

## From banknotes to bizum: the intergenerational boost of the pandemic to digital payment methods

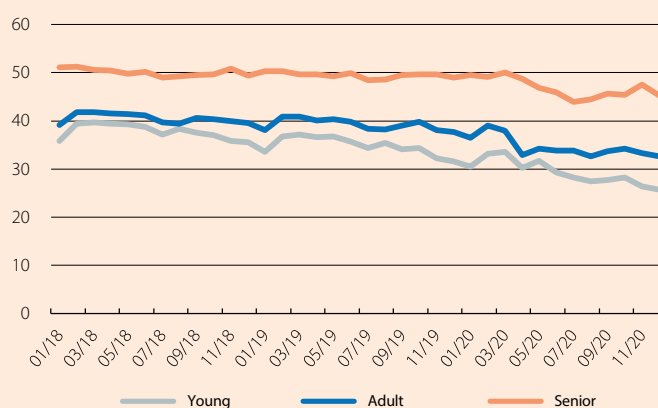
Soon we will once again be able to go to a restaurant for dinner with friends, like before. After enjoying the gathering, the food and the company, the time will come to pay the bill. Without giving it too much thought, we will most likely split it and each pay their share with their card or mobile, or perhaps one person will pay the full amount and the rest will *send them a bizum transfer* immediately afterwards. This situation which now seems so natural to us was not so just a few years ago, when everyone would most likely have paid their share in cash. The use of smartphones to pay a restaurant bill or share it among friends is a result of the spread of technological advances which, among many other transformations, facilitate digital means of payment over cash.<sup>1</sup> In the last 20 years, the use of digital means of payment has steadily increased in Spain. Card purchases in Spain have gone from around 1 billion transactions in the early 2000s to over 4.5 billion in 2019.<sup>2</sup> Over the same period, cash withdrawals have remained stable at around 900 million transactions a year. But are all generations joining this transition at the same speed? In this article we will analyse how young people, adults and seniors<sup>3</sup> are shifting from paying in cash to using digital payments, based on the card payment data, cash withdrawals and use of bizum of 13.4 million CaixaBank customers, completely anonymised. In particular, we will focus on how the pandemic we are currently enduring could act as a catalyst for relegating cash to a lower tier in the post-COVID world, and whether this catalyst will reach all generations.

### The reduction in the use of cash of recent years was accentuated during the pandemic

According to our data, in 2019 (a pre-pandemic world), seniors withdrew the same amount of cash as they used for card payments, while card spending among adults and young people was already 30% and 40%, respectively, above the amount of cash they withdrew. This greater use of cash by older people relative to the younger generations has been observed in many countries and is largely due to the persistence of habits.<sup>4</sup> However, all generations are reducing their use of cash and increasing their card purchases, a trend which the pandemic accelerated significantly (see first chart).<sup>5</sup>

The use of cash during the first few months of the pandemic was sharply reduced across all generations. In April (see second chart), seniors withdrew on average 40% less cash than in the same month of the previous year; while adults withdrew 46% less and young people, 51% less. However, from June onwards, the older generation quickly returned to withdrawing the same amount of cash as a year earlier (or only slightly less). In contrast, this recovery was only partial among adults and young people: the reduced use of cash persisted during the second half of 2020 (between June and December they withdrew on average around 15% and 22% less cash than a year ago, respectively). This is a potential indication of a change that could persist in the post-pandemic world too. Thus, the health crisis may have accelerated not only the transition to e-commerce (as discussed in the previous article), but also to a greater use of digital means of payment.

**Spain: cash withdrawals by each generation**  
(% of total card expenditure)



**Note:** Amount of cash withdrawn by card relative to the total amount of card purchases and cash withdrawals of each generation.

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

### The use of bizum as a means of payment increases exponentially

One of the electronic means of payment which has seen an exponential increase in its use in Spain is bizum. Bizum is a mobile payment solution of the Spanish banking system which allows users to send and receive money with nothing but the other person's mobile phone number. Its use was already growing rapidly before the pandemic, but has accelerated during it,

1. For more information on the evolution of the use of money, see the Dossier «[Money: past, present and future](#)» in the MR05/2018.

2. Bank of Spain (2021). Statistics on payment cards (<https://www.bde.es/f/webbde/SPA/sispago/ficheros/es/estadisticas.pdf>).

3. The three generations are classified as follows: young (18 to 29 years of age), adult (30 to 64) and senior (65 and over).

4. See J. Bagnall *et al.* (2014). «Consumer cash usage: a cross-country comparison with payment diary survey data». ECB Working Papers n° 1685.

5. This result has also been found in other studies. See, for example, «The paradox of banknotes: understanding the demand for cash beyond transactional use» in the ECB Economic Bulletin 2/2021.

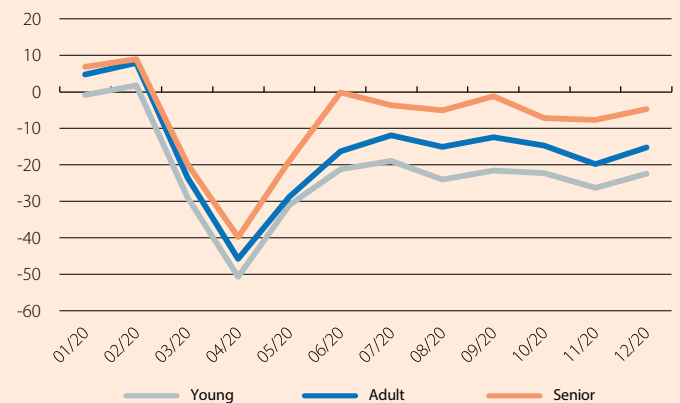
particularly among young people and adults (see third chart). In December 2020, young people were already using bizum for 11.6% of their expenditure (including card purchases, cash withdrawals from ATMs and payments made with bizum), 7.5 pps more than in December 2019. Adults, meanwhile, had increased their use of it to 4.5% of their total expenditure (a year earlier it accounted for 1.0%). Seniors also joined the trend, but are lagging further behind: in December 2020 they used the application to carry out 1.4% of their total expenditure (versus 0.2% a year earlier).

In short, the results of our analysis show that all generations are using more digital means of payment and more often, albeit at different rates. Young people have their mobile phone to hand for use as a regular means of payment, whilst adults reach for the card in their wallet. Even seniors are increasing their use of digital payments, although the acceleration in their adoption has not been as pronounced as among other age groups. These results, taken together, are encouraging in a context in which central banks – including the ECB – are analysing the pros and cons of digital currencies and their optimal design.<sup>6</sup> Creating a digital currency involves multiple challenges, such as questions over privacy or a potential impact on financial stability depending on how it is designed. The evidence presented in this article also underscores the importance of considering digital currency as an option that can serve to complement cash and other payment tools, but not to replace them.

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**Spain: cash withdrawals by each generation during the pandemic \***

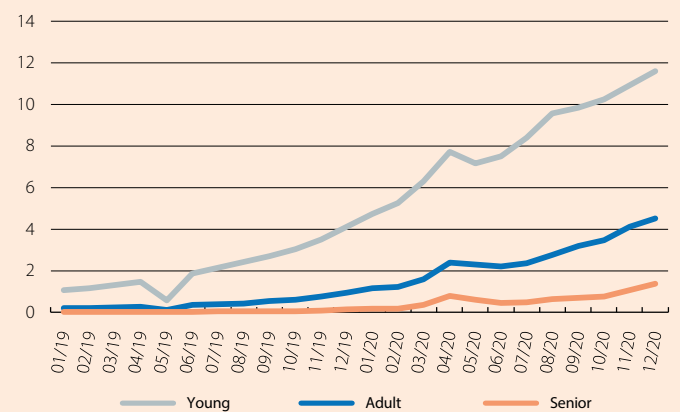
Year-on-year change (%)



**Note:** \* Average amount of cash withdrawn at ATMs per person for each generation.  
**Source:** CaixaBank Research, based on internal data.

**Spain: use of bizum by generation \***

(% of total card expenditure)



**Note:** \* The total expenditure includes the sum of purchases paid for by card, cash withdrawals at ATMs and payments made with bizum.  
**Source:** CaixaBank Research, based on internal data.

6. For more details, see the article «Central banks and digital currencies: a major challenge not without its difficulties» in the Dossier of the MR04/2021.