Golden homes and gardens: Shift in demand by German consumers due to COVID-19 pandemic

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Abstract

Research background: The COVID-19 pandemic led to a change in consumer demand behavior worldwide. Due to the pandemic, individual sectors and industries experienced enormous demand or significant decreases in demand. Hardly any sector or industry remained unaffected by the influences and consequences of the COVID-19 pandemic. Due to the many worldwide restrictions of private travel, many German consumers stayed in their home country. German tourists are internationally regarded as world champions in travel, so the lack of private long-distance travel led to implications for other sectors. Another trend that has emerged in the wake of the COVID-19 pandemic is the so-called cocooning. Cocooning is the term used by trend researchers to describe a tendency for consumers to increasingly withdraw from civil society and the public sphere into their private lives at home. This combination of a lack of private travel and a retreat into private domestic life has led to enormous growth in the furniture, household goods, garden, and home improvement sectors.
Purpose of the article: The pandemic-related shift in demand is examined using secondary market data. These are first systematically researched, reviewed, and analyzed. Then, by using growth figures, the German home and garden market is examined based on sales figures and pandemic-related changes are shown. Furthermore, the individual sales channels, the relevant market players, and market shares under the pandemic's influence will be analyzed.
Methods: Systematic analysis of market information and datasets in the home and gardening sector in Germany.
Findings & Value added: Creation of an information base regarding the shift in demand of German consumers in the wake of the COVID-19 pandemic.

Keywords: *shift in demand; home and garden market; consumer trends; impact of COVID-19*

JEL Classification: *L10; L11; L22; L67; L68; R20*

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1 Introduction

In April 2020, at the peak of the first wave of infections in the COVID-19 pandemic, international air travel had almost come to a standstill with a decline of -97 % compared to the previous year; in January 2021, the decline was still at -87 % (Fröhlich & Koch, 2021). The effects of these dramatic developments are particularly evident among German consumers. The combination of a high-income consumer group and the fact that they have a high number of paid vacation days makes German consumers the world's travel champions. For example, German consumers take 70.8 million vacation trips per year. While international air travel came to a standstill in 2020, vacationing in Germany became more popular but not more feasible. There is only limited capacity for vacations in Germany, and these experienced repeated phased closures or strong regulations and guest limitations (Deutscher Tourismusverband, 2021). Thus, a change in demand among German consumers quickly emerged. This change is particularly evident in the increased consumer spending in the home and garden sector of the economy (Bapuji et al., 2020). Although this sector was also affected by the pandemic-related closures, sales here shifted from stationary distribution to digital and experienced record levels in 2020. These factors make the COVID-19 pandemic a catalyst for this industry and accelerate the sector's structural changes (IFH Köln, 2021; Ketchen & Craighead, 2021). The German economy received a further boost from a temporary reduction in value-added tax (VAT). To mitigate the negative impact of the COVID-19 pandemic on the economy and society, the German government enacted a comprehensive economic stimulus package on July 1, 2020. One of the measures included a temporary reduction in VAT rates, which was intended to boost consumption and support businesses. In the second half of 2020 (temporarily from July 1, 2020, to December 31, 2020), the standard tax rate was reduced from 19 % to 16 % (Egner, 2021). This combination of no vacations and free consumption budget, lockdown regulations, and government stimulus package is historically unique. Therefore, this article addresses the study of a demand shift and the implications for the home and garden economic sector.

2 Theoretical framework of the research

2.1 Shift in demand

In microeconomic terms, the demand curve indicates the quantity of a good that consumers want to buy per unit in the event of a price change. However, the quantity of goods consumers want to buy is also influenced by other factors. An important factor is income. With higher income, consumers are able to spend more money on any good. Therefore, some, (though not all) consumers increase demand with increased income (Singh, Lentz & Nijssen, 2011). From time to time, in almost all markets, there is a shift in the demand and supply curves. For example, disposable income rises or falls due to economic growth and recessions (Judge, Fainshmidt & Lee Brown, 2014). Furthermore, price changes or changes in consumer tastes can explain shifts in the demand and supply curves. Additionally, wage and capital costs, as well as commodity prices, change. Thus, an ideal market equilibrium rarely exists (Harrison, Horridge & Pearson, 2000). Moreover, demand and supply curves are stimulated by exogenous shocks. These exogenous shocks are surprising market changes (exogenous variables) that occur once. No market participants can anticipate the magnitude or the timing of the exogenous shock (Pindyck et al., 2018; Grewal & Dharwadkar, 2002).

The COVID-19 pandemic can be considered an exogenous shock according to the above criteria. The impact on the demand and supply curves is multifaceted and is addressed in this article.

2.2 Cocooning as a trend

The term consumer cocooning as a consumer trend was first picked up by Popcorn in the 1990s. Here, author Popcorn defines cocooning as *"the impulse to stay inside when it gets too tough and scary outside, like turning a home into a nest."* The term consumer cocooning describes a shift in consumption from the outside to the inside. Thus, one's home becomes a place for multiple consumption needs such as education, culture, work, and leisure (Popcorn, 1991). In the process, this consumer trend is supported by digital commerce and remote work. Three forms are distinguished in the consumer trend of cocooning: The first form is social cocooning. This form is defined by moving everyday life into one's home. The second form is migratory cocooning. This form anticipates isolation using a mobile device (tablet or smartphone) that eliminates direct engagement with the outside world through technical equipment. The third form is called armored cocooning. This form includes an overcautiousness toward the virtual and analog outside world (Zalega, 2018; Wang et al., 2020).

It becomes clear that the pandemic conditions with soft prompts (e.g., home office recommendation) and rigid impositions (e.g., closure of brick-and-mortar retail, cultural venues, educational institutions, and sports and leisure activities, and reduction of social contacts) led to a cocooning situation in Germany (Bundesregierung, 2020; Nyberg, Shaw & Zhu, 2021). Many German consumers had to shift their center of life into their own homes for weeks and months and this major change to their everyday lives was not without consequences (Foss, 2020; Dheer, Egri & Treviño, 2021). One of those were record sales in the home and garden sector, which is the subject of this article.

3 Practical framework of the research

3.1 Economic indicators of the German market

Germany generates more than a quarter of the total GDP (Gross Domestic Product) of the Eurozone. Germany's most important economic sector is the service sector, with a share of 69.7 %, followed by the industrial sector with 29.4 % of the country's GDP in 2019. Due to strong domestic demand and export activities, Germany recovered quickly and sustainably from the financial crisis in 2008. In 2012 and 2013, the debt crisis slowed economic growth in the short term (0.4 %). However, due to strong export growth, the economy recovered from 2014 on. Trade wars between the USA and China between 2018 and 2019 also affected economic growth in Germany. The most significant impact on the economy in Germany (and globally) was recorded by the COVID-19 pandemic. In 2020, this caused a -5.9 % decline in economic growth in Germany. This was due to decreased domestic demand and global lockdown measures (MarketLine, 2019). Table 1 shows the most important key figures for the German market.

Table 1. Germany: key fundamentals, 2019-2024.

	2019	2020*	2021*	2022*	2023*	2024*
GDP, constant 2010 prices (US-$ tn)	3.96	3.73	3.90	3.98	4.06	4.13
GDP growth rate (%)	0.60	-5.90	4.58	2.08	1.93	1.82
GDP, constant 2010 prices (US-$)**	47,625	44,743	46,729	47,652	48,526	49,369
Inflation (%)	1.45	0.78	1.52	1.57	1.66	1.74
Mid-year population (million)	83.16	83.29	83.40	83.49	83.57	83.63
Unemployment rate (%)	3.17	5.55	5.27	5.10	4.95	4.75
Mobile penetration (per 100 people)	130.05	130.18	130.31	130.44	130.57	130.70

Source: MarketLine, 2019 [Note: GDP = gross domestic product, * = forecast ** = per capita].

3.2 Slump in sales in the tourism industry due to the COVID-19 pandemic

Around 57.8 million passengers took off or landed at the 24 largest commercial airports in Germany in 2020. The number of passengers thus decreased by -74.5 % compared to the previous year. All travel regions were similarly affected by this: While the number of passengers in European traffic fell by -74 %, the figure for intercontinental traffic was -77 %. In particular, air traffic to the essential destination countries USA (-80 %) and China (-88 %) slumped at an above-average rate. Domestic air traffic also fell by -75 % overall in 2020. The year 2020 thus recorded the lowest volume of passengers since German unification (1991: around 63 million passengers). By comparison, 2019 was a record year with a volume of 226.7 million passengers. The dramatic effects are also evident in the tourism industry. From April to June 2020, travel suppliers' sales were -91 % lower than in the same period in 2019 (Statistisches Bundesamt, 2021a, 2021b).

3.3 Industry overview for the home and garden market in Germany

The home and garden market is highly fragmented. The largest supplier, Ikea Deutschland GmbH & Co. KG, combines a market share of 7.1 %, measured in terms of retail sales in 2020. The second-largest supplier, Robert Bosch GmbH, has a market share of only 1.3 %, while the third-largest supplier, nobilia-Werke J. Stickling GmbH Co. KG, has a market share of only 0.9 %. Mostly, the players in the home and garden market hold a market share of ≥ 0.5 % (Euromonitor International, 2021). Before the COVID-19 pandemic, the vast majority (88.8 % in 2019) of sales were made via stationary retail (Jonsson & Foss, 2011). Here, non-wholesale specialty stores (66.3 % in 2019) were the primary distribution platform. Grocery retailers (17.3 % in 2019) and mixed retailers (5.2 % in 2019) also represented an important distribution platform. E-commerce sales were 9.7 % (in 2019) before the COVID-19 pandemic. Home shopping (0.9 % share of sales in 2019) and direct selling (0.6 % share of sales in 2019) are less relevant distribution channels for the industry. Sales in the home and garden market have grown consistently by 1.5 % per year over the past five years, reaching a level of EUR 23.9 billion in Germany in 2019 (Euromonitor International, 2021; Ciravegna & Michailova, 2021).

The practical framework of the research conducted puts three parts together: (1) It is made clear that Germany is a valuable sales market in terms of domestic demand and foreign companies. Furthermore, critical economic figures underline the attractiveness of the German market. (2) It is established what a historical slump the tourism industry experienced due to the COVID-19 pandemic. (3) It is shown how the home and garden market in Germany has been up to the third quartal of 2021.

Bringing together the theoretical and practical framework of the conducted research, it is shown that the exogenous shock in the form of the COVID-19 pandemic led to a change in demand in Germany. Long-distance travel stopped, consumers thus shifted their budgets, and the home and garden market benefited from the pandemic's regulations with an increasing trend toward cocooning. All the factors described are closely interconnected and should not be viewed in isolation. Instead, these factors demonstrated are closely interdependent. This combination of factors and the resulting implications will be empirically tested in the following.

4 Data and Methods

Based on the market data from Euromonitor International 2021, the market changes for the home and garden market are examined. In addition, the market changes before, during, and after the COVID-19 pandemic are examined. The following hypotheses are evaluated:

- $H_{0.1}$: Sales in the home and garden market show no market changes between 2019 and 2020.
- Alternative hypothesis H_1: Sales in the home and garden market did change from 2019 to 2020.
- $H_{0.2}$: Home and garden market sales showed no increases between 2019 and 2020 in e-commerce.
- Alternative hypothesis H_2: Sales in the home and garden market did increase between 2019 and 2020 in e-commerce.

5 Empirical findings and discussion

The market changes are examined based on the COVID-19 year 2020. This means that the year 2020 represents the comparative value. First, the market changes before the COVID-19 pandemic (years 2016 to 2019) are examined. Subsequently, the projected market change after the pandemic (years 2021 to 2025) is analyzed.

The Home Improvement and Gardening market segment grew at an average annual rate of 1.3 % between 2016 and 2019. In the year of the pandemic (2020), the market growth was 6.1 %. The Home Improvement and Gardening market segment can be further divided into the two sub-segments Home Improvement and Gardening.

The Home Improvement sub-segment grew by 1.2 % and the Gardening sub-segment by 1.8 % per year between 2016 and 2019. In the pandemic year 2020, the sub-segments achieved annual growth of 6.5 % (Home Improvement) and 5.3 % (Gardening).

This development represents a significant increase in sales in 2020. The market for Homewares and Home Furnishings, on the other hand, recorded a slight decline. While growth averaged 1.4 % per year between 2016 and 2019, this dropped to 1.1 % in the pandemic year. Thus, it seems that the pandemic is having a delayed effect on this market. The forecast for 2021 shows a market decline of -3.9 %. This decline is mainly due to the sub-segment Home Furnishings (-4.5 %). Thus, an ambivalent market change is visible.

The Home Improvement and Gardening segment benefited from the pandemic, but the Homewares and Home Furnishings segment did not. The further forecasts for 2021 to 2025 look pessimistic for both, the Home Improvement and Gardening and the Homewares and Home Furnishings segments. Here, an average decline of -0.1 % (Home Improvement and Gardening) and -0.2 % (Homewares and Home Furnishings) is forecast. An overview of the market changes can be seen in Figure 1.

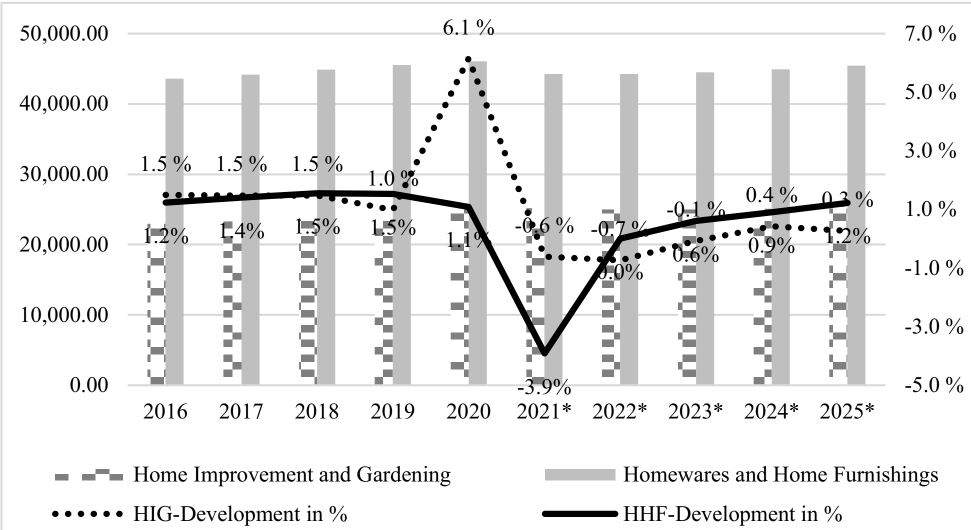

Figure 1. Home and garden market Germany, 2016 to 2025

Source: Own analysis based on data from Euromonitor International (2021) [Note: HIG = Home Improvement and Gardening Development in percentage to the last year, HHF = Homewares and Home Furnishings Development in percentage to the last year, and * = Forecast].

The $H_{0.1}$ can be rejected, and thus the alternative hypothesis H_1 can also be accepted. Market changes due to the COVID-19 pandemic can be identified in the segments Home Improvement and Gardening and Homewares and Home Furnishings. However, these market changes show different outcomes.

5.1 Distribution of the Home and Garden Market

The distribution changes are examined based on the COVID-19 year 2020. This means that the year 2020 again represents the comparative value. First of all, it can be seen that the share of non-store retailing (meaning home shopping, e-commerce, and direct selling) in the home and garden sector has increased slightly in recent years (2015 to 2019). The driver of this increase in the period under review was e-commerce (with an increase of 2.8 %), while the distribution channels of home shopping (-0.7 %) and direct selling (0 %) declined or stagnated. As a result, the share of non-store retailing grew between the years from 9.1 % (2015) to 11.2 % (2019). Complementary to this development is store-based retailing. This includes grocery retailers, mixed retailers, and non-grocery specialists. As a result, store-based retailing's share of sales was 90.9 % in 2015, but only 88.8 % in 2019. This decline is attributable to the mixed retailers' distribution channel. The COVID-19 pandemic reinforces all of these developments. Thus, the non-store retailing channel grew by 3.2 %, and the store-based retailing channel decreased by -3.2 %. The drivers of this shift were again e-commerce (with an increase of 3.2 %) and grocery retailers (increase of 0.4 %) for the observed growth and mixed retailers (-1.2 %) and non-grocery specialists (-2.3 %) for the decline.

5.2 Distribution of Home Improvement

The distribution changes in the Home Improvement sector are also examined based on the COVID-19 year 2020. The sales ratio between store-based retailing (average sales share between 2015 and 2019: 93.7 %) and non-store retailing (average sales share between 2015 and 2019: 6.3 %) is even stronger in the Home Improvement sector. While between 2015 and 2019, the share of sales in e-commerce developed positively from 4.4 % to 6.7 %, the distribution channel non-grocery specialists in particular decreased (from 73 % in 2015 to 70 % in 2019). Here, too, the pandemic year 2020 shows that these developments were reinforced. The e-commerce share of sales grew from 6.7 % in 2019 to 10.3 % in 2020. In contrast, the share of sales in the store-based retailing channel decreased by -3.7 % in the pandemic year. The distribution changes for the Home and Garden Market and the Home Improvement Market can be seen in Figure 2.

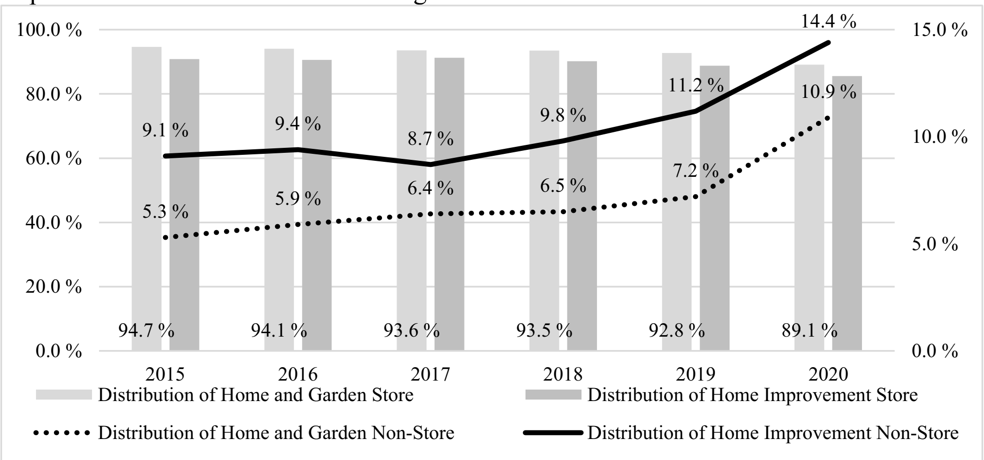

Figure 2. Distribution Home Improvement, Home and garden market Germany, 2015 to 2020

Source: Own analysis based on data from Euromonitor International (2021) [Note: Direct selling is excluded from
the analysis].

$H_{0.2}$ is rejected, and therefore the alternative hypothesis H_2 is accepted. Distribution changes due to the COVID-19 pandemic can be identified. The e-commerce distribution channel increased significantly during the pandemic.

6 Conclusion

From today's perspective, the course of the COVID-19 pandemic is still uncertain. After the third wave in Germany, the fourth wave is already being heralded by the delta variant. It is already clear that the COVID-19 pandemic can be regarded as a historical event. The measures taken so far, especially in the first and second waves, have been limited (in the absence of a vaccine) to contact reduction. As a result, many German consumers (and also consumers worldwide) were forced to stay at home. This circumstance supported or instead forced the trend of cocooning. At the same time, German consumers were only allowed to go on vacation on a strictly limited basis. Here, the assumed shift in demand towards Home and Gardening took place.

Furthermore, the digital distribution channel became the decisive market access, with brick-and-mortar retail closed due to the pandemic. It remains to be seen what additional shifts in demand can be expected in the event of a long-term pandemic development. It has already been shown that many industries have had to find digital solutions very quickly. Therefore, these digital offerings must be expanded further in the event of a long-term pandemic development and benefit from the circumstances of the pandemic.

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