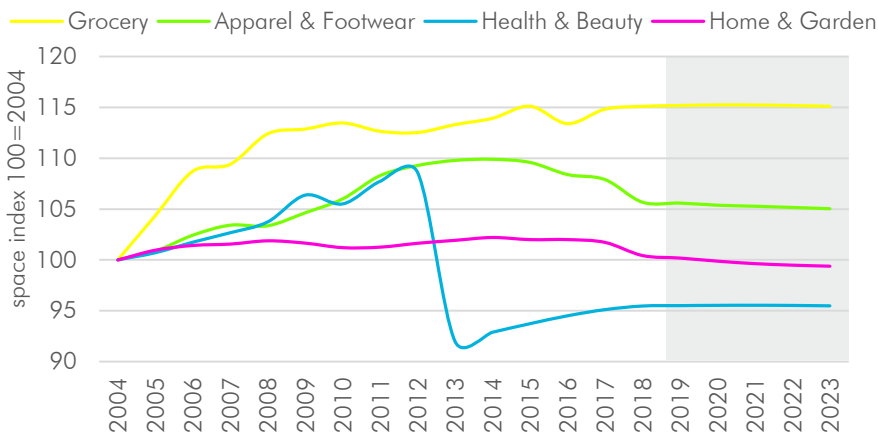
### 2018 year-end

Online penetration	5.4%
Retail spend, real, EUR p.c.	3,190
Sales density, EUR/sq m	2,520

# AUSTRIA

## INCREASING ONLINE SALES LEAD TO STAGNATION OF RETAIL SPACE

### Space Requirement Development



- Both retail sales and retail space per capita in Austria are among the highest in Europe. The further development path of turnover and sales area will be supported by expected population and income growth over the next five years.
- The decline in sales space in grocery retailing resulting from a market exit in 2016, has now been totally compensated. The forecasts for the next five years assume a stable development of store based retail sales and sales area in food retailing. Sales in online food retailing will more than double by 2023, albeit from a low share of the overall market compared to other sectors.
- In the health & beauty sector, Austria holds the Europe-wide record in terms of sales area per inhabitant, which means that no return to the level before the Schleckers insolvency is expected.
- The decline in sales space in the apparel and footwear segment, which began in 2014, should stabilise in the medium term. Sales, and above all, sales growth continue to shift significantly towards e-commerce, however, the resulting impact on space requirements will depend heavily on the success of retailers' omnichannel strategies.
- The high level of sales space per capita in the home and garden sector is offset by high sales density in a European comparison. The decline in sales space in the home & garden segment during the previous year is likely due to weakening for the five year forecasting period.

### Major Indicators

#### Growth 2018-2023

	Sales	Space	E-sales
Grocery	0.0%	0.0%	118%
Apparel	-7.5%	-0.6%	34%
Health	0.0%	0.1%	19%
Home	-4.4%	-1.0%	29%

#### Growth 2018-2023

Income, personal disposable, real, EUR	5.0%
Population Growth	2.6%

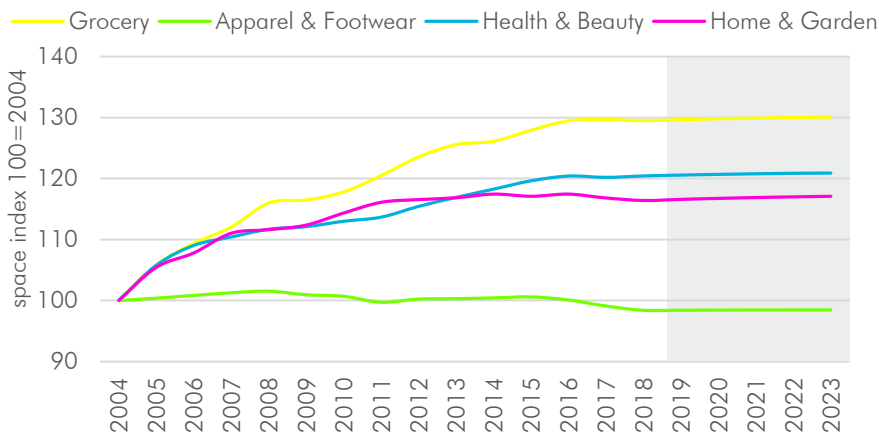
#### 2018 year-end

Online penetration	6.7%
Retail spend, real, EUR p.c.	6,360
Sales density, EUR/sq m	3,790

## CZECH REPUBLIC

### A MATURING CZECH RETAIL MARKET WITH A STRONG ECONOMY AND A MAJOR FOCUS ON INSTORE QUALITY AND EFFICIENCY

#### Space Requirement Development



- The Czech retail market has been offering very attractive conditions both for developers and investors and has continued to mature. Whilst new development has become limited, the major trend is now on re-positioning and ongoing enhancement of the dominance of already strong schemes within their catchment areas, with many projects considering refurbishment and in some cases extension.
- All sectors apart from Apparel & Footwear showed moderate growth since 2004 with the highest being recorded in the Grocery sector, which is expected to undergo two major trends: 1. Downsizing of large scale hypermarkets and 2. expansion of discount stores driven by a shift in customer behaviour from weekly to daily / fresh shopping.
- While sales in Apparel & Footwear have been continuously growing since 2014, the space requirement development figures indicate a decrease over the last three years, this phenomenon has mainly been caused by consolidations. We are currently seeing two types of retailer optimisation strategies: 1. Increasing store space in order to provide customers with a full brand offer and experience, and 2. Contrarily, some retailers are decreasing store space and are focussing on efficiency.
- Due to the increasing importance of online retail sales the role of the physical store is changing. Some stores are becoming an important part of a company's marketing strategy helping to increase sales. Omnichannel retail remains an important part of the sector, but we also see several online retailers going into a bricks and mortar presence.

#### Major Indicators

##### Growth 2018-2023

	Sales	Space	E-sales
Grocery	5.8%	0.5%	98%
Apparel	6.0%	0.1%	98%
Health	3.0%	0.4%	12%
Home	6.9%	0.6%	77%

##### Growth 2018-2023

Income, personal disposable, real, EUR	9.2%
Population Growth	0.7%

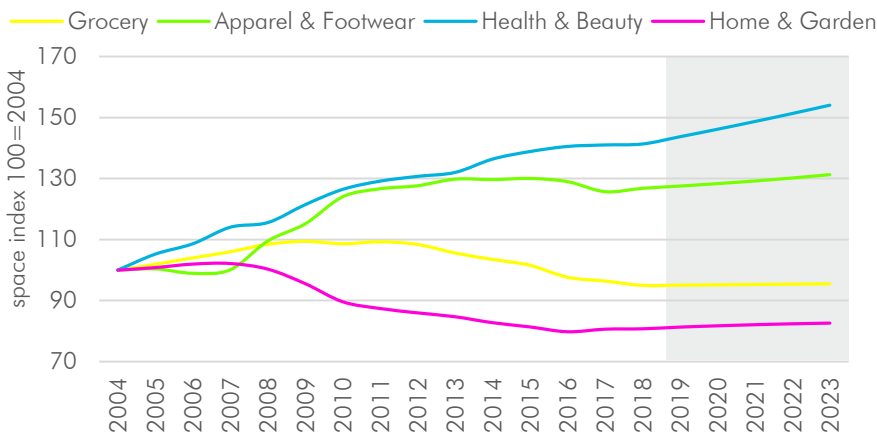
##### 2018 year-end

Online penetration	11.7%
Retail spend, real, EUR p.c.	4,160
Sales density, EUR/sq m	2,170

# HUNGARY

## IMPRESSIVE SALES GROWTH COUPLED WITH LIMITED EXPANSION IN SPACE WILL LEAD TO HIGHER SALES DENSITY FIGURES ACROSS ALL CATEGORIES

### Space Requirement Development



- Retail sales in Hungary have shown substantial growth in the past 3 years, hovering in the 5-8% range annually since 2017. This has been driven by favourable economic conditions leading to real income growth, which is predicted to continue in a similar vein until 2023. Sales growth is forecast to increase in all sectors over the next five years, led by 9% growth in the Health and Beauty sector and 3.5% in the Fashion sector.
- Hungary, which has lagged behind the region when it comes to the entrance of new retailers should see the most new brands entering the market across all non-food sectors. New store openings will be focussed on Budapest, where continuous tourism growth of between 5-10% annually is making the city a favourable destination for quality brands which are already present in the region.
- New zoning regulations are making it more difficult for discount and grocery operations to open new stores and as a result are causing strong increases in sales densities in existing locations as well as for on-line sales. We expect to see increased competition among retailers which will result in better quality and a wider choice of merchandise for the consumer, especially a greater variety in healthier food options.
- Record breaking new home construction in all sectors, ie. primary residence, investment properties and vacation homes as well as new subsidies being provided to families to enable them to renovate older homes is spurring growth in the home and garden segment. There are limited specialty retailers in this segment currently and we project brands active in the region to enter the Hungarian market to fill this gap.

### Major Indicators

#### Growth 2018-2023

	Sales	Space	E-sales
Grocery	13.2%	0.5%	55%
Apparel	18.0%	3.5%	193%
Health	21.9%	9.0%	25%
Home	15.6%	2.3%	31%

#### Growth 2018-2023

Income, personal disposable, real, EUR	7.6%
Population Growth	-0.8%

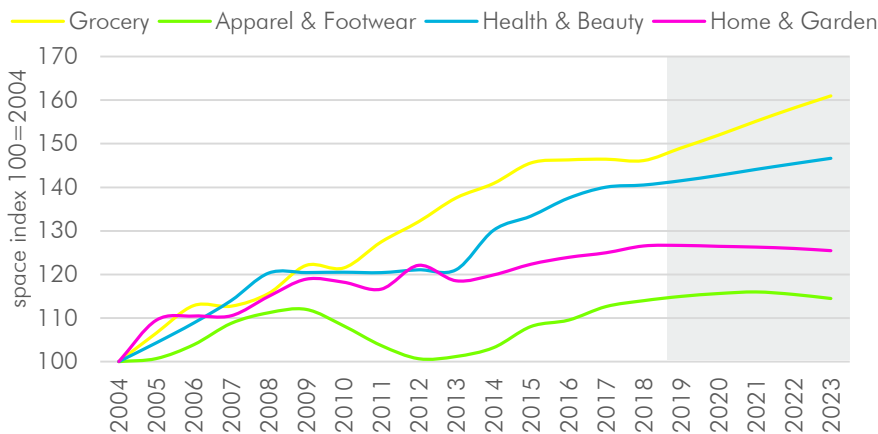
#### 2018 year-end

Online penetration	4.7%
Retail spend, real, EUR p.c.	3,290
Sales density, EUR/sq m	1,740

# POLAND

## POSITIVE FORECASTS FOR RETAIL SALES SUPPORTED BY MODERATE GROWTH OF RETAIL SPACE REQUIREMENTS

### Space Requirement Development



- The favourable economic situation in Poland generates an increase in consumption, thereby supporting growing retail sales in the grocery sector. In Poland the grocery segment with the highest growth potential is represented by discount stores, such as: Biedronka, Lidl, Aldi.
- The submarket of the apparel & footwear category seems to be quite saturated, therefore the need for retail space is expected to remain stable. In general, brands tend to optimise space leased in traditional stores by partially switching or expanding their e-commerce operations.
- The forecasted growth of retail space in the health & beauty category is in line with the general trend of well-being (healthy and active lifestyle, using natural cosmetics, caring about yourself, etc.). Retailers from this category occupy relatively large units of 250 sq m at a minimum, therefore proving a moderate increase in space requirements for this sector.
- Due to a booming residential market in Poland, the home & garden category is currently doing very well, therefore retail sales are forecast to grow strongly. However, it is necessary to divide this category into two sub-groups: DIY markets (the biggest in Poland are Castorama, Jula, Leroy Merlin and OBI) and concepts with home accessories in shopping centres. The first group of stores represents a rather saturated sub-sector in Poland, whilst the second continues to experience dynamic growth. Due to relatively small-scale retail concepts of the home accessories sub-sector, demand for retail space is expected to somewhat decrease in the long-term perspective.

### Major Indicators

#### Growth 2018-2023

	Sales	Space	E-sales
Grocery	16.7%	10.2%	67%
Apparel	0.8%	0.4%	91%
Health	7.7%	4.4%	42%
Home	9.9%	-0.8%	14%

#### Growth 2018-2023

Income, personal disposable, real, EUR	16.9%
Population Growth	-0.5%

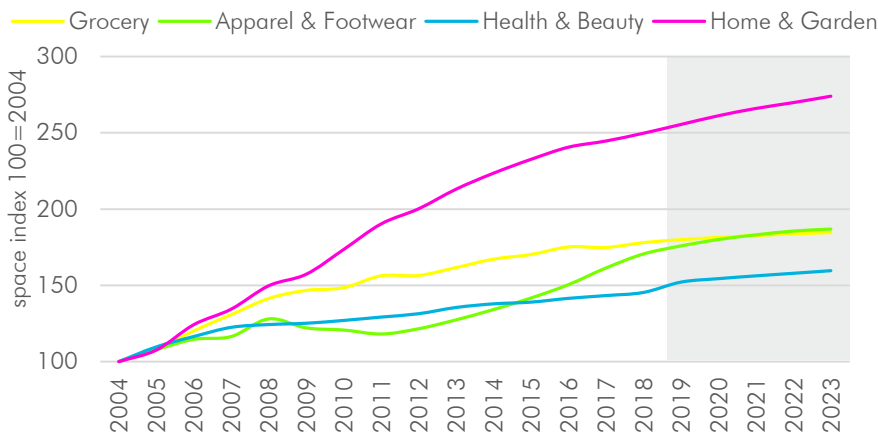
#### 2018 year-end

Online penetration	6.7%
Retail spend, real, EUR p.c.	3,330
Sales density, EUR/sq m	2,660

# ROMANIA

## STRONG PIPELINE OUTSIDE BUCHAREST WHILE EXTENSIONS ARE BECOMING A DRIVER OF THE LOCAL MARKET EXPANSION

### Space Requirement Development



- The modern retail stock in Romania reached 3.6m sqm at the end of 2018, of which, over 30% is located in Bucharest.
- The strong competition both in Bucharest and in the major regional cities has forced developers to concentrate on secondary and even tertiary cities in order to expand their coverage on the Romanian market.
- Extensions are becoming a trend, approx. 25% of the under-construction projects to be delivered in 2019 are extensions of existing retail schemes.
- Shopping centres will continue to be the first choice for new entry retailers playing safely, as they can leverage the centres' established market presence, footfall, reputation as well as tenant mix to their benefit.
- With an increasing retail density both in Bucharest as well as in major regional cities, location, catchment areas and the proximity of the competition are two key aspects that developers will have to solve.
- E-commerce has been gaining market share in Romania, but the figure cannot yet be compared with those encountered in Western countries. Retailers operating on the local market are aware of the fact that an omnichannel development strategy is essential to success.

### Major Indicators

#### Growth 2018-2023

	Sales	Space	E-sales
Grocery	7.8%	3.7%	117%
Apparel	24.0%	9.6%	105%
Health	32.1%	9.8%	70%
Home	24.4%	9.7%	59%

#### Growth 2018-2023

Income, personal disposable, real, EUR	16.0%
Population Growth	-3.4%

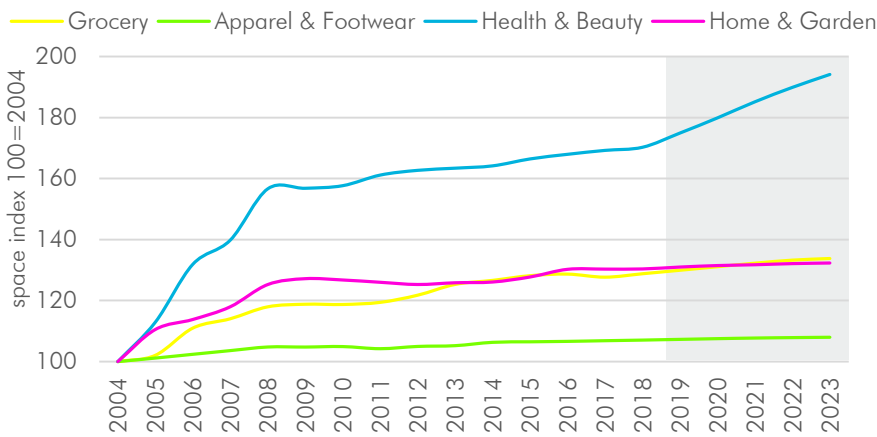
#### 2018 year-end

Online penetration	5.6%
Retail spend, real, EUR p.c.	2,210
Sales density, EUR/sq m	3,080

# SLOVAKIA

## RISING PURCHASING POWER DRIVING SALES GROWTH ACROSS SECTORS AND PLATFORMS

### Space Requirement Development



- Due to relatively high retail saturation in Slovakia, we expect only minor increases in space dedicated to both groceries and apparel while increasing demand for health and services should trigger an increase in this segment in the years to come.
- Retail spending in physical stores remains concentrated in shopping centres and outer city retail parks although certain resurgence of the high street is palpable in the centre of Bratislava as a result of the increasing density of development within the city boundaries.
- Increasing demand for quality in the specialist food segment has manifested itself by an increasing number of urban markets, expanding food courts and overall solid sales growth in the sector. Online sales of groceries have lagged behind neighbouring countries due to an absence of competition among providers. We expect this segment to attract new players and trigger significant cumulative growth of nearly 200% by 2023.
- The shift towards online sales remains split unevenly between sectors with electronics and books dominating the transformation, with the remaining segments progressively picking up trends from more mature markets.

### Major Indicators

#### Growth 2018-2023

	Sales	Space	E-sales
Grocery	9.3%	3.9%	192%
Apparel	16.7%	0.9%	83%
Health	25.8%	14.0%	36%
Home	4.9%	1.5%	59%

#### Growth 2018-2023

<b>Income, personal disposable, real, EUR</b>	12.7%
Population Growth	0.4%

#### 2018 year-end

<b>Online penetration</b>	6.8%
Retail spend, real, EUR p.c.	3,620
Sales density, EUR/sq m	2,130