Office for National Statistics

Article

Coronavirus (COVID-19) and its effects on household consumption, UK: January 2020 to December 2021

The impact of the coronavirus (COVID-19) pandemic on UK household expenditure. Including new analysis of credit card transaction data on household spending patterns in December 2021.

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Table of contents

1 . Main points

- Unprecedented public health measures during the coronavirus (COVID-19) pandemic caused a larger and more uneven impact on household spending on goods and services than following the 2008 global financial crisis.

- Reduced spending in restaurants, hotels, and transport were the main drivers of the overall fall in spending since the start of the coronavirus pandemic, along with some changes in how goods and services are consumed following the start of the recovery.

- New insights from card spending transactions show that the emergence of the Omicron variant in late 2021 led to relatively low levels of spending in pubs, restaurants, and fast food, entertainment, and travel and hotels, while there was a relative increase in spending on food and drink from supermarkets and convenience stores.

2 . Overview

The coronavirus (COVID-19) pandemic and the introduction of lockdowns and other public health measures led to the temporary closure of many businesses and shifts in household spending.

We present our latest estimates on how consumer spending has evolved during the pandemic. We also compare changes in the types of goods and services purchased during the pandemic with those purchased during the impact of the global financial crisis. We also use higher-frequency credit card transactions data to provide insight into the effects of the Omicron variant in late 2021.

From Quarter 1 (Jan to Mar) 2020, estimates of household final consumption expenditure have been subject to more uncertainty than usual. The temporary suspension of the Living Cost and Food survey (LCF), and other data sources for Office for National Statistics household expenditure estimates have led to some difficulties with data surveying and collection.

3 . Comparing household spending during the global financial crisis and the coronavirus pandemic

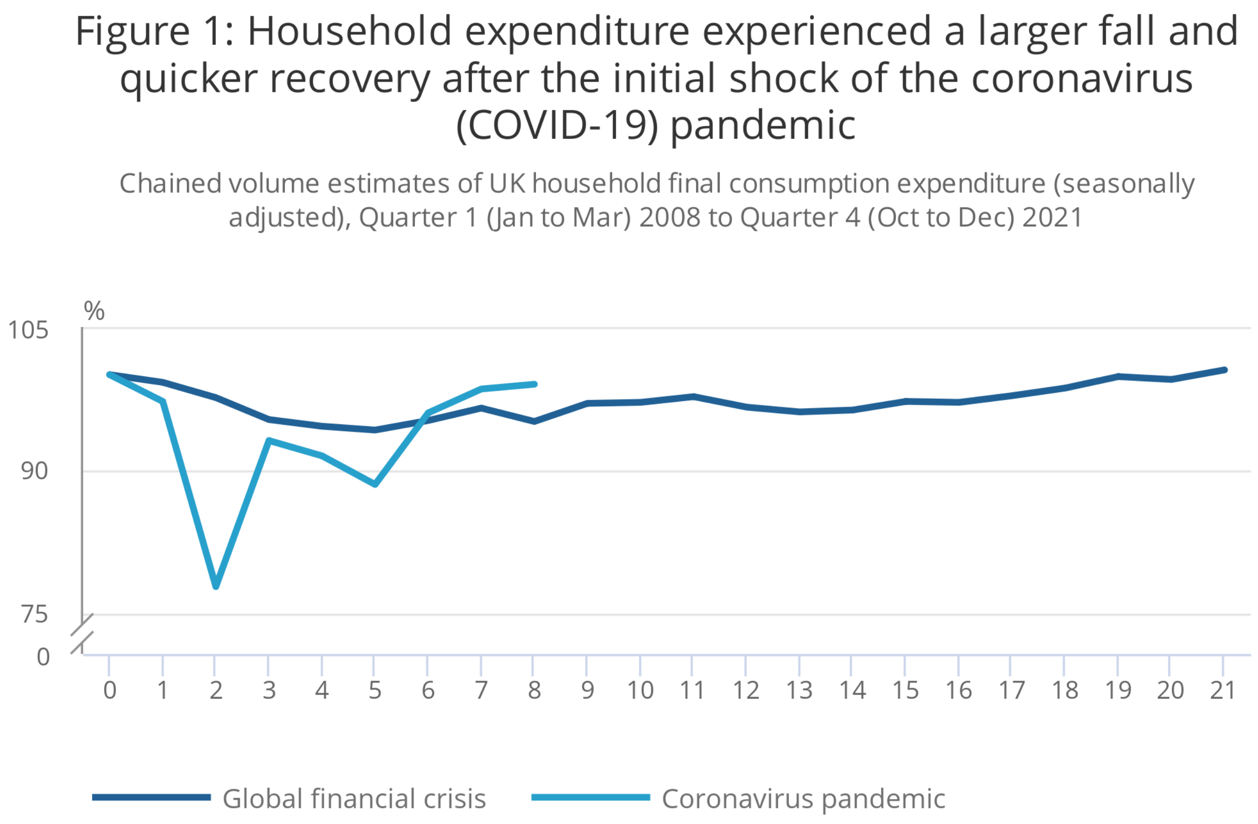
The impact of the coronavirus (COVID-19) pandemic on household spending has been more striking than that of the 2008 to 2009 global financial crisis (GFC). This reflects the effects of coronavirus restrictions that were in place during 2020 and 2021, which particularly affected non-essential retail, hospitality, and recreational and cultural industries (Figure 1). [Recent analysis from the Opinions and Lifestyle Survey (OPN)] found that 45% of respondents avoided close contact with people they do not live with to avoid infection, compared with 94% when surveyed in April 2020. This highlights how consumer behaviour has changed over time. Households were more cautious in the earlier stages of the coronavirus pandemic.

The effects of the coronavirus pandemic hit household spending harder and faster than following the GFC. During the first two quarters of the pandemic, household spending fell 22.2% because of the introduction of lockdowns and other public health restrictions. These particularly affected “social spending”, such as dining in restaurants and cafes, recreation, and culture.

Household spending recovered 19.6% in the following quarter and had almost returned to pre-coronavirus pandemic levels two years after the start of the pandemic, while household spending took over five years to recover following the GFC (Figure 1). This likely reflects the fact that household incomes have largely been protected since the start of the pandemic given the availability of government schemes such as the Coronavirus Job Retention Scheme and the Self-Employed Income Support Scheme.

Figure 1: Household expenditure experienced a larger fall and quicker recovery after the initial shock of the coronavirus (COVID-19) pandemic

Chained volume estimates of UK household final consumption expenditure (seasonally adjusted), Quarter 1 (Jan to Mar) 2008 to Quarter 4 (Oct to Dec) 2021



Source: Office for National Statistics - Consumer trends, UK

Notes:

1. The pre-recession quarter for the global financial crisis is Quarter 1 (Jan to Mar) 2008 and Quarter 4 (Oct to Dec) 2019 for the coronavirus pandemic.

Mass closures of parts of the economy and the shift towards working from home help explain the changes in spending habits over the last two years. During the height of the first UK lockdown (between 23 March and 5 April 2020), Office for National Statistics (ONS) Business Impact of Coronavirus (COVID-19) Survey (BICS) data found that 24% of businesses that responded had temporarily closed or paused trading. This is reflected in real-time indicators that track spending on credit and debit cards. The indicators have captured some of the behavioural responses to the coronavirus restrictions, in particular, social and work-related spending.

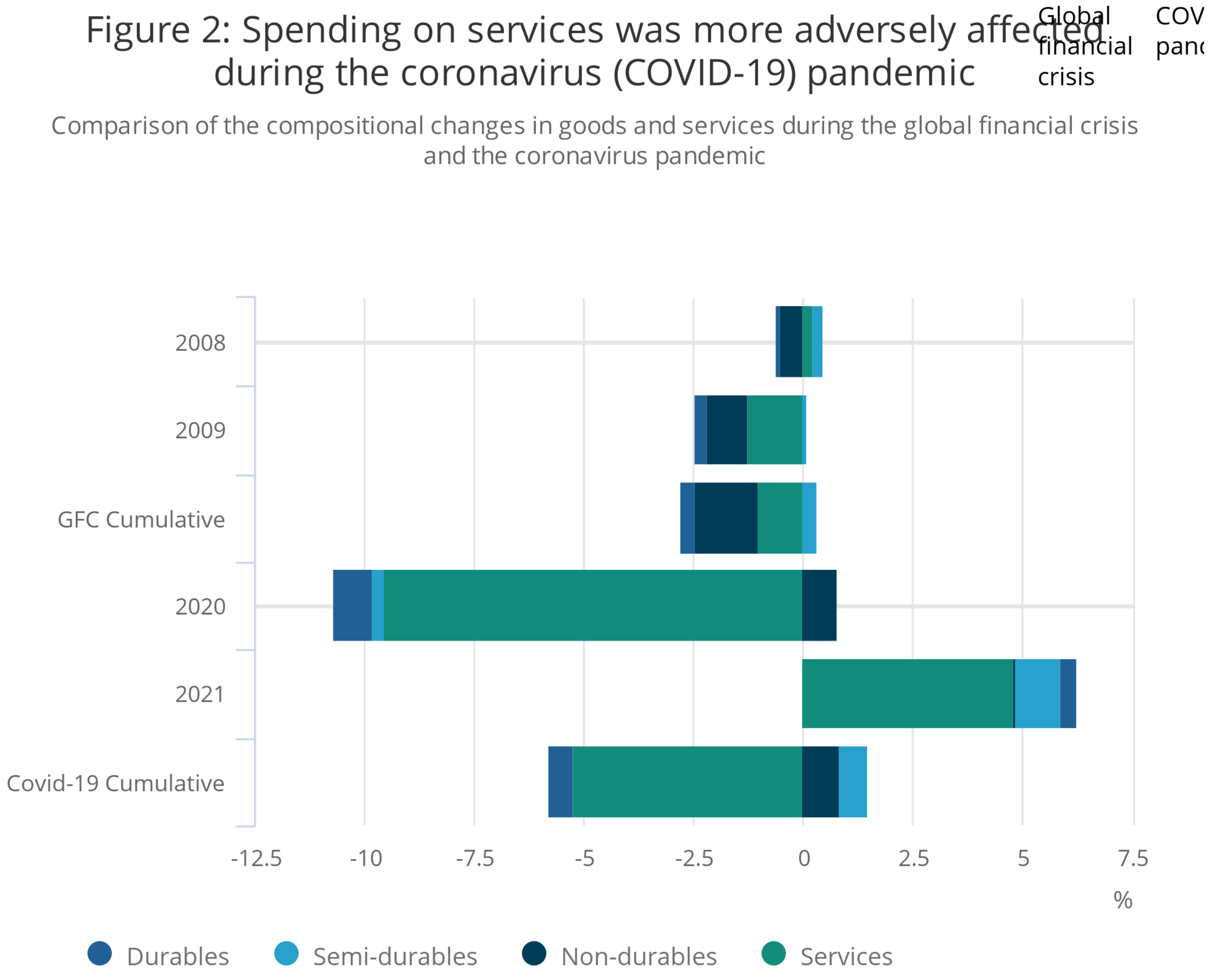
Recent ONS analysis on homeworking and household spending found that almost half (46%) of homeworkers who responded said they spent less money while working from home because of the coronavirus pandemic.

Figure 2 shows the comparison between the effect of the GFC and the coronavirus pandemic on household spending on goods and services. Household spending during the coronavirus pandemic saw lower spending on services. This is in contrast to the period after the GFC when the impact on household spending was smaller and more evenly distributed across goods and services.

This decrease in spending on services during the coronavirus pandemic was mostly driven by the tightening and easing of spending restrictions in high contact service industries. Other developed economies also experienced this shift between spending. The changes in relative demand and supply in the global economy may help explain some of the recent inflationary trends that have been experienced in recent months. For example, the latest Bank of England Monetary Policy Report says that it is this switch in demand from services to goods that has further worsened the supply chain disruption.

Figure 2: Spending on services was more adversely affected during the coronavirus (COVID-19) pandemic

Comparison of the compositional changes in goods and services during the global financial crisis and the coronavirus pandemic



Source: Office for National Statistics - Consumer trends, UK

Notes:

1. This shows the contributions to the annual percentage change in household final consumption expenditure, comparing the global financial crisis and the coronavirus (COVID-19) pandemic. This looks at domestic expenditure, which excludes net tourism spending.

2. The "cumulative" figures show the contributions to the net change in household final consumption expenditure over the respective two year periods – 2008 and 2009 for the global financial crisis and 2020 and 2021 for the coronavirus pandemic.

3. Total goods are the sum of the expenditures on durables, semi-durables, and non-durable goods. Durable goods are goods that can be repeatedly or continuously used over a period of more than a year. Non-durable goods and services can only be consumed or used once. Non-durable goods are items with shorter shelf-life, such as vegetables. Semi-durable is used to describe those goods that are used continuously or repeatedly over a period of a year but tend to have a shorter lifespan and a significantly lower purchaser price than durable goods.

4 . Changes in spending on goods and services

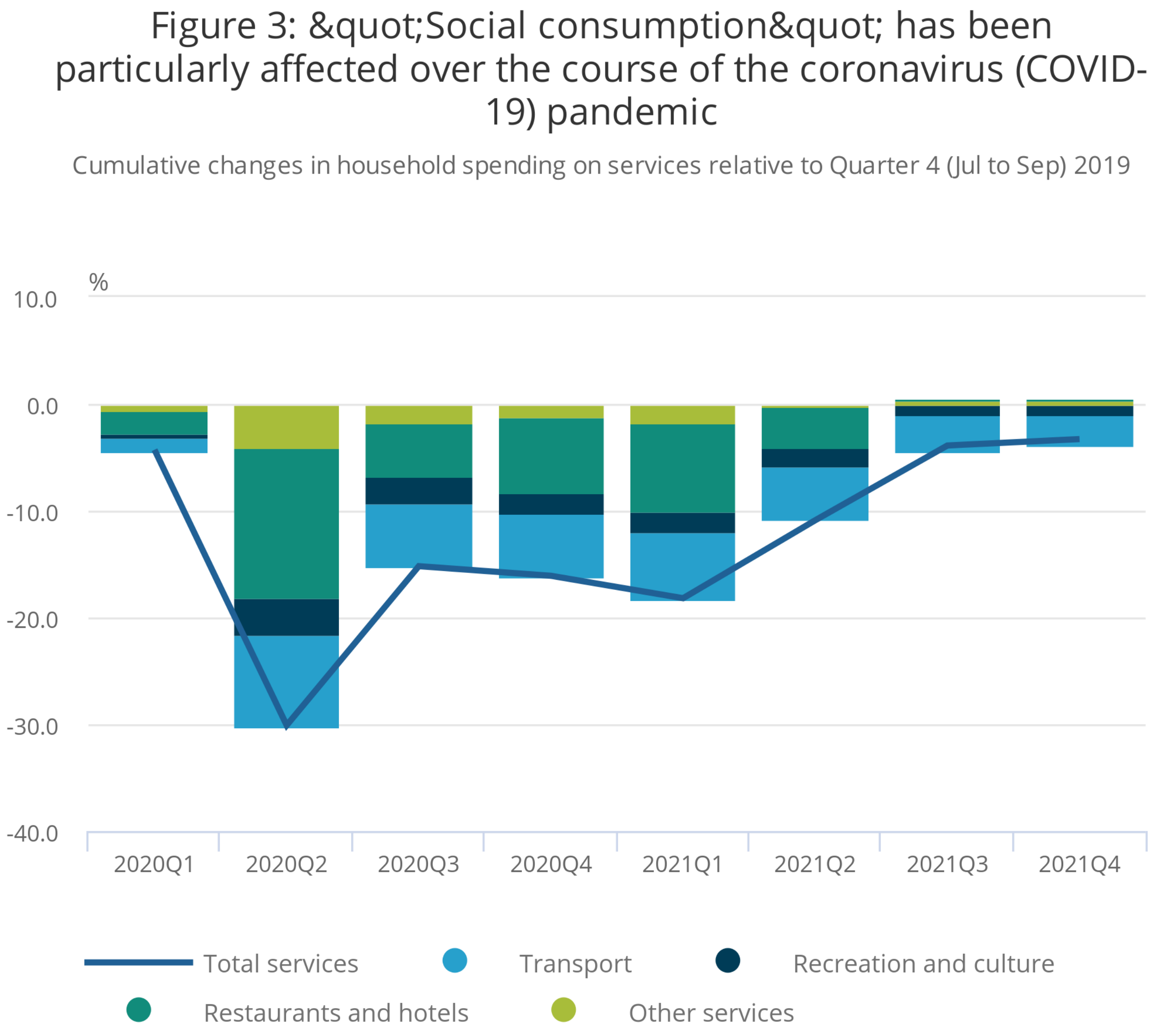
“Social consumption” refers to spending on eating out, leisure travel and cultural activities, which have been particularly affected by coronavirus (COVID-19) restrictions (Figure 3). Households have been unable and/or unwilling to spend on these types of social activities, because of the restrictions that have been in place and possibly also personal concerns for virus transmission. Figure 3 shows how household spending on services has evolved during the coronavirus pandemic relative to Quarter 4 (Oct to Dec) 2019, and that social consumption has been most affected.

The largest decline in spending on services for Quarter 2 (Apr to June) 2020 was mostly driven by restaurant and hotel services, mainly restaurants and cafés. Spending on transport services such as air and rail transport have also fallen sharply, reflecting the local and international mobility restrictions in place at the time.

Figure 3 also shows that within recreation and culture, spending on cultural services such as cinemas and theatres, as well as sporting services , which include gyms and live sport attendances, were most negatively affected for Quarter 2 2020. However, there was an increase in spending on pets and pet products, and veterinary services, which has been above its pre-coronavirus pandemic levels since Quarter 4 (Oct to Dec) 2020. This could be explained by the rise in the number of households with pets, from 41% of households with pets in 2019 to 2020 to 59% of households with pets in 2020 to 2021, according to the Pet Food Manufacturers’ Association.

Figure 3: "Social consumption" has been particularly affected over the course of the coronavirus (COVID-19) pandemic

Cumulative changes in household spending on services relative to Quarter 4 (Jul to Sep) 2019



Source: Office for National Statistics - Consumer trends, UK

Notes:

1. Transport services cover vehicle repair and services, and public transports such as buses and rail.
2. Restaurants and hotels services includes food and drinks sold by caterers such as restaurants, pubs, and accommodation services like hotels, and motels.
3. Recreation and culture services include repair and maintenance of equipment, veterinary and other services, sporting and arts, and gambling services.
4. Other services include spending on services for clothing and footwear, housing, furnishing, education and miscellaneous services.
5. Social consumption refers to spending on recreation and culture, and restaurants and hotels.

Spending in restaurants and hotels rose as coronavirus restrictions eased. The low levels of spending in transport services could be because of behavioural changes by households, such as the shift to working from home and local travel restrictions. Recent findings from the Opinions and Lifestyle survey on homeworking and spending show that half of homeworkers reported spending less on fuel and parking for commuting, and two-fifths reported spending less on commuting using public transport.

Office for National Statistics (ONS) analysis on how people spent their time during lockdown found that households were spending more time on leisure activities, such as gardening and DIY, in April 2020 when coronavirus restrictions were stricter. Spending on other services including hairdressing, education, and outpatient services grew as government restrictions eased. Expenditure on vehicle fuel and maintenance services recovered beyond its pre-coronavirus pandemic level following the end of the extension of the MOT test interval and as local travel restrictions loosened.

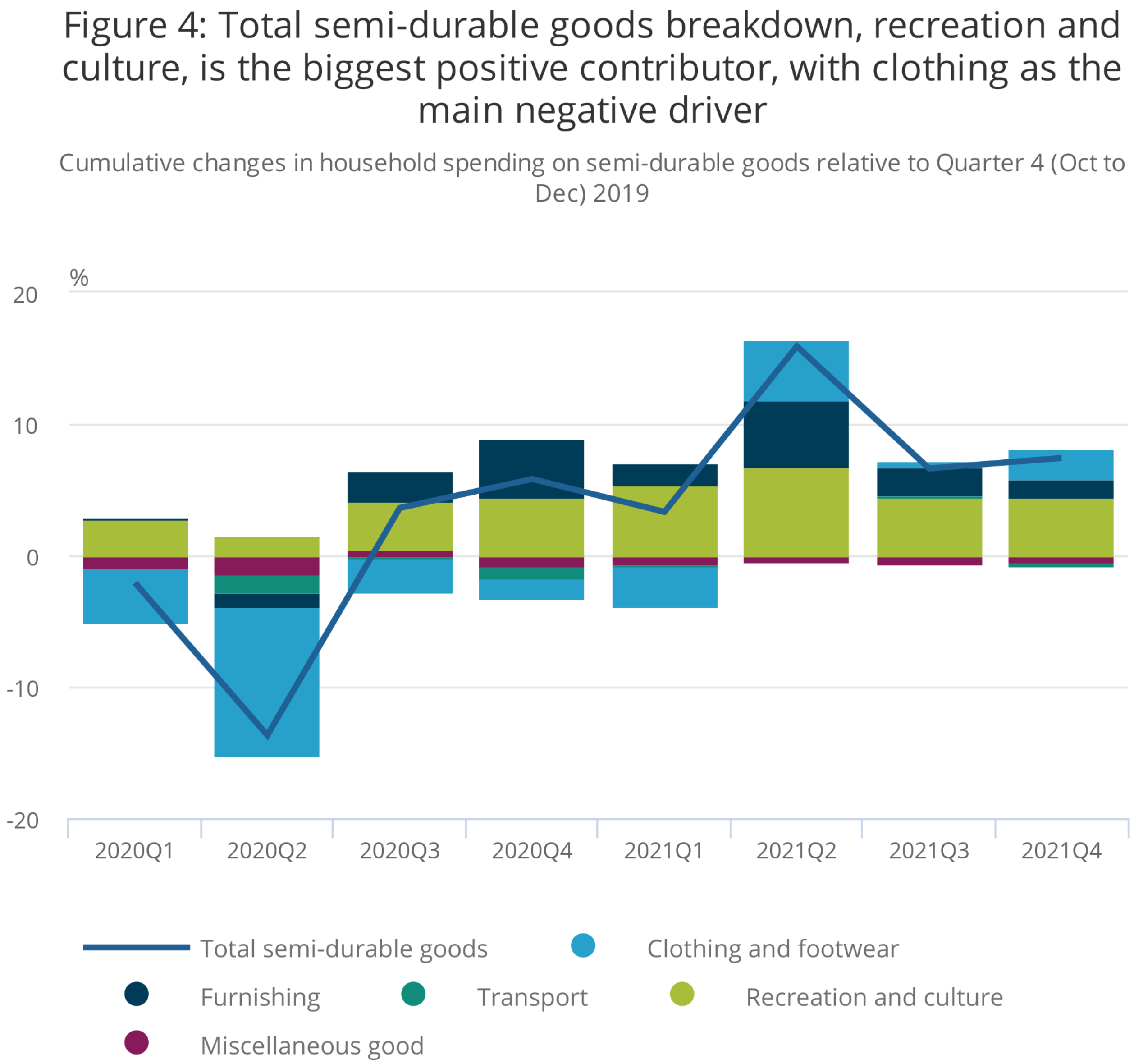
Household spending on goods has shown a faster recovery than spending on services. Figure 4 shows that while there was an initial decline in household spending on semi-durables, which can be mostly attributed to the closure of non-essential retail, spending recovered and exceeded pre-coronavirus pandemic levels in Quarter 3 (Jul to Sep) 2020. This recovery was mainly driven by spending on recording media, toys and hobby equipment, and sporting and camping equipment. The recovery may be linked to businesses expanding their online operations as more households turned to online shopping in response to the coronavirus pandemic; there was a rise in the share of online shopping in total retail sales.

Figure 4 also shows that there was a rise in home improvements and home entertainment (digital subscription and recording media). This could be explained by people spending more time at home because of homeworking and studying at home. This could also be linked to the housing market as evident in the Bank of England's 2021 Quarter 4 Credit Conditions Survey which shows the increase in demand for secured lending for house purchases and re-mortgaging over the coronavirus pandemic.

The rise in spending on equipment relating to staycations and outdoor exercising may be because more households chose to engage in outdoor leisure to mitigate the risks from COVID-19. Evidence suggests that as restrictions eased there was a rise in people visiting parks and travelling between local authorities as found by the Google COVID-19 Community Mobility Reports.

Figure 4: Total semi-durable goods breakdown, recreation and culture, is the biggest positive contributor, with clothing as the main negative driver

Cumulative changes in household spending on semi-durable goods relative to Quarter 4 (Oct to Dec) 2019



Source: Office for National Statistics - Consumer trends, UK

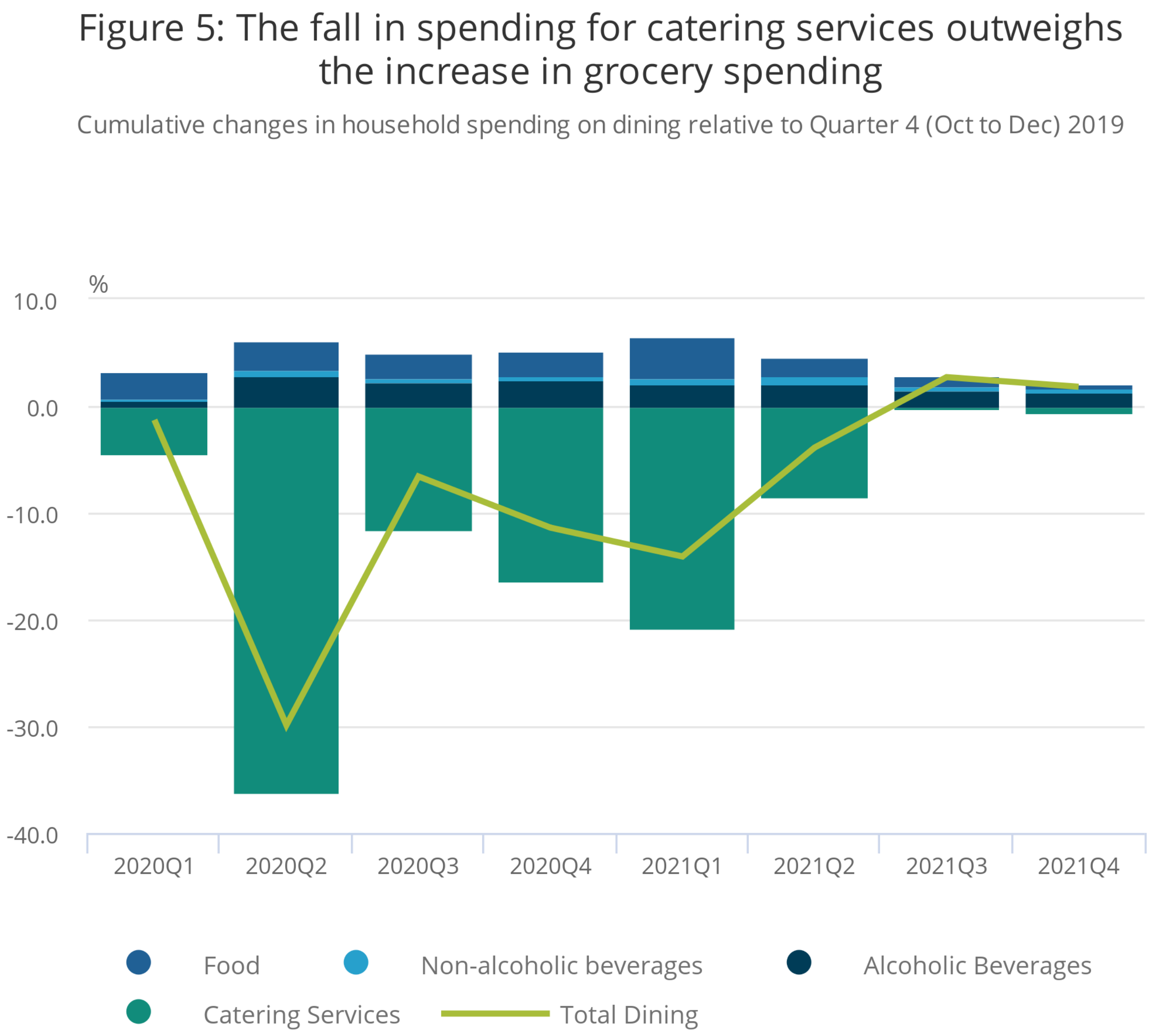
Notes:

1. Transport semi-durable goods cover motor vehicle spares.
2. Clothing semi-durable goods include clothing materials, garments, other articles of clothing or accessories, cleaning, repair and hire of clothing, and shoes and other footwear.
3. Furnishing and household equipment semi-durable goods include household textiles, small electric household appliances, household utensils, and small tools and minor accessories.
4. Recreation and culture semi-durable goods include spending on recording media, games, toys and hobbies, sports, camping and open-air recreation equipment, and books.
5. Miscellaneous semi-durable goods cover electric appliances for personal care and other personal effects.

There have also been some examples of shifts in spending between and within products. For example, Figure 5 shows ONS estimates of “total dining” which captures a broader measure of spending on food and drink – it covers spending on food, non-alcoholic beverages, alcoholic beverages, and catering services – and includes those consumed at home. There was a sharp fall in expenditure on catering services, but an increase in spending on food and beverages consumed at home. The subsequent recovery in catering services may be partially because of the inclusion of takeaways. Under coronavirus restrictions, more restaurants and pubs grew their takeaway services. As household spending on catering services recovered over the coronavirus pandemic, expenditure on food and beverage consumed at home fell.

Figure 5: The fall in spending for catering services outweighs the increase in grocery spending

Cumulative changes in household spending on dining relative to Quarter 4 (Oct to Dec) 2019



Source: Office for National Statistics - Consumer trends, UK

Notes:

1. Catering services covers meals, snacks, alcoholic and non-alcohol drinks sold by dining venues, as well as canteen meals.

2. Total dining is produced by combining the household spending in food, non-alcoholic beverages, alcoholic beverages, and catering services.

3. Alcoholic beverages cover those purchased for consumption at home. The group excludes alcoholic beverages sold for immediate consumption away from the home by hotels, restaurants, cafes, bars, kiosks, street vendors, automatic vending machines.

5 . The impact of the COVID-19 Omicron variant on household spending

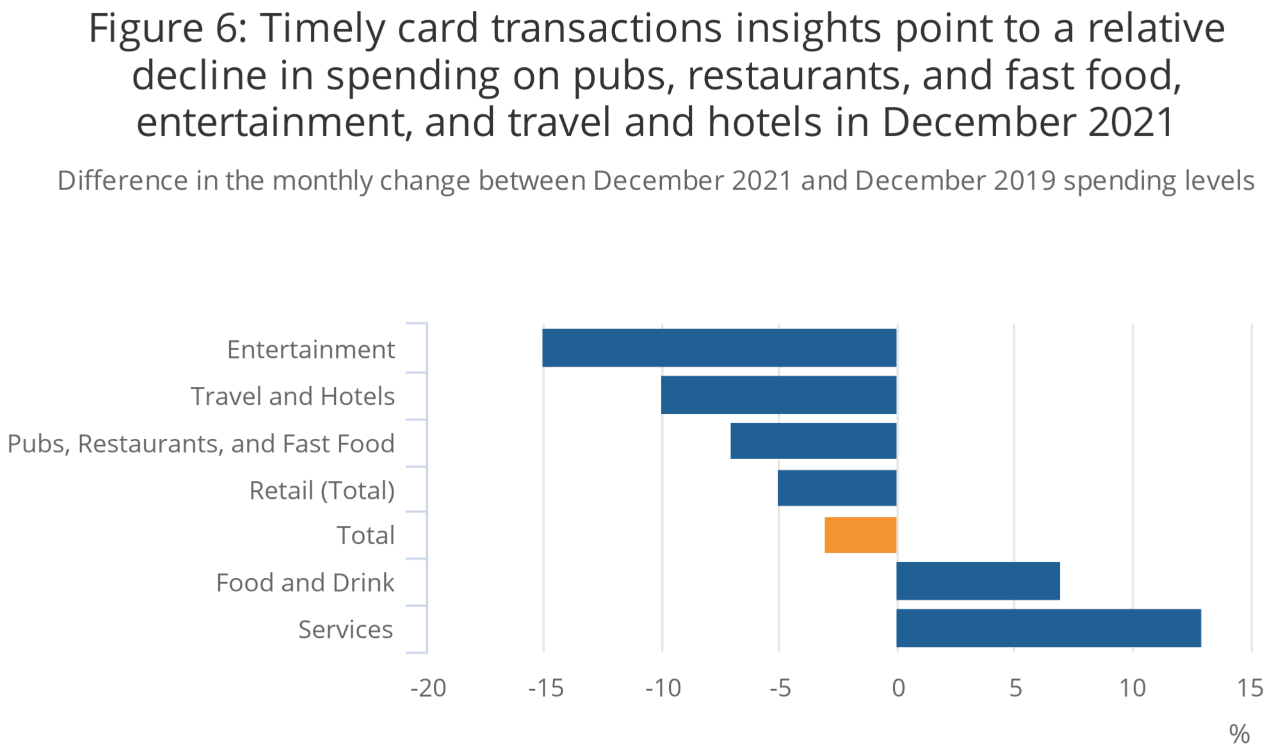
As part of our response to the coronavirus (COVID-19) pandemic, we have developed a range of real-time indicators to provide more timely and higher-frequency insights into how the economy is evolving over time. We have been working collaboratively with the financial technology company Revolut [note 1][1] which has allowed us to produce additional consumer spending insights. This includes understanding some of the impacts in response to the emergence of the Omicron variant in late 2021.

Figure 6 shows a relative change in card spending, comparing the change in the monthly levels in December 2021 with the change in the monthly levels in December 2019. Given the seasonality in these types of transactions, this differencing allows us to approximate what the effect of the Omicron variant might have been on "typical" spending in December 2021. Total card spending was 3% lower relatively in December 2021, particularly driven by declines in pubs, restaurants, and fast food, entertainment, and travel and hotels. These trends likely reflect the cautious behaviour by individuals to reduce the spread of Omicron and restrictions that were introduced in the UK.

There was a relative increase in spending on food and drink, which includes supermarkets and convenience stores, and might capture some shifts in demand by consumers. Services include financial services, utility and insurance, professional services, which are less likely to be affected by any type of restrictions.

Figure 6: Timely card transactions insights point to a relative decline in spending on pubs, restaurants, and fast food, entertainment, and travel and hotels in December 2021

Difference in the monthly change between December 2021 and December 2019 spending levels



Source: Revolut – Office for National Statistics (ONS) calculations

Notes:

1. Merchant category codes classify businesses dependent upon primary business categories, which are then grouped into higher, mutually exclusive sectoral levels.

2. Retail spending includes clothing, department, mixed retail, and household stores.

3. Food and drink includes supermarkets, convenience and other food providers.

4. Entertainment includes membership clubs, cinemas, ticketed events, sports, galleries, and tourist attractions.

5. Services includes financial services, utility and insurance, professional, and hospitality and personal services.

Notes for: The impact of the COVID-19 Omicron variant on household spending

1. Revolut customers tend to be younger and more metropolitan than average with a fast-growing customer base of several million in the UK, so spending may not be representative of the overall UK macroeconomic picture.

6 . Coronavirus and its effects on household consumption data

[Consumer trends: chained volume measure, seasonally adjusted]
Dataset | Released 31 March 2022
Quarterly and annual data on household expenditure in the UK, chained volume measure, seasonally adjusted. Estimates are consistent with Blue Book 2021.

Card spending trends: difference in monthly change December 2019 and December 2021
Dataset | Released 6 April 2022
Cardholder spending within the UK, total value measure, selected sectors, non-seasonally adjusted.

7 . Glossary

Household final consumption expenditure (HHFCE)

Household final consumption expenditure (HHFCE) is defined as personal expenditure on goods and services. Business expenditure, interest and capital expenditure on dwellings and valuables are all excluded from household final consumption.

Global financial crisis (GFC)

The global financial crisis (GFC) for this analysis covers the period between Quarter 4 (Oct to Dec) 2007 to Quarter 4 (Oct to Dec) 2009.

Chained volume estimates (CVM)

These time series have the effects of inflation removed by considering changes in quantity between consecutive periods, holding prices from previous periods constant.

Seasonal adjusted

A widely used technique for removing seasonal or calendar effects from time series data.

8 . Data sources and quality

Impact of the coronavirus (COVID 19) pandemic on household final consumption expenditure data

From Quarter 1 (Jan to Mar) 2020, estimates of household final consumption expenditure (HHFCE), along with other components of gross domestic product (GDP), are subject to more uncertainty than usual because of the challenges we faced in collecting the data under government-imposed public health restrictions.

In the case of HHFCE, these challenges have been made worse by the suspension of data collection for our International Passenger Survey (IPS) between March 2020 and January 2021 and the temporary suspension of our Living Costs and Food survey (LCF).

9 . Future developments

The coronavirus (COVID-19) pandemic has led to significant changes in UK household spending, driven by public health restrictions and wider behavioural changes. High-frequency credit card transactions data, which provide insights into the initial impact of the Omicron variant on spending, reinforced some of the earlier trends seen during the pandemic.

The extent to which any of the changes in how and what we consume that have been experienced over the last two years may continue into the future is uncertain. For example, increased levels of hybrid working could have an impact on where spending is taking place and what people are spending money on. On the other hand, the online share of retail spending has fallen considerably from its coronavirus pandemic highs, as shops and restaurants re-open. We will continue to provide insights on the extent to which we see any structural changes.

10 . Related links

Consumer trends, UK: October to December 2021
Bulletin | Released 31 March 2022
Household final consumption expenditure (HHFCE) for the UK, as a measure of economic growth. Includes all spending on goods and services by members of UK households.

Coronavirus and how people spent their time under lockdown: 28 March to 26 April 2020
Article | Released 27 May 2020
Experimental results of the pilot Office for National Statistics (ONS) online time-use study (collected 28 March to 26 April 2020 across Great Britain) compared with the 2014 to 2015 UK time-use study.

Coronavirus (COVID-19): disabled people are more likely to feel life will never return to normal
Article | Released 16 March 2022
With most restrictions lifted, over half of people in Great Britain were avoiding crowded places and spending more time at home in February 2022.

Homeworking and spending during the coronavirus (COVID-19) pandemic, Great Britain: April 2020 to January 2022
Article | Released 14 February 2022
Analysis of how working from home has affected individuals' spending, how this differs by characteristics, and how consumer spending has been affected.

Real-time indicators: a year on
Article | Released 7 June 2021
A review of the production and publication of real-time indicators by national statistical institutes in response to the coronavirus (COVID-19) pandemic including both the UK and international experience.