The children's apparel, toys and hardware (ATH) markets in Poland, Romania and Ukraine

Study extract

Contents

Page

A. Introduction

The ATH markets (0-14-year-old children) in all three countries are growing strongly and exhibit similar development paths

Executive summary (1/2)

1

Market overview

> **Measured by the key ATH market drivers of annual spend per child and disposable income, Poland, Romania and Ukraine** are significantly behind Western European countries in their development and therefore continuous strong growth is expected to catch up with more developed countries

> **ATH market growth in local currency** in all three countries is **forecast to accelerate through 2022** in comparison to the last five years – Similar positive trend expected in EUR currency, except for Ukraine, as a result of the considerable local UAH devaluation due to the political/economic crisis in 2014-15

> Forecast **real GDP growth and decreasing unemployment rates in all the countries** are expected to **positively impact disposable income**. As a result, **annual spend per child is forecast to grow significantly** in all three countries – at c. 6% CAGR in Poland, c. 8% in Romania, c. 9% in Ukraine

> The **number of children is forecast to continue increasing in Poland** thanks to government-led pro-birth legislation, while in the other countries the number of children is forecast to fall slightly

> **In Poland, the narrowing gap between disposable income in larger and smaller cities drives future opportunities** beyond the big cities. In other countries, the income gap is widening (in Romania this trend is expected to reverse). Consequently, in Poland there is an **expectation of further growth in medium-size and smaller cities**. In Romania, several brands have started exploring **larger store formats, with a focus on big cities**. Ukraine is still at **the beginning of this trend, with comparatively fewer shopping malls** and shopping mall rollout driving the market

> **In all three countries, children's apparel is the largest category in ATH**, accounting for 58% in Poland, 63% in Romania and 62% in Romania, **followed by toys and hardware**. Age structure is a key market driver for hardware and some subcategories within toys

> **Online players, children's one-stop shop chains and fashion chains are forecast to have the highest growth in share**, with gains coming from "other players" as well as the decline in the gray and second-hand market

> In the **ATH market**, key customer selection criteria for retailers include wide product assortment, brand awareness and convenience in shopping experience, including omnichannel, with growing importance of Click & Collect services. This has **led to the increasing importance of one-stop chains in the market**

> The **ATH online sales channel is becoming more and more important and is expected to have a significant share of the market in the future**, driven by the **increase of Internet penetration, key players' online strategy and customer preference for omnichannel availability**. This channel type offers convenience – families with children lack time and seek a broad offering and availability, expectations which are mainly met by large shops with omnichannel capability. In all three markets, the online sales channel is dominated by one large pure online player (i.e. Allegro as a marketplace in Poland, eMag in Romania, Rozetka TOV in Ukraine) with key players expected to challenge their position through omnichannel expansion. Currently, there is no evidence that global online players, like Amazon, are planning to enter these markets

Children's one-stop chains and online retailers have been and are forecast to be the fastest growing segments in the three countries

Executive summary (2/2)

2

Players in the market

> One-stop shop specialists, grocery retailers and online players generally **cover all three ATH product categories**, while children's specialist chains and fashion chains are generally focused on only one main product category

> The **Polish market is relatively consolidated** (top 5 players hold c. 42%) **and dominated by two large players** – a children's one-stop chain (Smyk, c. 12% market share) and a pure online player (Allegro as a marketplace provider, c. 12% market share). Both have experienced high growth over the past five years equal to c. 15%. The remaining market is split between many smaller players or big companies that generate low revenues from ATH sales, like grocery chains that are strong in toys and hardware categories and fashion chains that lead the apparel category

> **Romania's market is moderately consolidated** (top 5 players hold 27%), **led by one large player** – a grocery chain (Carrefour with over 7% market share) and four medium-size players – a grocery chain (Auchan), a pure online player (eMag), and two children's one-stop chains (Jumbo, Noriel) with c. 5% share

> The **Ukrainian market is the least consolidated** (top 5 players hold 14%) **and dominated by two large players** – a children's one-stop chain (Antoshka, 6% market share) and a grocery hypermarket chain (Auchan, 4% market share)

> **Players cover the full market spectrum in terms of breadth of product assortment and level of child focus** – The largest share of ATH revenues comes from chains with high SKU number. In Poland and Romania, in the apparel market, modern retailers position themselves at the high and low end of the price/ fashion spectrum leaving limited space for independent shops, but in Ukraine they are mainly in the upper range leaving room for independents at the low end

3

Market segment development

> **Online players, children's one-stop shops and fashion chains are expected to continue on their high-growth** trajectory in all three countries (annually between 11% -19% for online players; 8% - 12% for one-stop shops; 7% - 12% for fashion chains)

> **Future growth of grocery stores is expected to slow down**; their strong position seems to be higher in the countries with comparatively low disposable incomes (Romania, Ukraine)

> **Online players' and the online omnichannel players' revenue share** is expected to record **high growth in all countries** of between 15.5% and 22% CAGR

> The market share of **children's specialist chains is expected to erode over the coming years** in all countries, mainly due to customers' preference for wide SKU offerings from chains

> Other traditional players are **expected to lose their market share** in all three countries as they become less competitive in price, quality and location

> Growth of modern retail chains is expected to be supported by **growing number of shopping centers and retail parks in all three countries**

The three countries are heading towards Western European levels, but they are at different stages of ATH market development

ATH market development in the market maturity cycle

1 Annual spend per child [EUR][1]

Disposable income per HH [EUR '000][2]

As **the ATH markets in Poland, Romania and Ukraine are** developing **in line with the Western European trajectory**, further significant increases in market sizes are expected for the coming years to catch-up. As a result, there is still room for further development for well positioned players in both the offline and online markets

1) On ATH products   2) HH: household

Annual spend per child in Poland, Romania and Ukraine is below the average of selected Western European countries

Comparison of selected indicators to those for selected Western European countries

1

Annual spend per child [EUR, 2017][1]

	Annual spend per child
🇬🇧 The UK	828
🇸🇪 Sweden	960
🇳🇱 The Netherlands	904
🇮🇹 Italy	838
🇫🇷 France	643
🇩🇪 Germany	659
🇵🇱 Poland	364
🇷🇴 Romania	267
🇺🇦 Ukraine	120

Ø 620

Drivers of annual spend per child [2017]

	Disposable income per HH[2] [EUR ths]	Annual number of children apparel per child [#]	Annual number of toys per child [#]
The UK	33	37	39
Sweden	43	31	Data not available
The Netherlands	38	26	Data not available
Italy	32	24	12
France	44	18	20
Germany	41	21	25
Poland	18	16	13
Romania	12	11	12
Ukraine	3	9	5
	Ø 29	Ø 22	Ø 18

1) On ATH products   2) HH: household

ATH market is forecast to accelerate through 2022 in Poland and Romania and recover after the crisis in Ukraine

ATH market value, dynamics and trends

1

Poland

Romania

Ukraine

ATH market [EUR m, % of total]

Poland

3.1% → 6.5%

	2012	2017	2022F
Total	**1,795**	**2,086**	**2,858**
Hardware	14%	13%	12%
Toys	28%	29%	29%
Apparel	58%	58%	59%

Romania

5.1% → 7.0%

	2012	2017	2022F
Total	**635**	**815**	**1,142**
Hardware	15%	14%	13%
Toys	21%	23%	22%
Apparel	64%	63%	65%

Ukraine

-8.7% → 9.5%

	2012	2017	2022F
Total	**1,296**	**821**	**1,290**
Hardware	18%	17%	16%
Toys	20%	22%	22%
Apparel	61%	62%	63%

Trends

> ATH market is expected to grow strongly owing mostly to the growth in annual spend per child driven by disposable income growth and birth rate growth driven by pro-family programs

> The primary growth driver is the projected rise in annual spend per child driven by high disposable income growth
> The fastest growing segment is expected to be apparel, as a result of customer preference for more premium products

> In the last five years the market grew by 13% annually in UAH terms but declined in EUR terms due to currency exchange rate impact
> ATH market is expected to grow strongly owing mostly to growth in annual spend per child as a result of growing disposable incomes and normalization of the economic and social climate

■ **Hardware** ■ **Toys** ■ **Apparel** — X% → CAGR

In all three countries, consumers prefer ATH one-stop shop retailers with a strong online presence, broad SKU range and moderate prices

Key trends and customer criteria

1

Key trends and customer criteria

	Poland		Romania		Ukraine	
	Key positive trends	**Main criteria for choosing retailers**	**Key positive trends**	**Main criteria for choosing retailers**	**Key positive trends**	**Main criteria for choosing retailers**
	Omnichannel **Location**	Multichannel availability	**Omnichannel** **SKUs** **Product brand** **Location**	Multichannel availability	**Omnichannel** **SKUs** **Product brand** **Location** **Private label**	Multichannel availability
		One-stop shopping		One-stop shopping		One-stop shopping
		Wide SKU range		Wide SKU range		Wide SKU range
		Retail brand		Retail brand		Retail brand
		Price		Price		Price
		Sales counseling/advice		Sales counseling/advice		Sales counseling/advice
		Commercials/marketing		Commercials/marketing		Commercials/marketing

Trends

> One-stop shopping, availability of a wide range of SKUs and omnichannel presence are crucial for choosing retailers. For consumers, a strong retail brand increases the perceived quality of products sold by the respective retailer. Increasing marketing spend seems not to be as important to customers

> SKU range, one-stop shopping and multichannel availability appear to be the most important characteristics for ATH retailers
> The growing preference for higher quality products strongly contributes to market development

> Consumers favor branded products, at the same time price is still the most important purchasing criterion across the board, resulting in a key role for own brands
> As in the other countries, SKU range, one-stop shopping and omnichannel availability appear to be important for ATH retailers

Online players, children's one-stop shops and fashion chains are forecast to see the highest market share growth resulting from other players' decline

Share of ATH distribution channels, 2017-2022F [EUR m, % of total]

1 Share of ATH distribution channels [EUR m]

Poland

| 2017 | 17% | 5% | 23% | 18% | 15% | 23% | 2,086 |
| 2022F | 20% | 5% | 26% | 17% | 18% | 14% | 2,858 |

Romania

| 2017 | 16% | 1% | 24% | 14% | 10% | 34% | 815 |
| 2022F | 17% | 1% | 24% | 14% | 13% | 32% | 1,142 |

Ukraine

| 2017 | 19% | 10% | 8% | 6% | 7% | 51% | 821 |
| 2022F | 22% | 9% | 9% | 6% | 10% | 44% | 1,290 |

Trends

> In the three countries, the "other players" segment, which includes independent retail players, is going to shrink to the benefit of other distribution channels due to its weaker value proposition in the face of changing customer preferences as well as accelerated expansion of modern retail chains

> Online players, fashion chains and one-stop shops are expected to gain the most from the decline of other players as well as ATH market growth. They are forecast to have the highest growth as well as the largest shares of the modern retail ATH market

Children one-stop chains | Children specialist chains | Fashion chains | Grocery chains | Online players | Other players

ATH online market[1] in all three countries is forecast to grow due to both total e-commerce market and total ATH market growth

ATH online market[1] value, dynamics and trends

1

ATH online market [EUR m]

	Poland	Romania	Ukraine

Poland

| 12.2% | 18.9% | 37.6% |

+12.4% → +22.2% →

220 — 2012
395 — 2017
1,075 — 2022F

Romania

| 8.3% | 13.7% | 20.2% |

+16.1% → +15.6% →

53 — 2012
112 — 2017
231 — 2022F

Ukraine

| 5.9% | 8.0% | 12.6% |

-2.9% → +20.0% →

76 — 2012
66 — 2017
163 — 2022F

% Share of the total ATH market

Trends

> The ATH online sales channel is expected to experience significant growth in all three countries, driven by increased Internet penetration, key players' online strategy and customer preference for omnichannel availability. In all three markets, the online sales channel is dominated by one large pure online player (i.e. Allegro[2] in Poland, eMag in Romania, Rozetka TOV in Ukraine), with key players expected to challenge their position through omnichannel expansion

> In Poland, Sunday retail trade restrictions are expected to accelerate the growth of online sales. Additionally, a new trend of some smaller players in children's specialist chains moving into online-only sales has been observed in recent years. Click & Collect services are also increasing in importance

1) Including pure online players and online revenues of other players   2) Allegro as a marketplace   X% → CAGR

Decrease in the gray and second-hand market creates opportunities for ATH market growth in the medium to long term

Gray and second-hand ATH market value and trends – On top of the ATH market

1

	Poland			Romania			Ukraine		
	Since 2012	Estimated % of total market 2017	Through 2022F	Since 2012	Estimated % of total market 2017	Through 2022F	Since 2012	Estimated % of total market 2017	Through 2022F
Gray ATH	↘	5-7%	↘	↘	10-15%	↘	→	30-40%	→
Second-hand ATH	↘	<5%	↘	→	<5%	→	→	20-30%	→

Trends

Poland
> Tightening tax system is expected to lead to decline of the small gray market
> Growing disposable incomes, high availability of cheap products and preference for new products contribute to the decline in the second-hand market

Romania
> Tightening tax system is expected to lead to decline of the gray market, which will stimulate the growth of the ATH market
> Second-hand markets are expected to decline in the long term (after 2022)

Ukraine
> Both gray and second-hand markets are relatively large and are forecast to be steady in the medium term
> Long term, beyond five years, their size creates an opportunity for high ATH market growth

Roland Berger

Share of top 5 players differs between countries, indicating potential for further consolidation growth in Romania and Ukraine

Revenue market shares of 2017's top 5 ATH players [% of total ATH market value]

2

Top 5 revenue market shares

	Poland 🇵🇱	**Romania** 🇷🇴	**Ukraine** 🇺🇦
	2017	**2017**	**2017**
ATH market	42%	27%	14%
Children's apparel	43%	22%	10%
Toys	44%	58%	29%
Children's hardware	37%	30%	13%

Trends

> The Polish market is relatively consolidated and dominated by two large players in all categories – a children's one-stop chain (Smyk) and a pure online player (Allegro as a marketplace provider). The remaining market is split between many smaller players.

> The Romanian market is less consolidated and led by one large player – a grocery chain (Carrefour) – and four medium-size players – a grocery chain (Auchan), a pure online player (eMag), and two children's one-stop chains (Jumbo, Noriel)

> The Ukrainian market is the least consolidated and dominated by two large players – a grocery hypermarket chain (Auchan) and a children's one-stop chain (Antoshka) – with a much smaller children's one-stop chain following in third place

In all three countries, the ATH markets in respect of children's one-stop chains are expected to see rapid growth in number of stores

Development of retail distribution by ATH market segment[1] [# of stores]

3 — Number of stores by segment

Poland

	2017	2022F
Children's one-stop chains	400	600-750
Children's specialist chains	396	350-500
Fashion chains	2,851	3,300-4,000

Romania

	2017	2022F
Children's one-stop chains	110	220-270
Children's specialist chains	70	100-140
Fashion chains	360	450-510

Ukraine

	2017	2022F
Children's one-stop chains	170	250-290
Children's specialist chains	120	130-150
Fashion chains	110	150-180

Trends

Poland
> Narrowing disposable income gap between small and big cities opens up new opportunities for one-stop shops and fashion chains. Entry in smaller cities will challenge children's specialist chains and other players present in the smaller cities
> Development in big cities is expected to continue

Romania
> One-stop shop chains have already doubled and are forecast to increase their footprint by an additional 60-100% by 2022
> Children's specialist chains and other players are expected to experience further market share erosion as pressure from all other formats mounts

Ukraine
> Sustained growth expected for children's one-stop shops and fashion chains, based on announced expansion plans
> Grocery chains will continue to grow in both large and small urban areas, currently dominated by traditional trade

1) Methodology used is described in slide 136

Roland Berger

Growth of modern retail chains is expected to be supported by a growing number of commercial parks in all three countries

Overview of shopping malls and retail parks

3

	Poland	**Romania**	**Ukraine**

Key information

Poland	**Romania**	**Ukraine**
> Warsaw has a shopping mall density ratio of c. 450 sqm/1,000 population	> Bucharest has a shopping mall density ratio of c. 310 sqm/1,000 population	> Kiev has a shopping mall density ratio of c. 340 sqm/1,000 population
> Total of 569 commercial centers[1] and c. 56 new ones planned as of 2018, and total of 837 estimated for 2022	> Total of 95 commercial centers[1] and expected to exceed 100 in 2018	> 273 commercial centers[1] and 31 new ones planned in 2018 in the 12 biggest cities only[2]
> Cities statistics:	> Cities statistics:	> Cities statistics:
# of cities above 500,000 population: 5	# of cities above 500,000 population: 1	# of cities above 500,000 population: 9
# of cities 200,000-500,000 population: 11	# of cities 200,000-500,000 population: 10	# of cities 200,000-500,000 population: 22
# of cities 50,000-200,000 population: 70	# of cities 50,000-200,000 population: 35	# of cities 50,000-200,000 population: 66

Trends

> Most of the modern chains open their stores in shopping malls as well as in retail parks, so their rollout is dependent on the supply of new developments. Shopping malls in all three countries are located in city centers and close to the center, rarely outside cities

> Shopping malls are becoming very popular among customers in the analyzed countries. Growth is observed in terms of sqm as well as number of new developments, although the density ratio of the biggest cities in the analyzed countries is higher than or close to Western European countries' average density of shopping malls in big cities (c. 360 sqm/1,000 population). However, a number of new developments are likely to be small-scale projects and retail parks in Poland. Romania and Ukraine are expected to follow
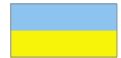
> Customers' preference for shopping malls over high street stores is not only driven by a preference for a wide range of stores under one roof, but also about the multifunctional and sometimes cultural role they play, with increased dining, leisure and entertainment offerings, and even medical and public services within a shopping mall. The importance of shopping malls for the inhabitants of big cities as well as for communities in smaller cities is expected to increase over time

> It is important for offline present retailers to be located in many shopping malls as one of the main drivers of their multichannel strategy. Online retailers are expected to open physical stores as a way to complement their existing omnichannel strategy. Shopping malls play an important role as showrooms and collection points

> A growing number of commercial centers are expected in all three countries, which will have a positive effect on growth of modern retail chains

1) Including shopping malls, retail parks, outlets, mixed use, retail street   2) Current number and plans of commercial centers in the following cities Kyiv, Kharkiv, Dnipro, Odessa, Khmelnytskyi, Zaporizhia, Lviv, Poltava, Mykolaiv, Zhytomyr, Vinnytsia, Symy

B. Poland
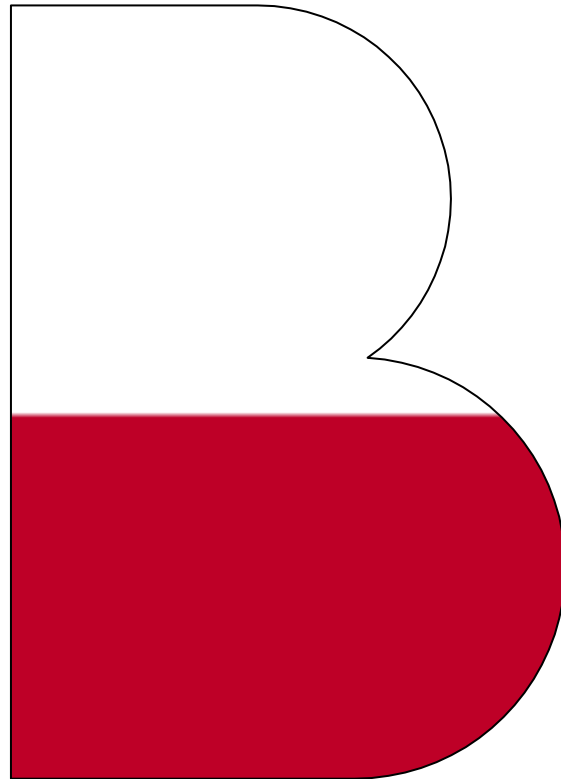
Real GDP growth, rising birth rate and high employment rates will contribute to market growth in Poland

Executive summary (1/2)

1

Market overview

> The ATH market had a value of approximately EUR 2.1 bn in 2017, with a CAGR of c. 3% in the past five years – The **market value** is forecast to **grow at an accelerated CAGR of c. 7%** due to favorable macroeconomic conditions and is anticipated to reach EUR 2.9 bn by 2022

> The **major ATH market growth driver** is expected to be **GDP growth with a CAGR of** c. 4% – Real GDP growth is tightly correlated to strong disposable income and annual spend per child growth

> The **500+ program, together with the other government's pro-family politics**, is forecast to continue **positively influencing birth rates** in the future

> In the past five years, the **gaps between disposable income for large versus smaller cities and rural areas further narrowed**, driving new opportunities for development beyond the big cities. A **new trend is observable whereby more retail space is being built** (smaller shopping malls and retail parks) in **smaller and medium-size cities**, where selected ATH-focused chains are entering the market

> **ATH product segments are dominated by apparel** in value terms (58% of the market), followed by toys (29%) and hardware (13%). Apparel is also the fastest growing category (6.9% CAGR) due to the modern retail focus on the segment as well as the potential entry and development of players like KiK or Takko

> Owing to **baby booms** in the corresponding years, **sales of products for 0-4-year-old and 10-14-year-old children will grow faster** by 2022 than those for 5-9-year-old children

> **Customer preference** analysis suggests **one-stop shopping, availability of a wide range of SKUs and omnichannel presence** are crucial for retailer choice. For consumers, a **strong retail brand** increases the perceived quality of products sold by the respective retailer. Marketing seems not to be as important to customers

> **Online sales are forecast to grow strongly** by 22% annually through 2022, both for omnichannel and pure online distribution channels, at a faster rate than offline sales, owing both to increased Internet penetration and changes in customer behavior and partially due to restrictions in trade on Sundays. Click & Collect services are expected to increase in importance

The market is forecast to develop in new locations and through omni-channel growth, with market leaders expected to grow market share

Executive summary (2/2)

2

Players in the market

> **Top 5 players make up c. 42% of the ATH market in 2017**, up from c. 25% in 2012. The Polish market is dominated by two large players in all categories – a children's one-stop chain (Smyk) and a pure online player (Allegro as a marketplace provider), which have experienced high growth over the past five years. **The remaining market is split between many smaller players or those that generate low revenues from ATH market**, like grocery chains that are strong in toys and hardware categories as well as fashion chains that lead the apparel category

> **Players cover the full market spectrum in terms of breadth of product assortment and level of child focus** – The largest share of ATH revenues comes from chains with high SKUs. Modern apparel market retailers position themselves at the high and low end of the price/fashion spectrum leaving limited space for independent shops

> Most players have **cover the entire age range** for the ATH selection they offer

> The ATH market retail leader, Smyk (156 stores), has a wide range of store formats, depending on location, with an average of 700 sqm. Other large ATH-focused chains – Coccodrillo (250 stores) and 5.10.15 (220 stores) – have typical store areas of 70-100 sqm

3

Market segment development

> **The share of independent shops is expected to decrease** due to the expansion of chains with broader product assortment and better product placement compared with the situation in other retail markets, e.g. food discounters (Biedronka, Lidl), drugstores (Rossmann), non-food discounters (Pepco) – In the ATH market there is **potential for one or two dynamic leaders to gain most of the market share in each segment**

> The **children's one-stop chain segment** is good at addressing the **customer preference for one-stop shopping and omnichannel**, and is expected to continue its high growth, mainly in small and medium-size cities; the segment outpaced the average ATH market growth in the past

> The **children's specialist chain segment** is **developing sluggishly**, with some players moving to shop-in-shop and online

> The **fashion chain segment expected to remain the leading segment** in children's apparel over the forecast period

> The **grocery chain segment** does not develop in hypermarkets and **most of the growth is in discounters**

> The **online player segment** is expected to **grow at a relatively high rate** compared to the other segments

> **In 2022**, the total number of stores is expected to reach **up to 750 of children's one-stop chain stores, 500 children's specialized chain stores and 4,000 fashion chain stores**

B.1 Market overview

ATH market is expected to grow strongly owing mostly to the growth of annual spend per child

ATH market value and key drivers

Annual spend per child [EUR]

312 (2012) → 3.1% → 364 (2017) → 5.6% → 479 (2022F)

ATH market value [EUR m]

2017-2022F

1,795 (2012) → 3.1% → 2,086 (2017) → 6.5% → 2,858 (2022F)

Average inflation 2.0%

0.2389 — 0.2349 — 0.2483 | EUR/PLN

ATH market value [PLN m]

7,512 (2012) → 3.4% → 8,883 (2017) → 5.3% → 11,512 (2022F)

Average inflation 2.0%

Number of children ['000]

5,750 (2012) → -0.1% → 5,735 (2017) → 0.8% → 5,969 (2022F)

X% → CAGR
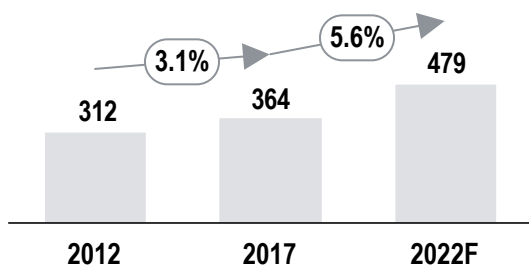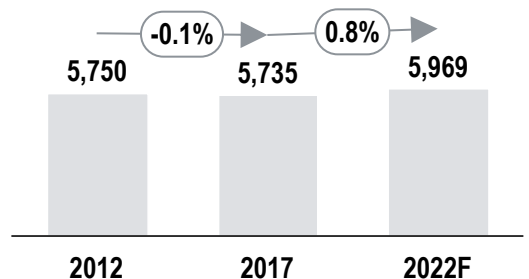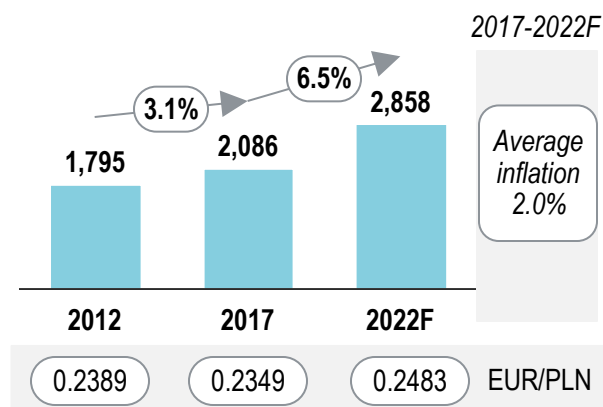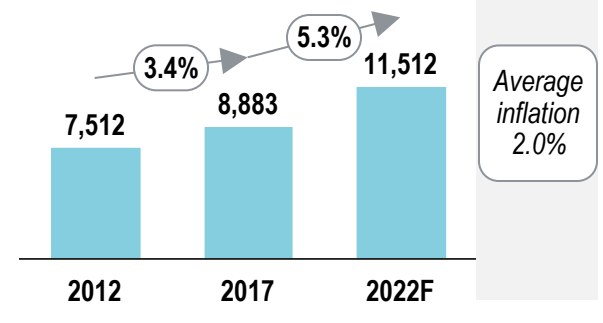
ATH market drivers and trends

Macroeconomic drivers
> Annual spend per child is more than 50% below the average of selected Western European countries, leading to a catch-up linked to disposable income growth
> Increasing birth rate

Country consumption drivers
> High GDP growth, 500+ program and closing gap between larger and smaller cities' wealth spurs the ATH market size

ATH market trends
> Customer preference for one-stop ATH shops and omnichannel, as well as new opportunities in chain rollout in medium-size and small cities are what's developing the market

The total population and share of 0-14-year-old children is forecast to grow slightly, especially in the 0-3 age group, through 2022

Population structure by age [total in m, % by age]

	2012	2013	2014	2015	2016	2017	2018F	2019F	2020F	2021F	2022F
Total	38	38	38	38	38	38	38	38	38	38	39
65 and over	14.1%	14.6%	15.1%	15.6%	16.1%	16.7%	17.0%	17.3%	17.6%	17.8%	18.1%
45-65	27.5%	27.3%	27.1%	26.9%	26.7%	26.5%	26.4%	26.3%	26.2%	26.1%	25.9%
15-44	43.3%	43.1%	42.8%	42.5%	42.1%	41.7%	41.3%	41.0%	40.8%	40.6%	40.5%
4-14	10.8%	10.8%	10.9%	11.0%	11.1%	11.2%	11.3%	11.2%	11.1%	11.1%	11.1%
0-3	4.3%	4.2%	4.1%	4.0%	3.9%	3.9%	4.0%	4.1%	4.3%	4.3%	4.4%
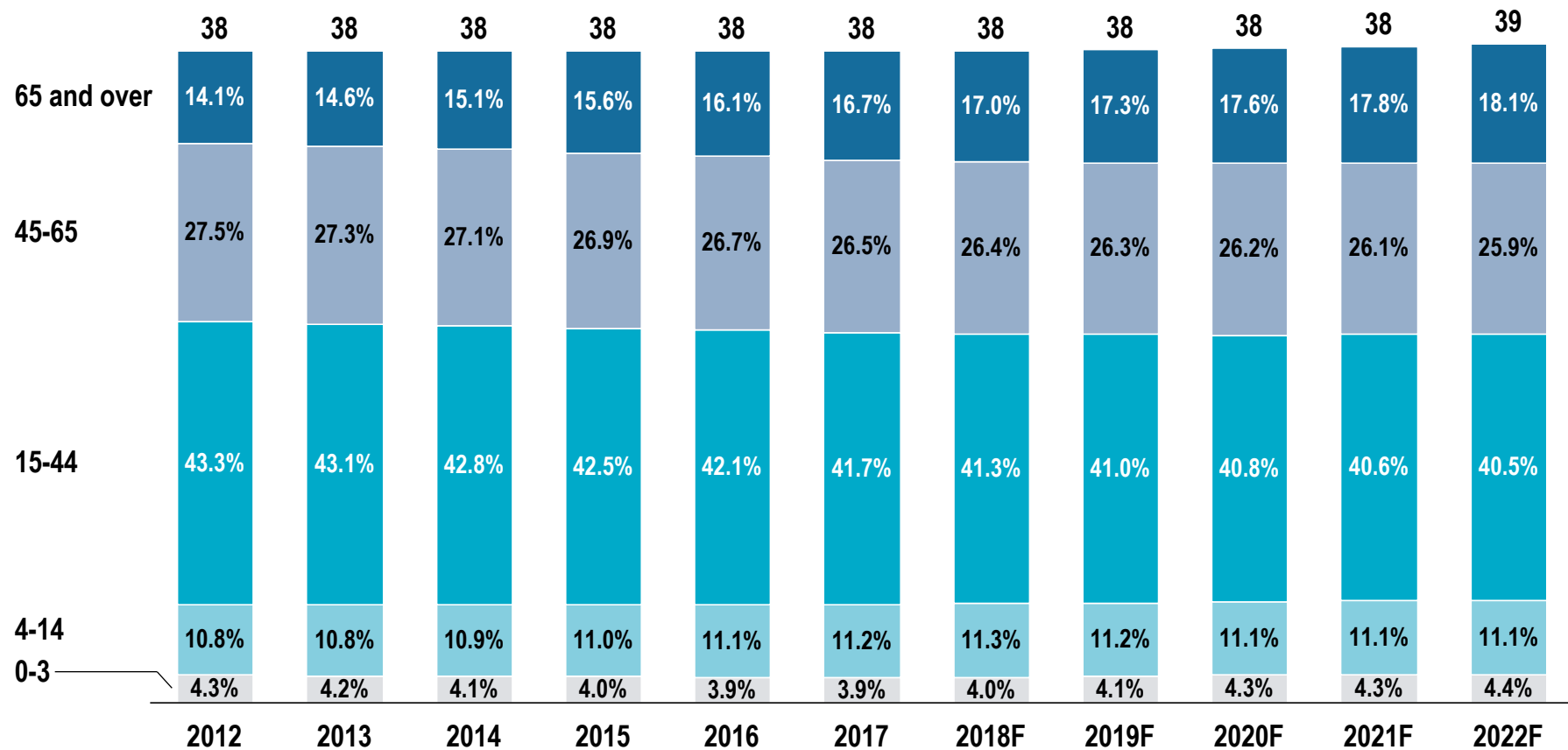
By 2022, two baby booms are expected to contribute to a comparatively high number of 0-4 and 10-14-year-old children

Number of children by age ['000]

2012

2017

2022F

2,027

2,027

2,089

Source: Market model based on National Statistics Institute, World Bank, Euromonitor

Roland Berger
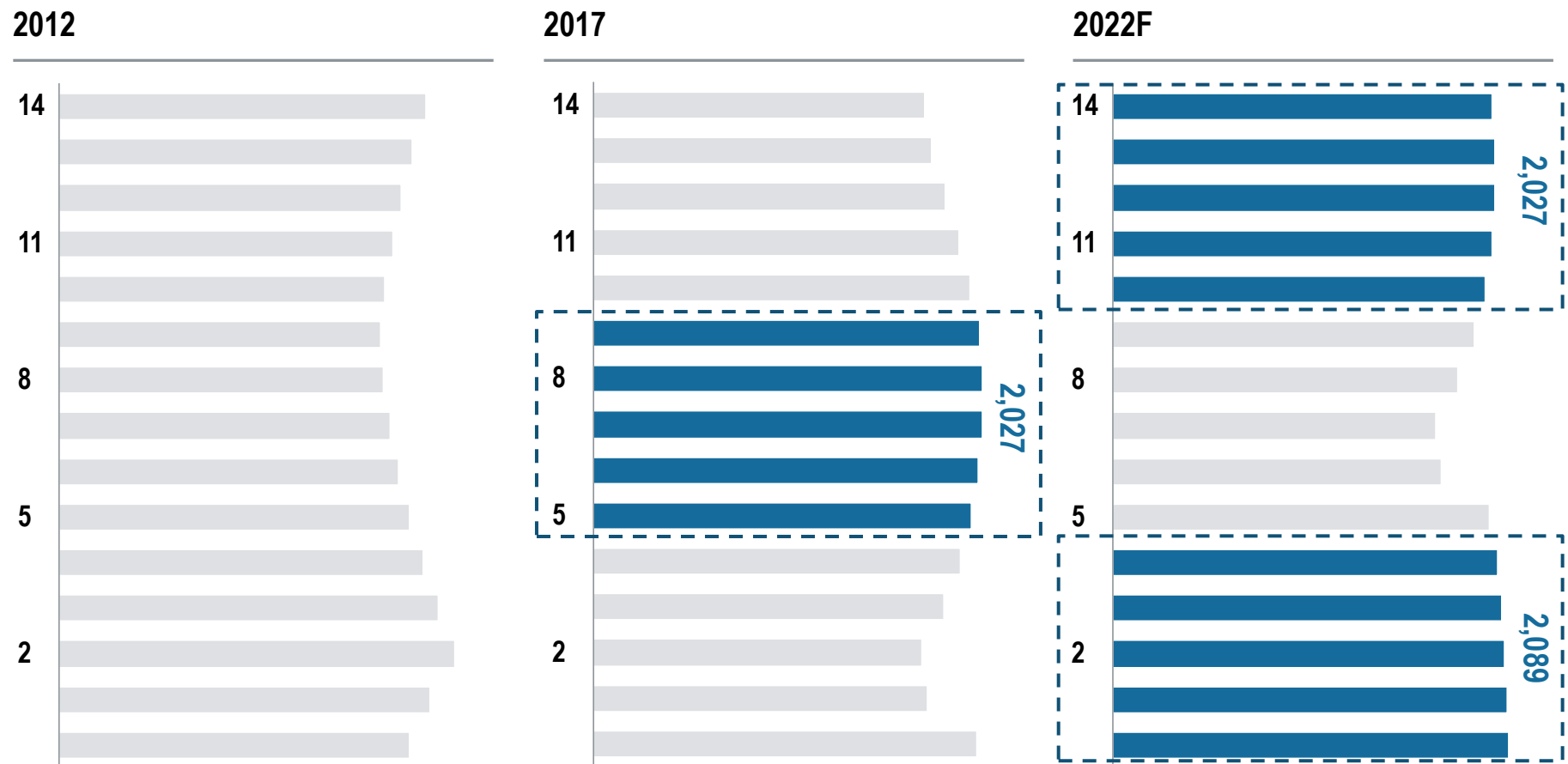
The number of children is expected to continue to grow over the coming years owing to a positive trend in the birth rate driven by pro-family programs

Children's group entries, exits and birth rates

-4.2% change | +9.4% change

	2012	2013	2014	2015	2016	2017	2018F	2019F	2020F	2021F	2022F
Children born ['000]	384	369	376	368	383	403	411	415	419	421	423
Children turned 15 ['000]	402	387	376	364	352	349	356	370	384	396	406
Difference ['000]	-18	-19	1	4	31	54	55	45	35	25	17
Births per total population	1.01%	0.97%	0.99%	0.97%	1.01%	1.06%	1.08%	1.09%	1.10%	1.10%	1.10%

500+ program launch

Source: Market model based on National Statistics Institute, World Bank, Euromonitor
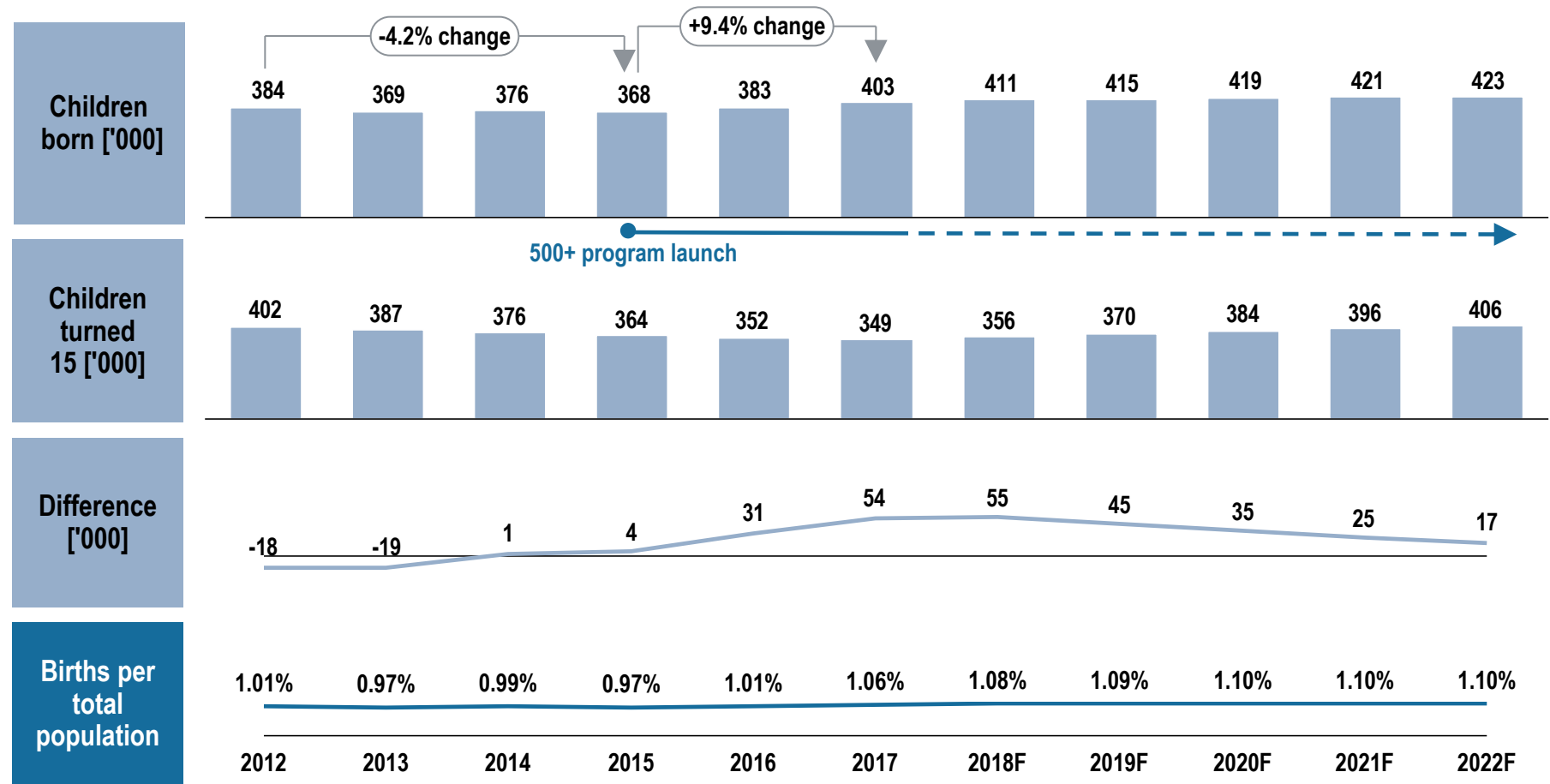
Forecast development of real GDP and unemployment rates are expected to strongly drive disposable income growth

Disposable income and its selected drivers

Selected drivers

Real GDP [EUR bn]

	2012	2017	2022F
	385	451	536

Unemployment rate [%]

	2012	2017	2022F
	12.8%	7.3%	5.2%

Impact on disposable income

Disposable income [EUR bn]

2012	2013	2014	2015	2016	2017	2018F	2019F	2020F	2021F	2022F
238	242	249	255	258	276	296	317	339	362	388

+3.0%

+7.0%

X% → CAGR
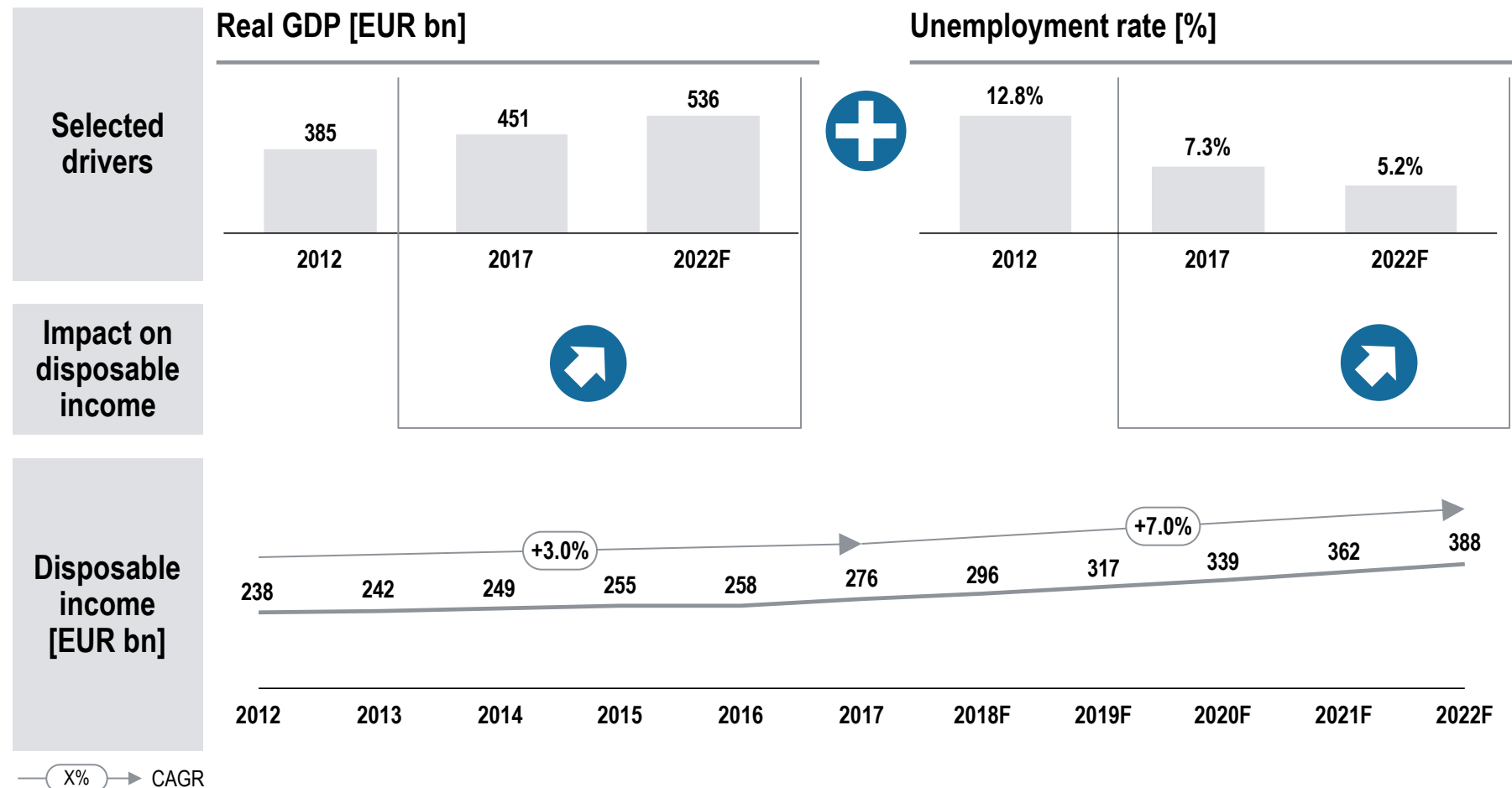
Real GDP growth is forecast to accelerate – Stable inflation and decreasing unemployment rate forecasts provide positive signs

Macroeconomic indicators, 2012-2022F

Real GDP [EUR bn]

+3.2% CAGR   +3.5% CAGR

385	390	403	418	431	451	469	486	501	518	536
2012	2013	2014	2015	2016	2017	2018F	2019F	2020F	2021F	2022F
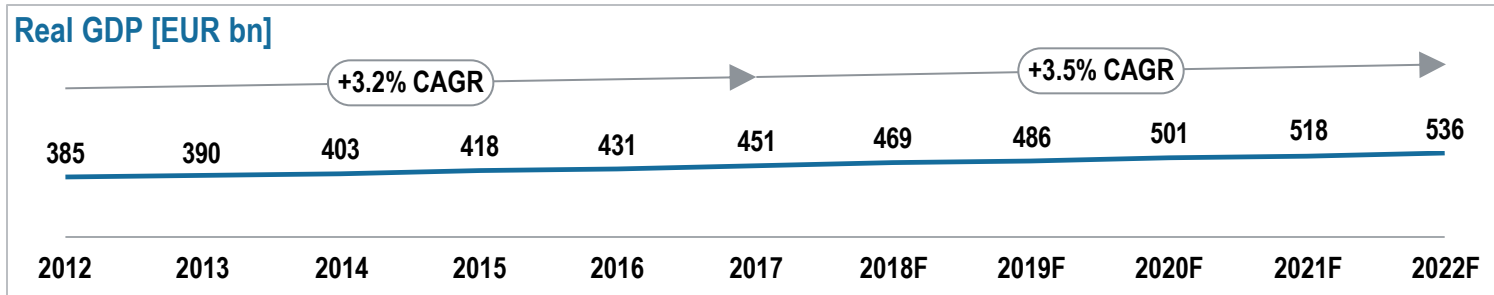
Real GDP growth is forecast to grow slightly faster in 2017-2022F than the growth rate in 2012-2017

Inflation rate [%]

-1.7 p.p. change   0.2 p.p. change

3.7%	1.2%	0.2%	-0.9%	-0.6%	2.0%	1.7%	1.8%	2.0%	2.1%	2.2%
2012	2013	2014	2015	2016	2017	2018F	2019F	2020F	2021F	2022F
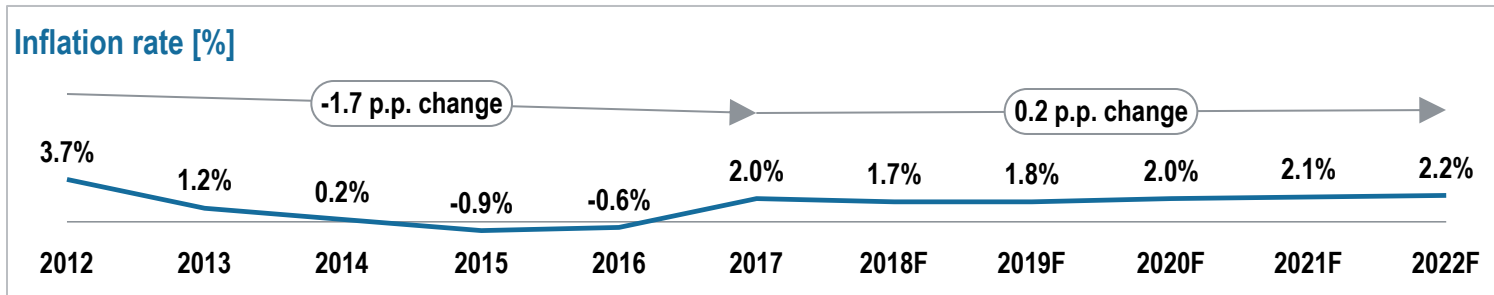
Inflation rate is forecast to stay at a level similar to 2017 through the entire period to 2022

Unemployment rate [%]

-6 p.p. change   -2 p.p. change

12.8%	13.5%	12.3%	10.5%	9.0%	7.3%	6.6%	6.6%	6.1%	5.6%	5.2%
2012	2013	2014	2015	2016	2017	2018F	2019F	2020F	2021F	2022F
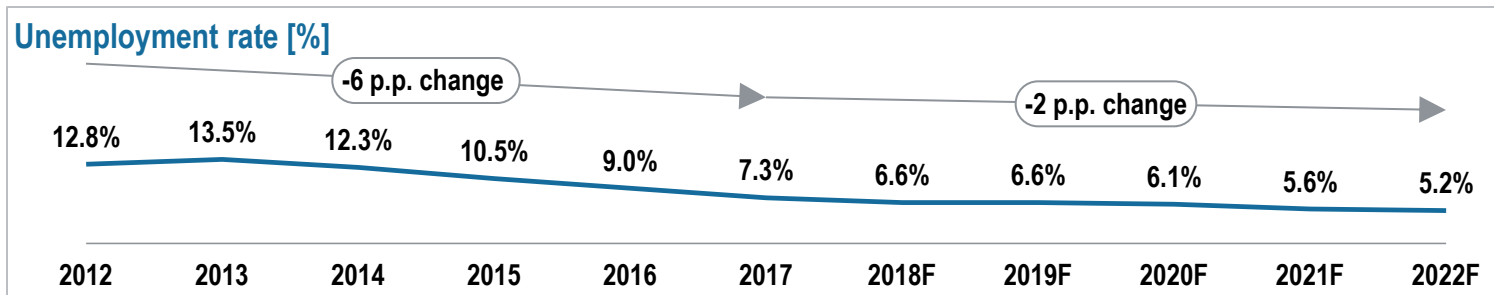
Unemployment rate is forecast to keep falling through 2022, though the fall is expected to slow down

Favorable macroeconomic development along with government programs have supported ATH market growth

Country-specific consumption drivers and trends (1/2)

500+ program and other pro-family government programs

> The "500+": PLN 500/month for every second and subsequent child and in some cases also for the first child, launched in 2016
> Some other programs like extension of maternity leave, pro-life, tax allowance

Minimum monthly wage development [EUR]

1.3%		10.8%	
418	424	470
2015	2016	2017
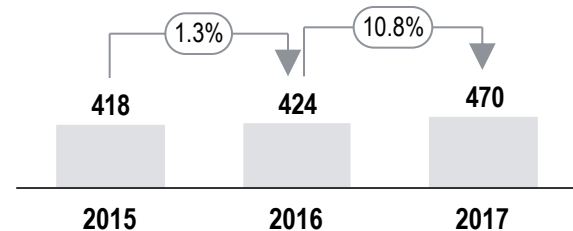
Limitations of retail trade on Sundays

> Since March 2018, Sunday retail is limited to twice a month in 2018, once a month in 2019, and seven times per year in 2020 and thereafter

Annual spend per child [EUR] and births per total population

	364	479
312		
1.01%	1.06%	1.10%
2012	2017	2022F
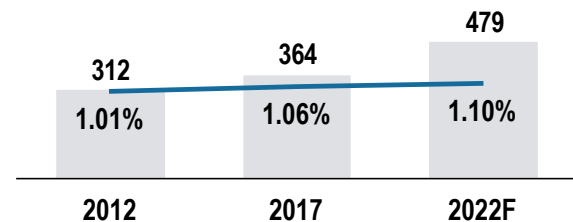
> **The 500+** and other pro-family programs were introduced to increase the birth rate in PL and were the key driver of the surge in the birth rate (9.4% more children born in 2017 vs. 2015). This is expected to continue to have a positive effect along with the government's pro-family politics

> Rising disposable income was positively influenced by the yearly **minimum wage increase**. In 2017, new legislation applied the minimum wage not only to permanent contracts, but also to order contracts[1], which make up a significant share. This change is supposed to eliminate the very low hourly rates used in order contracts

> **Sunday retail trade restrictions** are expected to have a negative effect on retail trade in the short term. In the medium term, experts agree that a change in consumer shopping habits will minimize the impact as they will adapt to the circumstances (shopping on other days). They also estimate limited influence of the restrictions on the ATH market, because in most cases purchase decisions are needs rather than impulse based. Offline toys sales may be impacted the most, as part of sales is driven by emotional, unplanned purchase during store visits. On the other hand, part of the impact is expected to be offset by higher online sales

> Overall, **country-specific consumption is growing** – Annual spend per child and the birth rate will drive market value growth

1) Order contracts are commonly used in Poland, the minimum hourly remuneration was implemented

The gap in disposable income between larger and smaller cities has been narrowing

Country-specific consumption drivers and trends (2/2)

Monthly disposable income per person by city size [EUR]
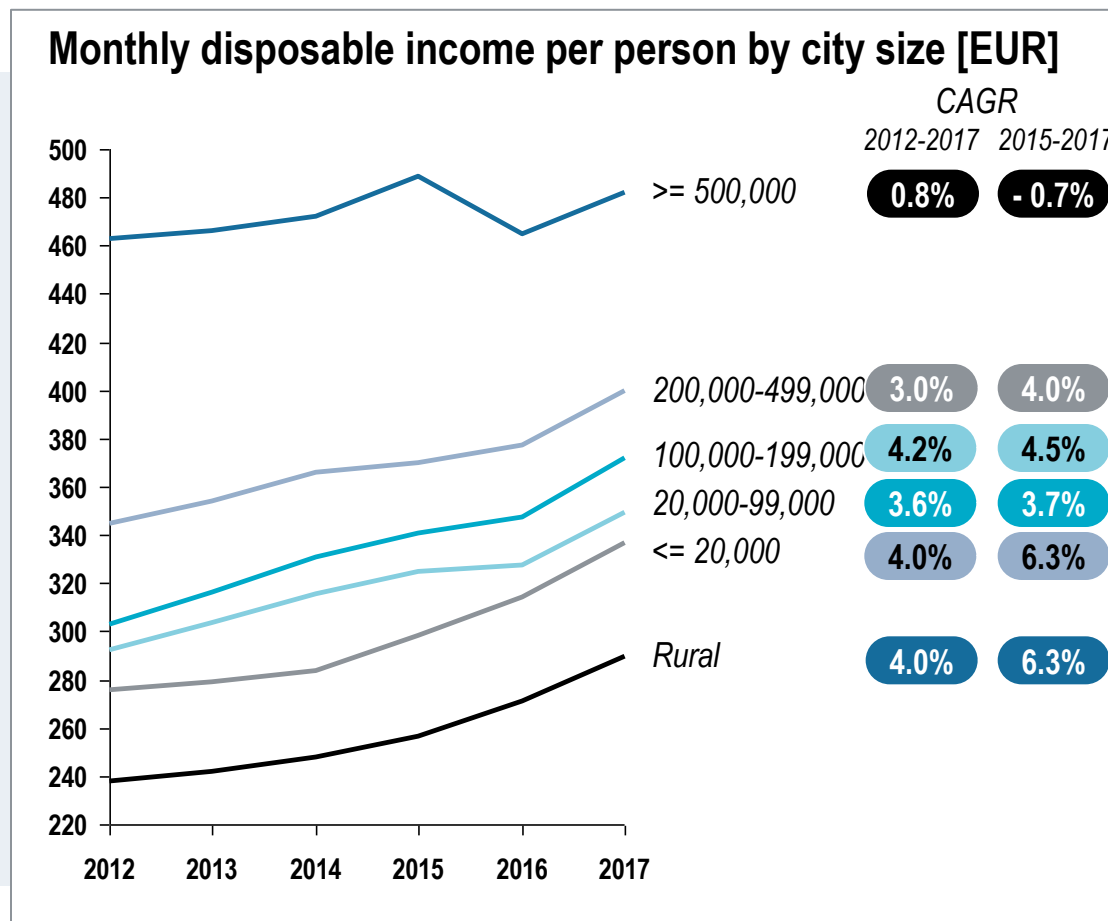
Income development trends

> Disposable income gaps between large, medium-size and small cities have been closing

> Cities with over 500,000 inhabitants have seen very moderate average disposable income growth

> Cities below 500,000 inhabitants experienced considerable disposable income growth

> The highest growth of disposable income was evident in cities with up to 200,000 inhabitants

> Declining gap between small and big cities creates opportunities for modern retail expansion in smaller cities

Key trends exert a positive influence on the ATH market – Especially related to penetration of smaller cities and growth of omnichannel

Key trends and market characteristics

The Polish ATH market

Product brand
> Consumer shift from branded products to private label decreases the market value
> On the other hand, collectable toys are becoming more popular and their sales are growing

SKUs
> Consumers generally appreciate a broad product range, but the market is relatively stable in this respect
> Growing assortment breadth can be observed in the online channel

Location
> Despite high penetration of modern retail (over 400 shopping malls countrywide), there is still room to grow in big cities based on developers' plans as well as strong growth expected in small and medium-size cities with at least 20,000 inhabitants

Omnichannel
> Already high relevance of online channel with additional strong growth projected
> Growth driven primarily by players with combined online and offline offering given consumer preference for store pick-up

Private label
> Private label driven by smart shopping trend
> Ample room to grow (currently c. 10% in toys and hardware) and neutral effect on the market (lower prices to be offset by volume increase)
> Positive effect on retailers' profitability/margins

Other trends
> In the toys market, increasing threat from video games in higher age groups partially offset by growth in educational toys and consumption of some toys by adults (e.g. board games)
> Increasing birth rates

Overall impact on the ATH market value: ↗ Positive ↘ Negative ⇒ Neutral

We have gathered significant insights into key Polish ATH market trends by interviewing local industry experts

Selected quotes from interviews with market participants

It's difficult to stay in business with a narrow product range, especially in toys, which have two peaks throughout the year. Retailers need to broaden their assortment to ensure a stable business.

Sales Director, children's specialist retailer

Online retailing is booming. The total e-commerce market for children's products will be twice as large in 2020 as in 2016.

Channel Manager, children's specialist retailer

In Poland we don't have the culture of high-street shopping. Polish people shop in malls because it's more convenient – you find everything you need and you get easy parking.

Sales Manager, toy specialist retailer

People are increasingly focused on value for money. For example, parents prefer to buy private labels over branded products in the 0-3-year-old assortment.

Buying Director, children's specialist retailer

Source: Expert interviews

Polish consumers seem to prefer one-stop shop ATH retailers with a strong online presence and a broad SKU range

Customers' retailer selection and product purchasing criteria

Main criteria for choosing retailers

Multichannel availability

One-stop shopping

Wide SKU range

Retail brand

Price

Sales counseling/advice

Commercials/marketing
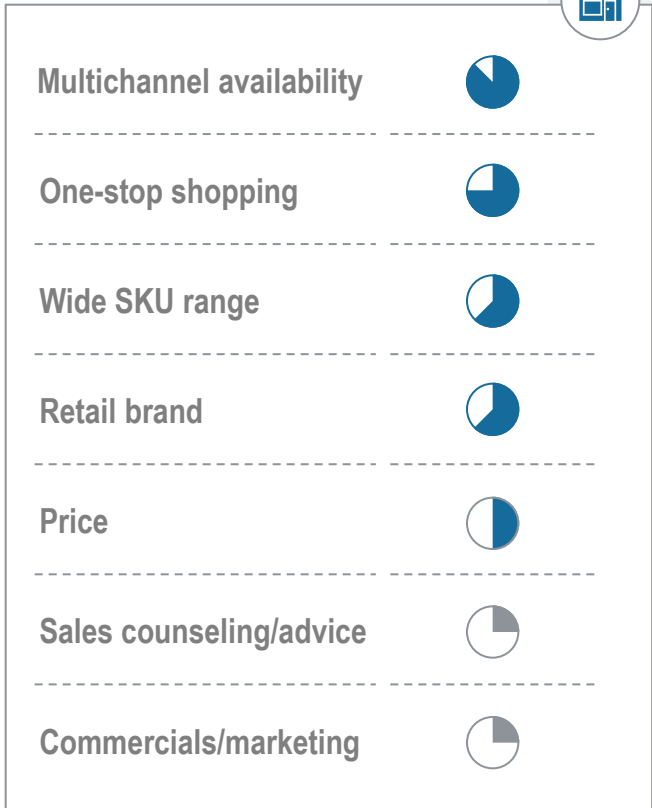
Customer purchasing criteria – Children's apparel

> When purchasing children's apparel, Polish consumers primarily focus on the quality of the **fabrics and materials** used in the garment
> **Price** also plays an important role, especially for items in the lower age groups, while **design** is important for selected customer segments

Customer purchasing criteria – Toys

> Toy **safety** is a key criterion for Polish consumers buying traditional toys
> **Commercials/marketing** sometimes encourage children who saw a toy advertised on TV (e.g. on children's stations) to ask their parents to buy it
> **Price sensitivity** appears to be highest for toys among the three markets

Customer purchasing criteria – Children's hardware

> **Functionality** and **safety** are key purchasing criteria for products in the hardware category, as many parents want to ensure they get the best available products for their babies
> **Price sensitivity** is lowest for hardware compared to apparel and toys

Overall importance of criterion in choosing a retailer   ◯ Low   ● High

ATH consumer preferences in Poland have been derived based on in-depth interviews with local industry experts

Selected quotes from interviews with market participants

Retail is all about "Location. Location. Location". This is extremely important to us, so we've tried to be in the best malls in Poland.

Sales Manager, children's apparel retailer

Customers tend to shop in stores they are already familiar with. That's why brand plays such an important role in Poland.

Sales Manager, toy specialist retailer

I would say a strong store brand is important to the rate of 60-70% in terms of attracting customers. The most important in toys market is TV commercials.

Sales Manager, toy specialist retailer

People with children are busy working so they prefer shopping malls where they can find everything they need in one place. This is why you see so many children's product retailers in shopping malls.

Non-Food Manager, grocery retailer

Online is becoming critical as customers demand a full omnichannel experience. For us, the integration of online and offline resulted in the growth of both channels.

Channel Manager, children's specialist retailer

Consumer preferences in the toy market are shifting: Demand for board games as well as educational and interactive toys is growing.

Consumer Insights Manager, toy specialist retailer

Roland Berger

Within the ATH market, apparel is the largest market – Fashion chains constitute the largest of the chain distribution segments

ATH market structure, 2017 [EUR m, % of total]

ATH market | Markets

2,086

13%	Hardware
29%	Toys
58%	Apparel

Product categories within ATH market segments

271
44	Furniture
42	Home textile
88	Transport
97	Nursery

614
37	Pre-school
38	Plush
40	Arts and crafts
43	Model vehicles
53	Baby and infant
75	Dolls and accessories
75	Games and puzzles
113	Construction
141	Other

1,201
365	Footwear
836	Clothing

Distribution channels

17%	5%	23%	18%	15%	23%	2,086

- Children one-stop chains
- Children specialist chains
- Fashion chains
- Grocery chains
- Online players
- Other players

Apparel is forecast to have the largest value and average growth within the ATH market through 2022

ATH market overview, 2012-2022F

ATH market [EUR m, % of total]

	2012	2017	2022F
Total	1,795	2,086	2,858
Hardware	14%	13%	12%
Toys	28%	29%	29%
Apparel	58%	58%	59%

CAGR

	2012-2017	2017-2022F
Total	3.1%	6.5%
Hardware	1.5%	4.8%
Toys	4.2%	6.4%
Apparel	2.8%	6.9%

ATH development

> The largest market is apparel. Its growth is expected to accelerate through 2022 vs. the period 2012-2017, due to modern retail focus on the segment as well as potential entry and development of active players like KiK or Takko

> Expected entering of medium-size and small cities by modern chains with a larger SKUs will contribute very significantly to the apparel and toys market growth

> Growth in the number of new-borns is expected to drive up the hardware market, with strollers, cribs, safety seats, etc. targeted at babies, but also selected apparel and toys categories

The major driver of children's apparel market growth is forecast to be the price per unit, with units per child also expected to increase

Children's apparel market value drivers, 2012-2022F
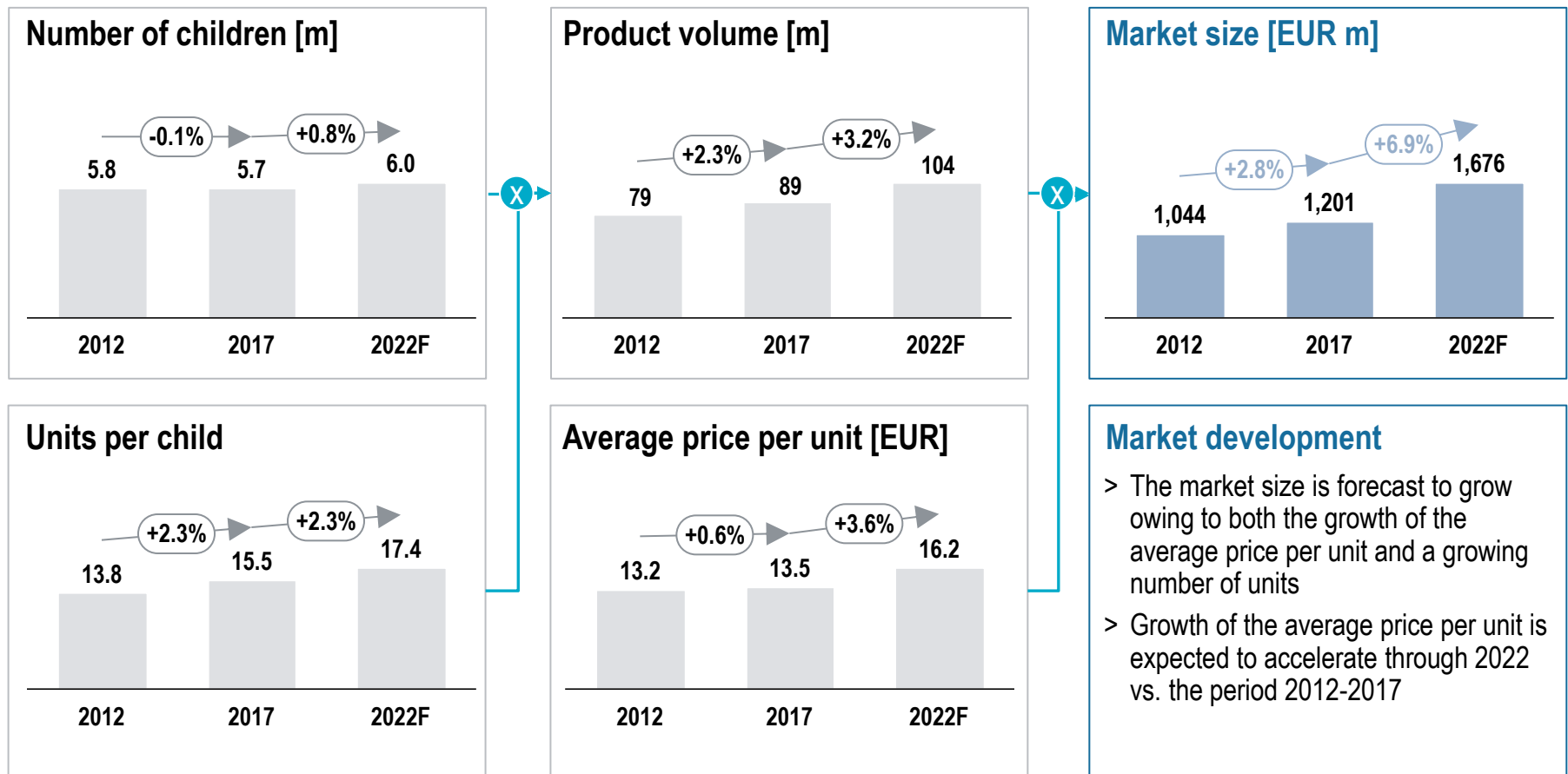
Number of children [m]
-0.1%   +0.8%
5.8   5.7   6.0
2012   2017   2022F

Product volume [m]
+2.3%   +3.2%
79   89   104
2012   2017   2022F

Market size [EUR m]
+2.8%   +6.9%
1,044   1,201   1,676
2012   2017   2022F

Units per child
+2.3%   +2.3%
13.8   15.5   17.4
2012   2017   2022F

Average price per unit [EUR]
+0.6%   +3.6%
13.2   13.5   16.2
2012   2017   2022F

Market development
> The market size is forecast to grow owing to both the growth of the average price per unit and a growing number of units
> Growth of the average price per unit is expected to accelerate through 2022 vs. the period 2012-2017

X% CAGR

Source: Market model based on National Statistics Institute, World Bank, desk research, mystery store checks, expert interviews

Footwear is forecast to grow faster than clothing within the children's apparel market through 2022

Children's apparel market by product category, 2012-2022F

Market by product category [EUR m, % of total]   **CAGR**

Market development

> Clothing is larger than footwear in 2017 and that relation is expected to be retained through 2022

> Footwear has grown faster due to more aggressive market initiatives by modern retailers that push out "other players" in this category, replacing cheaper products with more expensive ones. The trend is expected to continue through 2022

> Average yearly growth of both clothing and footwear is expected to accelerate considerably through 2022 vs. the corresponding CAGR in 2012-2017

Source: Market model based on National Statistics Institute, World Bank, desk research, mystery store checks, expert interviews

Roland Berger

The major driver of the toys market growth is forecast to be the increase in both the average price per unit and units per child

Toys market value drivers, 2012-2022F

Number of children [m]

-0.1% → +0.8%

5.8   5.7   6.0

2012   2017   2022F

Units per child

+3.6% → +2.5%

10.9   13.0   14.7

2012   2017   2022F

X

Product volume [m]

+3.5% → +3.3%

63   75   88

2012   2017   2022F

Average price per unit [EUR]

+0.7% → +3.0%

8.0   8.2   9.6

2012   2017   2022F

X

Market size [EUR m]

+4.2% → +6.4%

500   614   839

2012   2017   2022F

Market development

> The market size is forecast to grow mostly owing to the growth of the average price per unit and the number of units per child

> The number of children is also forecast to grow

X% → CAGR

Roland Berger

Construction toys are forecast to continue having the largest value within the toys market by 2022 as the number of older kids grows

Toys market by product category, 2012-2022F

Market by product category [EUR m, % of total]

CAGR

Category	2012-2017	2017-2022F
(total)	4.2%	6.4%
Pre-school	1.9%	2.5%
Plush	2.2%	11.4%
Arts and crafts	6.0%	6.6%
Model vehicles	1.9%	2.5%
Baby and infant	2.1%	11.3%
Dolls and accessories	2.5%	4.3%
Games and puzzles	6.2%	6.8%
Construction	8.9%	9.5%
Other	3.2%	3.1%

2012: 500
- Pre-school: 7%
- Plush: 7%
- Arts and crafts: 6%
- Model vehicles: 8%
- Baby and infant: 9%
- Dolls and accessories: 13%
- Games and puzzles: 11%
- Construction: 15%
- Other: 24%

2017: 614
- Pre-school: 6%
- Plush: 6%
- Arts and crafts: 6%
- Model vehicles: 7%
- Baby and infant: 9%
- Dolls and accessories: 12%
- Games and puzzles: 12%
- Construction: 18%
- Other: 23%

2022F: 839
- Pre-school: 5%
- Plush: 8%
- Arts and crafts: 7%
- Model vehicles: 6%
- Baby and infant: 11%
- Dolls and accessories: 11%
- Games and puzzles: 12%
- Construction: 21%
- Other: 20%

Market development

> The largest product categories within toys are construction toys, games and puzzles, and dolls and accessories in 2017

> Construction toys, games and puzzles, and dolls and accessories are forecast to remain the largest product categories within toys by 2022 as the number of older kids grows

> The fastest growing product categories are expected to be plush toys and baby and infant toys due to an increase in the number of births in the next five years

Roland Berger

The major driver of children's hardware market growth is forecast to be the average price per unit, with units per child also growing

Children's hardware market value drivers, 2012-2022F

Number of children [m]

-0.1% → +0.8% →

2012	2017	2022F
5.8	5.7	6.0

Product volume [m]

+0.8% → +1.8% →

2012	2017	2022F
39	41	45

Market size [EUR m]

+1.5% → +4.8% →

2012	2017	2022F
251	271	344

X

X

Units per child

+0.9% → +1.0% →

2012	2017	2022F
6.9	7.2	7.5

Average price per unit [EUR]

+0.7% → +3.0% →

2012	2017	2022F
6.4	6.6	7.6

Market development

> The market size is forecast to grow mostly owing to the growth of the average price per unit

> Growth of the average price per unit is expected to accelerate

X% → CAGR

Source: Market model based on National Statistics Institute, World Bank, desk research, mystery store checks, expert interviews

Roland Berger

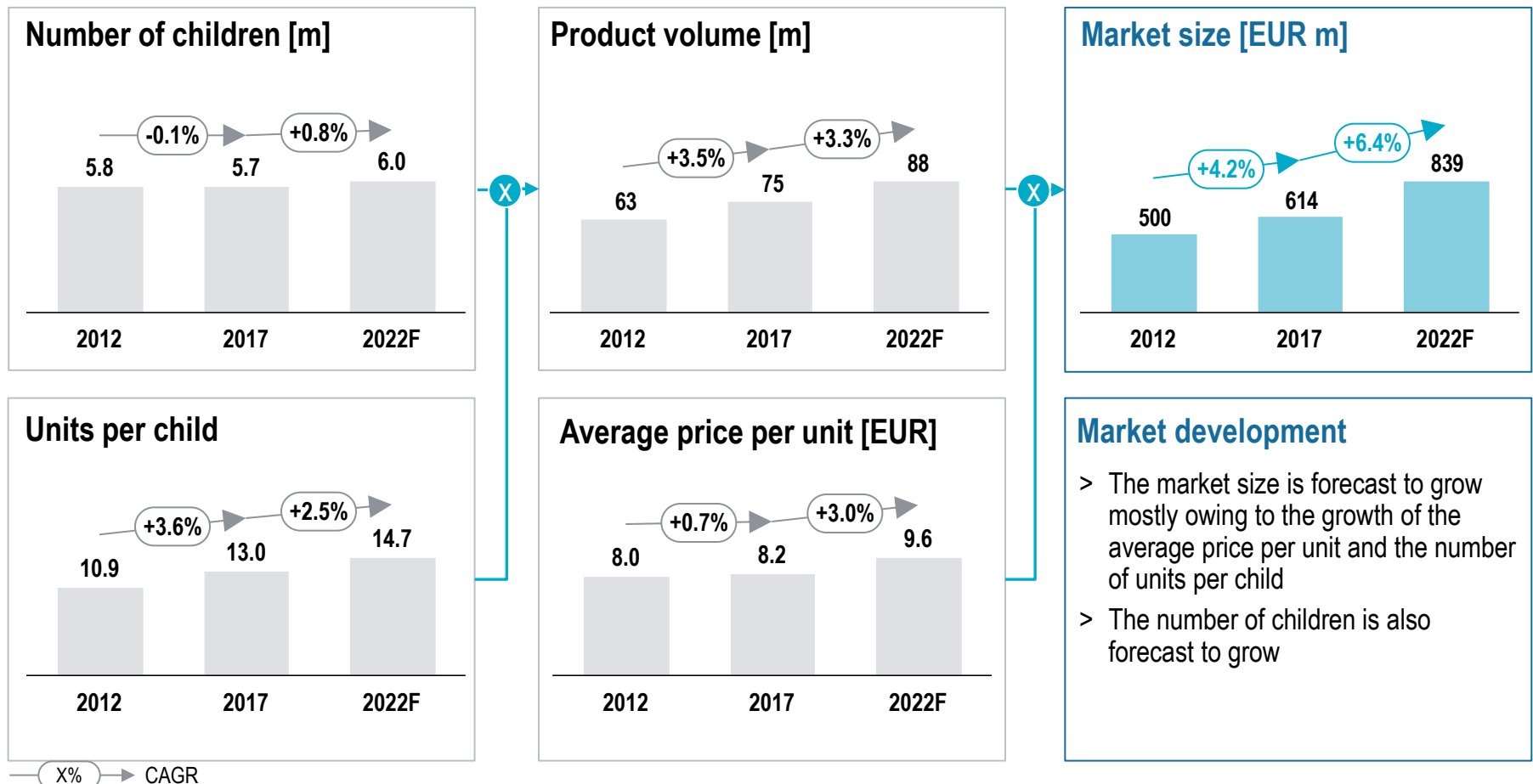# Nursery is forecast to continue to account for the largest value within the children's hardware market by 2022

Children's hardware market by product category, 2012-2022F

Market by product category [EUR m, % of total]

CAGR

	2012-2017	2017-2022F
	1.5%	4.8%

Market development

> The largest product categories are nursery and transport in 2017 and these are expected to remain the largest ones by 2022

> The fastest growing product category is expected to be nursery (this category includes e.g. soothers and feeding equipment)

> Nursery is expected to have the highest growth due to increasing share of newborns and the 0-2 years age group

251 (2012)
- Furniture: 15%
- Home textile: 18%
- Transport: 28%
- Nursery: 39%

271 (2017)
- Furniture: 16%
- Home textile: 15%
- Transport: 32%
- Nursery: 36%

338 (2022F)
- Furniture: 16%
- Home textile: 14%
- Transport: 31%
- Nursery: 39%

CAGR by category:

Category	2012-2017	2017-2022F
Furniture	2.9%	4.4%
Home textile	-1.6%	2.2%
Transport	4.6%	3.7%
Nursery	0.0%	6.2%

Source: Market model based on National Statistics Institute, World Bank, desk research, mystery store checks, expert interviews

20180814_The children's apparel, toys and hardware markets in Poland, Romania and Ukraine.pptx | 39

Roland Berger

Fashion chains and one-stop shops are forecast to have the largest shares in the ATH market by 2022, with online growing the fastest

Share of ATH distribution channels, 2012-2022F [EUR m, % of total]

ATH market

Year	Children one-stop chains	Children specialist chains	Fashion chains	Grocery chains	Online players	Other players	Total
2012	13%	5%	16%	18%	10%	38%	1,795
2017	17%	5%	23%	18%	15%	23%	2,086
2022F	20%	5%	26%	17%	18%	14%	2,858

Legend: Children one-stop chains — Children specialist chains — Fashion chains — Grocery chains — Online players — Other players
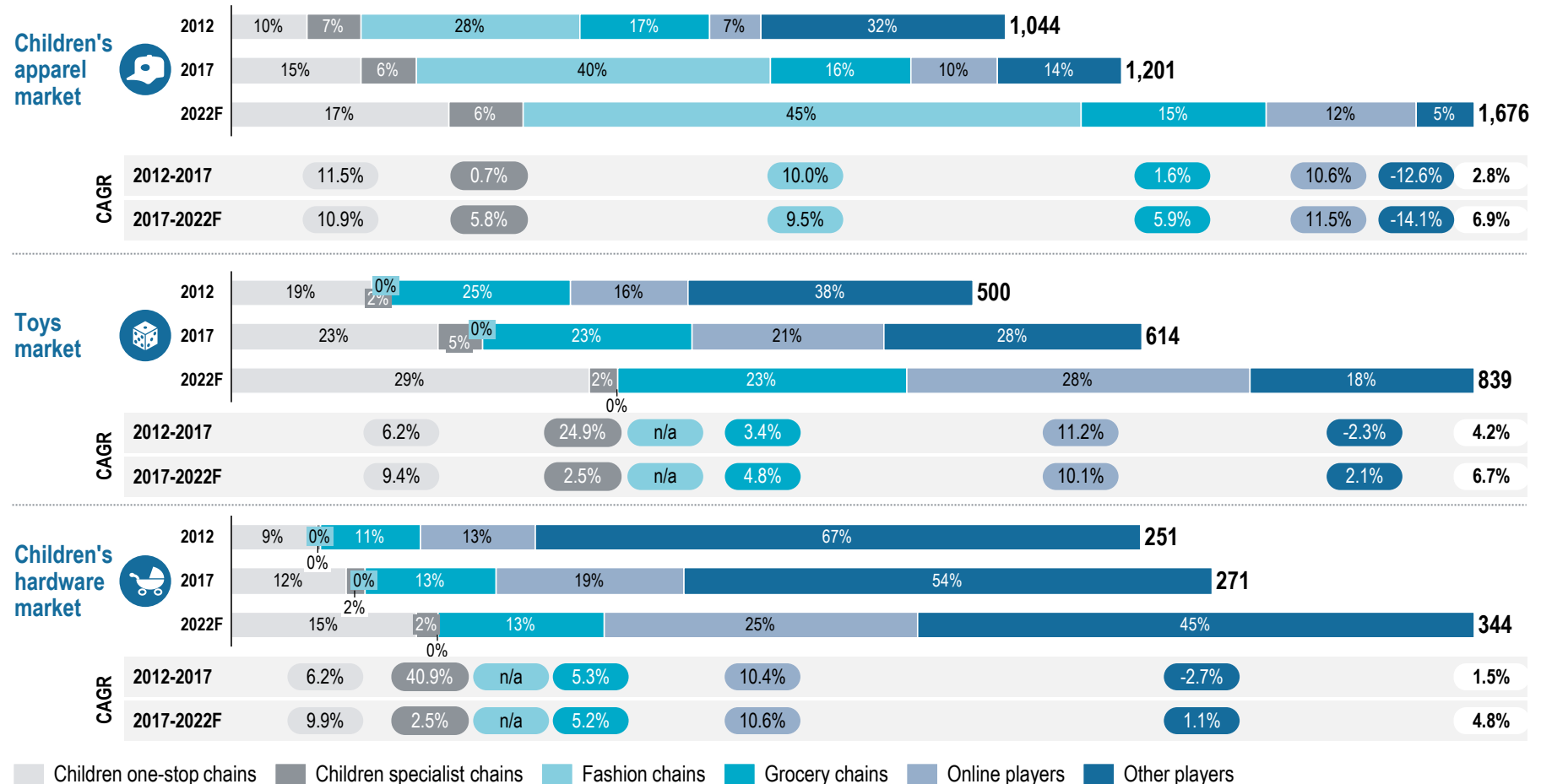
CAGR

Period	Children one-stop chains	Children specialist chains	Fashion chains	Grocery chains	Online players	Other players	Total
2012-2017	8.6%	5.9%	10.0%	2.6%	10.8%	-6.8%	3.1%
2017-2022F	10.2%	4.8%	9.5%	5.4%	10.7%	-2.8%	6.5%

Distribution channel development

> Fashion chains are expected to grow to become the largest distribution channel in 2022, closely followed by one-stop shop chains, while the online channel is expected to grow the fastest of all channels. Comparably high growth rates for one-stop chains, fashion chains and online players of c. 10% CAGR are aligned with customer preferences

> The other players segment is expected to further lose market share in line with the typical "shake-out" of smaller and weaker players as the retail market consolidates over time
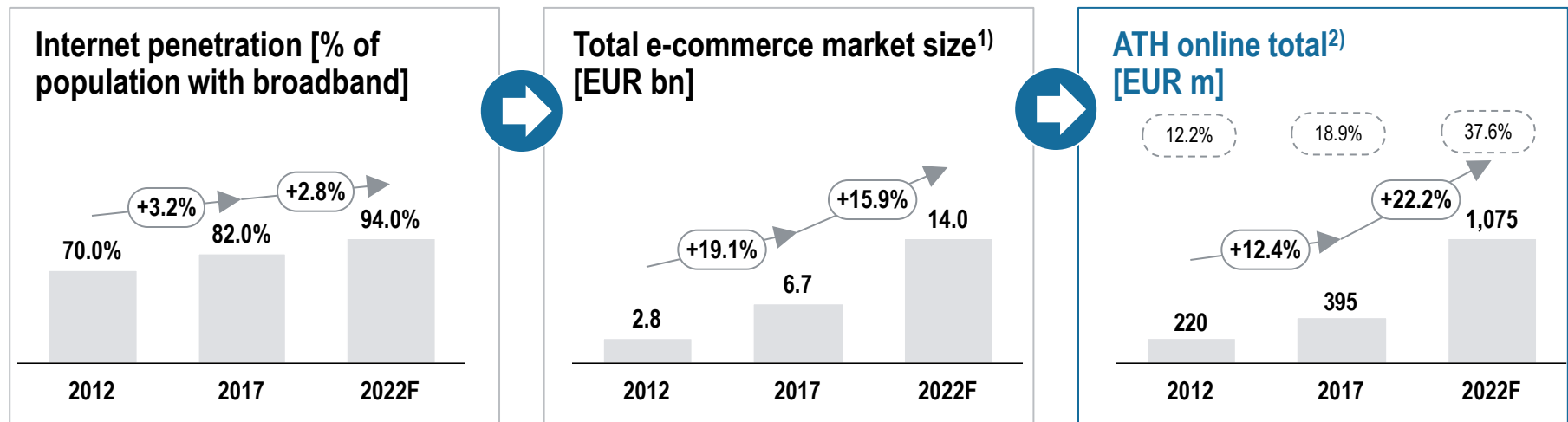
Other players segment expected to decline across all three categories – Online players and one-stop shops are the biggest beneficiaries

Share of distribution channels in ATH market, 2012-2022F [EUR m, % of total]

Children's apparel market

Year	Children one-stop chains	Children specialist chains	Fashion chains	Grocery chains	Online players	Other players	Total
2012	10%	7%	28%	17%	7%	32%	1,044
2017	15%	6%	40%	16%	10%	14%	1,201
2022F	17%	6%	45%	15%	12%	5%	1,676

CAGR							
2012-2017	11.5%	0.7%	10.0%	1.6%	10.6%	-12.6%	2.8%
2017-2022F	10.9%	5.8%	9.5%	5.9%	11.5%	-14.1%	6.9%

Toys market

Year	Children one-stop chains	Children specialist chains	Fashion chains	Grocery chains	Online players	Other players	Total
2012	19%	0% / 2%	25%	16%		38%	500
2017	23%	5% / 0%	23%	21%		28%	614
2022F	29%	2% / 0%	23%	28%		18%	839

CAGR							
2012-2017	6.2%	24.9%	n/a	3.4%	11.2%	-2.3%	4.2%
2017-2022F	9.4%	2.5%	n/a	4.8%	10.1%	2.1%	6.7%

Children's hardware market

Year	Children one-stop chains	Children specialist chains	Fashion chains	Grocery chains	Online players	Other players	Total
2012	9%	0% / 0%	11%	13%		67%	251
2017	12%	0% / 2%	13%	19%		54%	271
2022F	15%	2% / 0%	13%	25%		45%	344

CAGR							
2012-2017	6.2%	40.9%	n/a	5.3%	10.4%	-2.7%	1.5%
2017-2022F	9.9%	2.5%	n/a	5.2%	10.6%	1.1%	4.8%

Legend: Children one-stop chains · Children specialist chains · Fashion chains · Grocery chains · Online players · Other players

Roland Berger

ATH online is forecast to grow owing to growth of both the total e-commerce market and the total ATH market

ATH online distribution channel

Internet penetration [% of population with broadband]

- 2012: 70.0%
- 2017: 82.0% (+3.2%)
- 2022F: 94.0% (+2.8%)

Total e-commerce market size[1] [EUR bn]

- 2012: 2.8
- 2017: 6.7 (+19.1%)
- 2022F: 14.0 (+15.9%)

ATH online total[2] [EUR m]

- 2012: 220 — 12.2%
- 2017: 395 (+12.4%) — 18.9%
- 2022F: 1,075 (+22.2%) — 37.6%

X% → CAGR

% → Share of the total ATH market

Market development

> Growth of Internet penetration is expected to slow down but the penetration rate will reach almost 100%

> Internet penetration is expected to drive the increase in the total e-commerce market, together with the customer preference towards omnichannel experience supported by Click & Collect services that is also becoming important. Although in Poland C&C is a relatively new service, in Western Europe it is estimated that on average c. 40% of e-customers have already purchased products this way – It is convenient for customers as they decide when and where to pick goods up without additional delivery costs or waiting in for a courier

> ATH online will profit from both the total e-commerce growth and general ATH market growth

> Smaller players are expected to move to shop-in-shop and online sales only, while bigger players push to develop multichannel sales

1) The market excludes digital media, digitally distributed services (e.g. plane tickets), B2B markets, resale of used goods (reCommerce) and sales between private persons
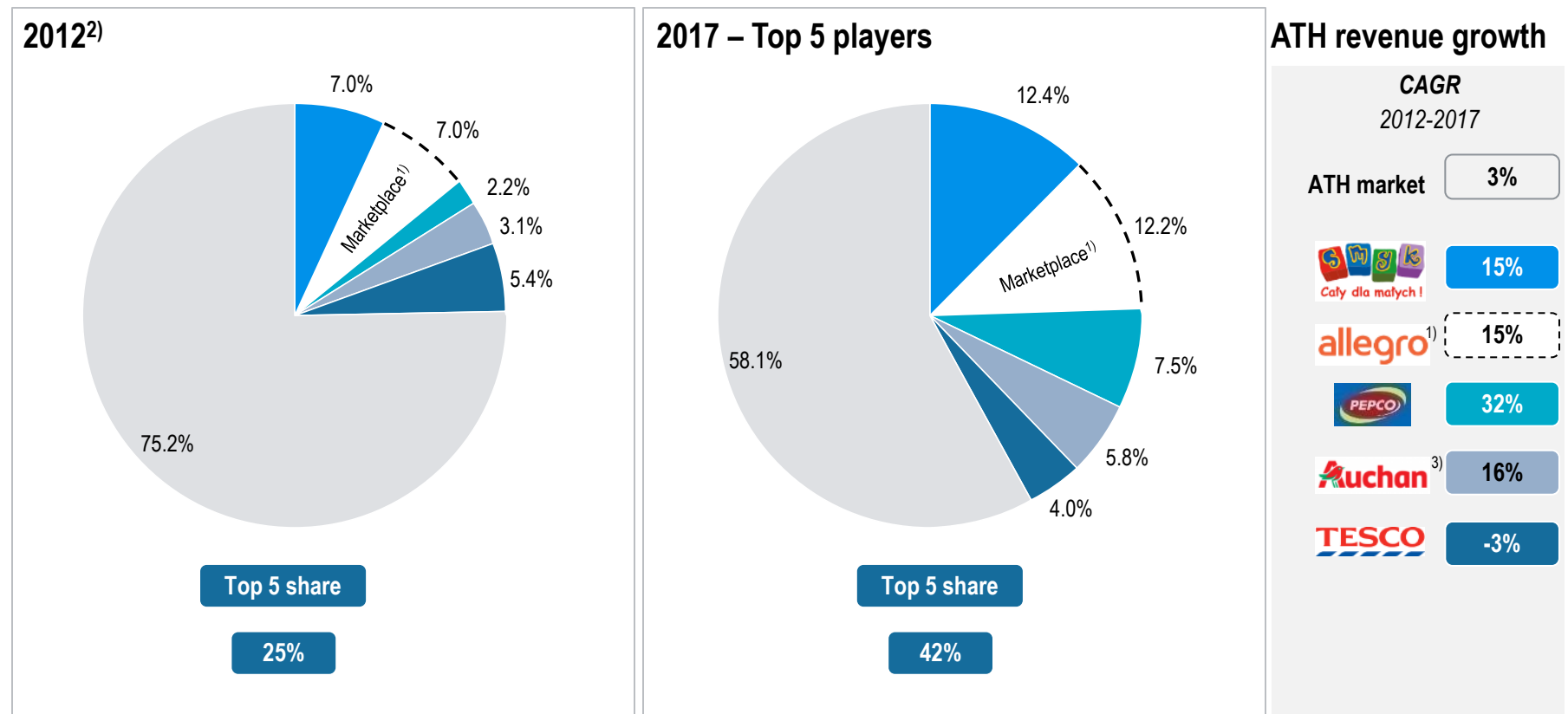2) Including pure online players and online share of other players

Source: Market model based on desk research, mystery store checks, expert interviews

B.2 Players in the market

In sum, 2017's top 5 ATH players experienced higher growth than the market average in 2012-2017, especially high for Smyk and Allegro[1]

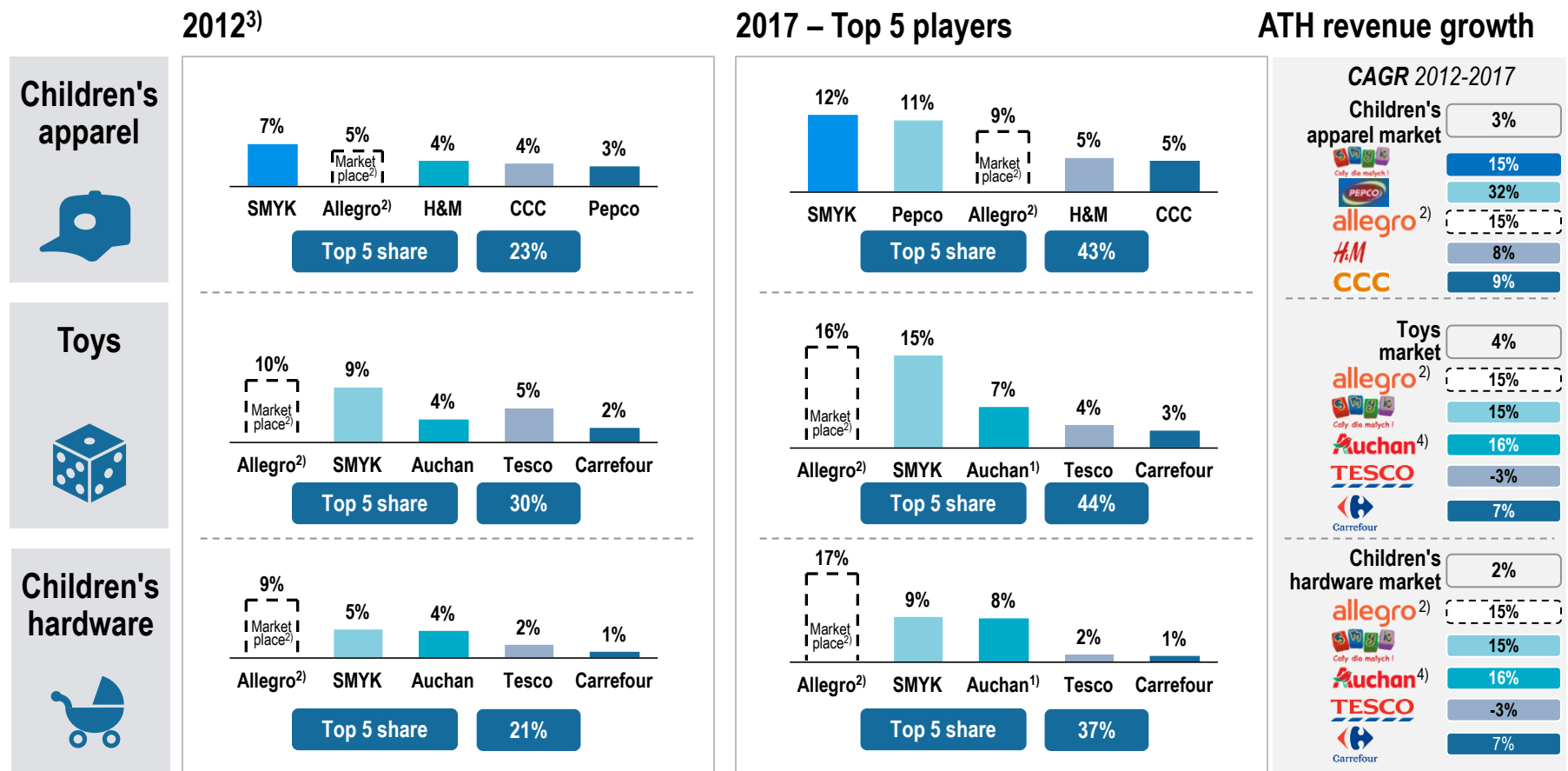Revenue market shares of 2017's top 5 ATH players [% of total ATH market value]   Indicative

2012[2]

- 7.0%
- 7.0% Marketplace[1]
- 2.2%
- 3.1%
- 5.4%
- 75.2%

Top 5 share

25%

2017 – Top 5 players

- 12.4%
- 12.2% Marketplace[1]
- 7.5%
- 5.8%
- 4.0%
- 58.1%

Top 5 share

42%

ATH revenue growth

CAGR
2012-2017

ATH market	3%
Smyk Cały dla małych!	15%
allegro[1]	15%
PEPCO	32%
Auchan[3]	16%
TESCO	-3%

Legend: ■ SMYK [ ] Allegro ■ Pepco ■ Auchan ■ Tesco ■ Others

1) Based on ATH value of transactions generated by Allegro as a marketplace   2) Based on ranking of 2017's top 5 players   3) Includes effect of merger with Real

The top 5 players of 2017 by product category also experienced high growth over the past several years

Revenue market shares of 2017 top 5 ATH players [% of group value]

Indicative

2012³⁾

2017 – Top 5 players

ATH revenue growth

Children's apparel

2012:
- SMYK 7%
- Allegro²⁾ 5% (Market place²⁾)
- H&M 4%
- CCC 4%
- Pepco 3%

Top 5 share: 23%

2017:
- SMYK 12%
- Pepco 11%
- Allegro²⁾ 9% (Market place²⁾)
- H&M 5%
- CCC 5%

Top 5 share: 43%

CAGR 2012-2017
- Children's apparel market: 3%
- SMYK: 15%
- PEPCO: 32%
- allegro²⁾: 15%
- H&M: 8%
- CCC: 9%

Toys

2012:
- Allegro²⁾ 10% (Market place²⁾)
- SMYK 9%
- Auchan 4%
- Tesco 5%
- Carrefour 2%

Top 5 share: 30%

2017:
- Allegro²⁾ 16% (Market place²⁾)
- SMYK 15%
- Auchan¹⁾ 7%
- Tesco 4%
- Carrefour 3%

Top 5 share: 44%

Toys market: 4%
- allegro²⁾: 15%
- SMYK: 15%
- Auchan⁴⁾: 16%
- TESCO: -3%
- Carrefour: 7%

Children's hardware

2012:
- Allegro²⁾ 9% (Market place²⁾)
- SMYK 5%
- Auchan 4%
- Tesco 2%
- Carrefour 1%

Top 5 share: 21%

2017:
- Allegro²⁾ 17% (Market place²⁾)
- SMYK 9%
- Auchan¹⁾ 8%
- Tesco 2%
- Carrefour 1%

Top 5 share: 37%

Children's hardware market: 2%
- allegro²⁾: 15%
- SMYK: 15%
- Auchan⁴⁾: 16%
- TESCO: -3%
- Carrefour: 7%

1) Includes growth driven by 2014 acquisition of Real   2) Based on ATH value of transactions generated by Allegro as a marketplace   3) Based on ranking of 2017's top 5 players
4) Includes effect of merger with Real

ATH online market is more consolidated as c. 77% of the market is generated by the Top 5 players - mainly by market place provider

Online revenue market shares of top 5 ATH players in 2017 [% of total online ATH market value]

Indicative

2017 – Top 5 players in ATH online sales

23.3%

1.0%
1.3%

2.2%

8.1%

Marketplace[1]

64.2%

Top 5 share

77%
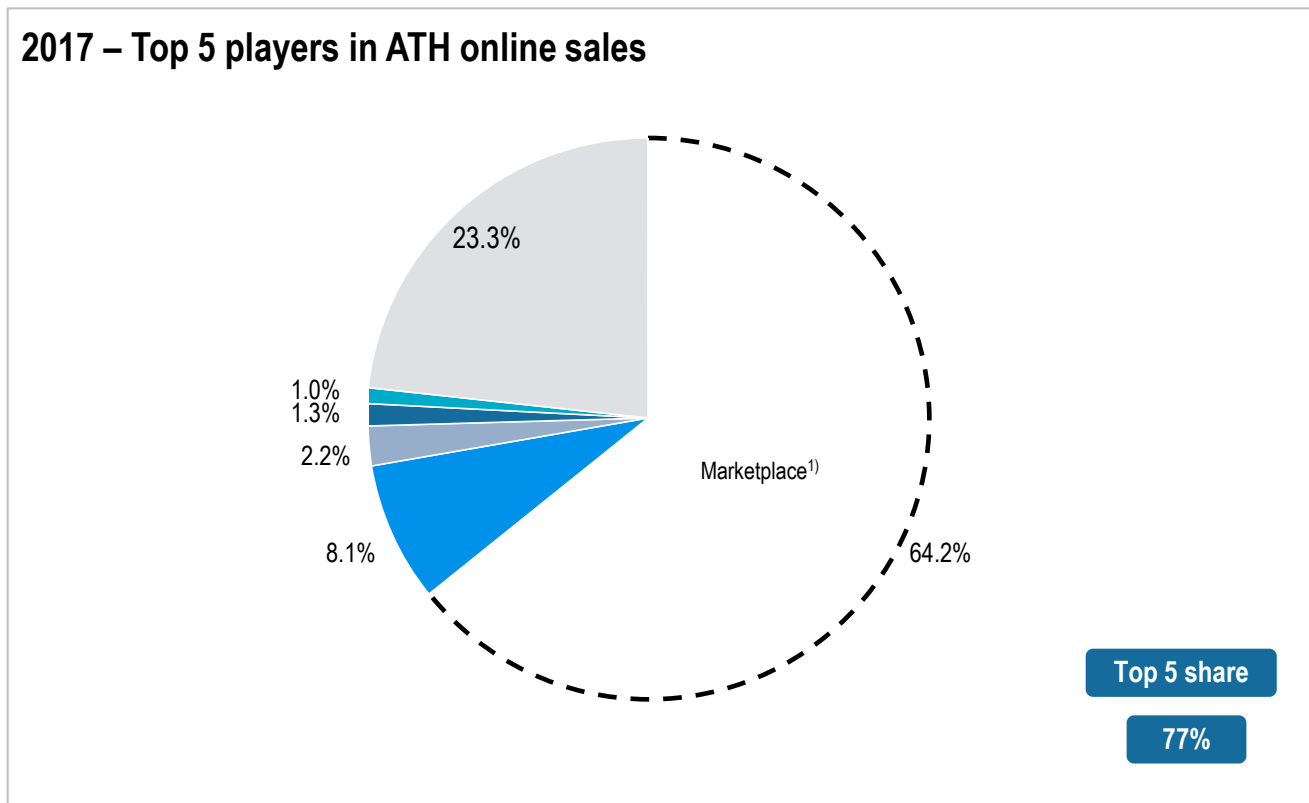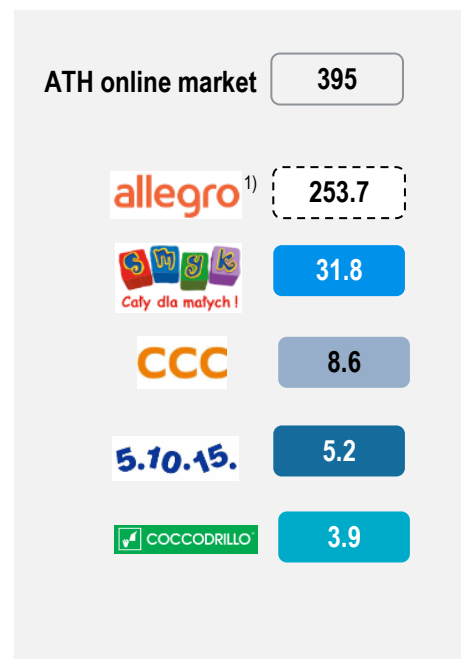
SMYK   CCC   5 10 15   Coccodrillo   Others

1) Based on ATH value of transactions generated by Allegro as a marketplace

ATH online revenue [EUR m]

ATH online market	395
allegro [1]	253.7
smyk Cały dla małych!	31.8
CCC	8.6
5.10.15.	5.2
COCCODRILLO	3.9

Players cover the full market spectrum – Largest share of ATH revenue from generalists

ATH market segments and selected segment players [% share in ATH market revenue][1]

Breadth of product assortment [generalist vs. specialist]

Generalists

Specialists

Market place[2]   allegro

TESCO
Auchan
REPORTER

Lidl

TXM textilmarket   CCC

5.10.15.   ŚWIATDZIECKA

smyk Cały dla małych!

H&M

C&A

Kaufland

D DEICHMANN

PEPCO

BARTEK

RESERVED   COCCODRILLO   ZARA kids

Toys'R'us   obaibi · okaïdi

funny toy planet   KANZ

Low   **High**

Child focus [high vs. low]

◯ Bubble size represents % share in ATH market revenue

◻ Children's one-stop chains   ◼ Children's specialist chains   ◉ Online players   ◉ Grocery chains   ◉ Fashion chains

1) As of 2017   2) % share based on ATH value of transactions generated by Allegro as a marketplace

One-stop children's chains cover all ATH categories, whereas specialist children's chains concentrate either on apparel or on toys

ATH product category coverage of selected market players (1/2)

		Children's apparel	Toys	Children's hardware
	Smyk	✓	✓	✓
	5.10.15	✓	✓	✓
	Swiat dziecka	✓	✓	✓
	Coccodrillo	✓	✗	✗
	Toys R Us	✗	✓	✓
	Bartek	✓	✗	✗
	Okaidi	✓	✗	✗
	Tup Tup [Kanz]	✓	✗	✗
	Toy Planet	✗	✓	✓

✓ Company has such products   ✗ Company does not have such products

Large hypermarkets and the online players offer a wide ATH range – Fashion chains concentrate mostly on children's apparel within ATH

ATH product category coverage of selected market players (2/2)

			Children's apparel	Toys	Children's hardware
	H&M	H&M	✓	✗	✗
	CCC	CCC	✓	✗	✗
	RESERVED	Reserved	✓	✗	✗
	PEPCO	Pepco	✓	✓	✗
	ZARA kids	Zara Kids	✓	✗	✗
	C&A	C&A	✓	✗	✗
	TXM	TXM	✓	✗	✗
	REPORTER	Reporter	✓	✗	✗
	D	Deichmann	✓	✗	✗
	Auchan	Auchan	✓	✓	✓
	TESCO	Tesco	✓	✓	✓
	Lidl	Lidl	✓	✓	✗
	Carrefour	Carrefour	✓	✓	✓
	Kaufland	Kaufland	✗	✓	✗
	allegro	Allegro	✓	✓	✓

✓ Company has such products   ✗ Company does not have such products

Most key chains focused on ATH markets cover all ages of children

ATH age coverage by selected market players (1/2)

ATH market players	ATH age coverage														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
SMYK	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
5.10.15	■	■	■	■	■	■	■	■	■	■	■	■	■	▨	▨
Swiat dziecka	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Coccodrillo	■	■	■	■	■	■	■	■	■	■	■	■	■	▨	▨
Toys R Us	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Bartek	■	■	■	■	■	■	■	■	■	■	■	▨	▨	▨	▨
Okaidi	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Tup Tup [Kanz]	▨	▨	▨	▨	■	■	■	■	■	■	■	■	■	■	■
Toy Planet	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

■ Age covered   ▨ Age not covered

Source: Mystery store checks
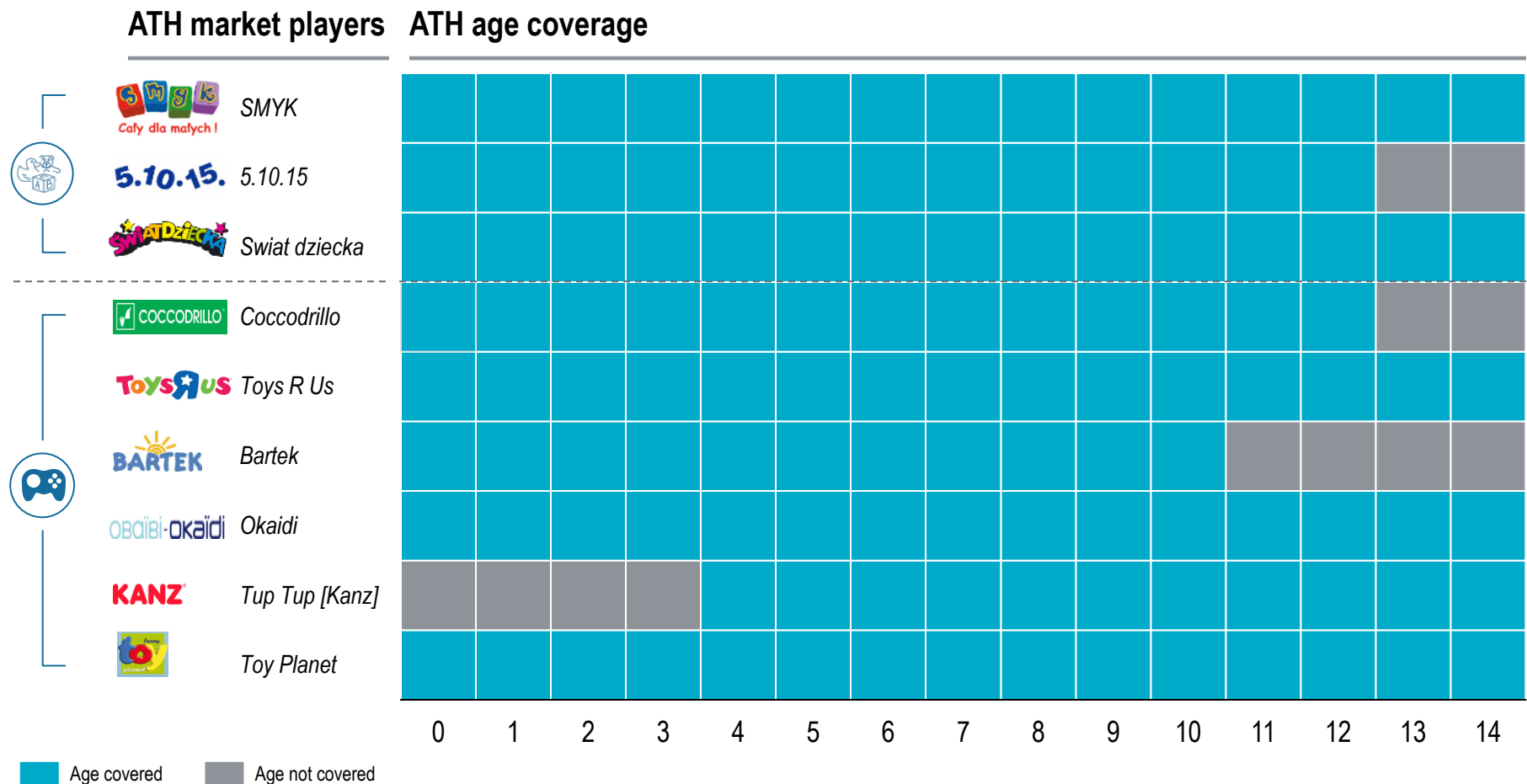
Key fashion and grocery chains as well as online players cover all ages of children within their ATH offerings

ATH age coverage by selected market players (2/2)

ATH market players   **ATH age coverage**

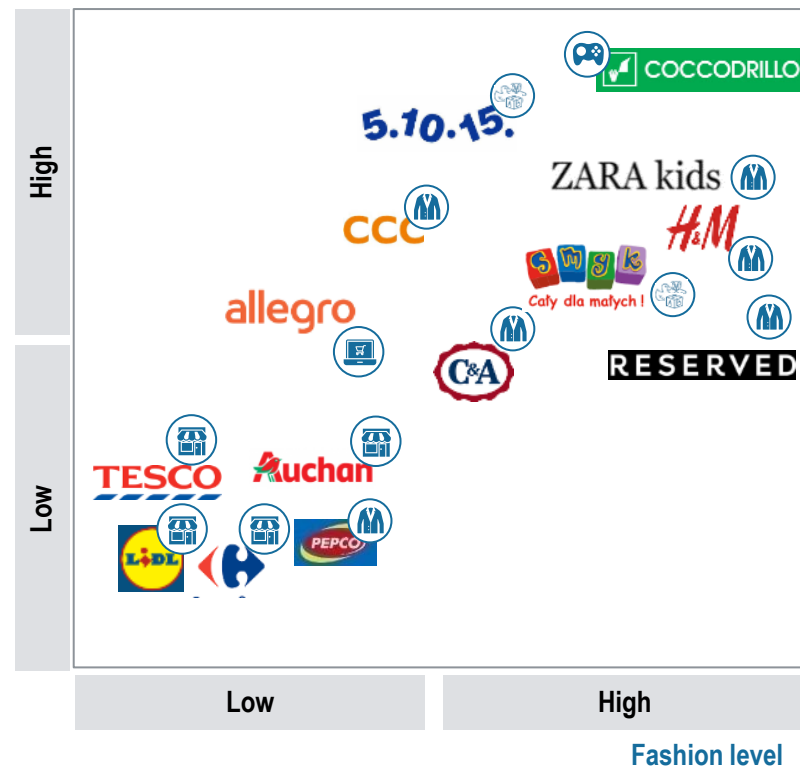| Player	1	2	3	4	5	6	7	8	9	10	11	12	13	14
H&M	■	■	■	■	■	■	■	■	■	■	■	■	■	■
CCC	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Reserved	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pepco	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Zara Kids	■	■	■	■	■	■	■	■	■	■	■	■	■	■
C&A	■	■	■	■	■	■	■	■	■	■	■	■	■	■
TXM	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Reporter	□	□	□	□	□	□	■	■	■	■	■	■	■	■
Deichmann	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Auchan	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Tesco	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Lidl	□	□	■	■	■	■	■	■	■	■	■	■	■	■
Carrefour	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Kaufland	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Allegro	■	■	■	■	■	■	■	■	■	■	■	■	■	■

■ Age covered   □ Age not covered
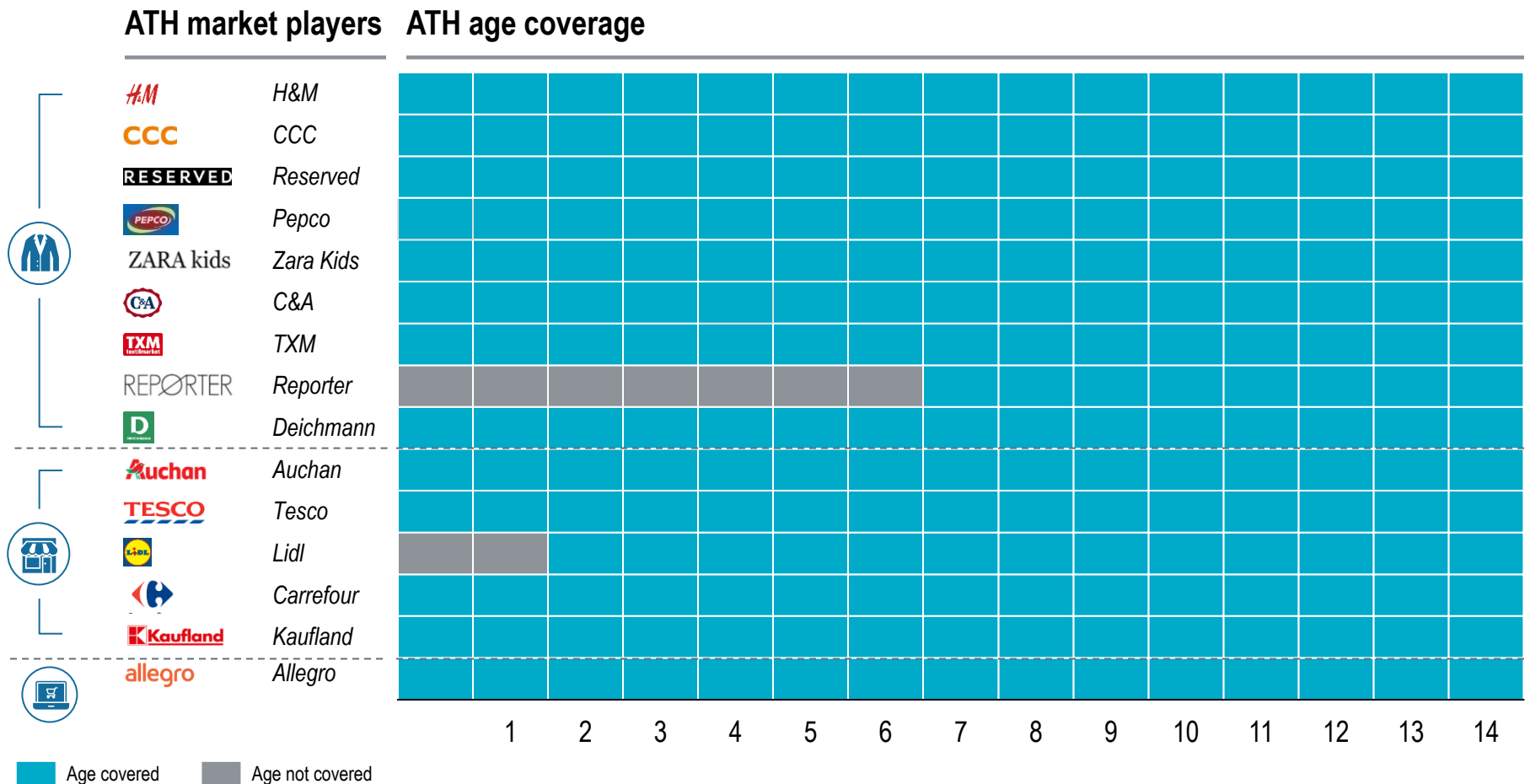
Grocery chains and discounters are at the low end, while fashion chains & children-focused chains lead in terms of fashionable apparel

Competitive positioning of selected children's apparel market players, 2018

Indicative

Competitive positioning

Price level

High | **Low** (vertical axis labels)

COCCODRILLO
5.10.15.
ZARA kids
CCC
H&M
smyk — Cały dla małych!
allegro
C&A
RESERVED
TESCO
Auchan
LIDL
Carrefour
PEPCO

Low | **High**

Fashion level

Approaches to competitive positioning

> Coccodrillo, 5.10.15 and Zara Kids are among the chains with the highest positioning in terms of price

> At the opposite end of the spectrum, Lidl, Tesco and Auchan are positioned to attract a large customer base sensitive to price

Comments on competitive positioning

Children's one-stop chains strive to offer a relatively high fashion level at an affordable price

Children's specialist chains have a similar approach to children's one-stop chains

Fashion chains have various approaches – From more fashionable to very basic apparel, with adjusted prices

Grocery chains offer basic apparel at comparatively low prices

The key online player is positioned at the lower end of the fashion spectrum and at medium price level – For Allegro as a marketplace the scope of offers is wide and there is no single positioning

Roland Berger

For selected shopping baskets, girls with highest price spreads and overall higher average prices

Price comparison of selected children's apparel market players, snapshot

Shopping basket – all

Price per shopping basket, min/avrg/max [EUR]

Legend:
- Girls (yellow)
- Boys (blue)
- Newborn/babies (grey)

C&A
- Girls: 104.26 / 67 / 31.80
- Boys: 84.18 / 65 / 44.96
- Newborn/babies: 62.93 / 51 / 40.68 / 37.07

RESERVED
- Girls: 119.62 / 77 / 37
- Boys: 98.09 / 74 / 42 / 41.86
- Newborn/babies: 47.84 / 35.88

H&M
- Girls: 145.77 / 87 / 46.47
- Boys: 114.71 / 82 / 51.30
- Newborn/babies: 66.86 / 52 / 38.14

ZARA kids
- Girls: 145.32 / 117 / 95.55
- Boys: 106.58 / 82 / 64.94
- Newborn/babies: 79.32 / 59 / 38.64

smyk Cały dla małych!
- Girls: 107.66 / 84 / 50.23
- Boys: 82.54 / 69 / 53.83
- Newborn/babies: 57.41 / 48 / 42.58

COCCODRILLO
- Girls: 142.92 / 116 / 93.39
- Boys: 116.19 / 105 / 93.18
- Newborn/babies: 83.37 / 74.51

5.10.15.
- Girls: 155.52 / 128 / 94.02
- Boys: 133.97 / 108 / 70.58
- Newborn/babies: 82.52 / 73 / 63.38

Comments on methodology

> Data input based on store checks conducted by TNS Kantar during the time period of 19.07.18-24.07.18 in selected stores in Warsaw[1]

> Effects of sales season could minimally occur, though we used the regular prices per item per category for the analysis

> Shopping baskets include:

- Only single items, no multi-packs

- Younger/older girls: 8 product categories; dresses (casual, elegant), t-shirts (long, short, no sleeve), leggings, trousers, shorts

- Younger/older boys: 6 product categories; t-shirts (long, short), sweatshirts, trousers, jeans, shorts

- Newborn/babies: 6 product categories; t-shirts (short & long sleeve), short-sleeve body, sweatshirt, jeans, shorts

1) Prices were recorded in PLN, thus we converted it to EUR (1 EUR = 4,17907), based on Oxford economics database

Smyk, 5.10.15 and Coccodrillo are children-focused chains with a large number of stores

Retail distribution of selected ATH market players, 2017 (1/2)

Indicative

ATH market players	ATH revenues[1) and market share 2017 [EUR m, %]		Number of stores	Typical store area [sqm]	Type of format	
					Own	Franchised
Smyk	259	12.4%	156	700	✓	✗
5.10.15	36	1.7%	220	100	✓	✓
Swiat dziecka	4	0.2%	5	1,000	✓	✗
Coccodrillo	38	1.8%	250	70	✓	✓
Toys R Us	16	0.8%	16	2,000	✓	✗
Bartek	10	0.5%	36	60	✓	✗
Okaidi	6	0.3%	20	185	✓	✗
Tup Tup [Kanz]	3	0.1%	24	70	✓	✓
Toy Planet	1	0.0%	30	125	✓	✓

✓ Company has such type of format ✗ Company does not have such type of format

1) Estimation of revenues from ATH market on the basis of financial statements and assumed % of ATH in revenues

Roland Berger

Selected fashion and grocery chains already have a high store coverage

Retail distribution of selected ATH market players, 2017 (2/2)

Indicative

ATH market players		ATH revenues[1] and market share 2017 [EUR m, %]		Number of stores	Typical store area [sqm]	Type of format	
						Own	Franchised
Pepco	Pepco	157	7.5%	780	450	✓	✗
H&M	H&M	64	3.1%	175	1,800	✓	✗
CCC	CCC	59	2.9%	448	550	✓	✓
RESERVED	Reserved	58	2.8%	232	1,200	✓	✗
ZARA kids	Zara Kids	43	2.0%	44	1,200	✓	✗
C&A	C&A	27	1.3%	46	1,500	✓	✗
TXM	TXM	18	0.9%	371	250	✓	✓
REPORTER	Reporter	14	0.7%	134	75	✓	✓
D	Deichmann	11	0.5%	249	500	✓	✗
Auchan	Auchan	121	5.8%	110	7,250	✓	✗
TESCO	Tesco	84	4.0%	420	2,050	✓	✗
Lidl	Lidl	64	3.1%	630	1,050	✓	✗
Carrefour	Carrefour	38	1.8%	243	2,300	✓	✗
Kaufland	Kaufland	9	0.4%	206	2,500	✓	✗
allegro	Allegro	254[2]	12.2%			✗	✗

✓ Company has such type of format   ✗ Company does not have such type of format

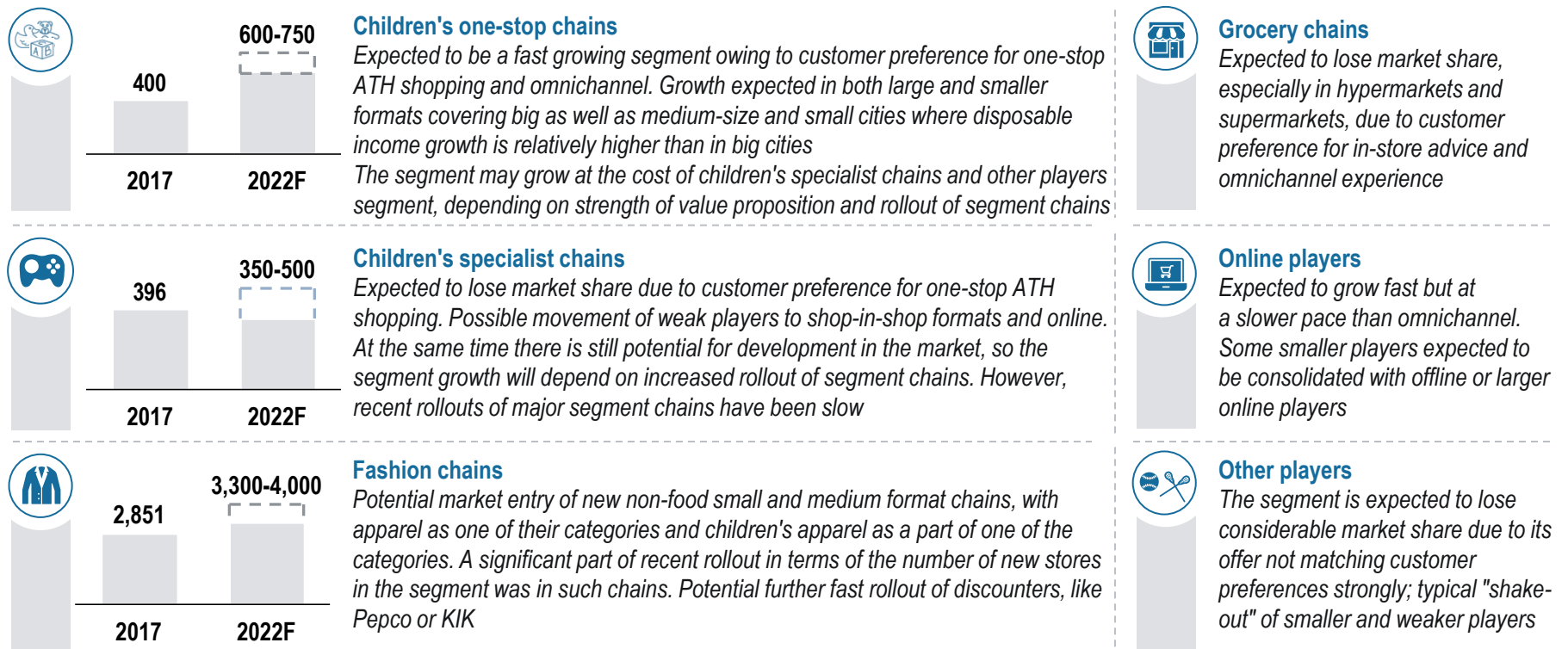Source: Mystery store checks, desk research, expert interviews

1) Estimation of revenues from ATH market on the basis of financial statements and assumed % of ATH in revenues   2) Based on ATH value of transactions generated by Allegro as a marketplace

B.3 Market segment development

Children's one-stop chains are expected to be fast growing, followed by online players

Development of retail distribution by ATH market segments[1] [# of stores]

Children's one-stop chains

400	600-750
2017	2022F

Expected to be a fast growing segment owing to customer preference for one-stop ATH shopping and omnichannel. Growth expected in both large and smaller formats covering big as well as medium-size and small cities where disposable income growth is relatively higher than in big cities
The segment may grow at the cost of children's specialist chains and other players segment, depending on strength of value proposition and rollout of segment chains

Grocery chains

Expected to lose market share, especially in hypermarkets and supermarkets, due to customer preference for in-store advice and omnichannel experience

Children's specialist chains

396	350-500
2017	2022F

Expected to lose market share due to customer preference for one-stop ATH shopping. Possible movement of weak players to shop-in-shop formats and online. At the same time there is still potential for development in the market, so the segment growth will depend on increased rollout of segment chains. However, recent rollouts of major segment chains have been slow

Online players

Expected to grow fast but at a slower pace than omnichannel. Some smaller players expected to be consolidated with offline or larger online players

Fashion chains

2,851	3,300-4,000
2017	2022F

Potential market entry of new non-food small and medium format chains, with apparel as one of their categories and children's apparel as a part of one of the categories. A significant part of recent rollout in terms of the number of new stores in the segment was in such chains. Potential further fast rollout of discounters, like Pepco or KIK

Other players

The segment is expected to lose considerable market share due to its offer not matching customer preferences strongly; typical "shake-out" of smaller and weaker players
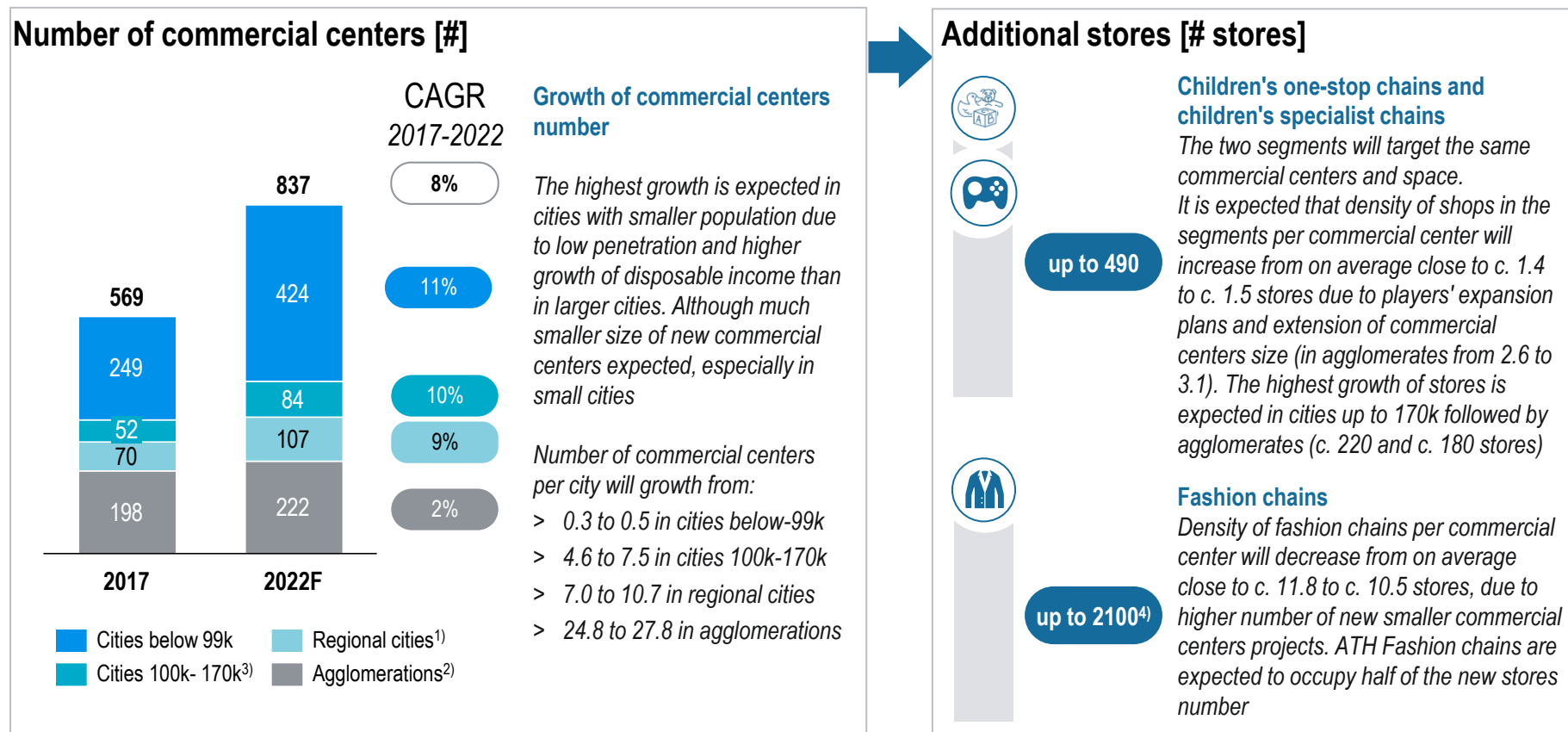
High growth is expected for children's one-stop shops and fashion chains, mostly by expanding in medium-size and small cities and by growing revenues owing to omnichannel offer

1) Methodology used is described in slide 140

Roland Berger

Higher growth of commercial centers in smaller cities creates new opportunities for players in the ATH market

Development of new commercial centers and potential number of additional stores

Number of commercial centers [#]

CAGR
2017-2022

837

8%

424 — 11%

84 — 10%

107 — 9%

222 — 2%

569

249

52

70

198

2017   **2022F**

- Cities below 99k
- Cities 100k- 170k[3]
- Regional cities[1]
- Agglomerations[2]

Growth of commercial centers number

The highest growth is expected in cities with smaller population due to low penetration and higher growth of disposable income than in larger cities. Although much smaller size of new commercial centers expected, especially in small cities

Number of commercial centers per city will growth from:

> 0.3 to 0.5 in cities below-99k
> 4.6 to 7.5 in cities 100k-170k
> 7.0 to 10.7 in regional cities
> 24.8 to 27.8 in agglomerations

Additional stores [# stores]

Children's one-stop chains and children's specialist chains
The two segments will target the same commercial centers and space.
It is expected that density of shops in the segments per commercial center will increase from on average close to c. 1.4 to c. 1.5 stores due to players' expansion plans and extension of commercial centers size (in agglomerates from 2.6 to 3.1). The highest growth of stores is expected in cities up to 170k followed by agglomerates (c. 220 and c. 180 stores)

up to 490

Fashion chains
Density of fashion chains per commercial center will decrease from on average close to c. 11.8 to c. 10.5 stores, due to higher number of new smaller commercial centers projects. ATH Fashion chains are expected to occupy half of the new stores number

up to 2100[4]

1) Białystok, Bielsko-Biała, Bydgoszcz, Częstochowa, Kielce, Lublin, Olsztyn, Radom, Rzeszów, Toruń
Upper Silesia (Katowice), Warsaw, Wrocław   3) Cities that are not included in Agglomerations
2) Kraków, Łódź, Poznań, Szczecin, Tricity (Gdańsk, Gdynia, Sopot),
4) Total number of new shops of fashion chains, part of them are ATH fashion chains

C.   Romania

Strong macroeconomic fundamentals will continue to fuel the ATH market development in Romania

Executive summary (1/2)

1 ### Market overview

> The ATH market had a value of approximately EUR 815 m in 2017, with a CAGR of 5.1% in the past five years – The **market value** is forecast to **grow at an accelerated CAGR of 7.0%** and is anticipated to reach over EUR 1 bn by 2022

> The total number of children aged 0-14 is expected to decrease slightly by 2022, in spite of continued state subsidies for childbirth

> However, the **primary growth driver** is the projected **rise in disposable income at a CAGR of approximately 9%** over the forecast period

> **Distribution channel trends** on the Romanian market favor **further development in modern retail**, which is expected to increase its penetration of the ATH market, mainly in big but also in medium-size and small urban areas (consumers favor modern retail for the wide SKU range and one-stop shopping features)

> The trend towards **omnichannel development will continue**, with both pure play retailers and physical retailers increasing their online presence – In fact, e-commerce in the ATH market is forecast to grow at about 15.6% CAGR through 2022

> **Product trends** point towards high brand awareness and increased popularity of licensed toys – At the same time, private label maintains around 30% of the value share in the ATH market, addressing the need for products offering value for money

> A strong contributor to market development is the **growing preference for higher quality products** – This has also in part led to a decline in the gray market for ATH

> **ATH product segments** are dominated by apparel in value terms (63% of the market), followed by toys (23%) and hardware (14%) – The fastest growing segment is expected to be apparel, as a result of customer preference for more premium products and continued decrease of gray and second-hand markets

The market is consolidating, with strong growth from key one-stop shop players like Noriel and Jumbo, as well as from online players

Executive summary (2/2)

2 **Players in the market**
> **Top 5 players make up approximately a third of the ATH market** in 2017 (+18 percentage points vs. 2012) – Visible impact from development of specialized stores (Noriel, Jumbo) and of leading Romanian e-commerce player eMAG
> One-stop shop specialists, grocery retailers and online players generally **cover all three ATH product categories**, while children's specialist chains and fashion chains are focused on only one product category
> In terms of **age coverage**, the majority of players address the entire 0-14-year-old age groups
> **Players cover the full market spectrum in terms of breadth of product assortment and level of child focus** – Largest share of ATH revenues comes from chains with high SKUs. Modern apparel chains are positioned at the high and low end of the price/fashion spectrum
> In terms of **outlet size**, certain specialized stores are experimenting with large formats carrying a broad range of SKUs (e.g. Noriel Mega Store concept). At the same time, grocery retailers offer ATH categories predominantly in large format stores

3 **Market segment development**
> **One-stop shops and online players** experienced the strongest growth in the past five years
> **One-stop shop chains** doubled their number of stores in the past five years and are forecast to increase their footprint by an additional 60-100% by 2022, while shifting to larger stores
> **Online players** saw considerable growth as the overall e-commerce market started to develop – The main share being attributed to the leading Romanian e-commerce player, eMAG
> **Grocery chains** are moderately growing market share due to penetration of modern retail in small urban areas currently dominated by traditional trade
> **Fashion chains'** market share expected to remain stable, as key players (Zara, H&M) have stabilized their growth
> **Children's specialist chains** and **independent retailers** are expected to experience further market share erosion as pressure from all other formats mounts
> **In 2022**, the total number of stores is expected to reach **up to 270 children's one-stop chain stores, 140 children's specialized chain stores and 510 fashion chain stores**
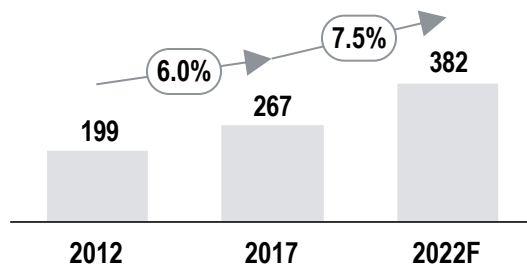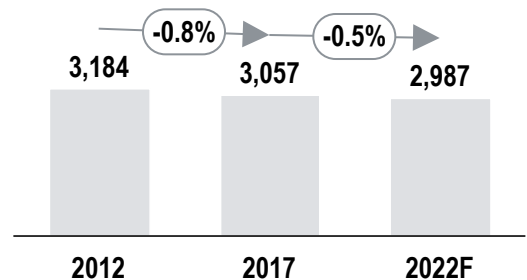
C.1 Market overview

ATH market is expected to grow owing mostly to the growth of annual spend per child
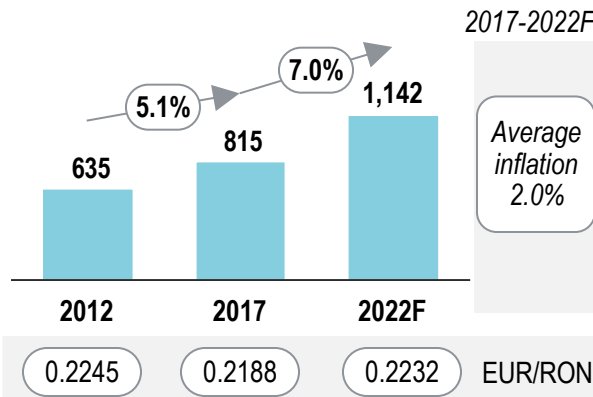
ATH market value and key drivers
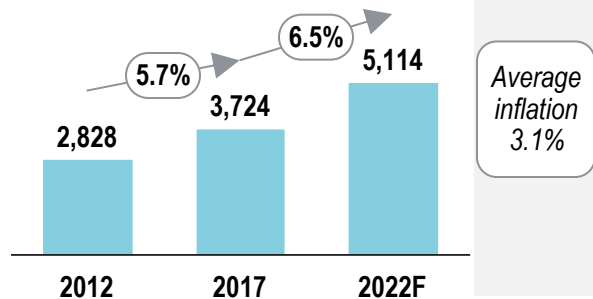
Annual spend per child [EUR]

199 (2012) — 6.0% → 267 (2017) — 7.5% → 382 (2022F)

Number of children ['000]

3,184 (2012) — -0.8% → 3,057 (2017) — -0.5% → 2,987 (2022F)

X% → CAGR

Market value [EUR m]

635 (2012) — 5.1% → 815 (2017) — 7.0% → 1,142 (2022F)

2017-2022F

Average inflation 2.0%

0.2245 | 0.2188 | 0.2232 — EUR/RON

Market value [RON m]

2,828 (2012) — 5.7% → 3,724 (2017) — 6.5% → 5,114 (2022F)

Average inflation 3.1%

ATH market drivers and trends

Macroeconomic drivers
> Annual spend per child is c. 2.5x below the average of selected Western European countries, leading to a catch-up driven by disposable income growth

Country consumption drivers
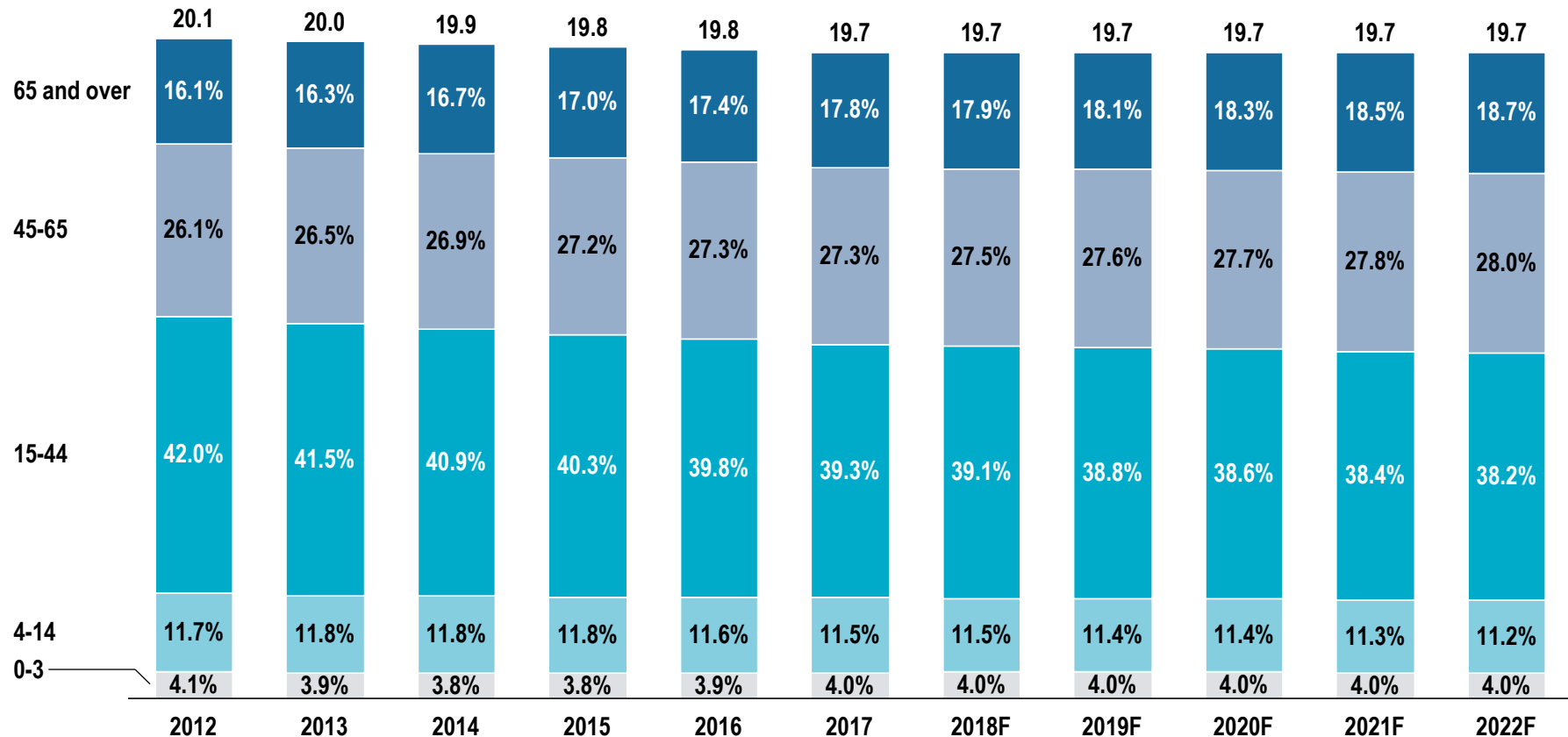> High GDP growth with falling unemployment rate increases disposable income of households

ATH market trends
> Increasing penetration of modern retail
> Importance of omnichannel, driven by increased access to Internet

The share of the population below 15 years old is forecast to remain relatively stable

Population structure by age [total in m, % by age]

	2012	2013	2014	2015	2016	2017	2018F	2019F	2020F	2021F	2022F
Total	20.1	20.0	19.9	19.8	19.8	19.7	19.7	19.7	19.7	19.7	19.7
65 and over	16.1%	16.3%	16.7%	17.0%	17.4%	17.8%	17.9%	18.1%	18.3%	18.5%	18.7%
45-65	26.1%	26.5%	26.9%	27.2%	27.3%	27.3%	27.5%	27.6%	27.7%	27.8%	28.0%
15-44	42.0%	41.5%	40.9%	40.3%	39.8%	39.3%	39.1%	38.8%	38.6%	38.4%	38.2%
4-14	11.7%	11.8%	11.8%	11.8%	11.6%	11.5%	11.5%	11.4%	11.4%	11.3%	11.2%
0-3	4.1%	3.9%	3.8%	3.8%	3.9%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%

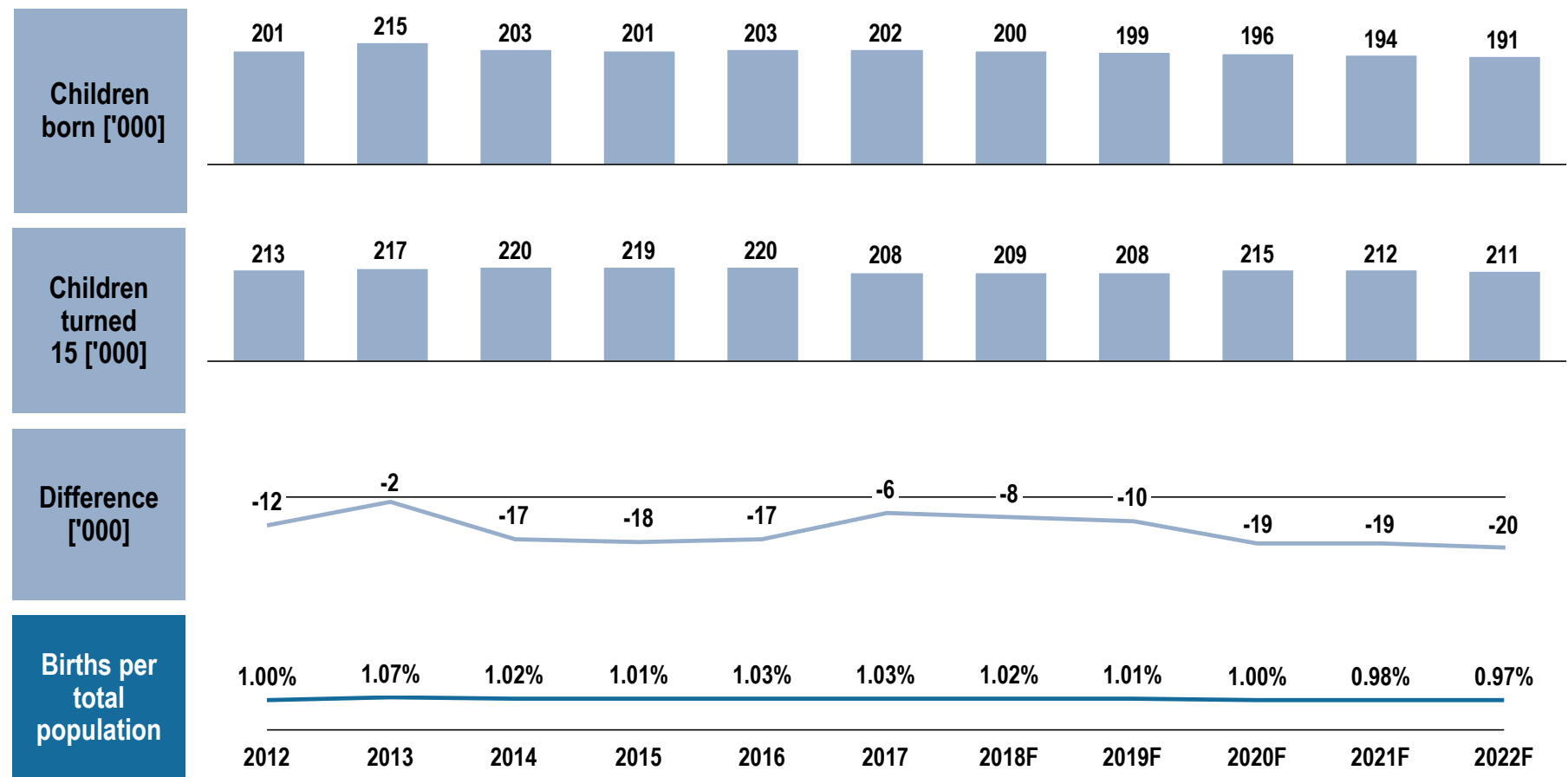Source: Market model based on National Statistics Institute, World Bank, Euromonitor

Children above 10 years old are forecast to constitute the highest share of the total number of children by 2022
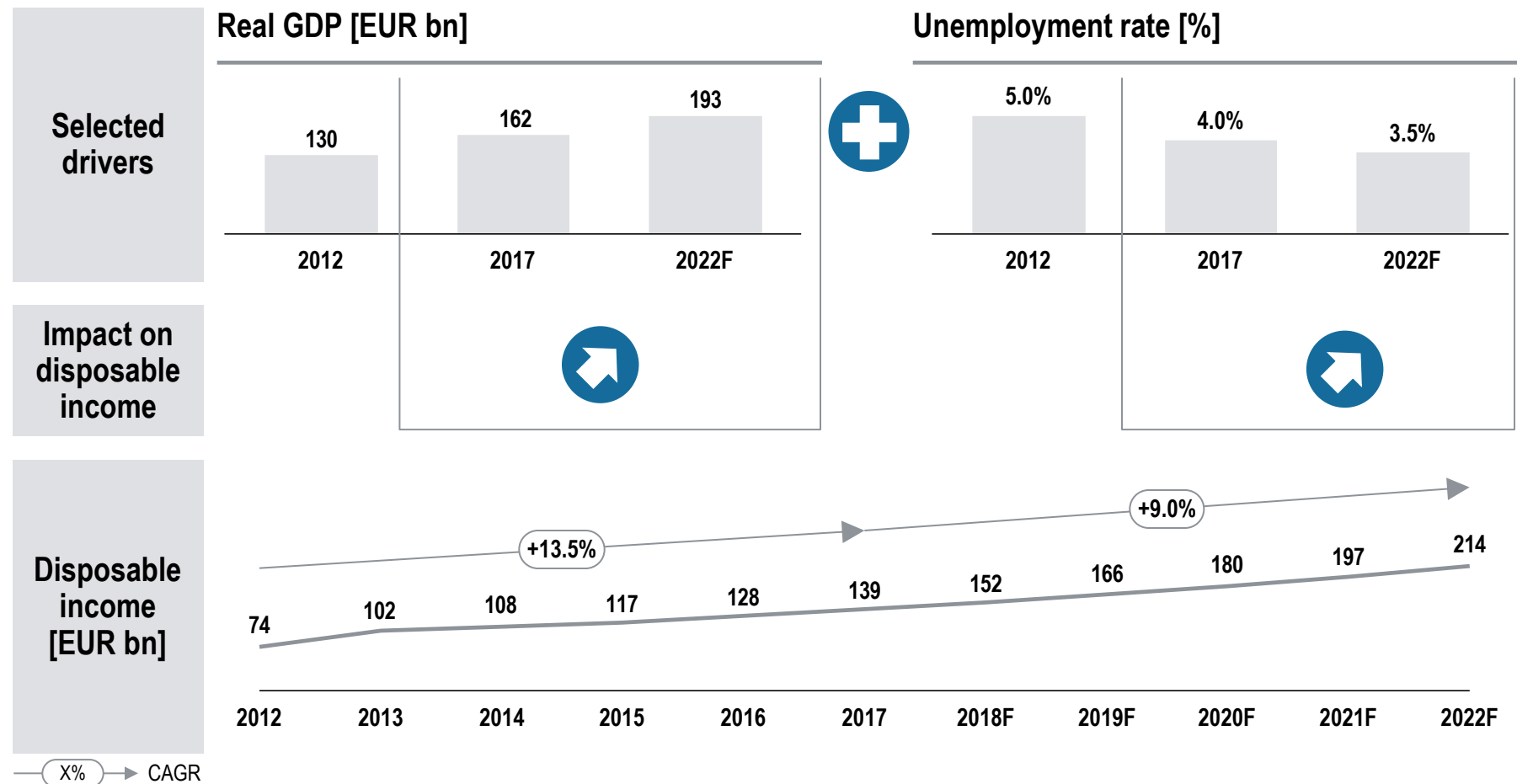
Number of children by age ['000]

2012

2017

2022F
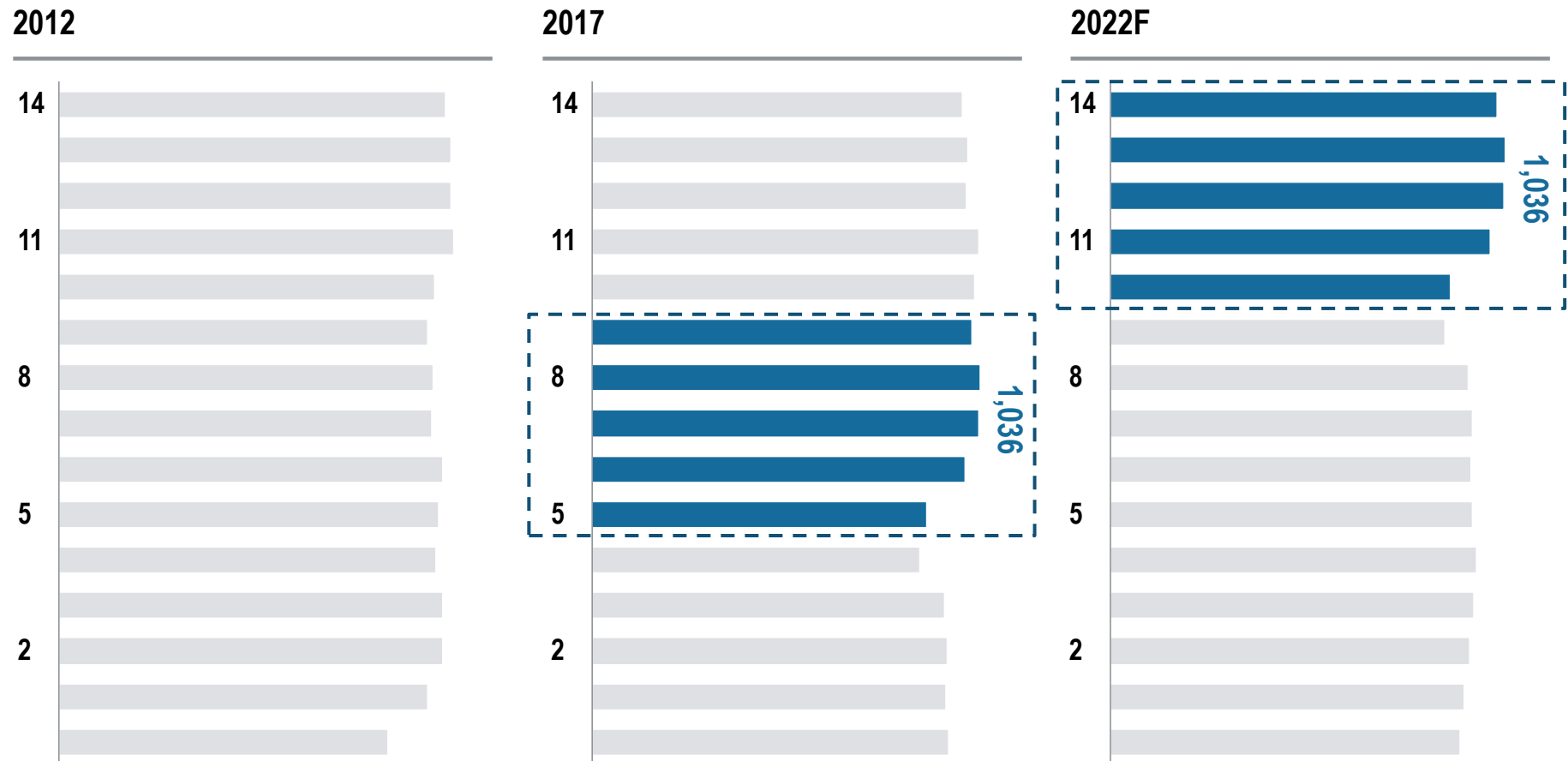
The number of children is going to drop through 2022 mainly due to decreasing birth rates

Children's group entries, exits and birth rates

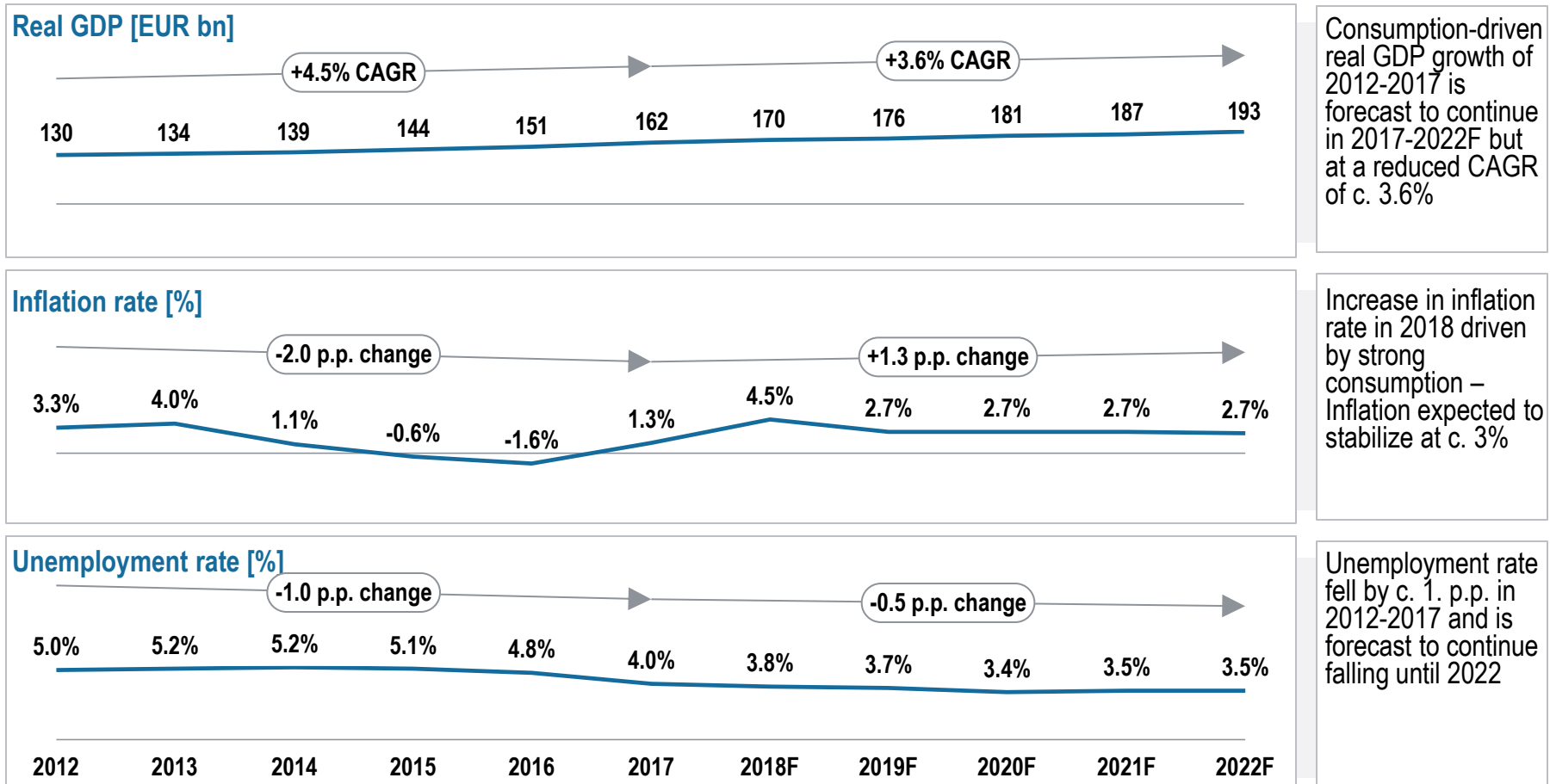|	2012	2013	2014	2015	2016	2017	2018F	2019F	2020F	2021F	2022F
Children born ['000]	201	215	203	201	203	202	200	199	196	194	191
Children turned 15 ['000]	213	217	220	219	220	208	209	208	215	212	211
Difference ['000]	-12	-2	-17	-18	-17	-6	-8	-10	-19	-19	-20
Births per total population	1.00%	1.07%	1.02%	1.01%	1.03%	1.03%	1.02%	1.01%	1.00%	0.98%	0.97%

Forecast development of real GDP and unemployment rates are expected to positively impact disposable income growth

Disposable income and its selected drivers

Real GDP [EUR bn]

	2012	2017	2022F
	130	162	193

Unemployment rate [%]

	2012	2017	2022F
	5.0%	4.0%	3.5%

Selected drivers

Impact on disposable income

Disposable income [EUR bn]

+13.5%   +9.0%

2012	2013	2014	2015	2016	2017	2018F	2019F	2020F	2021F	2022F
74	102	108	117	128	139	152	166	180	197	214

X% → CAGR

Roland Berger

Generally favorable economic conditions expected through 2022, driven by GDP growth, stable inflation and decreasing unemployment rates

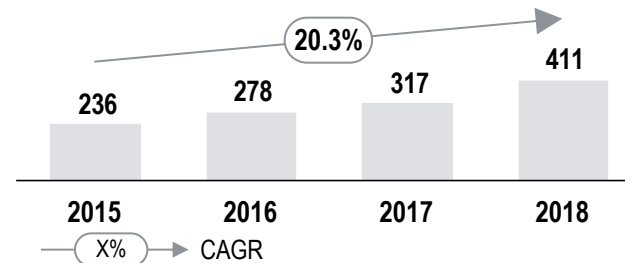Macroeconomic indicators, 2012-2022F

Real GDP [EUR bn]

(+4.5% CAGR) → (+3.6% CAGR) →

| 130 | 134 | 139 | 144 | 151 | 162 | 170 | 176 | 181 | 187 | 193 |

Consumption-driven real GDP growth of 2012-2017 is forecast to continue in 2017-2022F but at a reduced CAGR of c. 3.6%

Inflation rate [%]

(-2.0 p.p. change) → (+1.3 p.p. change) →

| 3.3% | 4.0% | 1.1% | -0.6% | -1.6% | 1.3% | 4.5% | 2.7% | 2.7% | 2.7% | 2.7% |

Increase in inflation rate in 2018 driven by strong consumption – Inflation expected to stabilize at c. 3%

Unemployment rate [%]

(-1.0 p.p. change) → (-0.5 p.p. change) →

| 5.0% | 5.2% | 5.2% | 5.1% | 4.8% | 4.0% | 3.8% | 3.7% | 3.4% | 3.5% | 3.5% |

Unemployment rate fell by c. 1. p.p. in 2012-2017 and is forecast to continue falling until 2022

| 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018F | 2019F | 2020F | 2021F | 2022F |

Favorable macroeconomic environment along with some government stimulus measures have supported ATH market growth

Country-specific consumption drivers and trends
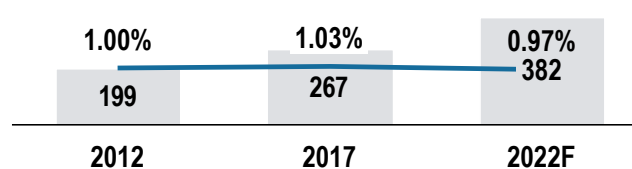
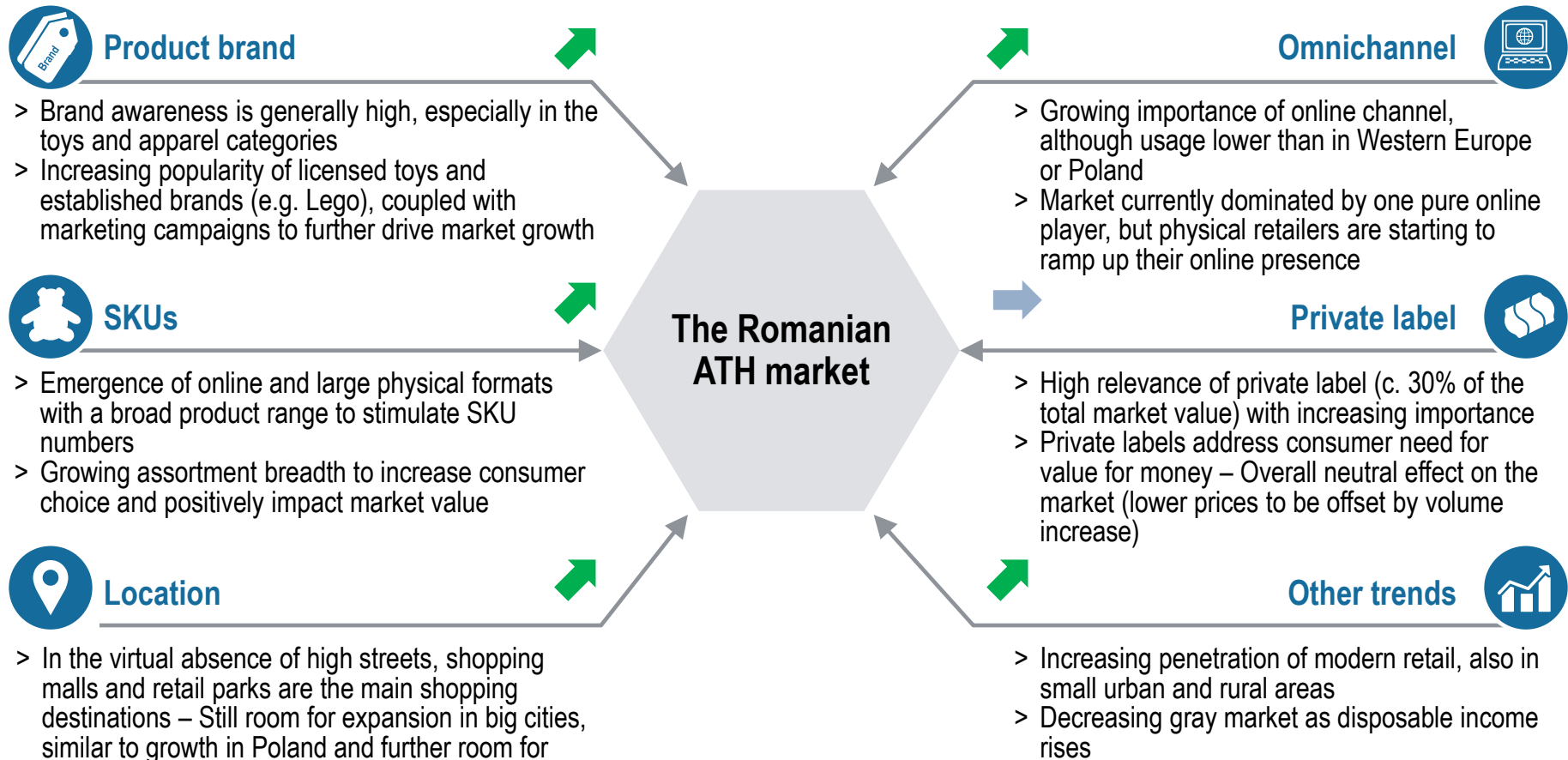| **Minimum salary development [EUR]** | 20.3% chart: 236 (2015), 278 (2016), 317 (2017), 411 (2018) — X% → CAGR | Significant increase in minimum wage over 2017-2018 has been a key driver of disposable income and consumption growth |

Tax reductions
> VAT reduction in 2017 to 19%, down from 21% previously
> Abolition of 102 tax packages

Sharp rise in disposable income resulting from wage increases and tax reductions has influenced GDP growth that reached 8.9% in Q3 2017 – Growth expected to cool down and stabilize over forthcoming period

Birth-related benefits
> State subsidies for maternity/paternity leave covering 85% of gross income for up to 2 years
> Ceiling for subsidies briefly removed between 2016-2017, leading to increase in parents opting for birth leave

State subsidies for childbirth, addressing both maternity and paternity leave, act as a buffer for working parents – However, limited impact on birth rate growth expected from subsidies going forward

Annual spend per child [EUR] and births per total population

Chart: 1.00% / 199 (2012), 1.03% / 267 (2017), 0.97% / 382 (2022F)

Despite reduction in child population, overall consumption growth and increase in annual spend per child are set to drive market value growth

Key market characteristics suggest strong growth potential for the ATH market in Romania

Key trends and market characteristics

Product brand

> Brand awareness is generally high, especially in the toys and apparel categories
> Increasing popularity of licensed toys and established brands (e.g. Lego), coupled with marketing campaigns to further drive market growth

SKUs

> Emergence of online and large physical formats with a broad product range to stimulate SKU numbers
> Growing assortment breadth to increase consumer choice and positively impact market value

Location

> In the virtual absence of high streets, shopping malls and retail parks are the main shopping destinations – Still room for expansion in big cities, similar to growth in Poland and further room for expansion in medium-size towns

The Romanian ATH market

Omnichannel

> Growing importance of online channel, although usage lower than in Western Europe or Poland
> Market currently dominated by one pure online player, but physical retailers are starting to ramp up their online presence

Private label

> High relevance of private label (c. 30% of the total market value) with increasing importance
> Private labels address consumer need for value for money – Overall neutral effect on the market (lower prices to be offset by volume increase)

Other trends

> Increasing penetration of modern retail, also in small urban and rural areas
> Decreasing gray market as disposable income rises

Overall impact on the ATH market value: ➚ Positive ➘ Negative ➡ Neutral

We have gathered significant insights into key Romanian ATH market trends by interviewing local industry experts

Selected quotes from interviews with market participants

Customers prefer specialized stores because they can find variety and quality there at the same time, which is not the case with non-specialized stores like supermarkets.

Import Manager, children's apparel retailer "

In the past two years, it became very important to also have an online store for selling children's products, especially for toys. Customers are using online for both the buying process and info gathering.

Sales Director, toy specialist retailer "

In the last few years, customers have increasingly been looking for one-stop shops and not for specialized stores. Diversification is really important for a company to survive in the market.

General Manager, toy manufacturer "

I think all children's specialist retailers are increasing the range of SKUs in most product categories. Their main limitation is the amount of available shelf space.

Sales Director, children's specialist retailer "

Yes, online will certainly continue to grow strongly. Young people who are nowadays parents are used to buying things online for themselves, so they will also do this for their children.

Marketing Manger, children's specialist retailer "

There are no stable and helpful government programs to stimulate the birth rate.

Toy specialist/independent market consultant "

SKU range, one-stop shopping and multichannel availability appear to be the most important characteristics for ATH retailers in Romania

Customer retailer selection and product purchasing criteria

Main criteria for choosing retailers

Multichannel availability

One-stop shopping

Wide SKU range

Retail brand

Price

Sales counseling/advice

Commercials/marketing

Customer purchasing criteria – Children's apparel

> Garment **quality** and **design** seem to be some of the most important purchasing criteria for Romanian consumers in the apparel category

> **Price** also plays an important role, although some consumer segments are more focused on value for money than price alone

Customer purchasing criteria – Toys

> **Commercials** for toys are an important influencing factor for the purchase decision, with many specialized shops having dedicated in-store aisles for products supported by TV advertisements

> Clients looking to buy toys also appreciate a broad **SKU range** and a low **price**

Customer purchasing criteria – Children's hardware

> Romanian consumers appear to be **price-sensitive** when purchasing children's products in the hardware category

> A broad **SKU range** is also important, especially for larger hardware, as many parents want to be able to browse multiple options before making a purchase

Overall importance of criterion in choosing a retailer   ○ Low   ● High

ATH consumer preferences in Romania have been derived based on in-depth interviews with local industry experts

Selected quotes from interviews with market participants

Customers prefer one-stop shops for purchasing children's products and not specialized stores for each category, because buying from the latter can be more time consuming and more expensive.

Sales Director, toy specialist retailer 〝

It is crucial to have an online store because clients sometimes look online first when they intend to buy something. There are a lot of clients who also go to the shop first and then compare prices online.

Sales Manager, children's specialist retailer 〝

Younger generations prefer products that are "Made in Romania" but those generations still don't have their own children.

Toy specialist/independent market consultant 〝

Most clients choose where to buy children's products from based on the quality of the products, promotions and value for money.

Sales Manager, children's specialist retailer 〝

Customers prefer specialized stores, not just due to the broader product range, but also because they can receive valuable information about the products, which is not the case in grocery stores.

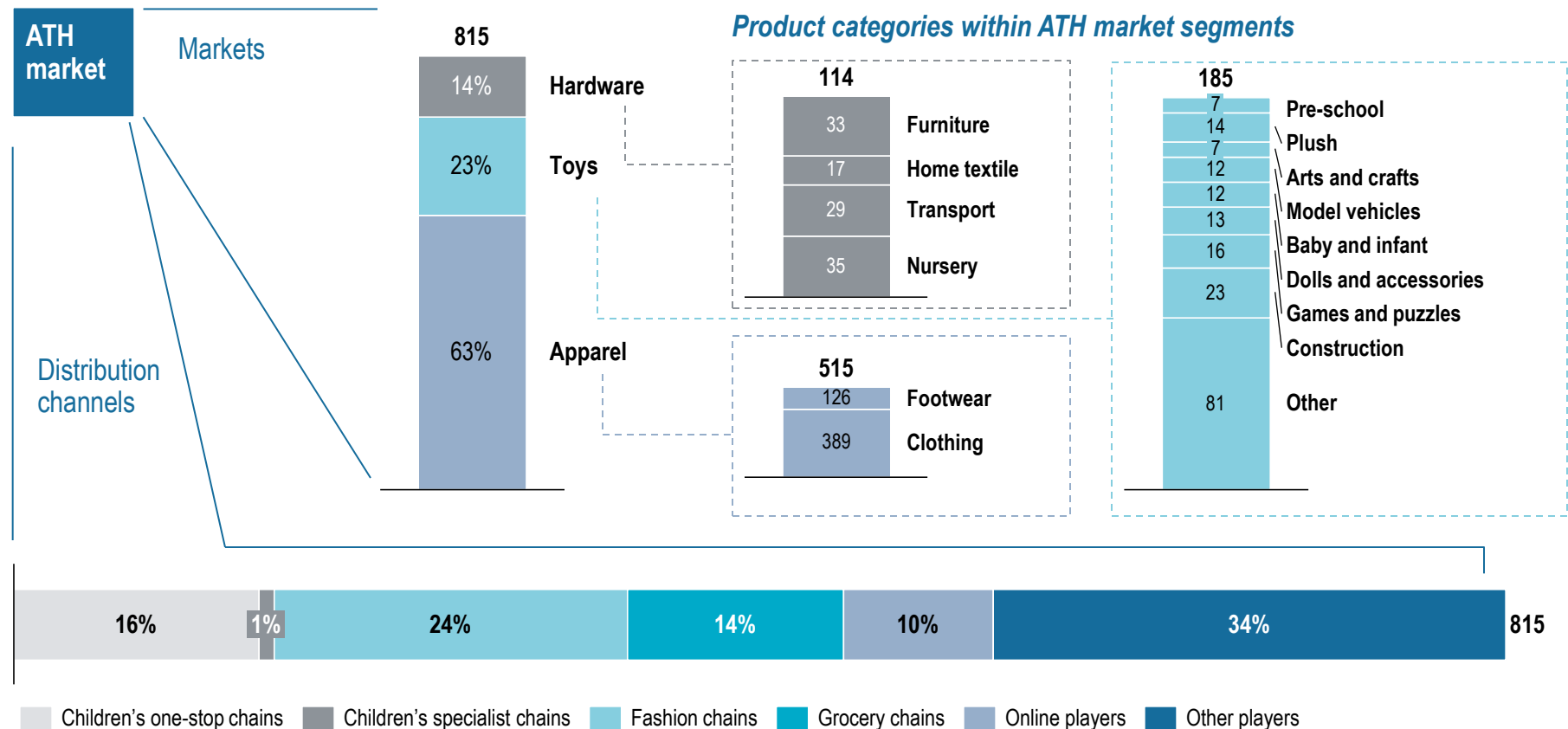**Sales Manager, toy specialist retailer** 〝

When people go online, they expect to find the best prices available. Sometimes people will just go online to use price comparison platforms.

Store Manager, children's specialist retailer 〝
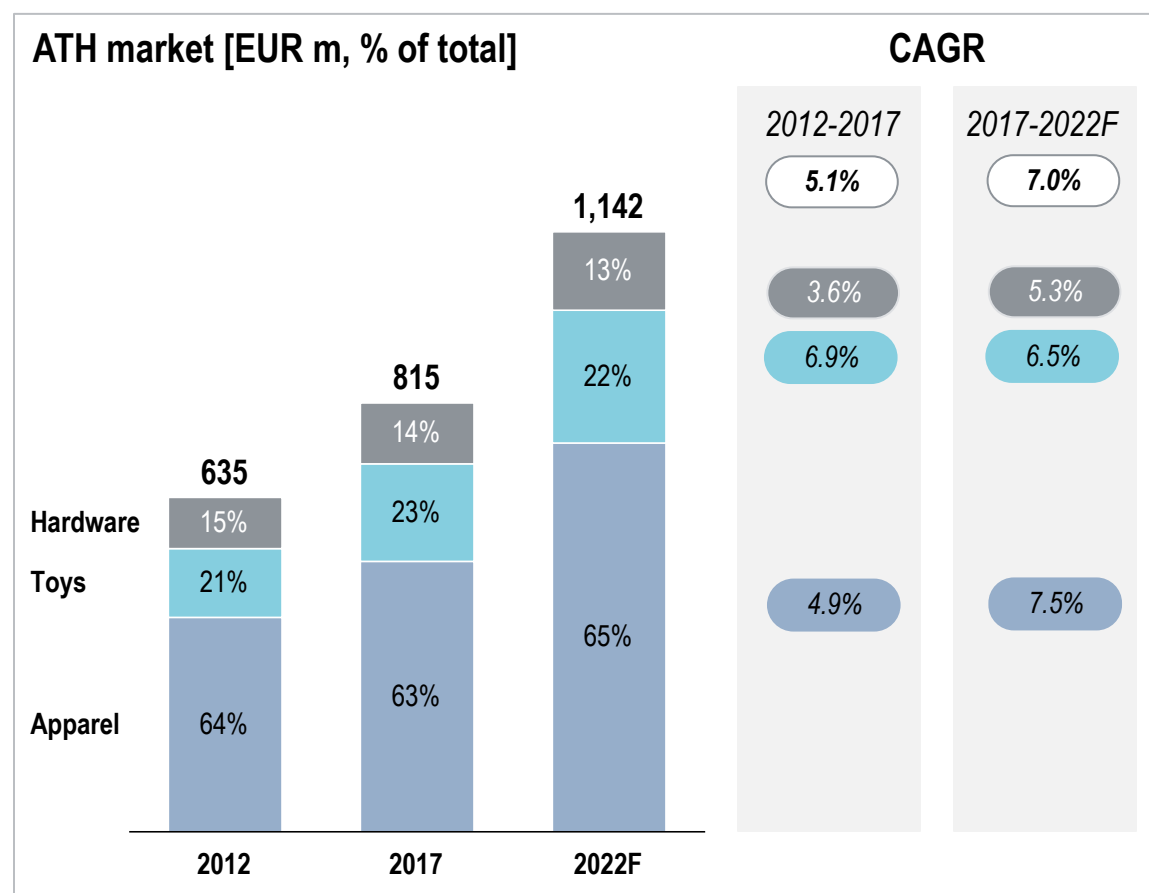
Roland Berger

Within the ATH market, apparel is the largest segment and fashion chains are the largest segment among chains

ATH market structure, 2017 [EUR m, % of total]

ATH market	Markets

815

14%	Hardware
23%	Toys
63%	Apparel

Product categories within ATH market segments

114

33	Furniture
17	Home textile
29	Transport
35	Nursery

185

7	Pre-school
14	Plush
7	Arts and crafts
12	Model vehicles
12	
13	Baby and infant
16	Dolls and accessories
23	Games and puzzles
	Construction
81	Other

515

126	Footwear
389	Clothing

Distribution channels

16%	1%	24%	14%	10%	34%	815

☐ Children's one-stop chains	☐ Children's specialist chains
☐ Fashion chains	☐ Grocery chains
☐ Online players	☐ Other players

Source: Market model based on Euromonitor, desk research, mystery store checks, expert interviews   20180814_The children's apparel, toys and hardware markets in Poland, Romania and Ukraine.pptx | 74

Roland Berger

The children's apparel segment is forecast to remain the largest within the overall ATH market through 2022

ATH market overview, 2012-2022F

ATH market [EUR m, % of total]

	2012	2017	2022F
Total	635	815	1,142
Hardware	15%	14%	13%
Toys	21%	23%	22%
Apparel	64%	63%	65%

CAGR

	2012-2017	2017-2022F
Total	5.1%	7.0%
Hardware	3.6%	5.3%
Toys	6.9%	6.5%
Apparel	4.9%	7.5%

ATH development

> The largest segment within the ATH market is children's apparel
  - Its growth is expected to accelerate through 2022 vs. 2012-2017, owing to higher average prices

> The fastest growing market is expected to be apparel, at c. 7.5% CAGR
  - Consumer orientation towards more premium products, coupled with the continued decrease of the gray/second-hand markets, is expected to have a positive impact on market value

Increase in average price of apparel as a key driver of market growth – Sustained increase in units per child will also spur growth

Children's apparel market value drivers, 2012-2022F

Number of children [m]

2012	2017	2022F
3.2	3.1	3.0

-0.8% → -0.5%

Product volume [m]

2012	2017	2022F
28	34	38

+3.7% → +2.5%

Market size [EUR m]

2012	2017	2022F
407	515	739

+4.9% → +7.5%

Units per child

2012	2017	2022F
8.8	11.0	12.8

+4.5% → +3.0%

Average price per unit [EUR]

2012	2017	2022F
14.5	15.3	19.4

+1.1% → +4.9%

Market development

> The market size is forecast to grow mostly owing to the growth of average price per unit and units per child

> Total volume expected to increase despite falling child population through 2022, driven by disposable income growth

X% → CAGR

Source: Market model based on National Statistics Institute, World Bank, desk research, mystery store checks, expert interviews

Roland Berger

Children's clothing is forecast to drive the bulk of growth within the children's apparel market through 2022

Children's apparel market by product category, 2012-2022F

Market by product category [EUR m, % of total]

CAGR

	2012-2017	2017-2022F
Total	**4.9%**	**7.5%**
Footwear	6.1%	7.1%
Clothing	4.5%	7.6%

2012: 407 — Footwear 23%, Clothing 77%
2017: 515 — Footwear 24%, Clothing 76%
2022F: 739 — Footwear 24%, Clothing 76%

Market development

> Children's clothing to remain the largest driver of the category

> Both product categories are expected to have similar dynamics, owing to higher disposable income and increasing willingness of parents to spend on children's apparel – Parents increasingly purchase according to latest fashion trends

> Growth of clothing is expected to accelerate through 2022 vs. the corresponding CAGR in 2012-2017

Source: Market model based on National Statistics Institute, World Bank, desk research, mystery store checks, expert interviews

The toys market is expected to grow by an average of 6.5% p.a. until 2022, driven by both units per child and average price per unit

Toys market value drivers, 2012-2022F

Number of children [m]

3.2   -0.8%   3.1   -0.5%   3.0

2012   2017   2022F

Product volume [m]

27   +5.7%   35   +3.5%   42

2012   2017   2022F

Market size [EUR m]

132   +6.9%   185   +6.5%   254

2012   2017   2022F

Units per child

8.4   +6.5%   11.6   +4.0%   14.1

2012   2017   2022F

Average price per unit [EUR]

4.9   +1.2%   5.2   +2.9%   6.0

2012   2017   2022F

Market development

> The market size is forecast to grow mostly owing to the growth of average price per unit – c. 3% annual increase expected in the period through 2022

> Growth in units per child expected to slow down to c. 4% annually

X% → CAGR

Source: Market model based on National Statistics Institute, World Bank, desk research, mystery store checks, expert interviews

Roland Berger

Construction toys are forecast to have the largest value within the toys market by 2022

Toys market by product category, 2012-2022F

Market by product category [EUR m, % of total]

CAGR

Category	2012-2017	2017-2022F
	6.9%	**6.5%**
Pre-school	3.3%	1.6%
Plush	2.9%	3.7%
Arts and crafts	10.0%	8.1%
Model vehicles	4.2%	2.5%
Baby and infant	2.5%	3.4%
Dolls and accessories	3.7%	2.4%
Games and puzzles	8.3%	6.5%
Construction	23.2%	13.4%
Other	6.2%	6.6%

2012: 132
2017: 185
2022F: 254

2012 values: 4%, 9%, 3%, 7%, 8%, 8%, 8%, 6%, 45%
2017 values: 4%, 8%, 4%, 6%, 7%, 7%, 9%, 13%, 44%
2022F values: 3% Pre-school, 7% Plush, 4% Arts and crafts, 5% Model vehicles, 6% Baby and infant, 6% Dolls and accessories, 9% Games and puzzles, 17% Construction, 44% Other

Market development

> The single largest category within toys is construction, which is also expected to have the highest growth rate by 2022, driven primarily by the performance of the Lego brand

> Arts and crafts are expected to grow by c. 8% annually, as parents are increasingly focused on the educational and learning aspect of toys driven by growing number of higher age groups

> Games and puzzles are also expected to increase rapidly, at an estimated c. 7% per year, driven by the category's increasing popularity among higher age groups, including adults (e.g. board games)

Source: Market model based on National Statistics Institute, World Bank, desk research, mystery store checks, expert interviews

20180814_The children's apparel, toys and hardware markets in Poland, Romania and Ukraine.pptx | 79

The children's hardware market is expected to grow at c. 5% annually by 2022, driven by both volumes and prices

Children's hardware market value drivers, 2012-2022F

Number of children [m]

-0.8% -0.5%

3.2 3.1 3.0

2012 2017 2022F

Product volume [m]

+1.6% +2.4%

14 15 17

2012 2017 2022F

Market size [EUR m]

+3.6% +5.3%

96 114 148

2012 2017 2022F

Units per child

+2.4% +2.8%

4.4 5.0 5.7

2012 2017 2022F

Average price per unit [EUR]

+2.0% +2.9%

6.8 7.5 8.6

2012 2017 2022F

Market development

> As disposable income increases, people are expected to purchase higher volumes of products in the hardware category

> The average price is expected to grow driven by inflation and a slight change in product mix towards more expensive products

X% → CAGR

Source: Market model based on National Statistics Institute, World Bank, desk research, mystery store checks, expert interviews

Home textile products are expected to experience the highest growth within hardware, followed by transport products

Children's hardware market by product category, 2012-2022F

Market by product category [EUR m, % of total]

Category	2012	2017	2022F
Furniture	33%	29%	29%
Home textile	11%	15%	17%
Transport	24%	25%	26%
Nursery	32%	30%	28%
Total	**96**	**114**	**148**

CAGR

	2012-2017	2017-2022F
	3.6%	5.3%
	1.3%	4.9%
	10.7%	8.0%
	4.4%	5.9%
	2.3%	3.9%

Market development

> The fastest growing product categories are home textile and transport
  – Increasing adoption of products in this category will be one of the main drivers for growth
> Despite falling number of children, category growth and relatively stable splits are explained by an increasing level of substitution of the gray market (e.g. passing on used hardware to relatives) with retail

Online players, children's one-stop shops and fashion chains are forecast to have the highest growth within the ATH market by 2022

Share of ATH distribution channels, 2012-2022F [EUR m, % of total]

ATH market

2012	15%	1%	23%	13%	5%	42%	635
2017	16%	1%	24%	14%	10%	34%	815
2022F	17%	1%	24%	14%	13%	32%	1,142

Legend: ☐ Children's one-stop chains ☐ Children's specialist chains ☐ Fashion chains ☐ Grocery chains ☐ Online players ☐ Other players

CAGR

	Children's one-stop chains	Children's specialist chains	Fashion chains	Grocery chains	Online players	Other players	Total
2012-2017	7.0%	9.5%	5.4%	7.0%	20.5%	0.8%	5.1%
2017-2022F	7.6%	1.4%	6.8%	6.1%	13.3%	5.2%	7.0%
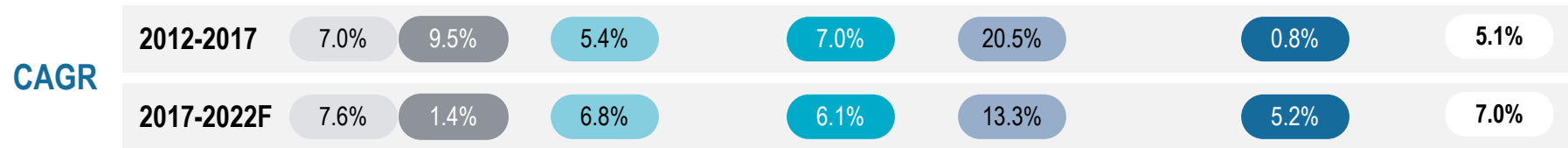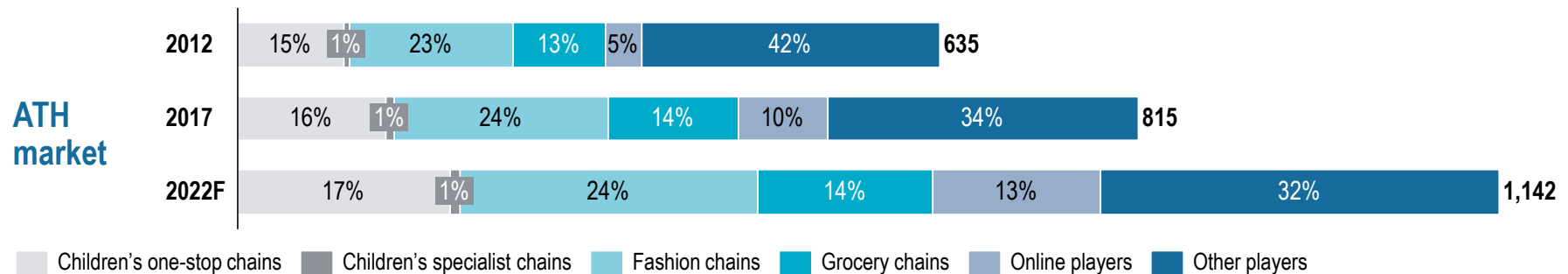
Segment development

> Fashion chains expected to remain largest ATH distribution channel through 2022, despite developments across other segments, including:

– Strong increase of online channel, with double-digit yearly growth since 2012 and on to 2022 – Several additional players are expected to support market growth, along with current leader eMag

– Children's one-stop chains gaining traction at the expense of children's specialists and independent stores

Fashion chains are a key segment for apparel, while one-stop shop children's specialists dominate the toys and hardware categories

Share of distribution channels in ATH market, 2012-2022F [EUR m, % of total]

Children's apparel market

Year	Children's one-stop chains	Children's specialist chains	Fashion chains	Grocery chains	Online players	Other players	Total
2012	8%	0%	36%	8%	4%	44%	407
2017	8%	1%	37%	9%	8%	37%	515
2022F	9%	0%	36%	9%	10%	35%	739

CAGR

	Children's one-stop chains	Children's specialist chains	Fashion chains	Grocery chains	Online players	Other players	Total
2012-2017	5.8%	8.3%	5.4%	6.7%	21.5%	1.6%	4.9%
2017-2022F	9.7%	3.4%	6.8%	6.7%	13.8%	6.3%	7.5%

Toys market

Year	Children's one-stop chains	Children's specialist chains	Fashion chains	Grocery chains	Online players	Other players	Total
2012	23%	1%		30%	9%	38%	132
2017	27%	2%		30%	14%	28%	185
2022F	28%	1%		29%	16%	26%	254

CAGR

	Children's one-stop chains	Children's specialist chains	Fashion chains	Grocery chains	Online players	Other players	Total
2012-2017	10.5%	13.1%	n/a	7.1%	17.5%	0.7%	6.9%
2017-2022F	7.6%	1.4%	n/a	5.5%	10.3%	4.9%	6.5%

Children's hardware market

Year	Children's one-stop chains	Children's specialist chains	Fashion chains	Grocery chains	Online players	Other players	Total
2012	36%	2%	12%	6%		45%	96
2017	37%	2%	14%	14%		32%	114
2022F	37%	2%	15%	24%		23%	148

CAGR

	Children's one-stop chains	Children's specialist chains	Fashion chains	Grocery chains	Online players	Other players	Total
2012-2017	4.6%	7.1%	n/a	7.2%	23.3%	-3.2%	3.6%
2017-2022F	5.3%	-0.7%	n/a	6.5%	16.1%	-1.6%	5.3%

Legend: Children's one-stop chains · Children's specialist chains · Fashion chains · Grocery chains · Online players · Other players

ATH online channel is forecast to grow at a faster rate than the overall e-commerce market growth rate

ATH online distribution channel

Internet penetration [% of population with broadband]

+7.1% → +3.0% →

2012: 54
2017: 76
2022F: 88

Total e-commerce market size[1] [EUR bn]

+22.1% → +12.3% →

2012: 0.7
2017: 1.9
2022F: 3.4

ATH online total[2] [EUR m]

8.3%   13.7%   20.2%

+16.1% → +15.6% →

2012: 53
2017: 112
2022F: 231
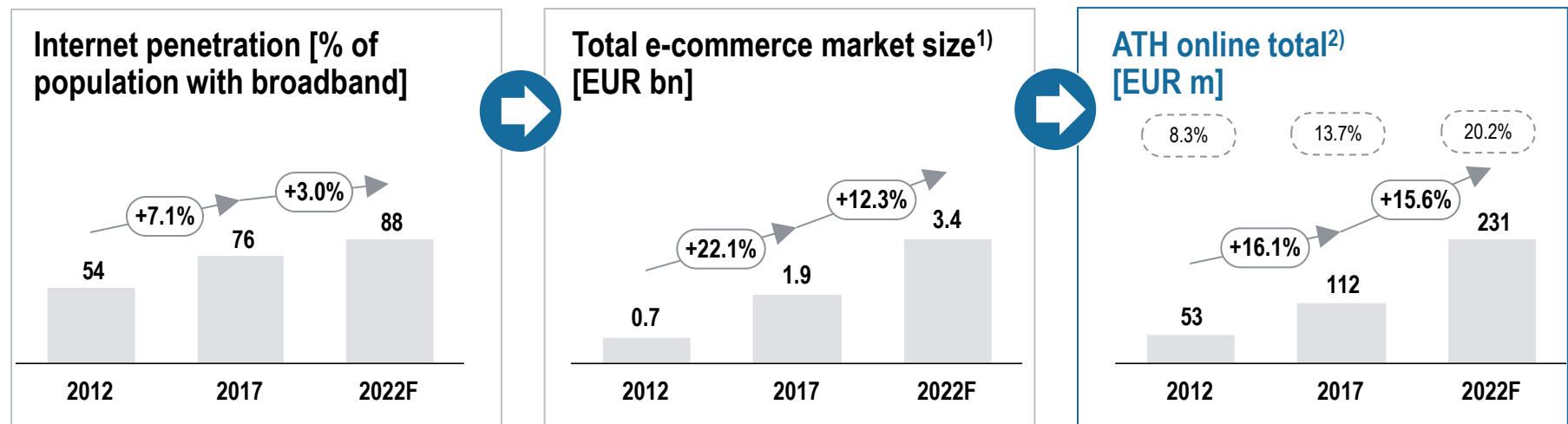
X% → CAGR

% ⟶ Share of the total ATH market

Market development

> Dramatic increase in Internet penetration, with >75% households having access to the Internet in 2017 vs. c. 55% in 2012 – Mobile broadband access also saw a 10x increase between 2012-2017

> Higher customer base as key driver of e-commerce market size – Trend expected to continue, albeit at a slower pace, through 2022

> ATH online channel expected to benefit from both growth in customer base and omnichannel strategy of key players

1) The market excludes digital media, digitally distributed services (e.g. plane tickets), B2B markets, resale of used goods (reCommerce) and sales between private persons
2) Including pure online players and online share of other players

C.2 Players in the market

The top 5 players from 2017 have largely increased their market shares in the last five years

Revenue market shares of 2017 top 5 ATH players [% of total ATH market value] | Indicative

2012[2]

5.3% 1.7% 0.7% 1.7%

90.7%

Top 5 share

9%

2017 – Top 5 players

7.4%

5.9%

4.9%

4.2%

4.0%

73.5%

Top 5 share

27%

ATH revenue growth

CAGR 2012-2017

ATH market | 5%

Carrefour	13%
JUMBO	n/a[1]
NORIEL	30%
eMAG	52%
Auchan	25%
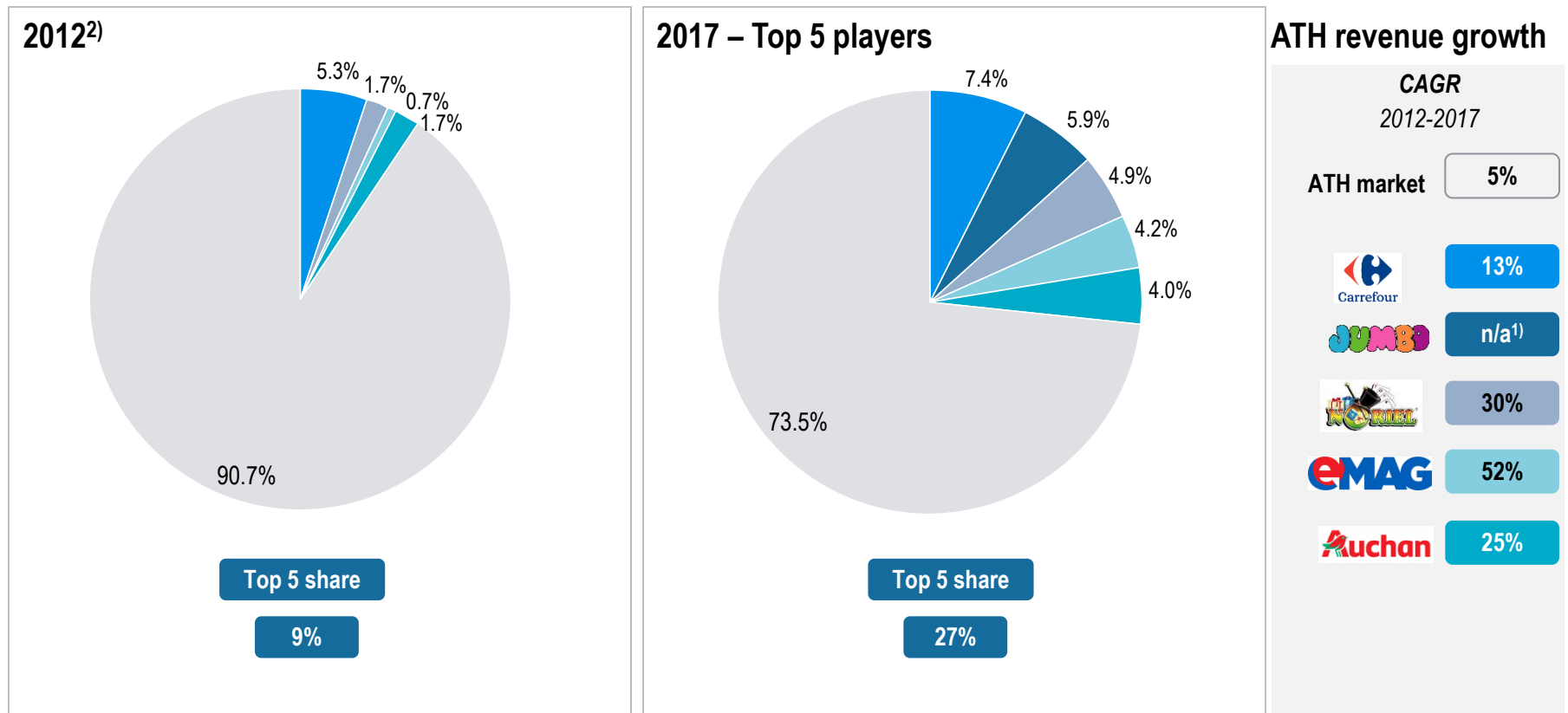
■ Carrefour ■ Jumbo ■ Noriel ■ eMag ■ Auchan ■ Others

1) Player entered the market after 2012   2) Based on ranking of 2017's top 5 players

Source: Market model based on desk research, mystery store checks, expert interviews

With one exception only, all of 2017's top 5 players have increased their market shares across the three ATH segments since 2012

Revenue market shares of 2017's top 5 ATH players [% of group value]

Indicative

2012[2)]

Children's apparel

Carrefour	Pepco	Zara	Auchan	eMag
5%	0%	2%	2%	1%

Top 5 share — **10%**

Toys

Jumbo	Carrefour	Noriel	Bebetei	Auchan
0%	6%	4%	0%	3%

Top 5 share — **14%**

Children's hardware

Noriel	Bebetei	eMag	Carrefour	Mothercare
3%	0%	0%	3%	5%

Top 5 share — **12%**

2017 – Top 5 players

Carrefour	Pepco	Zara	Auchan	eMag
6%	5%	4%	4%	4%

Top 5 share — **22%**

Jumbo	Carrefour	Noriel	Bebetei	Auchan
19%	14%	11%	7%	7%

Top 5 share — **58%**

Noriel	Bebetei	eMag	Carrefour	Mothercare
11%	9%	5%	3%	2%

Top 5 share — **30%**

ATH revenue growth

CAGR
2012-2017

Children's apparel market — 5%
- Carrefour — 6%
- PEPCO — 16%
- ZARA — 16%
- Auchan — 25%
- eMAG — 53%

Toys market — 7%
- JUMBO — n/a[1)]
- Carrefour — 26%
- Noriel — 30%
- BebeTei — n/a[1)]
- Auchan — 25%

Children's hardware market — 4%
- Noriel — 30%
- BebeTei — n/a[1)]
- eMAG — 66%
- Carrefour — 6%
- mothercare — -11%

1) Player entered the market after 2012   2) Based on ranking of 2017's top 5 players

ATH onlie market is more consolidated as c. 48% of the market is generated by the Top 5 players

Online revenue market shares of top 5 ATH players in 2017 [% of total online ATH market value]

Indicative

2017 – Top 5 players in ATH online sales

30.7%

52.5%

5.9%

4.3%

4.0%

2.5%

Top 5 share

47.5%

ATH online revenue [EUR m]

ATH online market	112
eMAG	34.5
Carrefour	6.7
NORIEL	4.8
best kids	4.5
Bebe Tei	2.8
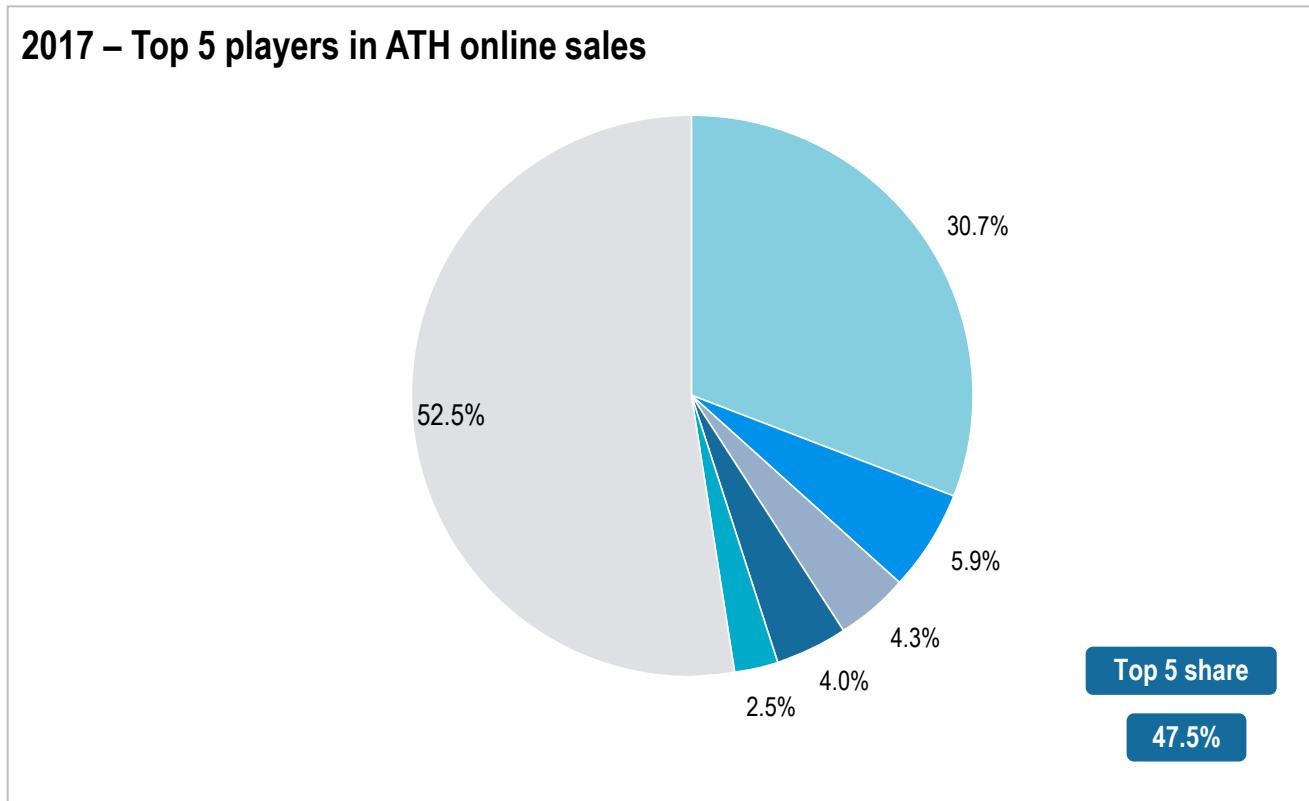
■ eMag ■ Carrefour ■ Noriel ■ Best Kids ■ Bebetei ■ Others

Players cover the full market spectrum – Largest share of ATH revenue from generalists

ATH market segments and selected segment players [% share in ATH market revenue][1]

Breadth of product assortment [generalist vs. specialist]

Low   **High**
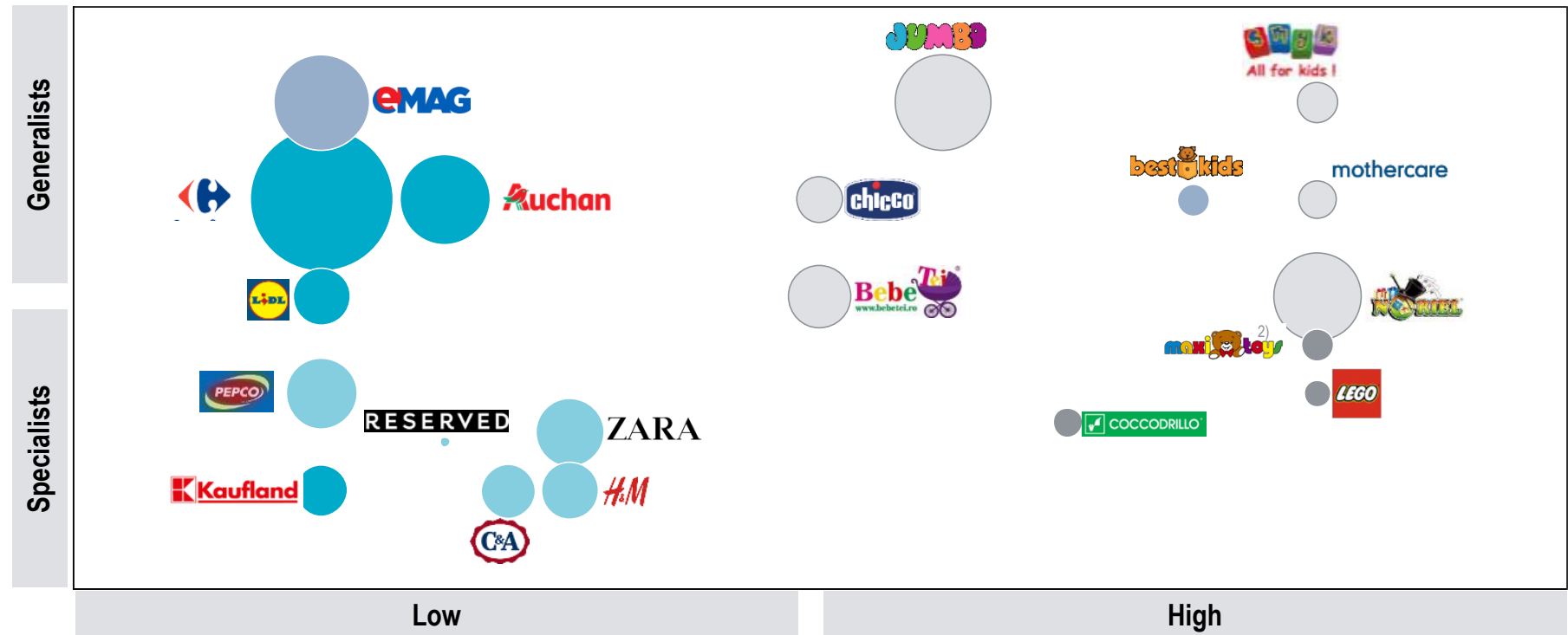
○ Bubble size represents % share in ATH market revenue

Child focus [high vs. low]

☐ Children's one-stop chains   ◼ Children's specialist chains   ◼ Online players   ◼ Grocery chains   ◼ Fashion chains

1) As of 2017 2) Also reflects Dino Land

The wide range of product categories distinguishes specialists stocking the full spectrum of products from other specialist chains

ATH product category coverage of selected market players (1/2)
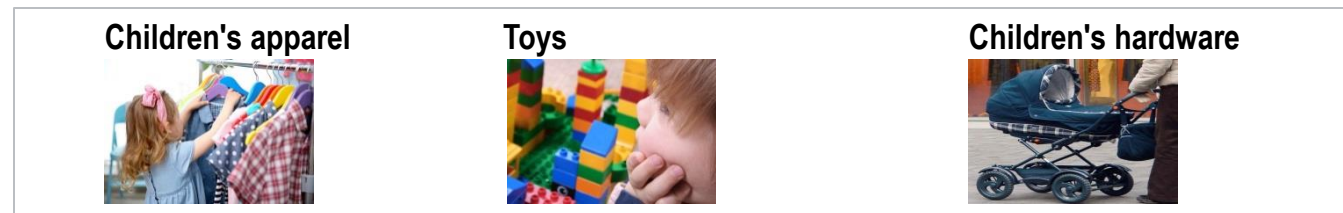
		Children's apparel	Toys	Children's hardware
	Jumbo	✓	✓	✓
	Noriel	✓	✓	✓
	Bebetei	✗	✓	✓
	Chicco	✓	✓	✓
	Smyk	✓	✓	✓
	Mothercare	✓	✓	✓
	Coccodrillo	✓	✗	✗
	Lego	✗	✓	✗
	Maxi Toys	✗	✓	✗
	Dino Land	✗	✓	✗

✓ Company has such products   ✗ Company does not have such products

Roland Berger

Grocery chains and online players generally offer an assortment that covers all ATH segments

ATH product category coverage of selected market players (2/2)

		Children's apparel	Toys	Children's hardware
	Pepco	✓	✗	✗
	Zara	✓	✗	✗
	H&M	✓	✗	✗
	C&A	✓	✗	✗
	Reserved	✓	✗	✗
	Carrefour	✓	✓	✓
	Auchan	✓	✓	✓
	Lidl	✓	✗	✗
	Kaufland	✓	✓	✓
	eMag	✓	✓	✓
	Best Kids	✓	✓	✓

✓ Company has such products   ✗ Company does not have such products

Apart from Chicco and Mothercare, all other players considered here cover the full spectrum of child ages

ATH age coverage by selected market players (1/2)

ATH market players	ATH age coverage

Player	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Jumbo	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Noriel	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Bebetei	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Chicco	■	■	■	■	■	■	■	■	■	▦	▦	▦	▦	▦	▦
Smyk	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Mothercare	■	■	■	■	■	■	■	■	■	▦	▦	▦	▦	▦	▦
Coccodrillo	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Lego	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Maxi Toys	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Dino Land	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pepco	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Zara	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
H&M	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
C&A	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Reserved	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

■ Age covered   ▦ Age not covered
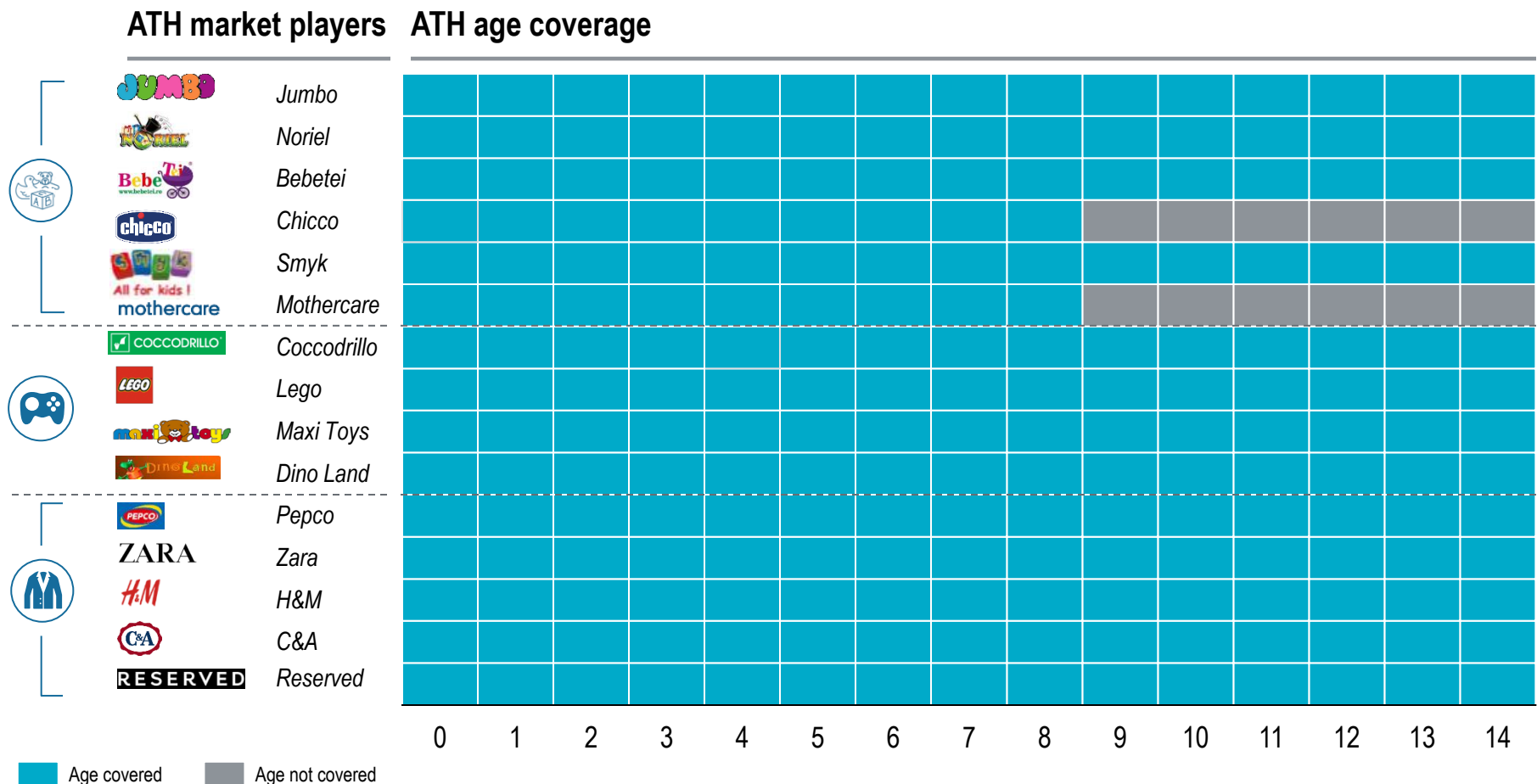
Most players in the grocery and online segments have a wide coverage of age categories

ATH age coverage by selected market players (2/2)

ATH market players   **ATH age coverage**

(Carrefour logo)	*Carrefour*	
(Auchan logo)	*Auchan*	
(Lidl logo)	*Lidl*	
(Kaufland logo)	*Kaufland*	
(eMAG logo)	*eMag*	
(best kids logo)	*Best Kids*	

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14

■ Age covered   ■ Age not covered
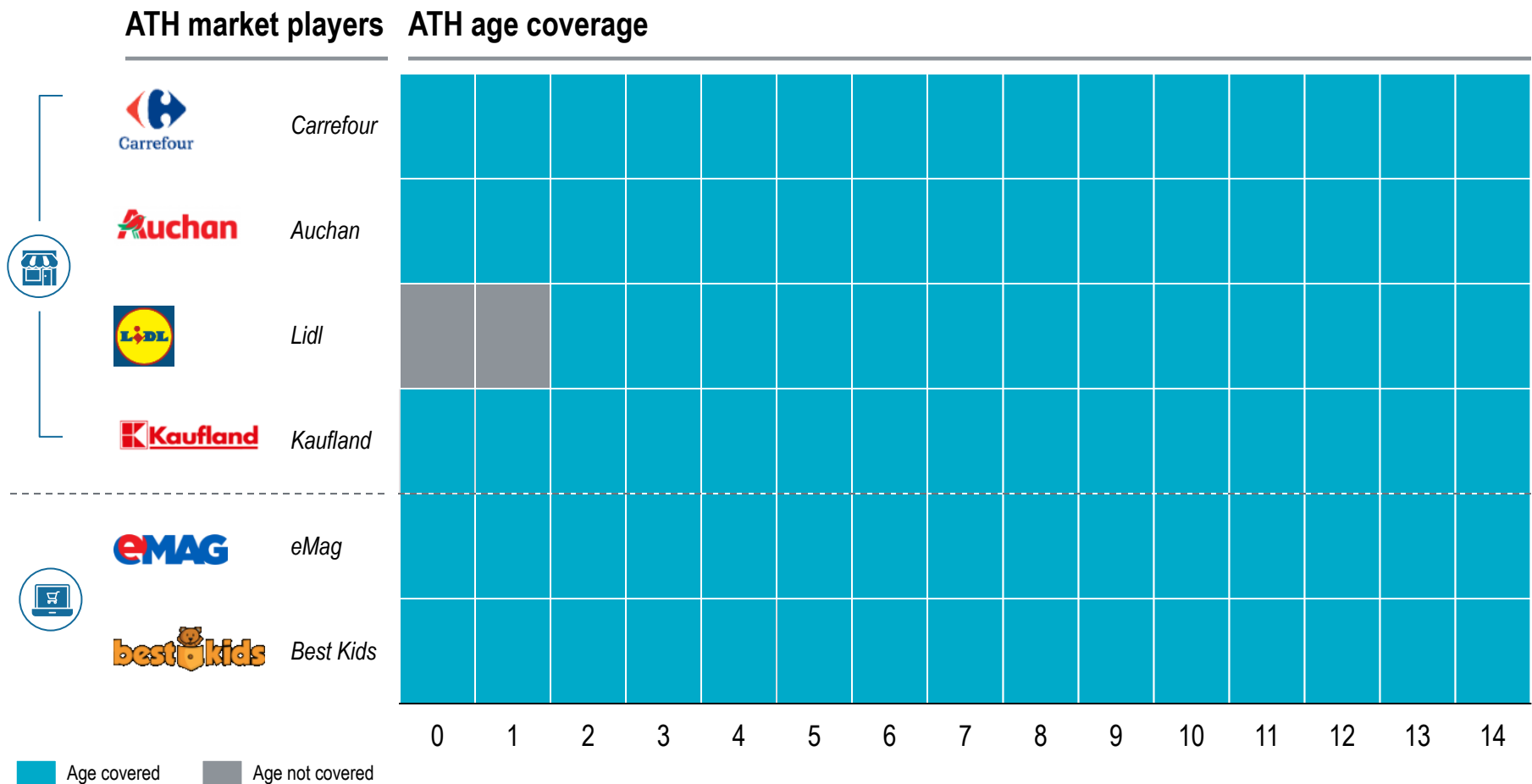
Due to the price sensitivity of some customers, modern retailers are both at the high and low end of the price/fashion spectrum

Competitive positioning of selected children's apparel market players, 2017

Indicative

Competitive positioning

Price level

High

Low

Low | High

Fashion level

Approaches to competitive positioning

> Coccodrillo and Zara are among the chains with the highest positioning in terms of both price and fashion levels

> At the opposite end of the spectrum, Jumbo, Lidl and Pepco are positioned to attract a large customer base sensitive to price

Comments on competitive positioning

Multiple approaches possible within segment, with players positioned at both high and low end of price/fashion spectrum

Analyzed players appear to have a high price and medium to high fashion levels

Multiple approaches possible within segment, with players positioned at both high and low end of price/fashion spectrum

Grocery chains typically positioned in the low fashion level range and have competitive prices

Product range wide enough to cover a broad spectrum across the fashion/price positioning

Roland Berger

Some players in the specialist ATH segment are launching larger store formats – For example, Noriel's Mega Store concept

Retail distribution of selected ATH market players, 2017 (1/2)

Indicative

ATH market players		ATH revenues[1] and market share 2017 [EUR m, %]		Number of stores	Typical store area [sqm]	Type of format	
						Own	Franchised
Jumbo	Jumbo	48	5.9%	9	8,600	✓	✗
Noriel	Noriel	40	4.9%	58	300	✓	✗
Bebetei	Bebetei	23	2.8%	3	2,500	✓	✗
Chicco	Chicco	7	0.9%	9	400	✓	✗
Smyk	Smyk	6	0.7%	10	350	✓	✗
mothercare	Mothercare	6	0.7%	5	300	✓	✗
Coccodrillo	Coccodrillo	5	0.6%	50	100	✓	✓
Lego	Lego	4	0.4%	8	130	✓	✗
Maxi Toys	Maxi Toys	5[2]	0.6%[2]	5	300	✓	✓
Pepco	Pepco	30	3.7%	153	330	✓	✗
ZARA	Zara	21	2.5%	24	2,000	✓	✗
H&M	H&M	14	1.7%	53	2,000	✓	✗
C&A	C&A	12	1.5%	38	2,000	✓	✗
RESERVED	Reserved	1	0.1%	35	1,200	✓	✗

✓ Company has such type of format   ✗ Company does not have such type of format

1) Estimation of revenues from ATH market on the basis of financial statements and assumed % of ATH in revenues   2) Revenue for Nicoro Trading; includes Dino Land

Source: Mystery store checks, desk research, expert interviews

ATH categories predominantly in large grocery formats, e.g. hypermarkets, with only seasonal offerings in smaller stores

Retail distribution of selected ATH market players, 2017 (2/2)

Indicative

ATH market players	ATH revenues[1] and market share 2017 [EUR m, %]		Number of stores	Typical store area [sqm]	Type of format	
					Own	Franchised
Carrefour	61	7.4%	33	7,200	✓	✗
Auchan	32	4.0%	44	8,500	✓	✗
Lidl	8	1.0%	220	1,200	✓	✗
Kaufland	6	0.7%	112	4,300	✓	✗
eMag	34	4.2%			✗	✗
Best Kids	5	0.6%			✗	✗

✓ Company has such type of format ✗ Company does not have such type of format

1) Estimation of revenues from ATH market on the basis of financial statements and assumed % of ATH in revenues

C.3 Market segment development
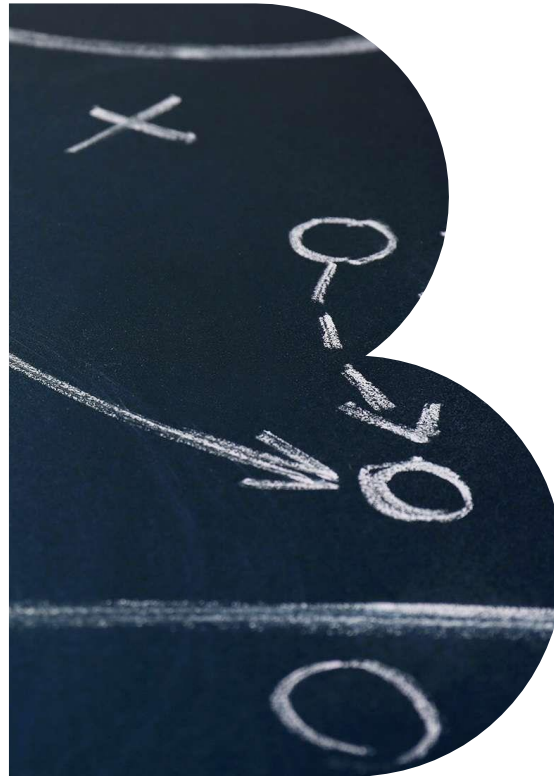
Dynamic landscape across segments throughout forecast period – Main winners are one-stop chains and online

Development of retail distribution by ATH market segments[1] [# of stores]

Children's one-stop chains
Footprint expected to grow over forecast period, driven by aggressive expansion plans of segment leaders
Shift towards larger store formats (e.g. Noriel's Mega Stores) expected going forward – Large product assortment as key customer selection criterion

220-270
110
2017   2022F

Children's specialist chains
Positive segment trend driven by growing popularity of Lego, both among children and adults; other brands in segment, incl. Coccodrillo, may also experience moderate increase in footprint, driven by developments in shopping malls in second-tier cities
Risk of erosion in segment share from one-stop shops, which are increasing their range of SKUs

100-140
70
2017   2022F

Fashion chains
Stabilization in growth of key players (e.g. Zara, H&M), while challengers (e.g. Reserved) expected to continue expansion across country, leading to moderate increase in overall footprint
Developments likely to focus on larger store formats, with key players covering the 1,000-2,000 sqm range

450-510
360
2017   2022F

Grocery chains
Moderately growing market share due to penetration of modern grocery in small urban areas currently dominated by traditional trade
Large hypermarkets (e.g. Carrefour, Auchan) expected to further challenge market with smaller formats

Online players
Considerable growth driven largely by increasing customer base as a result of enhanced broadband penetration and increasing consumer confidence in ordering products online

Other players
Reduction in footprint largely driven by erosion of independent specialists and fashion stores in favor of chains, typical "shake-out" of smaller and weaker players

Online players to experience highest growth driven by continued e-commerce expansion
Higher than ATH market growth expected in one-stop chains, expanding footprint and launching large format outlets

1) Methodology used is described in slide 140

Source: Market model based on desk research, mystery store checks, expert interviews

D. Ukraine

The Ukrainian ATH market was slowed down by economic and political instability – Positive macro environment to foster future growth

Executive summary (1/2)

1

Market overview

> The **Ukrainian ATH market** was valued at approximately **EUR 820 m** in 2017 – In EUR terms the market saw a -8.7% CAGR on account of FX fluctuations caused by political and economical instability; in UAH terms, the ATH market actually grew with a CAGR of 13.1% over the past five years

> Expectations are that the **ATH market in Ukraine will reach EUR 1.3 bn** by 2022 (9.5% CAGR in EUR terms and 14.8% CAGR in UAH terms), thereby reverting to its pre-crisis value in 2012

> **Birth rates** are **forecast to slightly decline** in the next five years, yet the **annual spend per child will see an upsurge** as a result of higher disposable income and normalization of the economic and social climate in Ukraine (from EUR 120 annual spend per child in 2017 to c. EUR 190 by 2022)

> In terms of distribution channels, **trends favor future development of modern retail** (especially in shopping malls), to the cost of the currently predominant traditional trade

> The **online channel** still makes up less than 10% of the total ATH market, with high potential for growth in the future, primarily due to the pricing difference vs. brick-and-mortar retail and increasing Internet penetration

> Product trends favor branded products, as Western European brands are especially sought after in spite of the price premium – At the same time, **for the majority of buyers price is still the most important purchasing criterion across all ATH product categories, resulting in a key role for own brands**

> In the Ukrainian market, similar to Romania and Poland, the **largest market segment is apparel** (primarily clothing), with c. 62% of the market, followed by toys (22%) and hardware (17%) – The **fastest growing category is expected to be apparel** (approximately 10% CAGR), as assortments evolve towards more expensive products

> **The gray ATH market is estimated to be at a high level, 30%-40%, whereas the second hand market is 20%-30%**

Modern retail will erode traditional trade's market share in the ATH market – Ambitious expansion plans announced

Executive summary (2/2)

2 Players in the market

> **Top 5 ATH market players are responsible for 14% of the market**, and their market share grew from 8% in the last five years
> Retailers generally cover all age groups with minor exceptions
> **Players cover the full market spectrum in terms of breadth of product assortment and level of child focus** – Largest share of ATH revenues comes from chains with high SKUs. Modern apparel chains position themselves at the high and low end of the price/fashion spectrum, leaving room for other players at the low end of the range
> Budynok Igrashok has the highest number of stores (52 stores) followed by Zara (50 stores) and Antoshka (38 stores) – **Further footprint expansion** expected to continue, via various store formats (e.g. Antoshka with both small format and large format stores measuring 4,000-8,500 sqm)
> **Pure online players** differentiate themselves via **competitive pricing** (e.g. Rozetka TOV), often up to 10%-15% below prices in brick-and-mortar outlets

3 Market segment development

> **The share of independent shops is expected to decrease** due to expansion of chains with broader product assortment and better product placement
> Sustained growth expected for **children's one-stop shops** (both small and large formats) **and fashion chains** (especially in large formats), based on **announced expansion plans** – Recovery after decrease in retail network in the past five years
> Online to experience highest growth driven by **increasing e-commerce adoption** as a result of wider broadband access and increasing consumer acceptance
> **Grocery chains** will **continue to grow** in both large and small urban areas, currently dominated by traditional trade
> **In 2022**, total number of stores is expected to reach **up to 290 children's one-stop chain stores, 150 children's specialized chain stores and 180 children's fashion chain stores**

D.1 Market overview

The share of independent shops is expected to decrease due to expansion of chains with broader product assortment and better product placement

ATH market value and key drivers
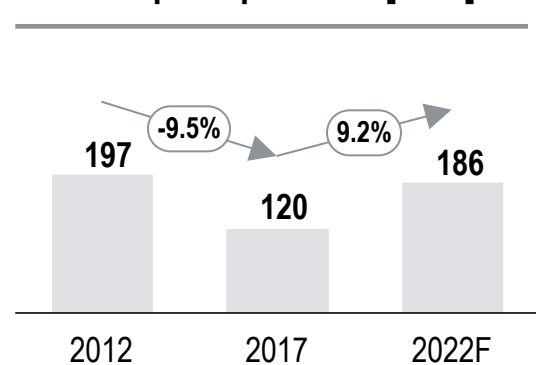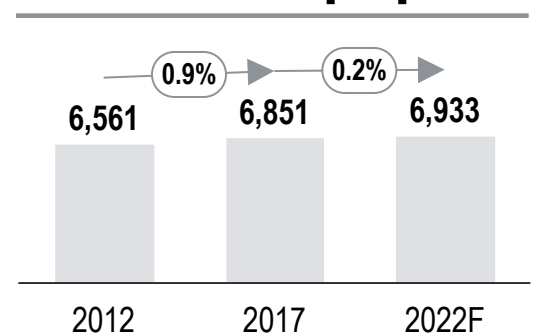
Annual spend per child [EUR]

	-9.5%		9.2%	
197		**120**		**186**
2012		2017		2022F

Number of children ['000]

	0.9%		0.2%	
6,561		**6,851**		**6,933**
2012		2017		2022F

X% → CAGR

ATH market value [EUR m]

2017-2022F

	-8.7%		9.5%	
1,296		**821**		**1,290**
2012		2017		2022F

Average inflation 2.0%

0.0974	0.0333	0.0262	EUR/ UAH

ATH market value [UAH m]

	13.1%		14.8%	
13,302		**24,666**		**49,173**
2012		2017		2022F

Average inflation 8.3%
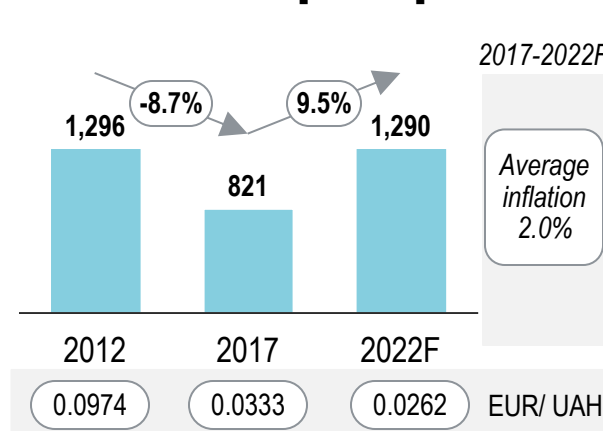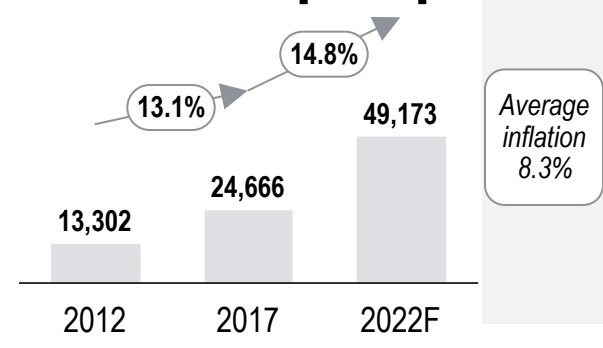
ATH market drivers and trends

Macroeconomic drivers

> Annual spend per child is more than 5x lower than the average of selected Western European countries

Country consumption drivers

> Increase in disposable income following a period of political/economic instability

ATH market trends

> Independent shops are expected to decrease due to expansion of chains with broader product assortment and better product placement

The total population is expected to continue on a slight downward trend through 2022

Population structure by age [total in m, % by age]
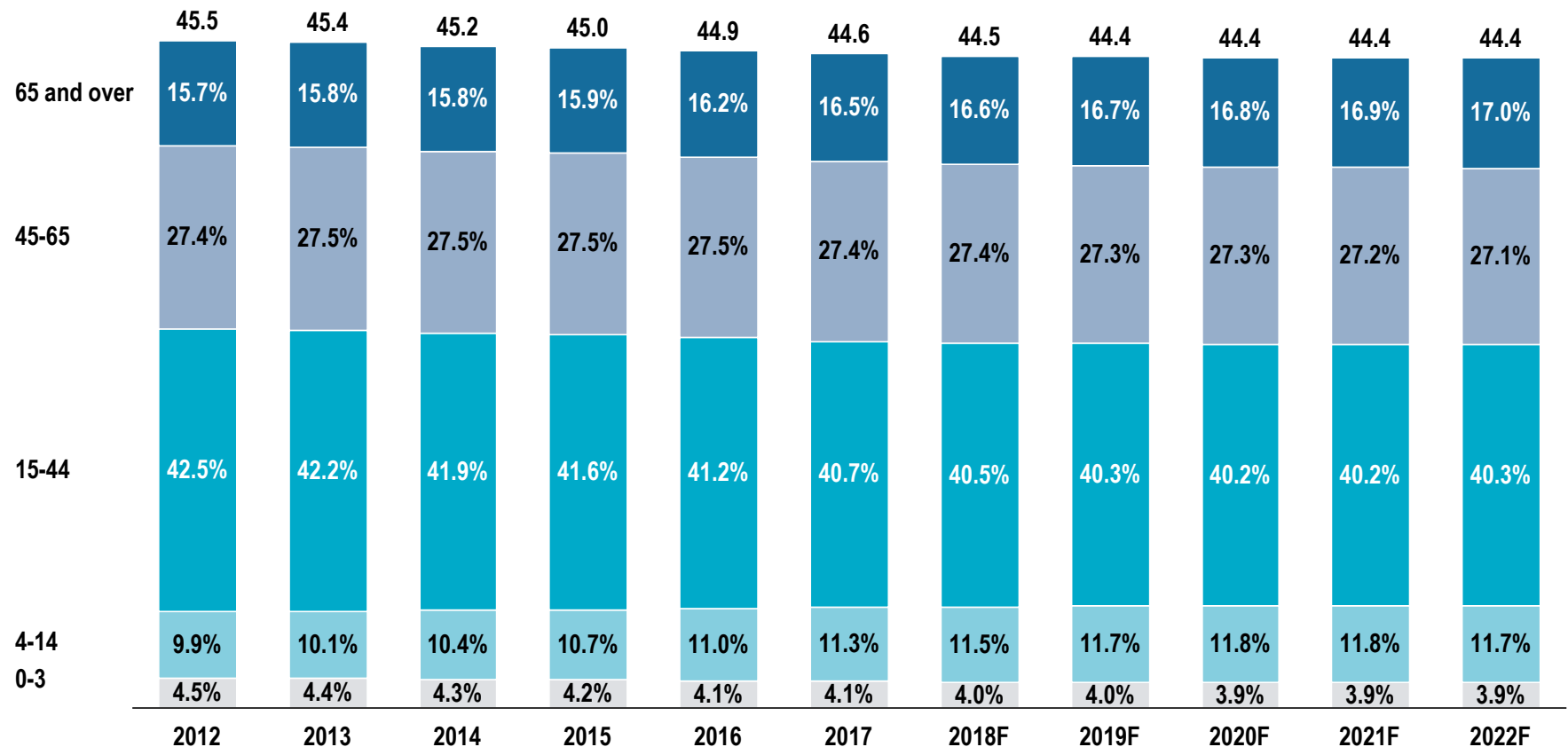
	2012	2013	2014	2015	2016	2017	2018F	2019F	2020F	2021F	2022F
Total	45.5	45.4	45.2	45.0	44.9	44.6	44.5	44.4	44.4	44.4	44.4
65 and over	15.7%	15.8%	15.8%	15.9%	16.2%	16.5%	16.6%	16.7%	16.8%	16.9%	17.0%
45-65	27.4%	27.5%	27.5%	27.5%	27.5%	27.4%	27.4%	27.3%	27.3%	27.2%	27.1%
15-44	42.5%	42.2%	41.9%	41.6%	41.2%	40.7%	40.5%	40.3%	40.2%	40.2%	40.3%
4-14	9.9%	10.1%	10.4%	10.7%	11.0%	11.3%	11.5%	11.7%	11.8%	11.8%	11.7%
0-3	4.5%	4.4%	4.3%	4.2%	4.1%	4.1%	4.0%	4.0%	3.9%	3.9%	3.9%

Children above 10 years old are forecast to constitute the highest share of the total number of children by 2022

Number of children by age ['000]

2012

2017

2022F

2,464

2,464
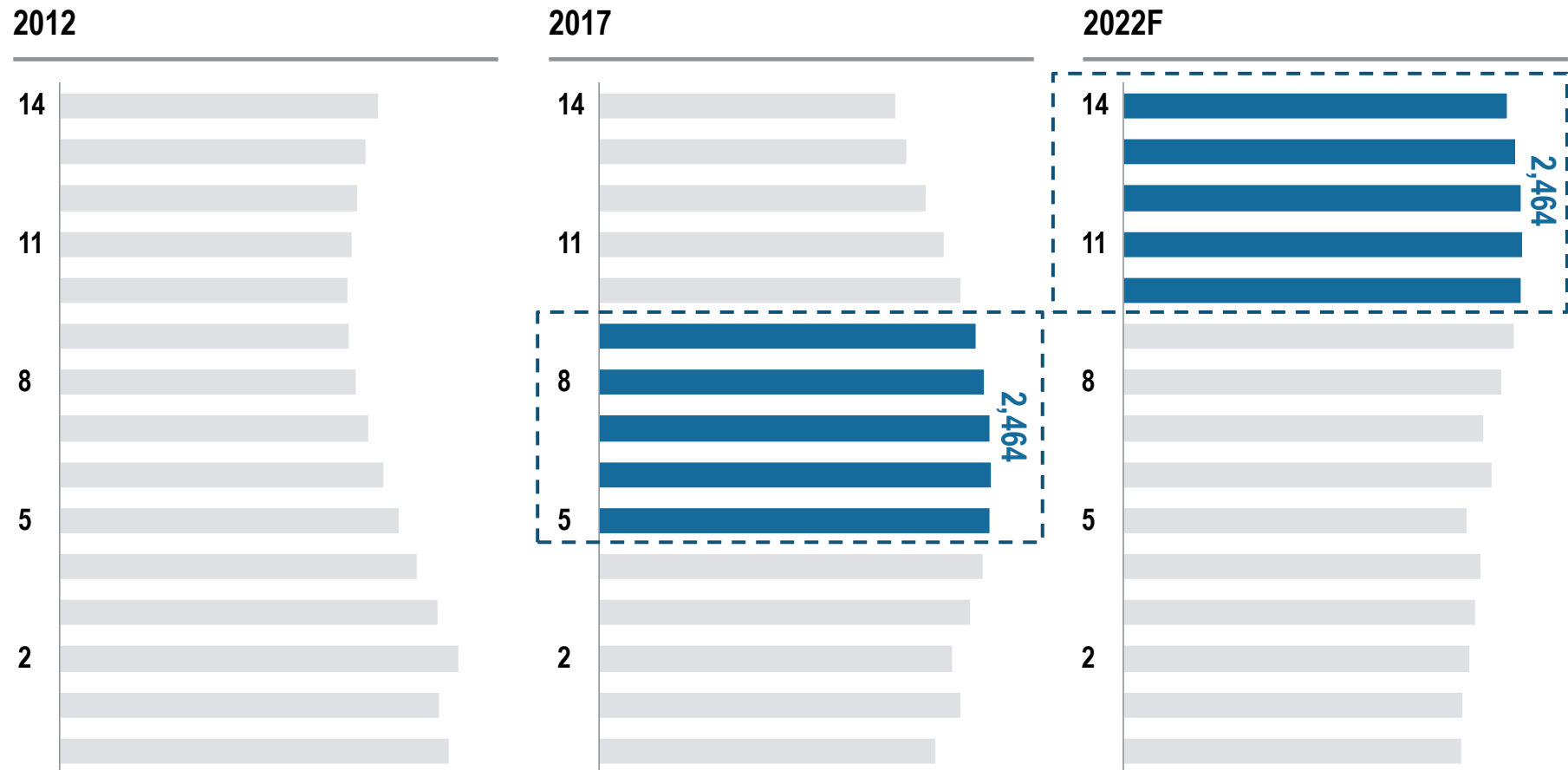
The number of children is expected to decrease from 2018 through 2022, mainly due to declining birth rates

Children's group entries, exits and birth rates
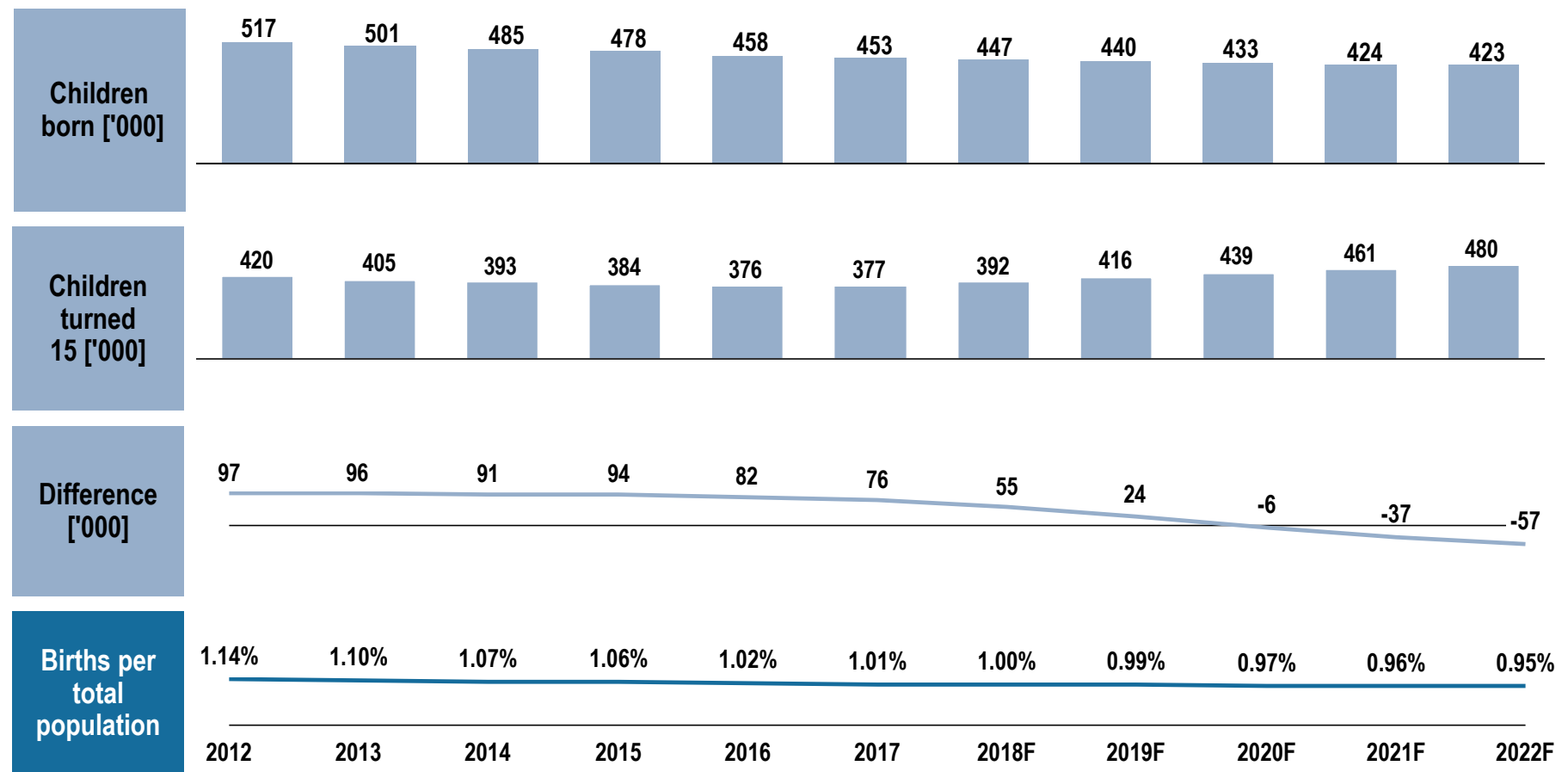
	2012	2013	2014	2015	2016	2017	2018F	2019F	2020F	2021F	2022F
Children born ['000]	517	501	485	478	458	453	447	440	433	424	423
Children turned 15 ['000]	420	405	393	384	376	377	392	416	439	461	480
Difference ['000]	97	96	91	94	82	76	55	24	-6	-37	-57
Births per total population	1.14%	1.10%	1.07%	1.06%	1.02%	1.01%	1.00%	0.99%	0.97%	0.96%	0.95%

Forecast development of real GDP and unemployment rates are expected to positively impact disposable income growth

Disposable income and its selected drivers

	Real GDP [EUR bn]				**Unemployment rate [%]**		
Selected drivers	108	96	111	➕	7.5%	8.5%	6.8%
	2012	2017	2022F		2012	2017	2022F

Impact on disposable income

Disposable income [EUR bn]

2012	2013	2014	2015	2016	2017	2018F	2019F	2020F	2021F	2022F
105	125	84	63	63	71	71	75	84	93	103

-7.7%   +7.9%

⟨ X% ⟩ → CAGR
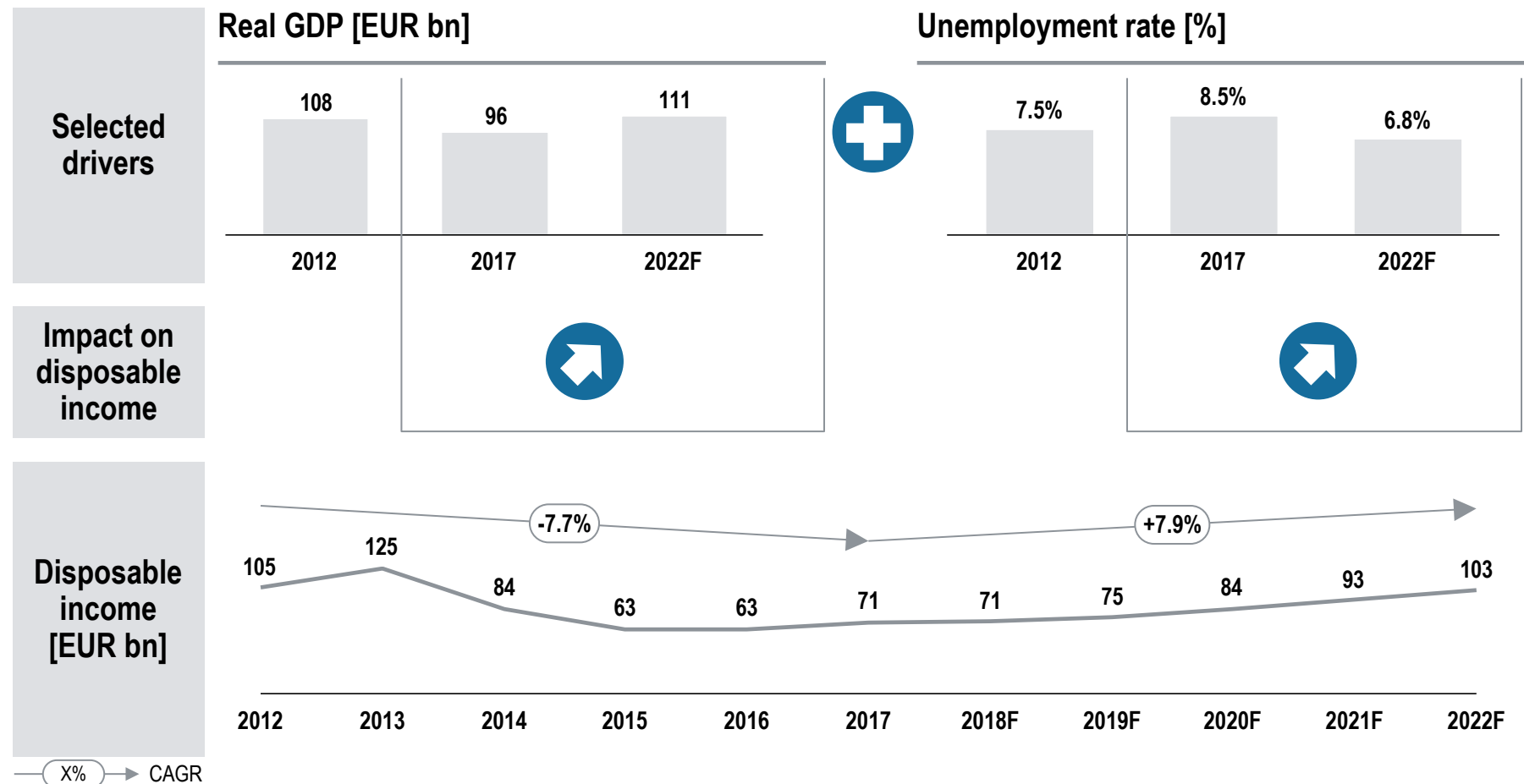
General economic recovery and stabilization is forecast through 2022, following considerable contraction in 2014-2015

Macroeconomic indicators, 2012-2022F

Real GDP [EUR bn]

-2.4% CAGR   +3.0% CAGR

| 108 | 108 | 101 | 91 | 94 | 96 | 99 | 102 | 105 | 109 | 111 |

Real GDP growth is forecast to recover to 2012 levels by 2021, following lengthy economic instability

Inflation rate [%]

+13.9 p.p. change   -7.4 p.p. change

| 0.6% | -0.2% | 12.1% | 48.7% | 13.9% | 14.4% | 11.5% | 9.0% | 7.0% | 7.0% | 7.0% |

Inflation rate expected to stabilize around the 7% mark in 2020, following large spikes in price levels in 2015

Unemployment rate [%]

+1 p.p. change   -2 p.p. change

| 7.5% | 7.2% | 9.3% | 9.1% | 9.4% | 8.5% | 7.5% | 6.8% | 6.8% | 6.8% | 6.8% |

High unemployment rate experienced during 2014-2015 turmoil to decrease in the forthcoming period

| 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018F | 2019F | 2020F | 2021F | 2022F |

Maternity stimulus and increases in minimum salary to partially mitigate adverse effects of 2014-2015 turmoil

Country-specific consumption drivers and trends

Maternity benefits

> 7x increase in lump-sum payment on childbirth since 2005 – Currently c. EUR 1,400/child
> Variable incentive, depending on household size, up to 2014 – As of 2014, fixed lump-sum and monthly benefits per child

Program had tangible impact on child population in Ukraine – Birth rates rose 50% between 2005 and 2009

Minimum salary development [UAH]

16%   100%

3.200

1.378   1.600

2015   2016   2017

C. 4x increase in minimum wage between 2012 and 2018 – Significant increase in consumption due to higher disposable income

Other drivers and trends

> Political and economic turmoil of 2014-2015 caused hyperinflation (spiking at c. 60%), devaluation of UAH (up to 70%) and fiscal deficits that caused severe contractions in GDP

Important progress has been realized to stabilize the economic indicators and drive economic growth – Economy set to recover to 2012 levels by 2020 in EUR terms

Annual spend per child [EUR] and births per total population

197   186
        120
1.14%   1.01%   0.95%
2012   2017   2022F

The birth rate is expected to decrease and the annual spend per child is expected to increase – Higher disposable income and normalization of economic and social climate spur the growth

Key trends have a positive influence on the ATH market – However, political instability and macroeconomic landscape hampering growth

Key trends and market characteristics

Product brand
> Brand is a key aspect for Ukrainians, with Western brands especially sought after despite price premium
> The increasing share of international brands as trade relations with the EU become less strained is expected to positively influence market value

Omnichannel
> Considerable untapped potential for online channel development as current share in total sales is below 10% across the ATH market

SKUs
> Large share of the overall retail market still consists of traditional retailers and supermarkets, leaving ample room to grow for medium format chains
> Increasing share of large formats/growing assortment ranges expected to stimulate market growth

The Ukrainian ATH market

Private label
> High relevance of private labels, especially in children's apparel, with its importance still increasing as consumers seek value for money
> Private label as a driver of market expansion rather than value erosion due to lower prices

Location
> High street relevant only in Kiev, shopping malls and retail parks are the main driver of growth
> Significant growth potential for shopping malls as the market is still underdeveloped

Other trends
> Political instability and high degree of uncertainty having a strong negative effect on consumer spending in the ATH market
> High inflation rate and exchange rate fluctuations adversely impacting market value

Overall impact on the ATH market value: Positive | Negative | Neutral

We have gathered significant insights into key Ukrainian ATH market trends by interviewing local industry experts

Selected quotes from interviews with market participants

Shopping malls are gaining popularity because parents have access to all the stores they need, both for them and the children. Also, there are some activities for kids, some relaxing areas, so it is always nice to have a day out there with children.

Sales Manager, children's specialist retailer

"

It's important to have a website, even though most parents will not buy directly online. It's good to offer them the space to research potential options before they visit a physical store.

Sales Director, children's specialist retailer

"

Buying online is sometimes a bit cheaper, up to 10-15%, and this is very attractive to Ukrainians, as price is an important factor in decision making.

Executive Director, children's specialist retailer

"

The bazaars and the open markets are still popular in Ukraine and probably will be for a while. Usually, people find good quality there for a fair price.

Sales Director, toy manufacturer

"

Retailer brand, price positioning, SKU range and one-stop shopping seem to be the top criteria for choosing ATH retailers in Ukraine

Customer retailer selection and product purchasing criteria

Main criteria for choosing retailers

Multichannel availability	◐
One-stop shopping	◑
Wide SKU range	◑
Retail brand	◔
Price	◔
Sales counseling/advice	◔
Commercials/marketing	◔
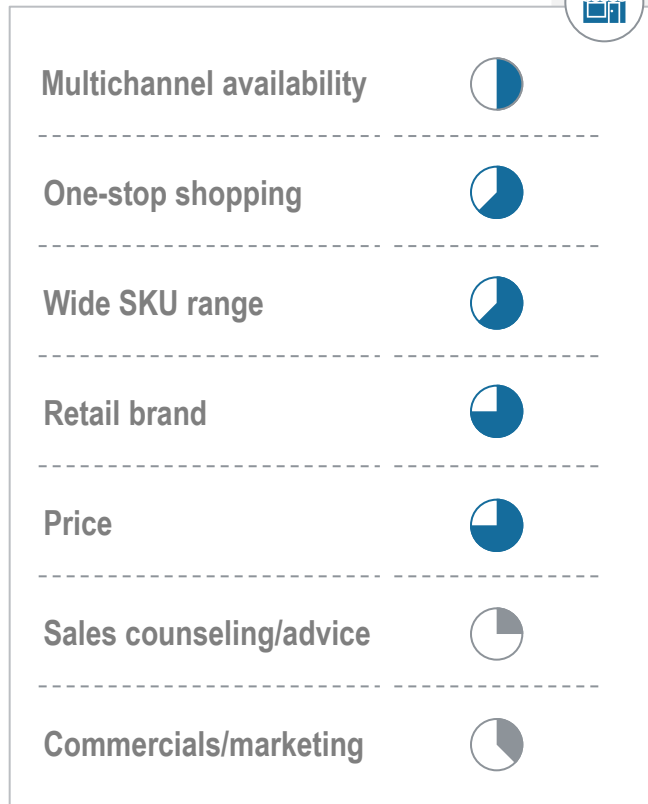
Customer purchasing criteria – Children's apparel

> **Price** is one of the main purchasing criteria for children's apparel in the Ukrainian market
> Consumers also appreciate the **quality of the fabrics** and the overall **garment design**

Customer purchasing criteria – Toys

> **Price** is clearly the most important purchasing criterion for most toy purchases in the Ukrainian market
> **SKU range** is also relevant for the traditional toys category, albeit to a lesser degree than price

Customer purchasing criteria – Children's hardware

> The overall **product quality/durability** is one of the leading purchasing criteria for products in the hardware category as consumers seek reliable products that will last for several years (e.g. for second child or to be given away or sold)
> **Recommendations** from friends or relatives and **price** are also important

Overall importance of criterion in choosing a retailer   ○ Low ● High

Roland Berger

ATH consumer preferences in Ukraine have been derived based on in-depth interviews with local industry experts

Selected quotes from interviews with market participants

The store brand is important, but when parents don't have enough money they will buy wherever the products are cheaper.

Sales Manager, children's specialist retailer

"

Assortment is important because parents want to see different models, colors and so on. For example, we only had one brand of strollers displayed in the shop, and when we added more models from the same brand, the brand started selling much better.

Sales Director, children's specialist retailer

"

There is a tendency to have toys from abroad, as it is considered very prestigious if you can afford to buy your child something from a well known and international brand.

Sales Director, toy manufacturer

"

Parents would love to buy their kids toys from international brands and not from China, but they are too expensive. Brand is important when buying for a birthday or a toy that they think will last longer.

Executive Director, children's specialist retailer

"

Parents don't want to buy a stroller today and tomorrow find out that it's broken. They want products that will last and maybe even be used for a second child, given to relatives or sold to someone else.

Category Manager, children's specialist retailer

"

Specialized shops are preferred due to the fact that they offer specialized advice on choosing the right model, and all the features of the products are presented and tested before the purchase.

Sales Director, children's specialist retailer

"

Roland Berger

Within the ATH market, apparel is the largest segment, and the other players segment makes up the largest distribution channel

ATH market structure, 2017 [EUR m, % of total]

ATH market

Markets

821

%	Market
17%	Hardware
22%	Toys
62%	Apparel

Product categories within ATH market segments

139

Value	Category
45	Furniture
15	Home textile
34	Transport
45	Nursery

177

Value	Category
10	Pre-school
13	Plush
10	Arts and crafts
9	Model vehicles
17	Baby and infant
22	Dolls and accessories
8	Games and puzzles
33	Construction
55	Other

505

Value	Category
117	Footwear
388	Clothing

Distribution channels

19%	10%	8%	6%	7%	51%	821

- Children's one-stop chains
- Children's specialist chains
- Fashion chains
- Grocery chains
- Online players
- Other players

Children's apparel is forecast to retain the largest value within the ATH market through 2022 – Nominal value to return to 2012 levels

ATH market overview, 2012-2022F

ATH market [EUR m, % of total]

	2012	2017	2022F
Total	1,296	821	1,290
Hardware	18%	17%	16%
Toys	20%	22%	22%
Apparel	61% (62%)	62%	63%

CAGR

	2012-2017	2017-2022F
Total	-9%	9%
Hardware	-10%	8%
Toys	-8%	10%
Apparel	-9%	10%

ATH development

> High variability in ATH market value across the 2012-2022 period, largely due to high fluctuations in local currency value vs. euro – Exchange rate expected to stabilize going forward

> All categories set to experience high growth over forecast period, driven by favorable macroeconomic conditions and rising levels of consumer confidence

> The largest market is children's apparel, with growth expected to accelerate through 2022 vs. the period 2012-2017

The major growth driver for the children's apparel market is expected to be units per child, expected to grow by 6.4% annually through 2022

Children's apparel market value drivers, 2012-2022F

Number of children [m]

+0.9% → +0.2% →

6.6   6.9   6.9

2012   2017   2022F

Product volume [m]

-4.1% → +6.6% →

75   61   84

2012   2017   2022F

Market size [EUR m]

-8.7% → +9.8% →

795   505   807

2012   2017   2022F

Units per child

-4.9% → +6.4% →

11.4   8.9   12.1

2012   2017   2022F

Average price per unit [EUR]

-4.8% → +3.0% →

10.6   8.3   9.6

2012   2017   2022F

Market development

> The market size is forecast to grow, mostly driven by strong growth in units per child and average price per unit

> Total product volume to experience a significant increase in the forecast period, despite falling population of children

X% → CAGR

Source: Market model based on National Statistics Institute, World Bank, desk research, mystery store checks, expert interviews

20180814_The children's apparel, toys and hardware markets in Poland, Romania and Ukraine.pptx | 116

Children's clothing is expected to remain the largest category within the children's apparel market through 2022

Children's apparel market by product category, 2012-2022F

Market by product category [EUR m, % of total]

CAGR

	2012-2017	2017-2022F
	-8.7%	9.8%
Footwear	-6.3%	8.0%
Clothing	-9.3%	10.4%

2012: 795 — Footwear 20%, Clothing 80%
2017: 505 — Footwear 23%, Clothing 77%
2022F: 807 — Footwear 21%, Clothing 79%

Market development

> Economic recovery as a key driver of market value – Consumers are expected to increasingly substitute second-hand trade in children's apparel, a common practice in post-crisis Ukraine, with retail, further driving market value

> Children's clothing is expected to experience a faster growth rate by 2022, driven primarily by an increase in volumes – Increasing popularity of sportswear among children, as well as potential entry of new brands, such as H&M, expected to drive growth

Roland Berger

The major driver of the growth of the toys market is expected to be a considerable increase in average price per unit

Toys market value drivers, 2012-2022F

Number of children [m]

+0.9% → +0.2% →

6.6   6.9   6.9

2012   2017   2022F

X

Product volume [m]

+3.1% → +3.0% →

27   31   36

2012   2017   2022F

X

Market size [EUR m]

-7.7% → +9.7% →

264   177   281

2012   2017   2022F

Units per child

+2.2% → +2.8% →

4.1   4.6   5.3

2012   2017   2022F

Average price per unit [EUR]

-10.5% → +6.5% →

9.8   5.6   7.7

2012   2017   2022F

Market development

> The market size is forecast to grow mostly owing to the growth of average price per unit and higher spend per child

⎯ X% → CAGR

Roland Berger

Construction toys are forecast to have the largest value within the toys market by 2022

Toys market by product category, 2012-2022F

Market by product category [EUR m, % of total]

CAGR

	2012-2017	2017-2022F
	-7.7%	9.7%
Pre-school	-11.5%	4.1%
Plush	-23.4%	-7.6%
Arts and crafts	9.3%	17.6%
Model vehicles	-13.0%	2.3%
Baby and infant	-4.8%	13.0%
Dolls and accessories	-7.2%	9.6%
Games and puzzles	0.0%	10.2%
Construction	7.2%	16.0%
Other	-8.8%	7.6%

Market development

> Following a similar path as in Poland and Romania, the largest product category in the Ukrainian toys market is construction toys, which has also seen steady growth since 2012

> Construction toys category expected to further increase its share in the overall segment through 2022, mainly driven by growing number of higher age groups

> Slowest growth expected in plush toys, which are becoming less sought after as both children and parents seek other, more versatile toy categories such as arts & crafts or games & puzzles

The major driver of children's hardware market growth is expected to be average price – C. 6.5% annual growth expected through 2022

Children's hardware market value drivers, 2012-2022F

Number of children [m]

+0.9% → +0.2% →

6.6 — 6.9 — 6.9

2012 — 2017 — 2022F

X

Product volume [m]

-0.2% → +1.2% →

38 — 37 — 40

2012 — 2017 — 2022F

X

Market size [EUR m]

-10.1% → +7.7% →

236 — 139 — 201

2012 — 2017 — 2022F

Units per child

-1.0% → +0.9% →

5.7 — 5.4 — 5.7

2012 — 2017 — 2022F

Average price per unit [EUR]

-9.9% → +6.5% →

6.3 — 3.7 — 5.1

2012 — 2017 — 2022F

Market development

> The market size is forecast to grow mostly owing to the growth of average prices – Assortment evolution towards more expensive products

X% → CAGR

Source: Market model based on National Statistics Institute, World Bank, desk research, mystery store checks, expert interviews

Nursery and furniture products are forecast to make up almost 60% of the value within the children's hardware market by 2022

Children's hardware market by product category, 2012-2022F

Market by product category [EUR m, % of total]

CAGR

	2012-2017	2087-2022F
	-10.1%	7.7%

Furniture
- 2012: 236 — 30%
- 2022F: 201 — 29%
- CAGR 2012-2017: -8.1%
- CAGR 2087-2022F: 5.4%

Home textile
- 2012: 15%
- 2017: 33%
- 2022F: 15%
- CAGR 2012-2017: -15.9%
- CAGR 2087-2022F: 15.1%

Transport
- 2012: 26%
- 2017: 11%
- 2022F: 25%
- CAGR 2012-2017: -10.8%
- CAGR 2087-2022F: 8.6%

Nursery
- 2012: 29%
- 2017: 139 — 24% / 32%
- 2022F: 30%
- CAGR 2012-2017: -8.2%
- CAGR 2087-2022F: 6.4%

Years: 2012, 2017, 2022F
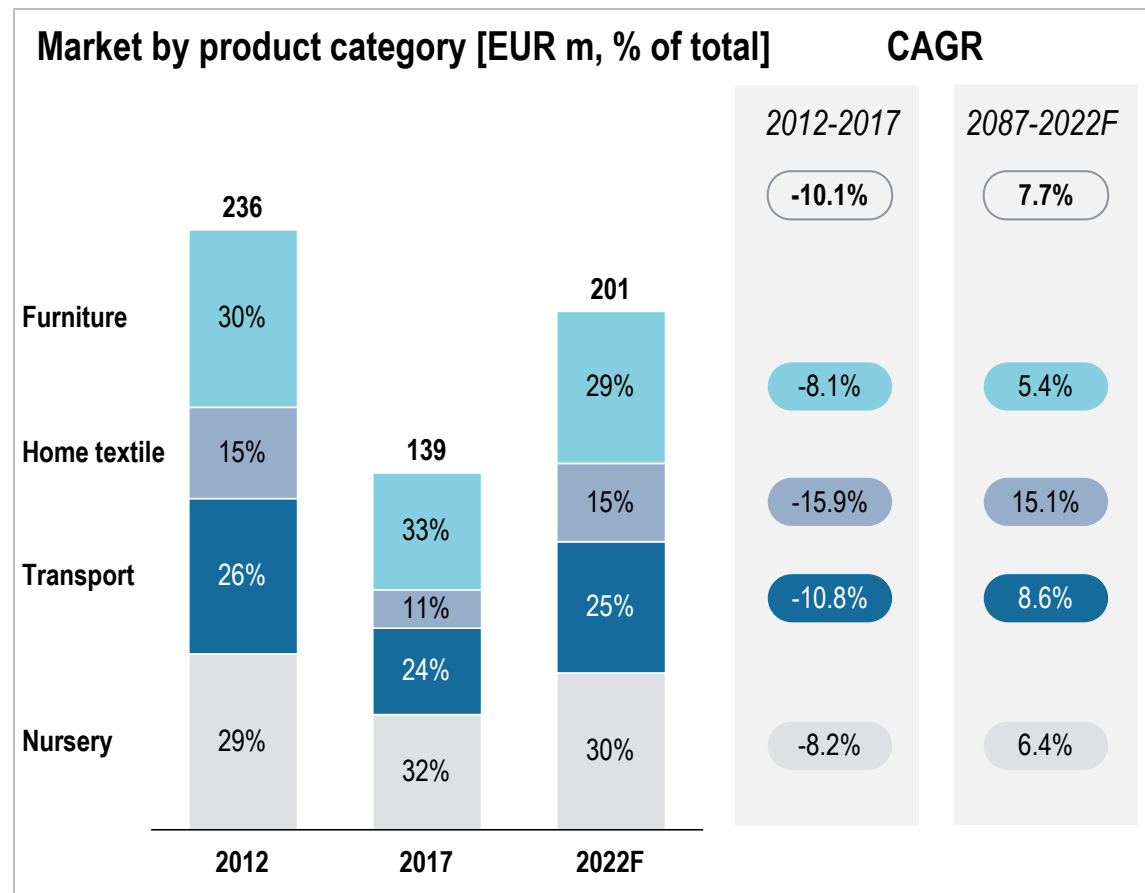
Market development

> The overall hardware market is dominated by second-hand markets, with a large share of hardware products passed on between relatives or friends, or sold online – Going forward, such practices are expected to decline due to increasing disposable income

> Home textile and transport categories are forecast to grow fastest through 2022

– Market premiumization is the key driver of growth in this category, due to increasing customer preference for brands

Source: Market model based on National Statistics Institute, World Bank, desk research, mystery store checks, expert interviews

20180814_The children's apparel, toys and hardware markets in Poland, Romania and Ukraine.pptx | 121

Roland Berger

Online players, fashion chains and children's one-stop shops are forecast to see the highest growth within the ATH market through 2022

Share of ATH distribution channels, 2012-2022F [EUR m, % of total]

ATH market

Year	Children's one-stop chains	Children's specialist chains	Fashion chains	Grocery chains	Online players	Other players	Total
2012	14%	10%	7%	6%	5%	57%	1,296
2017	19%	10%	8%	6%	7%	51%	821
2022F	22%	9%	9%	6%	10%	44%	1,290

Legend: Children's one-stop chains · Children's specialist chains · Fashion chains · Grocery chains · Online players · Other players

CAGR

Period	Children's one-stop chains	Children's specialist chains	Fashion chains	Grocery chains	Online players	Other players	Total
2012-2017	-3.4%	-10.3%	-5.4%	-9.8%	-4.2%	-10.8%	-8.7%
2017-2022F	12.2%	8.1%	12.4%	9.0%	19.2%	6.5%	9.5%

Segment development

> Although decreasing in share, the other players segment continues to dominate the ATH market through 2022
> Increase in disposable income expected to shift share of market to children's one-stop chains and fashion chains, with broader product range and higher quality products
> Potential market entry of apparel brands to Ukraine expected to drive growth of fashion chains through 2022

Online segment and children's one-stop chains are expected to experience the highest growth rates in all categories

Share of distribution channels in ATH market, 2012-2022F [EUR m, % of total]

Children's apparel market

	Children's one-stop chains	Children's specialist chains	Fashion chains	Grocery chains	Online players	Other players	Total
2012	13%	9%	11%	3%	5%	59%	795
2017	16%	10%	13%	2%	7%	52%	505
2022F	18%	11%	15%	2%	9%	46%	807

CAGR

2012-2017	-4.8%	-7.5%	-5.4%	-12.3%	-3.4%	-10.9%	-8.7%
2017-2022F	12.5%	12.0%	12.4%	4.2%	16.2%	7.1%	9.8%

Toys market

	Children's one-stop chains	Children's specialist chains	Fashion chains	Grocery chains	Online players	Other players	Total
2012	17%	12%		6%	5%	60%	264
2017	24%	10%		6%	7%	54%	177
2022F	28%			6%	7%	15%	281

Note: 2022F toys row also shows 44%

2012-2017	-1.1%	-11.9%	n/a	-8.6%	-2.3%	-9.5%	-7.7%
2017-2022F	13.4%	-1.7%	n/a	13.3%	29.6%	5.4%	9.7%

Children's hardware market

	Children's one-stop chains	Children's specialist chains	Fashion chains	Grocery chains	Online players	Other players	Total
2012	16%	12%		18%	6%	48%	236
2017	24%	8%		19%	7%	43%	139
2022F	27%	5%		20%	8%	40%	201

2012-2017	-2.5%	-17.4%	n/a	-9.2%	-8.6%	-12.2%	-9.8%
2017-2022F	10.0%	0.2%	n/a	8.9%	13.4%	5.9%	7.7%

Legend: Children's one-stop chains | Children's specialist chains | Fashion chains | Grocery chains | Online players | Other players

ATH online channel is forecast to grow in line with the total Ukrainian e-commerce market

ATH online distribution channel

Internet penetration [% of population with broadband]

+2.4%

+5.1%

50   64   72

2012   2017   2022F

Total e-commerce market size[1] [EUR bn]

+19.6%

+11.2%

0.8   1.3   3.2

2012   2017   2022F

X% → CAGR

ATH online total[2] [EUR m]

5.9%   8.0%   12.6%

+20.0%

-2.9%

76   66   163

2012   2017   2022F

% → Share of the total ATH market
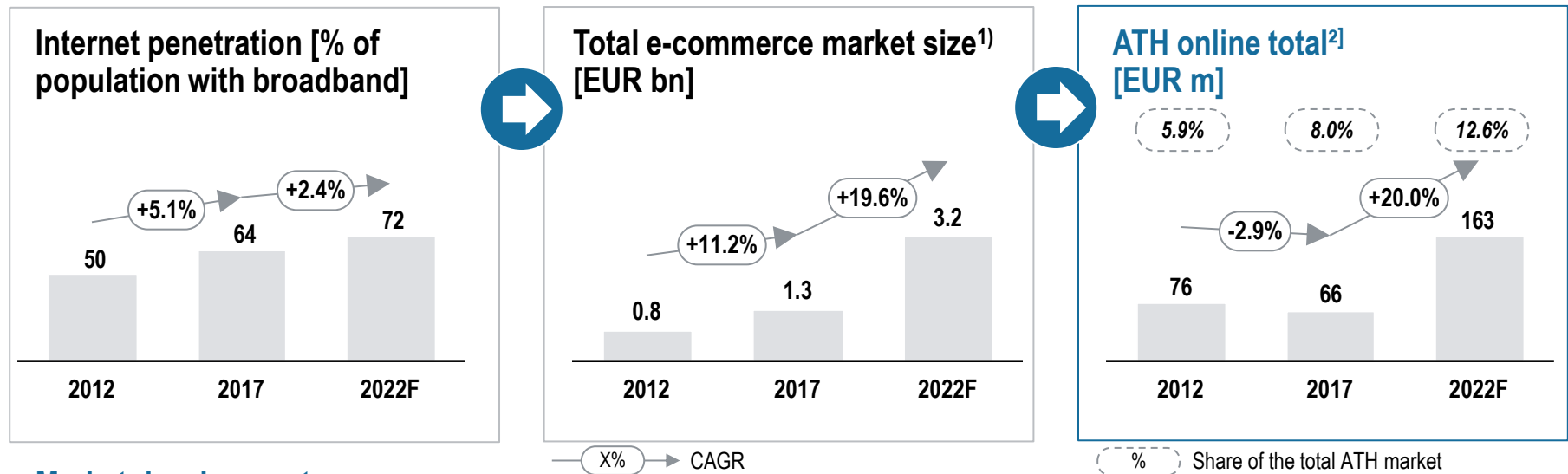
Market development

> Steady growth in Internet penetration for both broadband and mobile – Growth expected to continue beyond 2022, converging towards higher penetration rates in CEE region

> Enhanced Internet access to drive surge in e-commerce market size, with fivefold growth between 2012 and 2022

> ATH online channel will profit from both the total e-commerce growth and omnichannel strategy of key players

1) The market excludes digital media, digitally distributed services (e.g. plane tickets), B2B markets, resale of used goods (reCommerce) and sales between private persons
2) Including pure online players and online share of other players
Source: Market model based on desk research, mystery store checks, expert interviews

D.2 Players in the market

Roland Berger
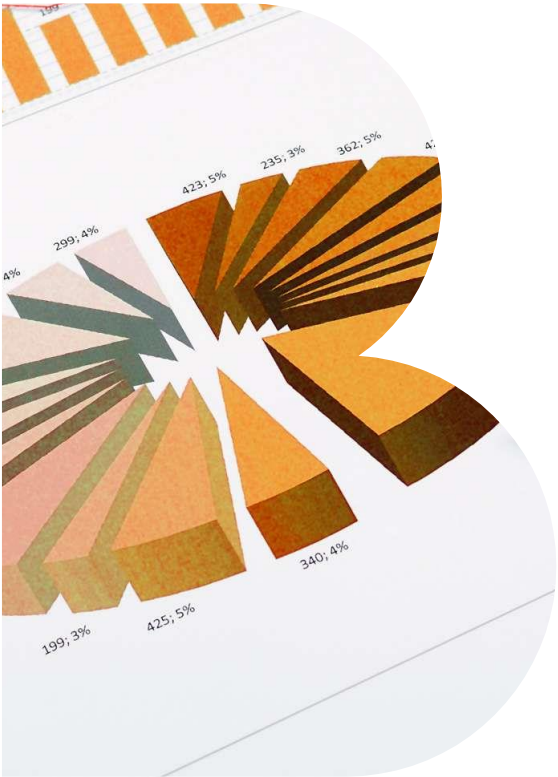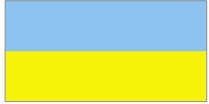
The top 5 ATH players of 2017 have consolidated their market positioning in the ATH market

Revenue market shares of 2017's top 5 ATH players [% of total ATH market value]   Indicative

2012¹⁾

3.4% 3.0% 1.1%
0.1%
0.1%

92.3%

Top 5 share

8%

2017 – Top 5 players

6.3% 4.2%
1.6% 1.1%
0.9%

85.9%

Top 5 share

14%

ATH revenue growth [EUR]

CAGR 2012-2017

ATH market | **-12.1%**

Антошка | **2.0%**

Auchan | **-2.0%**

СМИК | **-2.3%**

PLANETTOYS | **40.6%**

chicco | **43.2%**

> ATH market and players revenue in EUR terms affected by unfavorable FX reduction of UAH currency in 2014/2015
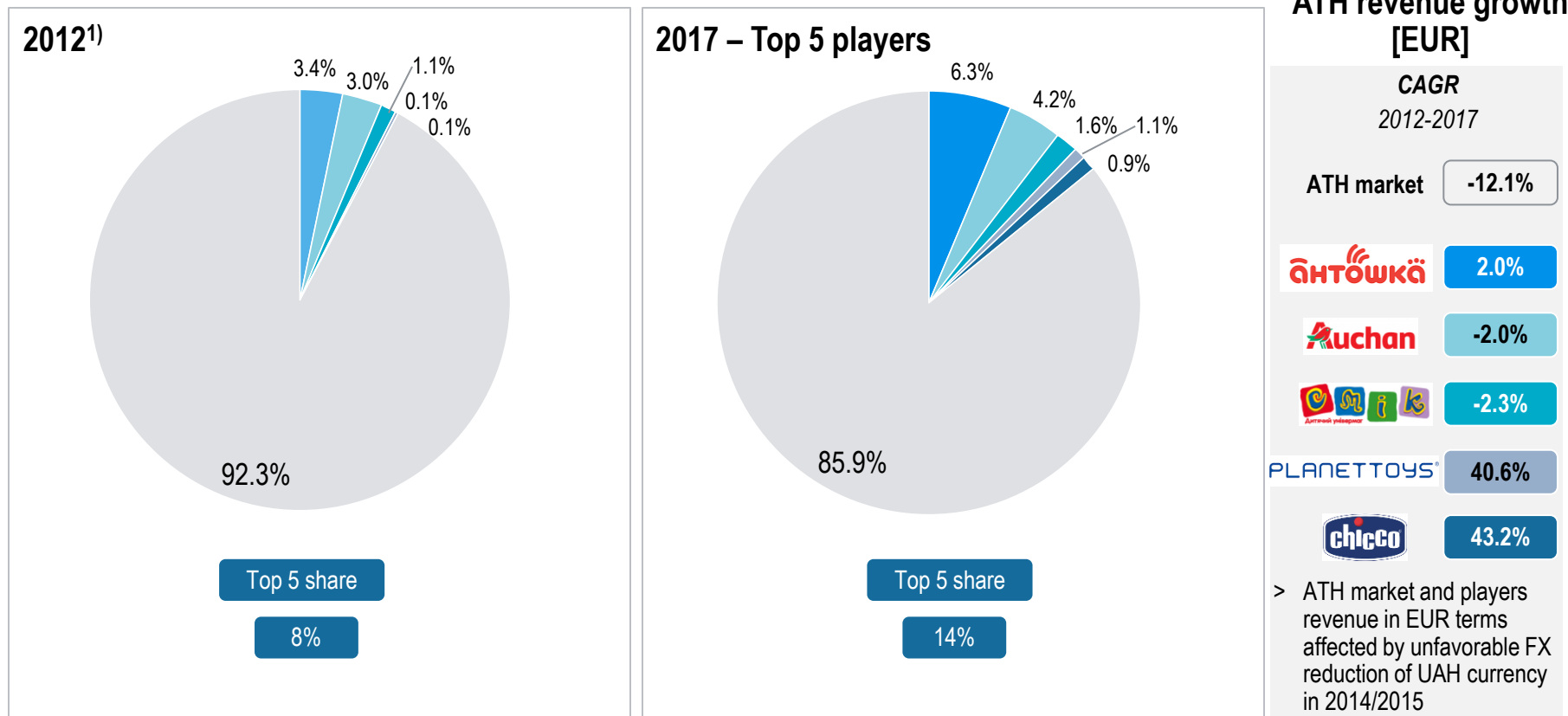
Legend: Antoshka — Auchan — Smyk — Planettoys — Chicco — Others

1) Based on ranking of 2017's top 5 players

The top 5 ATH players of 2017 have consolidated their market positioning in all key categories

Revenue market shares of 2017's top 5 ATH players [% of group value]

Indicative

2012[1]

Children's apparel

Auchan	Antoshka	LC Waikiki	Smyk	Reserved
3%	1%	0%	1%	0%

Top 5 share — 6%

Toys

Antoshka	Auchan	Planettoys	Smyk	Chudo-Ostriv
9%	5%	1%	2%	

Top 5 share — 17%

Children's hardware

Antoshka	Mothercare	Chicco	Smyk	Rozetka TOV
4%	5%	0%	1%	0%

Top 5 share — 10%

2017 – Top 5 players

Children's apparel

Auchan	Antoshka	LC Waikiki	Smyk	Reserved
4%	2%	1%	1%	1%

Top 5 share — 10%

Toys

Antoshka	Auchan	Planettoys	Smyk	Chudo-Ostriv
15%	6%	4%	3%	1%

Top 5 share — 29%

Children's hardware

Antoshka	Mothercare	Chicco	Smyk	Rozetka TOV
8%	2%	1%	1%	1%

Top 5 share — 13%

ATH revenue growth

Children's apparel market — -8.7%
- Auchan: -3%
- Антошка: 2%
- LC Waikiki: n/a
- Смик: -3%
- RESERVED: 26%

Toys market — -7.7%
- Антошка: 2%
- Auchan: -3%
- PLANETTOYS: 39%
- Смик: -3%
- ЧУДО СТРІВ: n/a

Children's hardware market — -10.1%
- Антошка: 2%
- mothercare: -28%
- chicco: 41%
- Смик: -3%
- ROZETKA: 21%

1) Based on ranking of 2017's top 5 players

Source: Market model based on desk research, mystery store checks, expert interviews

ATH onlie market is comparatively consolidated as c. 15% of the market is generated by the Top 5 players – no market place provider

Online revenue market shares of top 5 ATH players in 2017 [% of total online ATH market value]

Indicative

2017 – Top 5 players in ATH online sales

- 7.2%
- 5.5%
- 1.2%
- 0.9%
- 0.6%
- 84.7%

Top 5 share

15.3%
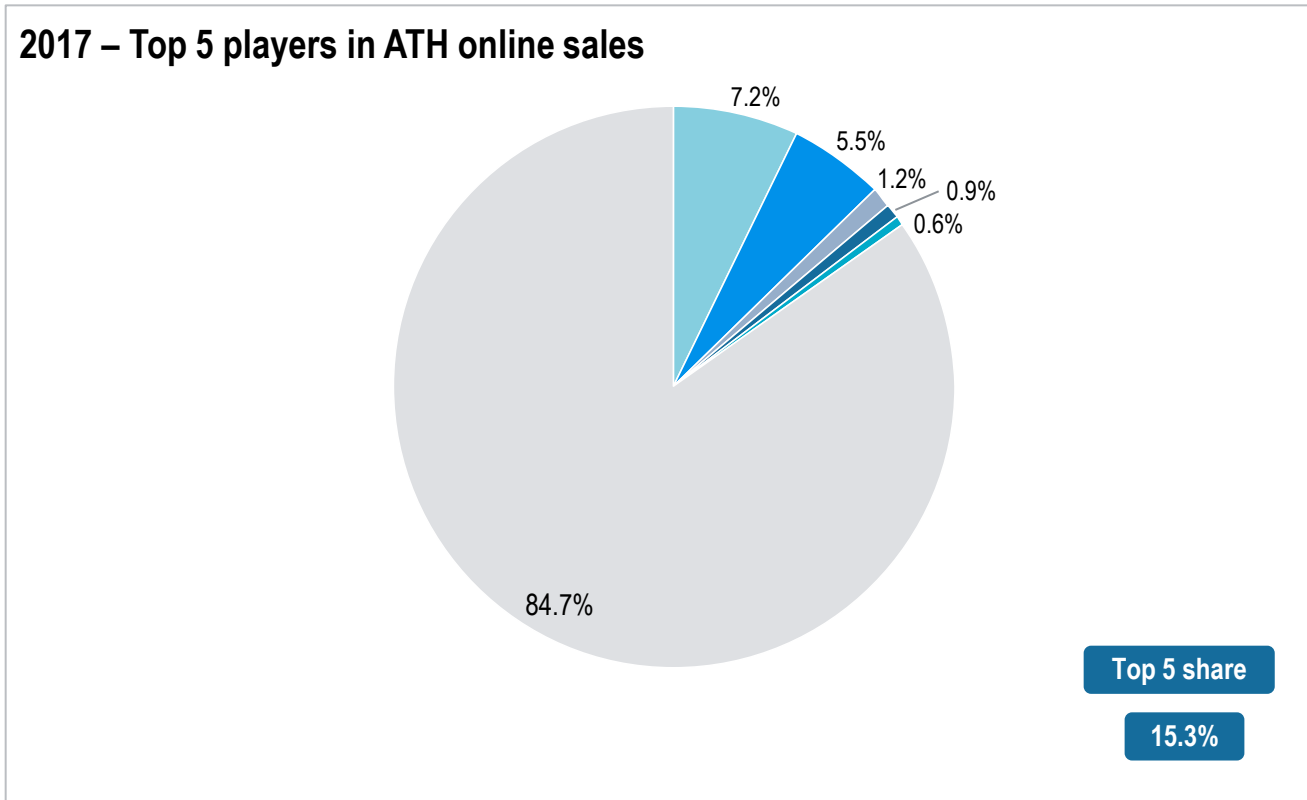
ATH online revenue [EUR m]

ATH online market	66
ROZETKA интернет-супермаркет	5.7
антошка	3.6
chicco	0.8
PLANETTOYS	0.6
LC WAIKIKI	0.4

Rozetka TOV   Antoshka   Chicco   Planettoys   LC Waikiki   Others

Roland Berger

Players cover the full market spectrum – Largest share of ATH revenue from generalists

ATH market segments and selected segment players [% share in ATH market revenue][1]

Breadth of product assortment [generalist vs. specialist]

Low   **High**

Child focus [high vs. low]

◯ Bubble size represents % share in ATH market revenue

▢ Children's one-stop chains   ▢ Children's specialist chains   ▢ Online players   ▢ Grocery chains   ▢ Fashion chains

1) As of 2017

The wide range of product categories distinguishes one-stop specialists from other specialist chains

ATH product category coverage of selected market players (1/2)

		Children's apparel	Toys	Children's hardware
	Antoshka	✓	✓	✓
	Smyk	✓	✓	✓
	Planettoys	✓	✓	✗
	Chicco	✓	✓	✓
	Mothercare	✓	✓	✓
	Budynok Igrashok	✓	✓	✗
	Babyzone	✓	✓	✓
	Shalunishki	✓	✗	✗
	Chudo-Ostriv	✓	✓	✓
	Reserved	✓	✗	✗
	LC Waikiki	✓	✗	✗
	Gloria Jeans	✓	✓	✗
	Zara	✓	✗	✗
	Adidas	✓	✗	✗

✓ Company has such products   ✗ Company does not have such products

Considerable seasonal variability in children's product range for hypermarkets

ATH product category coverage of selected market players (2/2)

		Children's apparel	Toys	Children's hardware
	Auchan	✓	✓	✗
	Rozetka TOV	✓	✓	✓

✓ Company has such products   ✗ Company does not have such products

Most of the players considered across all segments cover the full age spectrum up to 14 years old (1/2)

ATH age coverage by selected market players (1/2)
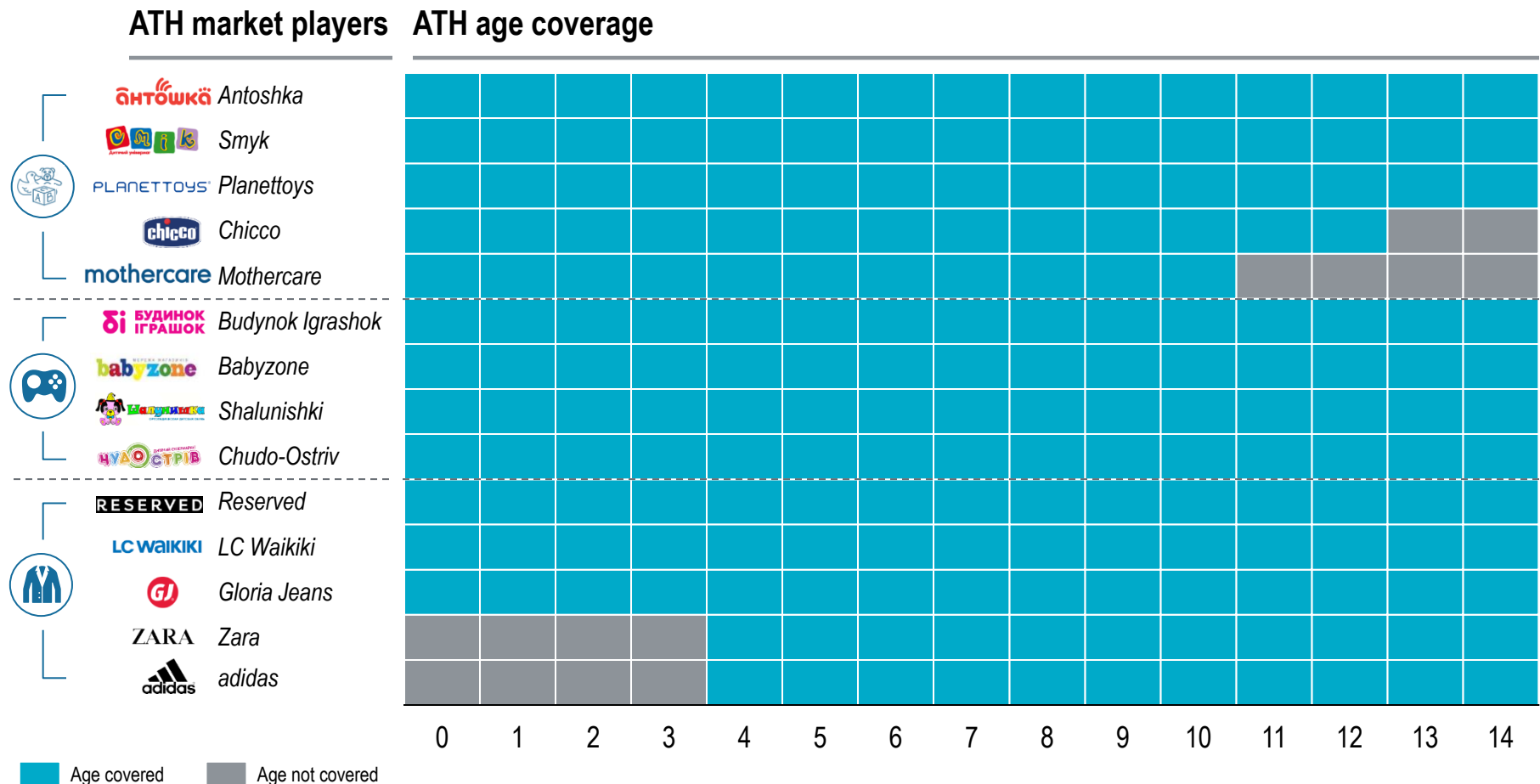
ATH market players | **ATH age coverage**

ATH market players	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Antoshka	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Smyk	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Planettoys	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Chicco	■	■	■	■	■	■	■	■	■	■	■	■	■	□	□
Mothercare	■	■	■	■	■	■	■	■	■	■	■	□	□	□	□
Budynok Igrashok	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Babyzone	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Shalunishki	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Chudo-Ostriv	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Reserved	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
LC Waikiki	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Gloria Jeans	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Zara	□	□	□	□	■	■	■	■	■	■	■	■	■	■	■
adidas	□	□	□	□	■	■	■	■	■	■	■	■	■	■	■

■ Age covered   □ Age not covered

Most of the players considered across all segments cover the full age spectrum up to 14 years old (2/2)

ATH age coverage by selected market players (2/2)

ATH market players

ATH age coverage

		Age
🏪	**Auchan** *Auchan*	
💻	**ROZETKA** *Rozetka TOV*	

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14

■ Age covered   ■ Age not covered
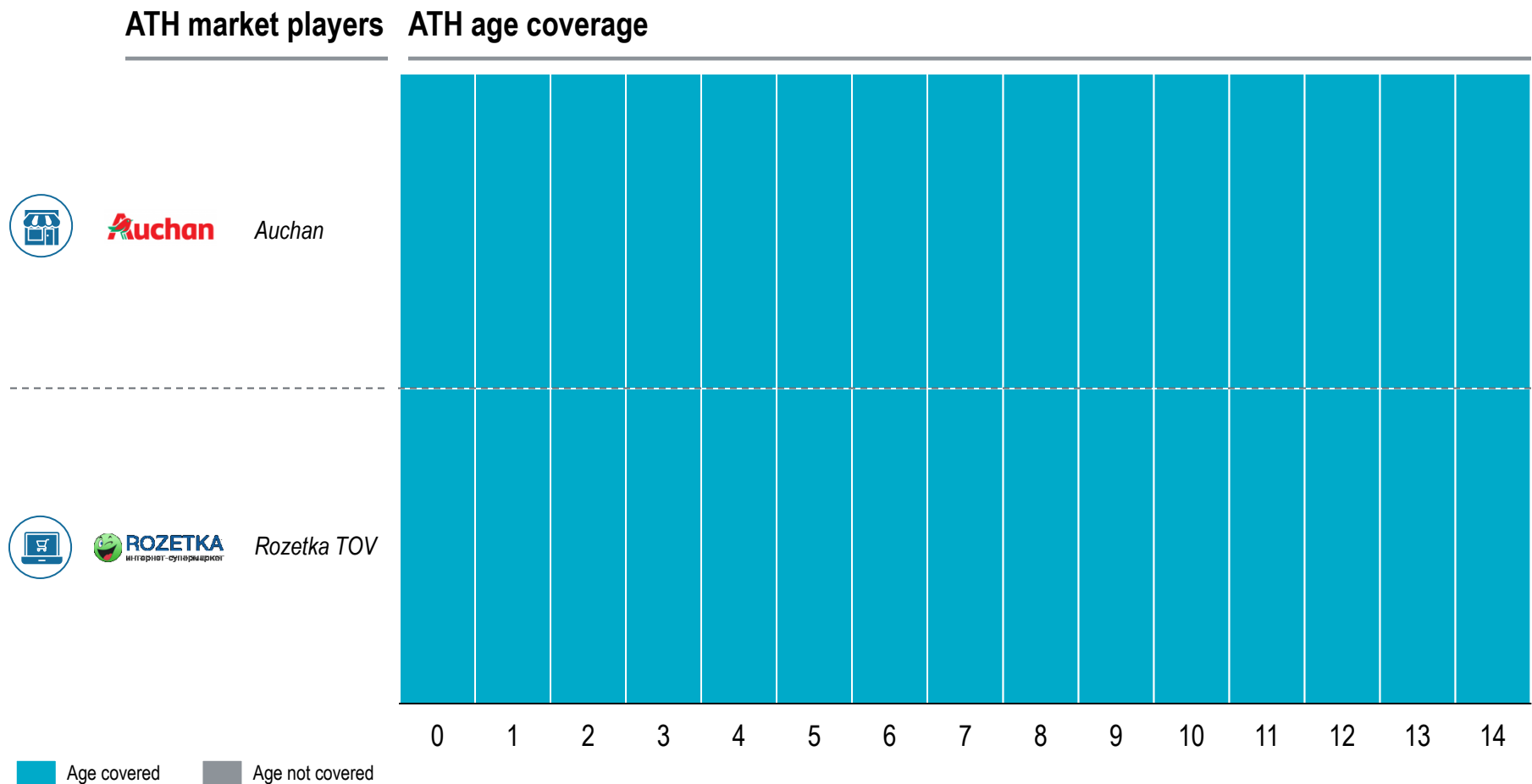
Most chain players have moderate or high prices/fashion level, with Auchan at the low end in terms of prices and fashion level

Competitive positioning of selected children's apparel market players, 2017

Indicative

Competitive positioning

Price level
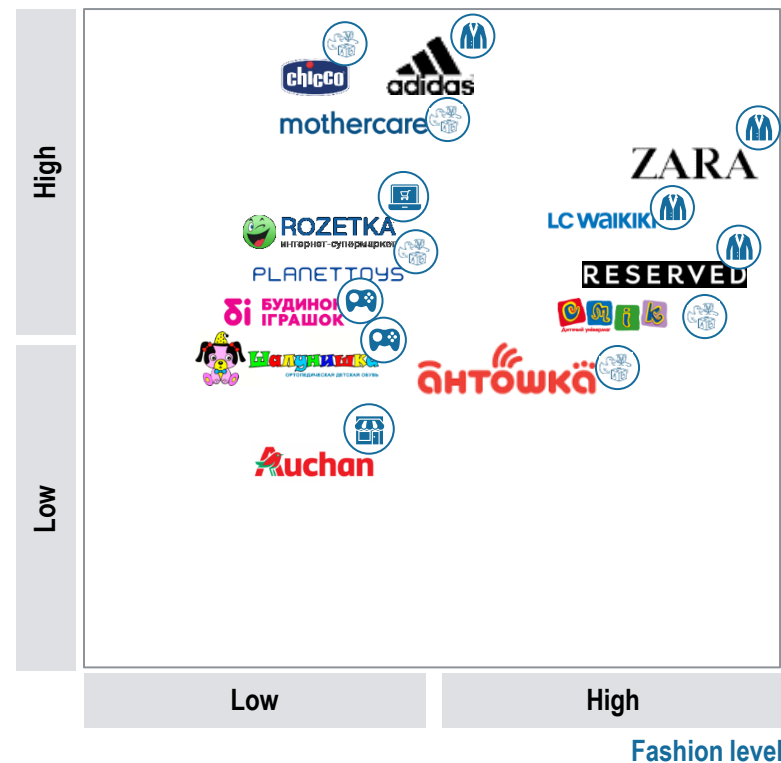
Approaches to competitive positioning

> In general, Antoshka offers a wide range of products at more competitive prices than its international rivals, such as Mothercare and Chicco, who focus on high-quality products
> Relatively high price sensitivity of consumers drives popularity of the online and other players segments (i.e. independent players)
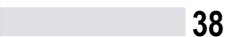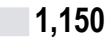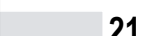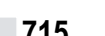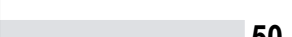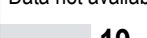
Comments on competitive positioning

Antoshka positioned mid-range, with other international brands (e.g. Chicco) positioned towards higher end of market

Players positioned both at high and low end of price/fashion level spectrum

Multiple approaches possible within segment – Players positioned at both high and low end of price/fashion level spectrum

Low fashion level with competitive prices

Wide range of products with various fashion level, at competitive prices

Budynok Igrashok has highest number of stores, followed by Zara and Antoshka – Further footprint expansion expected to continue

Retail distribution of selected ATH market players, 2017

Indicative

ATH market players		ATH revenues[1] and market share 2017 [EUR m, %]		Number of stores	Typical store area [sqm]	Type of format	
						Own	Franchised
Antoshka	Antoshka	52	6.3%	38	1,150	✓	✗
Smyk	Smyk	13	1.6%	10	650	✓	✗
Planettoys	Planettoys	9	1.1%	4	1,000	✓	✗
Chicco	Chicco	8	0.9%	Data not available	Data not available	✓	✗
mothercare	Mothercare	4	0.5%	21	500	✓	✗
Будинок Іграшок	Budynok Igrashok	not available		52	250	✓	✗
babyzone	Babyzone	not available		13	220	✓	✗
	Shalunishki	not available		13	200	✓	✗
Чудо Острів	Chudo-Ostriv	2	0.3%	35	1,000	✓	✗
RESERVED	Reserved	6	0.7%	18	1,000	✓	✗
LC WAIKIKI	LC Waikiki	6	0.8%	24	715	✓	✗
GJ	Gloria Jeans	0.4	0.1%	Data not available	1,000	✓	✗
ZARA	Zara	3	0.4%	50	3,400	✓	✗
adidas	adidas	3	0.3%	Data not available	180	✓	✗
Auchan	Auchan	35	4.2%	19	10,000	✓	✗

✓ Company has such type of format   ✗ Company does not have such type of format

1) Estimation of revenues from ATH market on the basis of financial statements and assumed % of ATH in revenues

D.3 Market segment development

Roland Berger

Traditional other players, are expected to continue to dominate the ATH market through 2022, however their share is likely to decrease

Development of retail distribution by ATH market segments[1] [# of stores]

Children's one-stop chains

250-290

170

2017   2022F

Wide spectrum of store formats and sizes, ranging from c. 50 sqm to c. 9,000 sqm – Larger store formats explored in the past, incl. Antoshka's shopping and entertainment centers, which look beyond retail to include entertainment areas for kids and various services for parents, such as counseling
Going forward, higher penetration in smaller cities is expected – So far, only Antoshka and Chicco have a presence in >10 cities

Grocery chains

Market share and footprint expected to grow as a result of higher penetration of modern grocery in both urban and rural areas, which are currently dominated by traditional trade

Children's specialist chains

130-150

120

2017   2022F

Wide range of store sizes (from c. 30 sqm up to c. 1,000 sqm), with Budnyok Igrashok, the market leader by store numbers in Ukraine, skewing towards smaller store sizes
Wide presence across Ukraine, compared to one-stop shops, with Chudo-Ostriv covering 25 cities – Growth expected to extend beyond key cities

Online players

Growth driven largely by increasing customer base, and e-commerce penetration as a result of wider broadband access

Fashion chains

150-180

110

2017   2022F

Large store formats, often >1,000 sqm
Relatively low penetration of household brands with significant kids portfolio (e.g. Nike, H&M) vs. other countries
Expansion expected to continue aggressively, both through expansion of current players (e.g. LC Waikiki announcing 60 stores by 2023) and potential entry of new players

Other players

Relative reduction in footprint/ importance largely driven by advancement in modern retail – However, expected to dominate market through 2022 due to competitive price offering

Sustained growth expected for one-stop shops and fashion chains based on announced expansion plans
Online to experience highest growth driven by increasing e-commerce adoption

1) Methodology used is described in slide 140

E. Definitions and methodology

Roland Berger

The three markets in the scope of the study have been analyzed in detail by reviewing relevant market and competitive data

ATH market definitions and sources used

Children's apparel
> The market includes all clothing and footwear for babies and children 0 to 14 years old
> Clothing includes indoor and outdoor day clothes, night garments, underwear, sports clothes, accessories (caps, belts, scarves, etc.)
> The market excludes child care products (e.g. diapers, wipes)

Toys
> The market includes all traditional baby and children's toys, including construction toys, games and puzzles, dolls and their accessories, baby and infant toys, model vehicles, arts and crafts toys, plush toys, pre-school toys, outdoor and sports toys, scientific and educational toys, action figures and their accessories, remote control toys, ride-on vehicles, dress-up and role play toys, other traditional children's toys and games
> The market excludes all types of video games

Children's hardware
> The market includes all types of durable home (furniture, textile) and travel product for babies and children 0 to 14 years old
> The products included are e.g. strollers, safety seats, cribs, travel cribs, beds, playpens, footbaths, bed textiles
> The market excludes child care products, stationery, media products (books, CDs, DVDs, etc.)

Key sources used

> National Statistics Institutes
> Eurostat
> World Bank
> Statista
> Oxford Economics
    – Global Economic Database
> Desk research
    – Retail associations
    – Public company information
    – Press releases
    – National and international press
> Expert interviews
> Euromonitor
> Mystery store checks
    – Stores of key players across three countries
> Generally available consumer research

In the course of the study, we identified six distribution segments

ATH market distribution segments

Children's one-stop chains

> Chains offering the full spectrum of ATH categories
> Typical format: small, medium and sometimes large
> Typical locations: often shopping malls

Fashion chains

> Chains with apparel for children and adults; also non-food chains with apparel as one category
> Typical format: small and medium (but small area for children)
> Typical locations: shopping malls, retail parks

Online players

> Pure online players active in ATH

Children's specialist chains

> Chains focused on one of the ATH categories, typically apparel or toys
> Typical format: small, rarely medium
> Typical locations: high streets, shopping malls

Grocery chains

> Grocery chains with a wide range of ATH products – hypermarkets, supermarkets, discounters
> Format: medium and large
> Locations: shopping malls, stand-alone

Other players

> All other players active in ATH including independent
> Format: often small
> Typical locations: traditional, with low footfall

A thorough market model based on external information was applied consistently across the three markets to determine key trends

Market modeling approach

Overall market value and forecast

> **Historical market values** for children's apparel, toys and children's hardware are based on desk research and expert interviews

> **Market forecasts** are based on a combination of top-down and bottom-up approaches. The top-down approach includes a regression analysis of market values for the three product markets and macroeconomic factors. The bottom-up approach estimates market values based on the expected evolution of underlying drivers and corresponding adjustment factors (e.g. spend per child elasticity against disposable income)

> **The breakdown of markets into product categories** was based on desk research and expert interviews

> **Market forecasts were sense-checked** in expert interviews and by means of benchmarking with other markets, both at an aggregated level as well as at the level of individual drivers (e.g. number of children, product units per child, price per unit)

Market value by distribution segment

> **Indicative market values by distribution segment** were determined based on a bottom-up quantitative approach and insights gathered from expert interviews

> **The top 20-25 players by ATH revenues** in each market were identified and assigned to a certain distribution segment

> **The segments' shares in total market revenues and their evolution** was determined based on the evolution of the respective players assigned to each

> **Forecasts** were based on top players' announced expansion plans where available and considered declining growth or linear growth elsewhere

> **Revenues from apparel, toys and hardware** were estimated for each player based on available company data, desk research and expert interviews

> For some retailers, revenues in the three markets were estimated based on **the share of shopfloor area dedicated to each category**, which was adjusted for differences in average ATH revenue per square meter

> **Final results** were discussed in expert interviews and adjusted based on feedback received

> **Estimated number of stores range** was based on the forecast number of stores per player in a given segment taking into account top players' announced expansion plans where available and considered declining growth or linear growth elsewhere where possible (in some cases we assumed withdrawal from own offline sales). The number was adjusted to include other brands active in the segment and was adjusted based on expectations regarding development of shopping malls and centers in a given country. We applied +/- figures to the resulting expected number of stores to provide an estimated range for number of stores. The range differs between countries and segments and depends on the range of stores' shopfloor area, number of players, stability of players and trends in a given segment as well as assumed country risk. The analysis was based on desk research and interviews with experts and players

Disclaimer

This study was prepared by Roland Berger GmbH ("RB") and is based on publicly available information which has not been independently verified by RB, as well as certain assumptions, general assessments, projections and experience derived from RB's consulting activities, in each case as at the time of the study's preparation.

Any assumptions, assessments, projections and experience values contained in this study involve significant elements of subjective judgment and analysis, which may or may not be correct. No reliance may be placed, for any purposes whatsoever, on the information contained in this study or on its completeness. Although care has been taken to ensure that the facts stated in this study are accurate, and that the opinions expressed are fair and reasonable, the contents of this study have not been subject to any independent audit or review or been verified. Neither RB, nor any of its affiliates or partners, nor the directors, shareholders, managers, partners, employees or agents of any of them provides any guarantee or warranty (express or implied), or accepts any liability or other form of responsibility with respect to the authenticity, origin, validity, accuracy, reasonableness, completeness or relevance of any information, assumption, assessment, projection or experience contained in this study. All such parties and entities expressly disclaim any and all liability for, or based on or relating to any such information contained in, or errors in or omissions from, this study or based on or relating to the use of the study or otherwise arising in connection with it.

This study may include certain forward-looking statements, estimates, predictions, influences and projections with respect to anticipated future market performance and as to the market for products or services. These statements and forecasts involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future. Accordingly, forward-looking statements are not guarantees of future market performance and actual results of the development of the industry may differ materially from those made in or suggested by the forward-looking statements in this study. As a result, you should not rely on these forward-looking statements. To the extent this study contains statements or projections which are forward-looking, neither RB nor any of its affiliates or partners, nor the directors, shareholders, managers, partners, employees or agents of any of them provides any guarantee or warranty (express or implied) or accepts any liability or other form of responsibility in the event that the actual future developments differ from the statements and projections in this study. Furthermore, the information and opinions contained in this study are provided as at the time of the study's preparation and are subject to change without notice and, even if changes and events occurring after the publication of this study do impact the validity, accuracy, completeness or relevance of this study, RB does not assume or accept any responsibility or obligation to update, amend or revise this study or any of the forward-looking statements contained herein.

Roland
Berger

THINK:ACT