

## 5. Durability and retail

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### 5.1 Introduction

The public debate about short product lifetimes and planned premature obsolescence has been widely publicised in recent years and has involved many stakeholders. The focus of the debate has been mainly on manufacturers, which lay the foundations for product longevity in the design phase (e.g. Poppe and Longmuß 2019). In addition, research shows that consumers can have a significant impact on product lifetime and useful lives through their behaviour (see, e.g., Jaeger-Erben and Hipp 2017). One player that has received little attention to date and still manages to escape attention in debates on product lifetimes and premature obsolescence is the retail sector. As the point of sale, retail plays a central role in mediating and steering supply and demand. Retailers not only decide what products to put on their shelves and what product assortment to present to potential customers. They are also the direct contact and contractual partner for the customer. Consequently, retailers are thought to have an arsenal of practices and strategies that can have a direct impact on product quality and customer behaviour. The aim of this chapter is to uncover these practices and to ask what influence retail can exert within the supply chain. The chapter discusses the role of retail for durability and how its position and retailing practices in the supply chain exert influence over the lifetime and durability of products.

Recent research has identified production and consumption characteristics that influence product lifetime. On the production side, time and budget constraints are central factors determining product lifetime (e.g. Longmuß et al. 2019). On the consumption side, motives such as the desire for new products, societal norms, but also environmental concerns influence product lifetime (e.g. Jaeger-Erben et al. 2021). As another example, it has been found that consumers use products longer when they perceive them as ‘workhorses’

(e.g. washing machines) than when they perceive them as modern or status products such as information and communication technology (ICT) (Cox et al. 2013). Although research on product lifetimes and obsolescence has grown considerably in recent years, there has been comparatively little dedicated work on the role of retailers. There are several reasons for this. On the one hand, the term ‘retail’ encompasses a wide range of actors operating in a variety of ways. On the other hand, retailers are often described as mere intermediaries between supply and demand, and their potential to influence product quality and consumer behaviour is often underestimated. But are retailers really subordinate to the evolution of supply and demand? Offensive retail strategies such as offering low-priced private brands, ‘cash for clunkers’ and trade-in programmes, as well as regular sales promotions such as ‘Black Friday’ or ‘Cyber week’, paint a different picture. For example, it has been argued that the desire to consume the latest products and conspicuous consumption are fuelled by marketing activities, a significant part of which comes from retailers (e.g. Kasser and Kanner 2004; Thøgersen 2014). The role of such retail strategies in obsolescence is examined in more detail in the following sections.

The issue of obsolescence generally focuses on what are known as durable goods. In contrast to non-durable goods, such as food and other perishables, durable goods are more complex technical items and processed goods that are not consumable but can be used over a long period of time. We therefore examine the role of retail in the longevity of such durable goods. Examples include electronic devices, textiles, and furniture. We identify positions of power and practices along the supply chain through which retailers can have a direct and indirect impact on product durability.

## 5.2 Retail as a gatekeeper for durability

The word ‘retail’ is an English term derived from the French *retaille*, in its origin meaning ‘a piece cut off’.<sup>1</sup> It describes the practice of various economic agents of selling goods in relatively small quantities to consumers. Retailing has a long and diverse history. While research on consumers and consumption has steadily developed, dedicated reviews of the history of retail are lacking so far (Jacques and Sandgren 2018). There are several reasons for this gap. On the one hand, retailing is shaped by national and geographical characteristics that

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1 See [www.lexico.com/definition/retail](http://www.lexico.com/definition/retail) (accessed 10 February 2022).

make it impossible to draw a universal picture of retailing across countries or regions; on the other hand, the diversity of retail formats and actors means that it is not always easy to analytically distinguish it from other forms of business or to pin a common label on it. Retailing has been defined as a specific economic practice that is prototypically characterised by three factors:

1. In contrast to wholesaling, retailing involves offering end customers a specific product range in small sales quantities.
2. The retailer usually acts as an intermediary between different manufacturers and customers.
3. The retailer buys low and sells high to make a profit from the transaction.

Retail actors vary widely in size, scope, and market strategies. Individuals may act as merchants in public marketplaces or on the internet, offering a range of goods. Corporations may engage in retailing on their own or as part of large conglomerates. Today, we encounter a variety of retailers in the form of supermarkets, fashion stores, hardware stores, electronics stores, and the bakery around the corner. In addition to these 'bricks and mortar' stores, internet-based stores or e-commerce have become increasingly popular in recent decades. Online and offline retailing are also sometimes combined as hybrid concepts ('clicks and bricks').

In addition, retailers can sometimes act as wholesalers, manufacturers of private labels and brands, or non-profit cooperatives. In their economic role, however, retailers essentially act as merchants whose central economic motive is to make a profit from their transaction between the producer of the product and the customer, without adding any functional value to the product, a practice that can also be described as 'rent seeking'. The faster and the more goods are traded, the higher the turnover – also known as 'rotation' in the language of retail.

Beside their economic interests, retailers fulfil a key economic distribution and coordination function. Around 35 per cent of private consumer spending in Germany is spent in the retail sector, with local stores still accounting for the majority. In contrast to local retailing, online retailing has a share of around 13 per cent of private consumer spending in Germany (HDE 2021). This applies not only to complex electronic products and textiles, the so-called durables, but also to food and other perishable goods, the so-called non-durables, which in the past could increasingly be made durable by new technologies such as preservatives and refrigeration, making them available to consumers in

remote locations and for longer periods (Dobeson and Kohl 2020). Globalised supply chains and modern distribution systems provide customers with an enormous choice of products across all commodity groups. Supermarkets in Germany more than tripled their average range of products from 3,200 to 11,600 between 1965 and 2015 (LZ 2015). At the end of 2016, online retailer Amazon had more than 200 million items on its website (Jordan 2020). Other surveys even speak of over 500 million products,<sup>2</sup> making it one of the largest product databases in the world.

Retailing took a central role in the development and emergence of the capitalist economy because it facilitated the commodification, distribution, and mass production of products. Although merchants were held in low esteem by authoritative institutions such as the church due to their practice of rent seeking until the early Middle Ages (see also Mazzucato 2019), retailing made certain products accessible to broad sections of the population for the first time. Retailing was less discriminatory than other forms of social interaction, as all individuals could participate if they had the financial means (Trentmann 2017). Even in centrally organised economic systems, market-based informal retail plays a central role in supplying the population. Without the many informal retailers and the 'grey market', supply in countries such as North Korea would simply collapse (Tudor and Pearson 2015).

In addition to its many benefits and achievements for society, retailing is also associated with environmental and socio-structural problems that have become increasingly apparent as a result of the consumerism that has evolved since the early 1950s. Until the middle of the twentieth century, the primary task of the economic system was to eliminate scarcity in all areas of life; but since the early 1990s there has been a growing saturation of demand, especially for durable goods in the industrialised countries (cf. Kostecki 1998). In a linear and growth-oriented economic system, however, saturation of demand can become a problem for companies and retailers if the majority of business models continue to be based on the profitable sale of new goods. As an intermediary between supply and demand, the retail sector plays a central role in the supply chain and can control the flow of goods in terms of quality and price, market availability, and target groups. First, in their role as purchasers and producers, they influence production-specific aspects of durability. Second, they influence consumption-specific aspects; as marketers, they influence the

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2 'How Many Products Does Amazon Sell?', Scrapehero.com, January 2018, [www.scrapehero.com/many-products-amazon-sell-january-2018/](http://www.scrapehero.com/many-products-amazon-sell-january-2018/) (accessed 21 April 2022).

purchasing behaviour of consumers who may shorten the life of existing products through premature replacement. These influences on the production and consumption sides are the subject of the following analysis. The concluding discussion raises the question of how retailers can meet future challenges that may encourage the extension of products' lifetimes and use.

### **5.3 The role of retail on durability and obsolescence within the supply chain**

In the following section, selected practices and strategies in the retail sector that may have an impact on product life and useful life are presented. A typical retail supply chain is used as a simple analytical framework to identify key positions and relevant practices. Due to the limited scope and lack of research in this area, it is not always possible to empirically validate the impact and relevance of the identified practices for the product lifecycle. The aim of this chapter is to draw a broader picture of the potential for retailers to influence product obsolescence, durability, and lifetime.

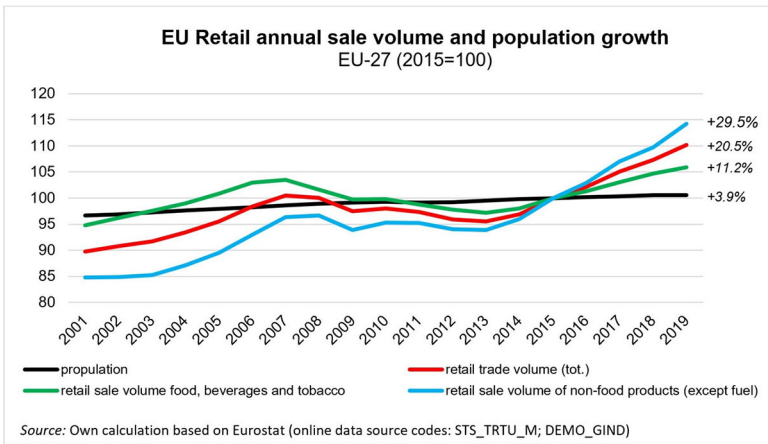
#### **5.3.1 Purchaser role: curator and gatekeeper of supply**

Consumers in Germany spend 35 per cent of their income in retail outlets, making it the dominant point of sale for private spending on consumer goods. On average, German households spend around €385 (15.5 per cent) per month on food, beverages, and tobacco; €93 (4 per cent) on textiles and shoes; and €160 (7 per cent) on furniture and other household appliances (Statistisches Bundesamt 2021a, b). Whether in local stores or online, retail is the most important touchpoint for the majority of consumers when buying products.

Despite low population growth in Europe of only 3.9 per cent between 2001 and 2019, the European retail sector has managed to increase its product sales by more than 20 per cent on average over the same period, and by as much as 30 per cent for consumer durables (see retail sales of non-food products in Figure 5.1). Sales figures here refer to product volumes calculated on the basis of deflated turnover, which gives a more quantitative picture of how many products people consume in the EU. The figures show that product sales per person have increased significantly over the last two decades. There may be several structural economic reasons for this growth effect. The purchasing power of consumers is growing due to continuous productivity gains, while the EU cen-

tral bank has ensured cheap credit with a zero-interest rate policy since 2015. However, in addition to consumer purchasing power, additional consumption has also been stimulated by the expansion of physical infrastructure and marketing, areas in which retailers play a key role.

Figure 5.1: Annual sales volume in retail and population growth in the EU-27 from 2001 to 2019.



To ensure continuously high sales rates, retailers are under pressure to constantly offer customers new consumption options; this manifests itself in a wide differentiation of product qualities. The fact that retailers can sell low-budget toasters for as little as €9 and designer toasters for up to €500 is not only due to the manufacturer that manages to produce such a range of qualities and varieties, but also to the retailer that offers them. Put simply, if retailers were more demanding about the durability and longevity of products, many short-lived products would never make it into the hands of consumers. Unfortunately, some retailers, such as the fast fashion industry, have put low-quality products and fast market cycles at the heart of their business models (Mehrjoo and Pasek 2014). Between 2000 and 2011, the average number of collections by European textile companies doubled every year (Remy et al. 2016). The Spanish fashion retailer Zara launches 65,000 different clothing items per year, which corresponds to an average of 200 models per day (Alliot 2020). It is not easy to prove the extent to which retailers intend premature obsolescence

and rapid product replacement cycles, but, as curators of supply, they bear a great deal of responsibility for the overall product quality level in the market.

In contrast to this, retailers are sometimes motivated to strategically withhold certain product innovations to serve other profit interests. When engineer James Dyson invented the first vacuum cleaner that did not require a separate dust bag, no retailer wanted to stock his product because it would disrupt the replacement dust bag market (White 2020). Also legendary is the story of the Phoebus cartel, in which leading lamp manufacturers conspired in the early 1920s to limit the life of lightbulbs on the market (Krajewski 2014). But there are also more day-to-day practices that retailers can use to control which products are on the market. As the largest purchaser, retailers are in constant contact with manufacturers and producers regarding the introduction of new products and the sale of older stock. If retailers are struggling to sell their older stock, why should they risk selling a manufacturer's new products? In this case, retailers have developed a number of strategies to exploit their position of power and minimise their risk in the supply chain. For example, if a particular manufacturer's older products are not selling, they can financially participate in sales promotions or even receive compensation for permanently discounting the older inventory.<sup>3</sup>

The close cooperation between manufacturers and retailers in planning prices and timing market cycles is not well researched and often not visible to the public. However, experts are observing a trend: in times of globalised supply chains and increasing digitalisation, retailers are gaining more and more power in the vertical supply chain. This no longer includes just scouting new products and selling them to customers, but increasingly product development, pricing and timing of market cycles, sourcing of materials, and all kinds of other fulfilment services for manufacturers (Zentes et al. 2012). By far the largest company in the world today in terms of sales and number of employees is the retailer Walmart, followed by Amazon.<sup>4</sup> Obviously, any product-related decision taken by the major retailers can have an impact on the general market.

Besides their position of power, it is also crucial to understand the economic drivers of retailers and the economic trade-offs between product rotation and long product life. As the demand for durable goods in developed

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3 Based on personal interviews with purchasers and product category managers in the retail sector for consumer electronics in 2021.

4 See <https://fortune.com/global500/2021/search/>.

countries is generally saturated and growing at low rates (Sohl and Rudolph 2012), retailers have to compete primarily for market share in replacement or improvement purchases by customers. Storage, shelf space, and consumer attention are the limiting factors in retailing, and retailers' revenues depend on the volume and speed of sales. Retail has developed a key performance indicator called 'product rotation rate', which quantifies the speed at which products are sold. The shorter the time products are in stock and the faster they are sold, the better the product rotation rate. High rotation rates are particularly important for perishables, the 'fast movers'. However, research on traditional 'slow movers', such as fashion items and electronics, has found that these products have also moved to faster rotation and consumption modes over the past two decades (e.g. Cooper 2010; Wieser and Tröger 2015; Kostecki 1998). From an economic perspective, retailers benefit from faster product rotation by customers, which is not necessarily beneficial for long product use cycles. Given the importance of fast product rotation, retailers are the least likely to complain about premature obsolescence and are currently in a very comfortable position, as they can shift responsibility to manufacturers or consumers.

### 5.3.2 Producer role: the hidden business with private label brands

As part of their vertical integration, every major retailer, from supermarkets and DIY stores to electronics and fashion retailers, offers what are known as 'private labels'; these are products produced and marketed exclusively on behalf of the company under its own label. E-commerce retailer Amazon, for example, offers the private label brand 'AmazonBasic', with a range of products from displays, office chairs, and vacuum cleaners to frying pans and toasters. In terms of volume, the market share of private labels in the European food retail sector is between 20 and 50 per cent (Nielsen 2020), while estimates for the retail of consumer durables such as electronics and fashion are in the lower range (Bluemont 2020), making it highly relevant for sustainable market management. Aside from its significant market penetration, private label deserves special attention for at least three reasons:

- It is not always clear to customers whether a brand is a private label or an independent brand.
- Retailers can present their products in a way that discriminates against other brands that may be better value for the customer.

- Most retailers place their private label brands in the lower price segment, which can be associated with lower quality compared with higher-priced products.

Private label brands are not always as transparent to consumers as in the case of Amazon. The German electronics retailers Mediamarkt and Saturn, for example, offer the brands PEAQ, Koenig, ISY, and ok<sup>5</sup> without indicating direct brand ownership at the point of sale. Some retailers expect to gain a market advantage over other brands by masking their own brands and it is debatable to what extent consumers may be deceived by this practice. Consumers tend to be insufficiently informed about the market (cf. Clark 1918; Nelson 1970) and this enables retailers, for example, to use the appearance of independence to recommend their own brands over others or to place them in a better position. The placement and pricing of private labels can go so far as to specifically disadvantage other brands at the point of sale. In a recent antitrust investigation, the US Federal Trade Commission cited Amazon's practice of prioritising items on its website in favour of its own products and those of manufacturers that use Amazon's fulfilment services.<sup>6</sup>

So far, the practice of product discrimination at the point of sale is not well researched and it is not clear to what extent it causes avoidable societal costs (i.e., violation of antitrust law, cut-throat competition). Nevertheless, it is striking that private labels are often placed in the lower price segment. This does not mean that they are of lower quality than other brands in the same price category (Boyle et al. 2018), but private label brands are often the cheapest products in the market, and it seems important to ask how durable and sustainable an electric hand blender costing less than €10<sup>7</sup> or a washing machine for less than €200<sup>8</sup> can be. Although not entirely uncontroversial, research suggests that there is a strong relationship between the quality and price of durables, implying that the lower the price, the lower the quality of the product (see Mitra and Golder 2006), which can have a negative impact

5 See [www.mediamarkt.de/de/specials/eigenmarken](http://www.mediamarkt.de/de/specials/eigenmarken).

6 See <https://crsreports.congress.gov/product/pdf/R/R45910/3>.

7 See, for example, 'OK. OSB 2019 W Stabmixer Weiß (200 Watt)' for €9.99 at [www.mediamarkt.de/de/product/\\_ok-osb-2019-w-2606520.html](http://www.mediamarkt.de/de/product/_ok-osb-2019-w-2606520.html) (accessed 26 April 2022).

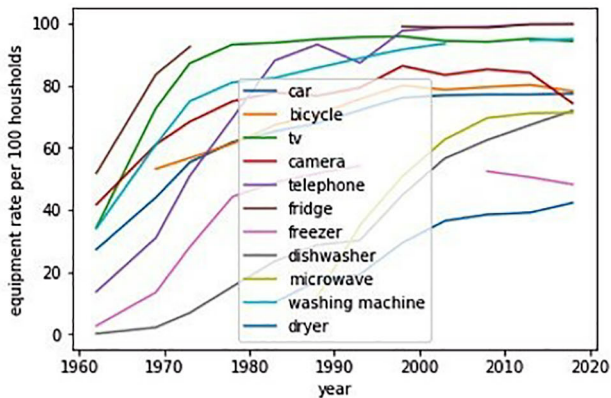
8 See, for example, 'OK. OWM 5112 D Waschmaschine (5 kg, 1000 U/Min., D)' for €199.99 at [www.mediamarkt.de/de/product/\\_ok-owm-5112-d-2665050.html](http://www.mediamarkt.de/de/product/_ok-owm-5112-d-2665050.html) (accessed 26 April 2022).

on the durability of the product. In addition, the lower prices of the retailer's own brands may put pressure on other competitors and brands to lower their prices as well, thereby reducing their budgets for quality and leading to cut-throat competition that reduces overall quality in the market. As noted above, retailers have an interest in rapid product rotation and replacement, and lower-priced private labels would offer them two advantages. First, the profit margins are much higher than from selling other brands (Bluement 2020); and second, the lower quality of low-priced private labels could correspond to faster replacement cycles by the customer. Unfortunately, there is no research yet to support these conjectures, even though private labels are the best evidence that retailers have a direct influence on the quality and durability of products.

### 5.3.3 Marketer role: between profit increase and liability

Without question, retail is one of the most important supply systems for the population. Retailers now make an abundance of durable goods available to everyone, all year round. As a result, consumer demand for durable goods has become increasingly saturated in recent decades (see Figure 5.2).

Figure 5.2: Household equipment per 100 households in Germany from 1962 to 2018.



Source: Illustration based on data in Statistisches Bundesamt 2020.

Market saturation poses a problem for retailers and their business models: if everyone already has everything, who is going to buy new products? Not least because of this ‘paradox of the plenty’, manufacturers and retailers have been accused of planned obsolescence (London 1932; Packard 1960; Slade 2006; Gultinan 2009). In planning for premature product replacement, the retail sector is subject to strict limits – at least in theory. After all, the retail sector is liable for the contracted quality and condition of the products sold. When products fail prematurely, the seller is legally obliged under European law to replace or repair the item for the customer.<sup>9</sup> Although retailers may benefit from shorter product lifetimes and lower durability in the short run, such strategies may become a liability later. However, research provides evidence that many consumers tend to replace their products prematurely without any defect or failure due to symbolic or psychological obsolescence (Prakash et al. 2016; Jaeger-Erben and Hipp 2017; Cooper 2004), an effect that retailers can exploit to boost their sales. Current literature (e.g., Bala and Verma 2018) reveals several marketing practices that retailers have developed to actively encourage customers to increase their purchases and thus potentially replace their old products with new ones:

- **‘Cash for clunkers’:** Manufacturers and retailers offer customers a discount on new products if they bring in their old products, thus incentivising early product replacement (Xu et al. 2019).
- **Upselling and cross-selling:** Retailers offer various marketing techniques such as discount and bonus schemes that are designed to encourage customers to make additional purchases that were not previously planned (Pandya and Dholakia 2021).
- **Variety seeking:** Marketing research supports companies in the assumption that consumers generally welcome a certain level of product variety and selection (variety seeking) (Kahn 1995, 1998; Stasiuk et al. 2018). Although an excess of product selection can put people off (Schwarz 2016; Iyengar and Lepper 2001), a highly differentiated and changing assortment of products can incentivise consumers to look for better products in terms of brand, price, quality, and functionality (Beath and Katsoulacos 1991).

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9 Directive (EU) 2019/771.

- **Novelty seeking:** New products are often valued higher than older or currently used products (Frick et al. 2020).<sup>10</sup> Marketing strategies can reinforce this belief by portraying the new as technologically superior, more convenient, and easier to use, encouraging early replacement or additional purchases.

These marketing strategies show that retailers do not have to degrade the quality of products to induce premature replacements and additional consumption. The quantitative effect of these practices is difficult to examine. There are studies that show a correlation between marketing activities and consumption levels (e.g. Frick et al. 2021; Gossen et al. 2022), yet causal relationships are difficult to prove empirically. Retailers use marketing for a variety of reasons: to build brand awareness, introduce new products, enhance their image, or increase sales. It can therefore be assumed that retailers are evaluating and optimising their marketing practices very closely.

The importance and influence of marketing also shed new light on the issue of environmental and social responsibility. From a narrow business perspective, it might be expected that retailers would seek to encourage premature replacement and additional consumption, as their business model is often based on the rapid rotation of products in the marketplace. However, the question remains as to what extent retailers are aware of their active role in premature obsolescence and the negative consequences of overconsumption. In discussions on degrowth and consumption reduction, retailers have tended to stay out of public debates (with some prominent exceptions, such as Patagonia; see Hwang et al. 2016). At other times, their key position has been overlooked in public and scientific debates. However, as this contribution has hopefully shown, the retail sector plays a central role in enabling and accelerating consumption. Therefore, the chapter concludes with a discussion of how retail can decelerate consumption.

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10 'NEWISM. Why More Than Ever, Consumers Lust After the New. And Why That Spells Heaven or Hell for Brands', Trendwatching.com, July/August 2012, <https://trendwatching.com/trends/newism/> (accessed 4 November 2020).

## 5.4 Discussion: circularise consumption through retail

Retail holds a key position in the supply chain, which can have a bidirectional influence through the control of material and information flows. On the supply side, it coordinates, bundles, and distributes the products from many different manufacturers. As a gatekeeper and curator, it can determine the type, volume, and speed of products on the market. On the demand side, retailers can influence consumer behaviour through a variety of marketing practices, giving retailers great power to influence the overall speed and scope of consumption. The following section takes a closer look at both power positions in the supply chain to discuss the potential for more sustainable production and consumption patterns.

### 5.4.1 Supply side: reduce and decelerate

There is an inherent problem with the idea of endless economic growth: ‘The more goods we produce, the more bads we generate, in the form of waste and pollution’ (Wiese and Mayrhofer 2020). Overproduction and overconsumption are not only problems of a linear economy, but can also become issues in a circular economy. Every production requires the transformation of energy and materials, which creates entropy and can have a negative impact on the environment by increasing the overall level of entropy (Georgescu-Roegen 1971; Rapf and Kranert 2021). As the problem of entropy cannot be avoided in any kind of sustainable future scenario (Jackson 2021; Corvellec et al. 2021), it becomes increasingly important to reduce or at least limit the overall level of production and consumption in the economy. In economics, these approaches have been discussed for some time in the debates on degrowth and the steady-state economy (Kallis et al. 2018), but what would this entail for the retail sector?

One way to immediately cap the supply side would be through selective product bans and the introduction of supply quotas for certain consumer products. Both are tools that are already used to regulate markets. Quotas on the supply side, for example, are used to prevent the overfishing of oceans and other natural resources. Today, product bans can exist for any type of product in the EU that does not meet minimum safety, environmental, and social standards (EC 2022a).

Regarding the retail sector, one could consider imposing selective limits on product variety in the market, at least in problematic product areas such as

the ultra-fast fashion sector, whose business model is based on rapid product changes and low product quality (Mehrjoo and Pasek 2014). Another way to put the brakes on the supply side would be to introduce selective speed limits on the market cycles of certain products. This could include consumer electronics such as smartphones, whose short usage cycles of around 2.5 years are not in sustainable relation to their environmental impact. A study of the market cycles of smartphones shows that online retailers in Germany change 40 per cent of their product range within a year, while 16 per cent of smartphones are sold for a period of only 100 days (Poppe 2019).

There are many reasons for short usage cycles, but one of them is that the devices are usually not designed by the manufacturer to be used for long periods, and therefore they have short support cycles for software and spare parts, as well as generally poor repairability. The reasons for this lie in the business models of the manufacturers and retailers themselves, which want to keep the wheel of consumption turning by changing the models on the market every year and constantly introducing new models. But what would happen if major manufacturers such as Apple or Samsung started releasing a new smartphone model only every three years? The annual sales of new devices would certainly decrease, but it is also likely that manufacturers and retailers would be forced to shift more of their value creation to after-sales activities and services, where the focus would be on product preservation and life extension, which could lead to an overall increase in useful life (Ertz et al. 2019). The potential for retail could be to better differentiate itself from the competition by focusing more on the downstream part of the value chain. This could include better customer service and a better shopping experience, which is increasingly important to customers. It could also include more circular activities, helping consumers to make more sustainable choices, offering them maintenance or refurbishment services, and organising reverse logistics for better reuse and recycling of used products.

Reducing product variety and extending market cycles could play a more important role in sustainable market governance in the future. In its ecodesign directives,<sup>11</sup> the EU has already started to set legal requirements for minimum support periods for software and spare parts for some product groups. Specifically, the support period is set in relation to the market cycle of a product, which is an innovation in environmental product law. For example, for dis-

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11 Directive 2009/125/EC.

plays, manufacturers and retailers are obliged to provide software updates for at least eight years after the sale of the last model.<sup>12</sup>

#### 5.4.2 Demand side: demarketing and sufficiency-oriented consumption

Retailers can use their unique position to influence both upstream suppliers and downstream customers (Vadakkepatt et al. 2021). As customer-facing stakeholders, they can encourage and incentivise consumers to be more sustainable, not only by improving the sustainability of their products, but also by influencing consumer behaviour (Gossen et al. 2019). However, promoting sustainable and sufficiency-oriented consumption is not without its challenges, as retailers are usually interested in the rapid marketing and sale of products. Why, then, should retailers advise their customers to buy less and buy more responsibly? Fortunately, research shows that some of the trade-offs between economic self-interest and sustainability can be partially overcome.

Gossen et al. (2019), as well as Bocken and Short (2016), provide overviews on business and marketing practices and approaches that promote sufficiency-oriented consumption, which they define as the avoidance of over- and under-consumption in affluent societies. One example is the anti-consumption campaign of the fashion label Patagonia, which advertises its clothing with slogans such as 'Don't buy this jacket'. In general, research suggests that brands can benefit from marketing aimed at reducing consumption by improving the image of a product's quality (Hwang et al. 2016). This could also be applied to the retail of durable goods, where the benefits of long-lasting and high-quality products can be communicated to customers. A prerequisite for this is to provide customers with more information on the durability of products at the point of sale. To this end, the EU has already taken several measures in recent years as part of its Green Deal. Under the so-called EU Sales Directive (Directive 2009/125/EC), customers should expect products to have a reasonable lifespan, and retailers must provide information on support periods for software and spare parts, especially for electronic products. In addition, the European Commission plans to introduce a digital product passport for all products, which will include information on durability, repair, and other information relevant to the product's lifetime (EC 2022b). Consumers should have access to all the information they need at the point of sale to make informed and

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12 Regulation (EU) 2019/424.

more sustainable purchasing decisions. Of course, not every retailer will benefit from more transparency in the marketplace, but, given the need for more sustainable consumption and production patterns, the measure seems reasonable and overdue. Although surveys clearly show that most consumers want information about the durability and repairability of products (Gnanapragasam et al. 2018), the impact of more transparency is not always clear and does not guarantee that consumers will switch to more durable products. However, increased transparency on product durability offers the potential to disadvantage short-lived products at the point of sale; this approach could go even further and include the deliberate demarketing of short-lived products on the market.

The concept of pro-environmental demarketing aims to suppress demand for certain products that are either scarce (e.g. electricity or water) or not desired by market authorities (e.g. drugs and counterfeits) (Ramirez et al. 2017; Kotler 2011). For retailers, this could include better placement and active recommendation of more durable products, or even excluding items from the store that do not meet certain quality criteria. Although customers highly value information on the durability of products, leading retailers in the durable goods market do very little to meet this specific customer need. While grocery retailers have been successful in implementing a variety of rating and labelling systems that indicate a product's sustainability and environmental profile, retailers in the durable goods sector are still lacking in initiatives that provide greater transparency regarding the repairability, durability, and longevity of products.

## **5.5 Conclusion: from product rotation to deceleration and circularisation**

According to market research, sustainability is one of the biggest value drivers in retail (Deloitte 2021). Although rapid market cycles, immense product proliferation, and the ongoing discount battles show that retailers still rely heavily on the traditional 'make, take, and dispose' business model, there is a great opportunity for retailers to become key players and operators in a circular economy.

As the nexus for hundreds of millions of products and billions of customers worldwide, retail is in the best position to organise the bidirectional flow of materials and information along the supply chain that is necessary to make

a circular economy work. Retailers are experts at sourcing and distributing products and materials, so why not use their skills to bring material back into the loop? Some deposit schemes are already in place, such as the generally successful bottle deposit scheme in Germany. In addition, retailers selling electronic equipment in Europe are required by law to take back old electronic equipment for disposal.<sup>13</sup> A revised law in Germany, ElektroG3, even requires food retailers to take back electrical equipment. Others, particularly fashion retailers, have successfully established take-back schemes on a voluntary basis. Some retailers have already started to offer used goods alongside new goods (Höfler 2021). According to market studies, the second-hand market and re-commerce are among the fastest-growing retail sectors (Deloitte 2022). These are all good developments that are slowly becoming mainstream.

In recent decades, retailers have become increasingly integrated into the vertical supply chain and have expanded their product and service offerings. In doing so, they have not only gained a great deal of knowledge about how markets work, but they have also become an important data hub for all product-related information. The flow of information is important in creating and providing opportunities for sustainable practices and in helping supply chain members to coordinate (Vadakkepatt et al. 2021). As part of the European Green Deal, retailers will be more involved in market surveillance to ensure that products meet all environmental and social standards. This includes the introduction of a digital product passport that must be accessible at the point of sale (EC 2022b). Ultimately, the question remains whether all this is enough for retailers to build economically successful circular business models. As the previous analysis has shown, most retail business is based on the rapid and highly competitive rotation of products in the market, which is inherently opposed to the idea of longevity, with retailers constantly under pressure to introduce new products more quickly. In contrast, retailers are in a unique position to benefit from any type of emerging circular business model, and they have a great opportunity to provide better products to people.

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