

## Characteristics of the demand for electronic goods in Spain

In the previous article, we presented to the reader the evolution of the demand for electronic goods in Spain from an aggregate standpoint, through the use of duly anonymised internal CaixaBank data. In this article, we will analyse the behaviour of this demand according to different sociodemographic segments.<sup>1</sup>

### Demand by age bracket

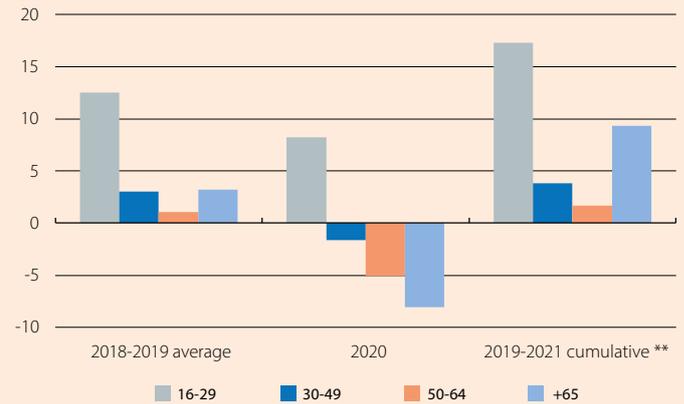
In the first chart, we show how spending on electronic goods in Spain has changed over time, split into four different age brackets.

In the pre-COVID period, there is a marked difference between the growth of spending on these goods among the younger segment of consumers compared to the rest: specifically, the growth was 10 pps higher among the younger group compared to the weighted average of the rest. That said, all age brackets showed positive growth.

With the advent of the COVID-19 crisis, it is clear that the trend in spending was closely correlated with age. In particular, the older the age group, the greater the decline in spending on this type of goods. Finally, the recovery during 2021 was significant across all age brackets, bringing the level of spending during the first half of 2021 above 2019 levels in all cases. Nevertheless, notable differences persist between the different segments: for the population between 16 and 29 years of age, spending was well above 2019 levels (more than 15% higher), while in the case of people aged 30 to 64 the cumulative increase was just under 5%. Somewhat surprisingly, the recovery in spending on electronic goods has been particularly strong in the 65-and-over age group: while this was the group with the biggest declines in 2020, its spending in the first half of 2021 was almost 10% above 2019 levels, 6 pps higher than in the case of those aged 30 to 64.

### Spain: consumption of technological goods by age bracket \*

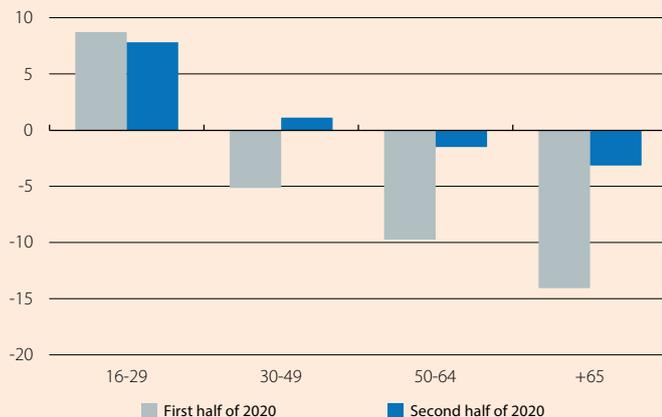
Annual change (%)



Notes: \* Consumption in nominal terms. \*\* 2021 includes data only up to June 2021 in order to avoid the potential impact of the disruptions in global supply chains on the demand for electronic goods. Source: CaixaBank Research, based on internal CaixaBank data.

### Spain: consumption of technological goods by age bracket

Year-on-year change (%)



Source: CaixaBank Research, based on internal CaixaBank data.

We have highlighted the inverse relationship between age and spending on electronic goods that occurred during 2020. This relationship comes as a surprise as it does not seem to occur so clearly in the pre-crisis years: while it is true that the younger group showed higher growth in spending on this type of goods than the other age groups, this is not the case when we compare the rest of the age groups to each other. For instance, the average spending growth in the 30 to 49 age bracket was very similar to that of the 65-and-over group in 2018 and 2019, but not in 2020.

One possible explanation for the relationship between age and spending on electronic goods in 2020 is the fact that as age increases, we see a decrease in the use of e-commerce.<sup>2</sup> Thus, when we look at the monthly behaviour of spending on electronic goods in 2020, there is a marked difference between the first and second half of 2020 (see second chart). In the 16 to

1. To approximate the total consumption of electronic goods, we use internal data on purchases of electronic goods based on credit and debit card usage, the historical percentages of payment types used to purchase these durable goods (mainly card and consumer credit) and the global growth figures for consumer credit (to correct for the sharp contraction in this type of credit in 2020). In the various sociodemographic segments, we will apply this latter correction symmetrically, since we do not have the level of detail necessary to differentiate between the different segments.

2. See the article «[The transition to e-commerce during the pandemic: everyone in equal measure?](#)» in the Dossier of the MR05/2021.

29 age bracket, spending grew at high rates in both halves of the year, indicating intense use of the e-commerce channel during the first half of 2020, given that face-to-face consumption was not possible from the second half of March until June 2020 due to the lockdown. In contrast, the other age brackets show much more pronounced declines in spending in the first half of 2020 than in the second half, and the higher the age range, the bigger the decline. This behaviour suggests that the lower use of the e-commerce channel as we go up the age brackets had a negative impact on people's spending decisions.

### Do geographical situation and wage income matter?

Secondly, we analysed the behaviour of spending on electronic goods according to whether it was carried out by people living in rural or urban areas.<sup>3</sup> As shown in the third chart, we did not see any substantial differences between the two groups. In the pre-crisis period, both groups showed a very similar rate of expenditure growth. In 2020, spending in rural areas held up better than it did in urban areas, but the difference in magnitude between the two growth rates, of only 1 pp, is not enough to conclude that there was differentiated behaviour. In addition, the greater recovery of spending in urban areas during the first half of 2021 allowed the gap that opened up in 2020 to be closed, or even reversed.

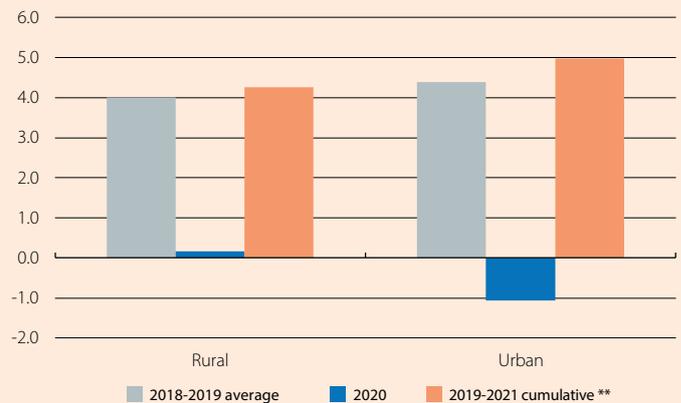
Finally, the data also do not show any significant differences when we look at the behaviour of spending on electronic goods disaggregated by wage income. In particular, in 2020, expenditure growth in the wage range of less 1,000 per month was 0.0%, while it was -1.4% in the 1,000 to 2,000 euros range, and +0.9% in the case of wages over 2,000 euros per month.<sup>4</sup> This result is surprising when we consider the fact that, in 2020, remote working, one of the factors that could have driven the demand for electronic goods, was more common among higher wage-earners.<sup>5</sup> One reason that could explain the absence of a clear relationship between expenditure on electronic goods and wages is that our data only capture the spending of individuals, whereas much of the investment that enabled the use of teleworking may have been made by entities (companies).<sup>6</sup> In contrast, spending on leisure-related technological goods used to offset the restrictions imposed on more social forms of entertainment – another likely source that has helped to boost the consumption of electronic goods – may have been more even across the income spectrum.

In short, the data show that the pattern of demand for technological goods differs according to the consumer's age bracket, and these differences were further accentuated during 2020, possibly due to the lower use of e-commerce among the older age groups. However, the data do not show any differential behaviour in demand between rural and urban settings, nor do they show any differences by income level.

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### Spain: consumption of technological goods in rural areas vs. urban areas \*

Annual change (%)



**Notes:** \* Consumption in nominal terms. \*\* 2021 includes data only up to June 2021 in order to avoid the potential impact of the disruptions in global supply chains on the demand for electronic goods.

**Source:** CaixaBank Research, based on internal CaixaBank data.

3. A municipality is defined as rural if it has fewer than 30,000 inhabitants or fewer than 100 inhabitants per square kilometre. Everything else is classified as urban.

4. The internal data do not include furlough benefits as wages. In order to control this factor, in 2020 we assigned to each observation the corresponding salary range according to the average annual salary observed in 2019, regardless of the salary observed in 2020.

5. See, for example, J.M. Barrero, N. Bloom and S.J. Davis (2021). «Why working from home will stick». National Bureau of Economic Research.

6. For example, it is common for companies to provide their staff with a laptop computer for the purpose of working remotely.