

The use of cash and other means of payment: how is the way we pay changing?

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Rationale

Digitalisation has made significant headway in recent years, particularly following the outbreak of the COVID-19 pandemic. Against this background, it is important to analyse how consumers' payment habits are changing at the physical point of sale, online and person-to-person.

Takeaways

- In 2022, cash is the most commonly used payment method in Spain at the physical point of sale and in person-to-person transactions, but has declined compared with 2019.
- The decrease in the use of cash is primarily driven by two factors. First, the growth in online purchases, which limits the opportunity to pay in cash and, second, a shift in consumers' payment habits, with an increase in the use of digital payment methods in their purchases.

Keywords

Means of payment, cash, digital payments, payment behaviour.

JEL classification

E41, E51, J33.

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THE USE OF CASH AND OTHER MEANS OF PAYMENT: HOW IS THE WAY WE PAY CHANGING?

Introduction

The study on the payment attitudes of consumers in the euro area (SPACE)¹ is a survey conducted by the European Central Bank (ECB) that compiles information on the payment methods used by consumers for their non-recurring payments (purchases at the physical point of sale (POS), online purchases and person-to-person (P2P) payments) and recurring payments (including rent, mortgage, household bills and taxes). The survey was first carried out in 2019 and a second study was conducted in 2022.

This article describes the main SPACE results for Spain and analyses the changes in the use of payment methods since 2019, a period marked by the COVID-19 pandemic. Such analysis is particularly important at a time of growing digitalisation across all areas of society, including the use of payment methods, and as a broader range of digital payment methods become available to the public.

The first section focuses on how consumers use the different payment methods to make their non-recurring purchases, taking into account the nature of the payments and different sociodemographic characteristics of the users. The second section describes the payment methods used to make recurring payments.

Non-recurring payments

The decline in the use of cash as a payment method has accelerated in recent years, particularly following the outbreak of the COVID-19 pandemic, which has intensified the ongoing digitalisation of the economy.

The decrease in the use of cash is associated with two main factors. First, consumers' purchasing habits are shifting, with fewer purchases made at the POS and more made online. Second, payment behaviour is changing, with greater use of digital payment methods for non-recurring purchases, particularly for payments at the POS and P2P transactions.

Changes in purchasing habits

Consumers in Spain are making more purchases through online retailers and fewer at the POS. In 2022, 80% of non-recurring payments were made at the POS, down by nearly 7 percentage

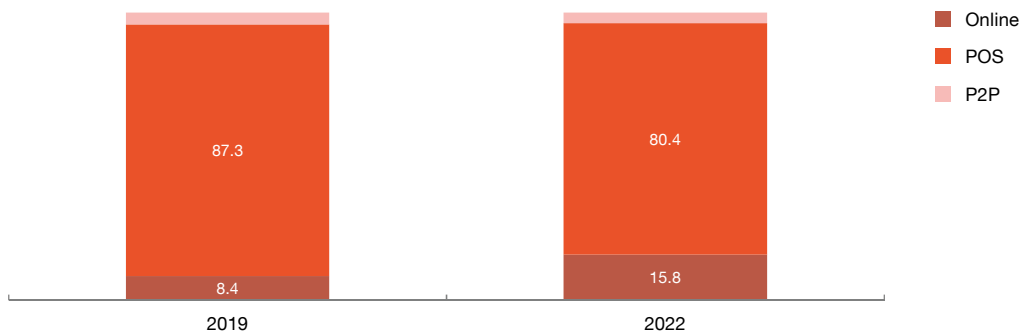
¹ This article is published to coincide with the ECB's publication of the SPACE results for the euro area as a whole. Details of the survey methodology, along with the results for 2022, can be found on the ECB website.

Chart 1

Non-recurring purchases, by type

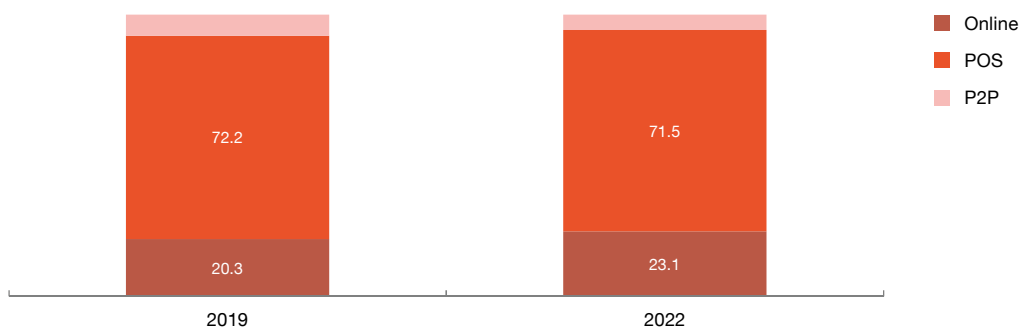
1.a Transactions

% of the total



1.b Value

% of the total



SOURCES: ECB and Banco de España.



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points (pp) on 2019 (see Chart 1). By contrast, online purchases were up by virtually the same proportion, rising to 16% of the total.

These compositional changes in consumer purchases directly affect usage of the different payment methods.

The rise in online transactions is leading to a drop in the use of cash as a means of payment, since online purchases generally preclude cash payment. Further, the shift from purchases at POS to online transactions has been concentrated in cash-intensive sectors, such as restaurants, hotels and supermarkets (see Chart 2), which has intensified the decline in cash usage. In these sectors, approximately 69% of payments at POS are made in cash.

Changes in payment behaviour

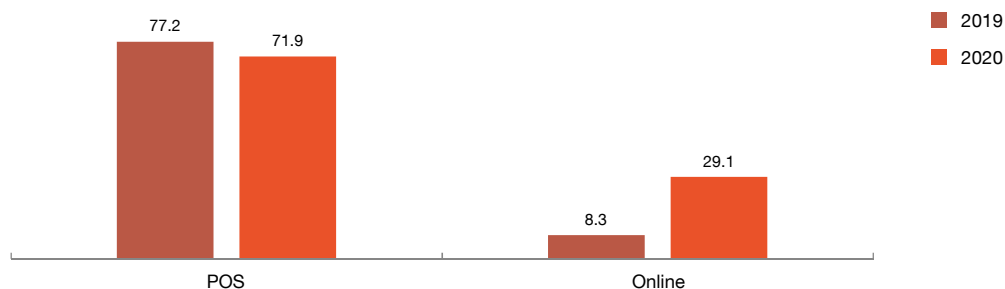
Shifts in payment behaviour have a dramatic impact on the use of payment methods. Consumers may alter their payment behaviour for a number of reasons, such as changes in

Chart 2

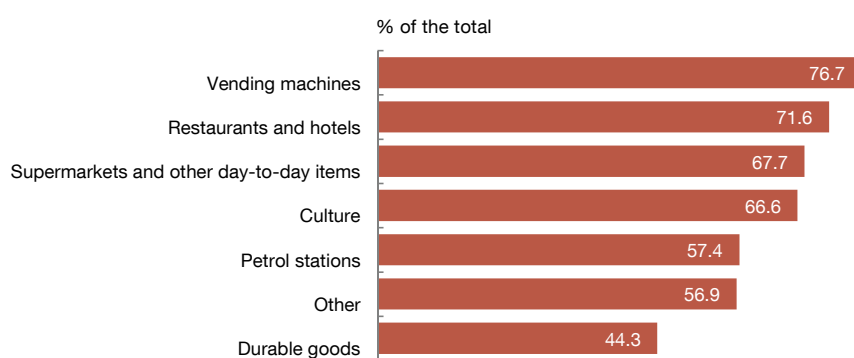
Purchases and payments, by economic sector

2.a Purchases in restaurants, hotels and supermarkets

% of retail purchases



2.b Cash payments in 2022



SOURCES: ECB and Banco de España.

payment preferences or in access to and the acceptance of the different payment instruments (see Box 1).

In recent years, it appears that the shifting payment habits of people in Spain have also been contributing to a lower use of cash, with consumers increasing the number of payments made with digital means for both POS and P2P transactions.

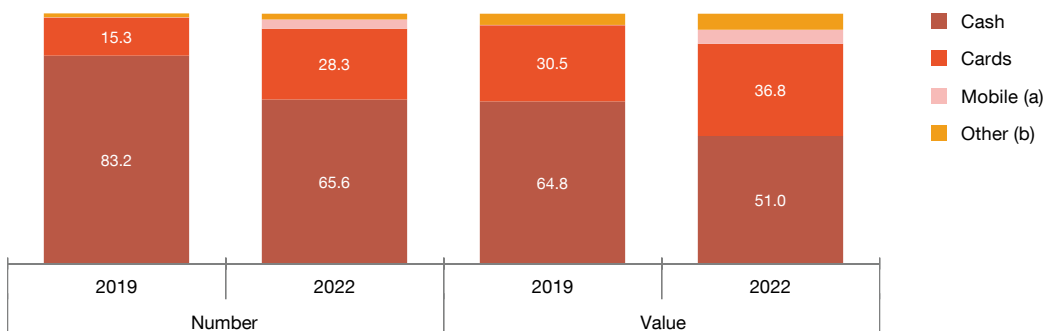
Physical POS payments are still mostly made in cash (see Chart 3), although to a lesser extent than in 2019. The share of cash purchases was 66% in 2022, compared with 83% prior to the pandemic. In general terms, cash payments are used over card payments for smaller value purchases (an average amount of €22.6 in cash, as compared with €38.0 by card). As a result, the value of cash payments at the POS accounted for 51% of the total (65% in 2019).

Bank cards are the second most popular means of payment and were used for 28% of purchase transactions, a 13 pp increase on 2019. Cards accounted for 37% of the total value of payments. Finally, mention should be made of developments in mobile payment apps, the use of which was negligible in 2019, whereas in 2022 they represented 3.7% of total POS payments.

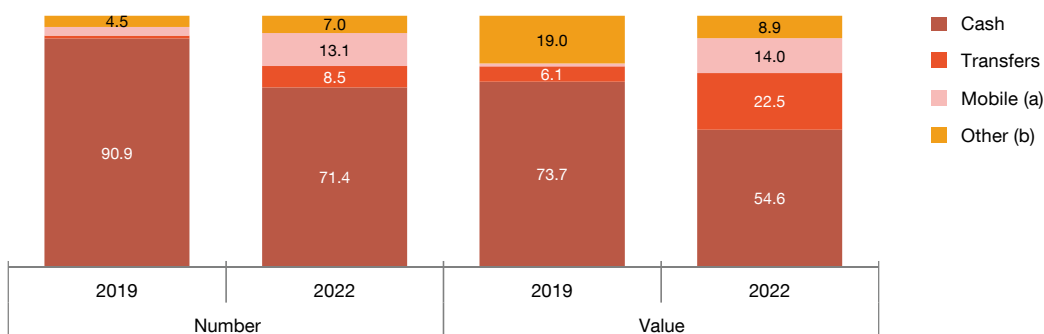
Chart 3

Use of payment methods for POS and P2P transactions**3.a POS payments**

% of the total

**3.b P2P payments**

% of the total

**SOURCES:** ECB and Banco de España.

a Mobile payments include those made with e-payment solutions such as banking applications, wallets, PayPal, Apple Pay and Samsung Pay, among others.

b The "Other" category includes credit transfers, bank cheques and loyalty points or cards, among others.



Based on the sociodemographic characteristics of the population, the study reveals that older citizens use cash more intensively (see Chart 4). Specifically, individuals aged over 55 pay for approximately 70% of their POS purchases in cash, compared with a share of almost 60% in the case of those aged under 40.

The use of cash has decreased since 2019 across all age groups, mainly driven by an increase in bank card payments. This increase was stronger among those aged over 65, whereas young people aged 18 to 24 have replaced cash payments primarily with card payments and mobile payment apps.

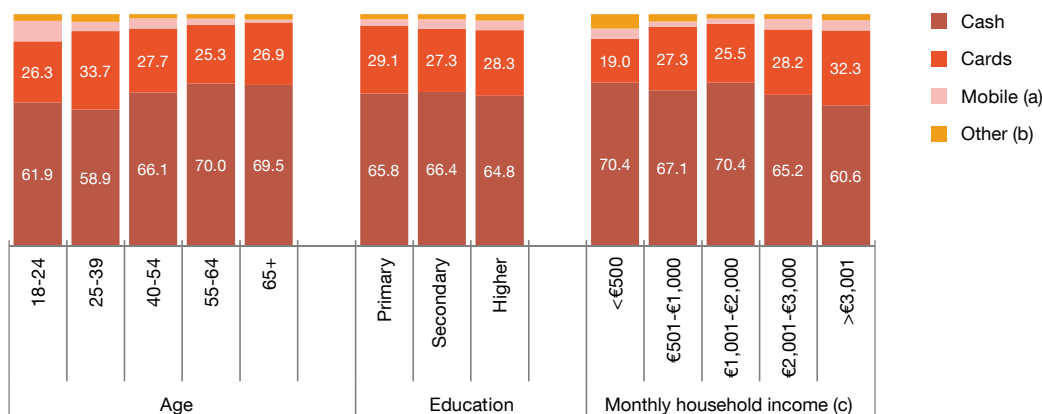
As regards the level of education, there are no significant differences at present in the use of cash across education groups. This situation contrasts with that observed in 2019, when the use of this means of payment was greater among individuals with a lower level of education and declined as

Chart 4

Use of payment methods, by sociodemographic variable in 2022

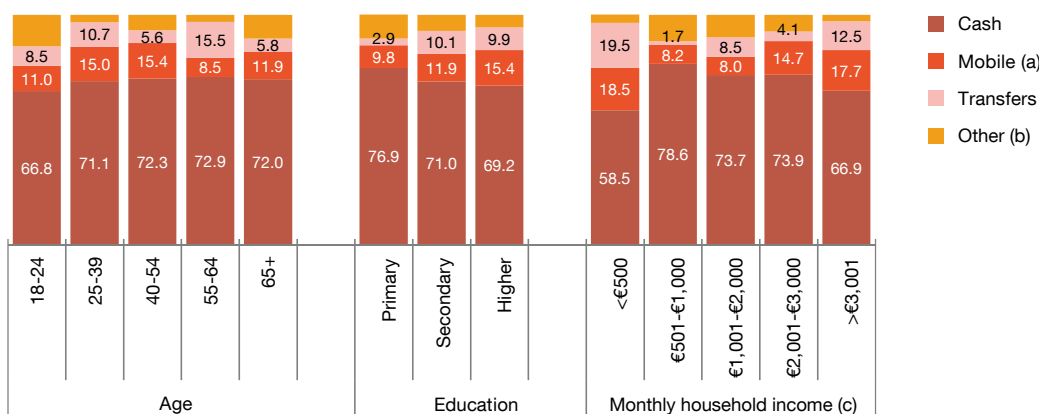
4.a POS payments

% of the total



4.b P2P payments

% of the total



SOURCES: ECB and Banco de España.

- a Mobile payments include those made with e-payment solutions such as banking applications, wallets, PayPal, Apple Pay and Samsung Pay, among others.
- b The "Other" category includes credit transfers, bank cheques and loyalty points or cards, among others.
- c The "Income" variable refers to the net income of households. This means that consumers may belong to a higher income group even if their personal income is low.



the educational attainment level increased. Therefore, the use of cash by citizens across all education groups has converged at levels below those of 2019.

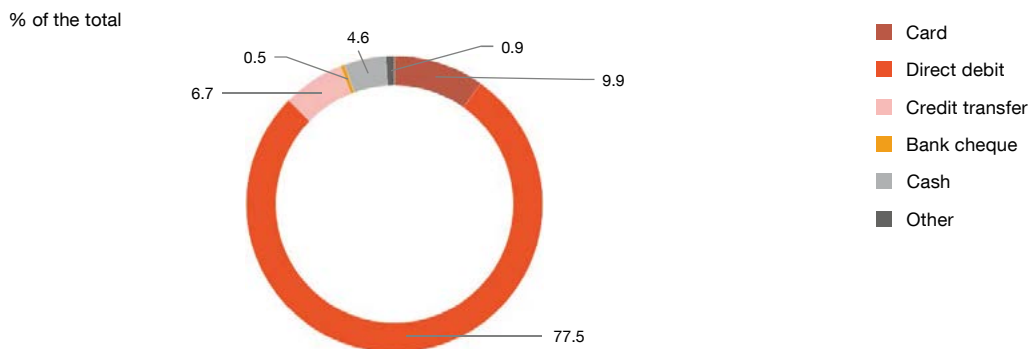
By income level, cash payments decrease as households' net income increases. The reduction is sharper for higher income groups.

Lastly, with respect to P2P payments, 71% of these transactions are made in cash, almost 20 pp less than in 2019. In value terms, cash payments account for 55% of the total (74% in 2019). The decrease in the number of cash payments appears to be related to digital payments becoming more convenient thanks, among other things, to new payment methods such as Bizum. Thus,

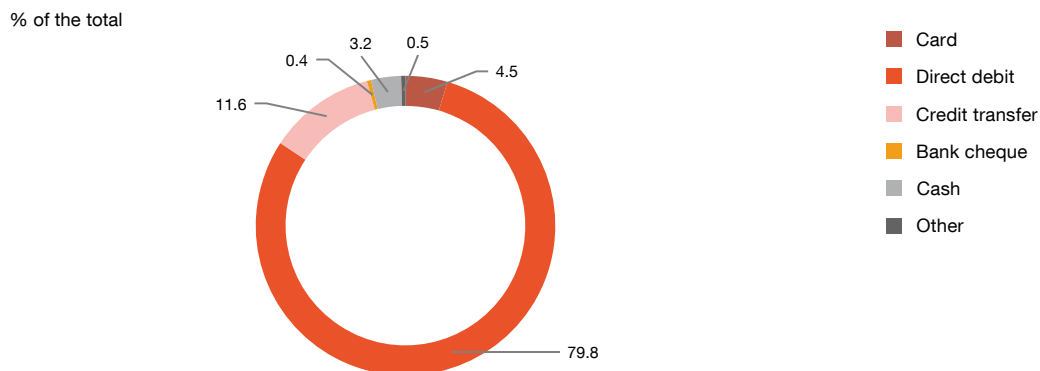
Chart 5

Recurring payments in 2022, by type

5.a Transactions



5.b Value



SOURCES: ECB and Banco de España.

there has been an increase in the number of payments via mobile payment apps and credit transfers, which accounted for 13.0% and 8.5%, respectively, of total transactions.

Recurring payments

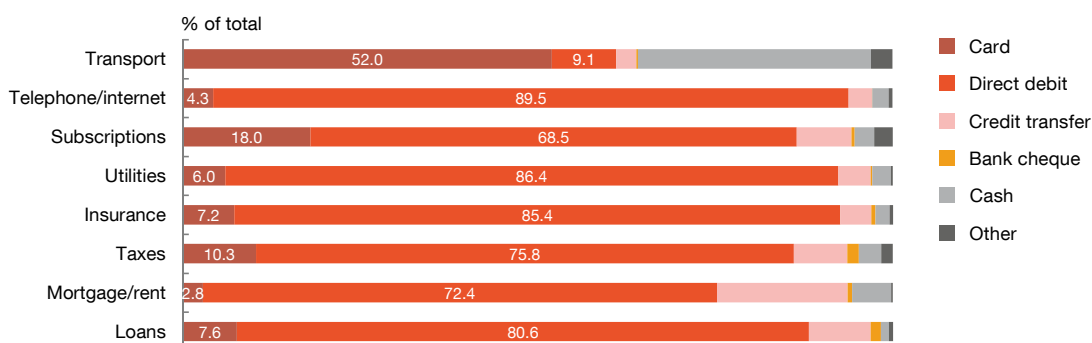
Recurring payments relate to payments made at a fixed frequency. In particular, SPACE includes the following categories: rent or mortgage, loans, utilities, taxes, insurance policies, subscriptions, telephone and/or internet bills and transport.

Citizens currently make recurring payments mostly via direct debits. Specifically, 77.5% of these payments were made through direct debits, whose value accounted for almost 80% of the total. Card payments were the second most frequently used means of payment, followed by credit transfers (see Chart 5).

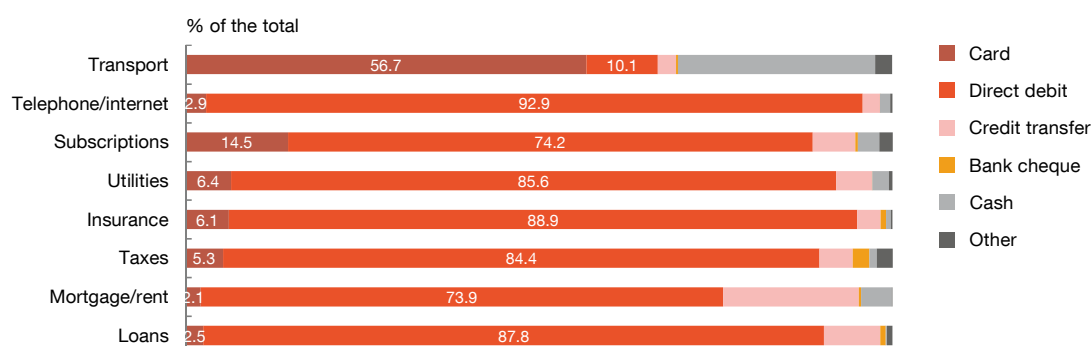
Chart 5

Recurring payments in 2022, by type (cont'd)

5.c Transactions, by category



5.d Value, by category



SOURCES: ECB and Banco de España.



By category, no major changes have been observed overall in the use of the different payment methods, except for transport payments. In this category, 52% of the payments were made with a bank card, followed by cash, which was used for almost 33% of the payments.

Leaving transport to one side, direct debits were used intensively for telephone and/or internet bill payments, accounting for almost 90% of these, and to a lesser extent for paying subscriptions (almost 70%). As regards card payments, these were mostly used for subscriptions and taxes (18% and 10% of transactions, respectively). Finally, the use of cash for recurring payments was marginal, although nearly 5.5% of mortgage and/or rent payments were made in cash.

Conclusions

In the 2022 study, significant changes were observed in the way Spanish citizens make and pay for their purchases. The COVID-19 pandemic may have accelerated a trend that had already been

under way for some years. As a result, a larger share of purchases are currently made online and, broadly speaking, cash usage has decreased compared with 2019.

Nevertheless, cash remains the most commonly used means of payment at the physical POS. Specifically, the share of cash purchases was 66% in 2022, compared with 83% in 2019.

From a sociodemographic standpoint, older people use cash more intensively, although, in recent years, the use of digital means of payment for POS purchases by older people has followed a similar upward path to that observed in other age groups, indicating that digitalisation also reaches part of this population segment. Another significant finding is that the use of cash among different educational attainment groups has converged towards similar levels, albeit lower than those observed in 2019.

As regards P2P payments, 71% of them were still made in cash. Nevertheless, the greater convenience of making these payments via mobile payment apps or credit transfers has led to a lower use of cash for P2P payments compared with 2019.

Recurring payments are mostly made by means of direct debits, except for transport payments, for which cards are the preferred payment instrument.

In sum, the way in which citizens make their payments has changed, with higher levels of digitalisation partly as a result of digital payment methods becoming more convenient. Against this background, it is important to note that cash continues to play a key role given its widespread and extensive use.

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Annex 1

Table A1.1
Use of payment methods at POS, by age, level of education and income

% of the total	Payments		Payment methods							
	% of the total		Cash		Card		Mobile (a)		Other (b)	
	2019	2022	2019	2022	2019	2022	2019	2022	2019	2022
Transactions										
Age bracket										
18-24	7.3	9.0	80.6	61.9	16.8	26.3	1.0	8.9	1.6	2.9
25-39	23.2	21.7	76.8	58.9	19.9	33.7	2.0	4.0	1.3	3.4
40-54	31.1	29.9	83.3	66.1	15.6	27.7	0.6	4.3	0.5	1.9
55-64	15.0	15.9	86.0	70.0	13.1	25.3	0.3	2.8	0.5	1.9
65+	23.4	23.5	89.1	69.5	10.5	26.9	0.2	1.3	0.2	2.3
Monthly household income (c)										
<€500	7.4	2.3	84.0	70.4	13.7	19.0	1.6	4.3	0.7	6.3
€501-€1,000	23.2	7.0	85.1	67.1	14.0	27.3	0.1	2.4	0.8	3.2
€1,001-€2,000	31.1	27.8	85.2	70.3	13.5	25.6	0.8	2.2	0.5	2.0
€2,001-€3,000	15.0	37.8	80.9	64.9	17.2	28.4	0.7	4.6	1.1	2.1
>€3,001	23.4	25.1	80.8	60.5	17.1	32.4	1.4	4.4	0.7	2.7
Level of education										
Primary education	32.9	35.7	87.9	65.8	11.4	29.1	0.3	2.9	0.4	2.1
Secondary education	28.4	26.4	84.2	66.4	14.4	27.3	0.6	4.1	0.8	2.2
Higher education	38.7	37.9	78.1	64.8	19.5	28.3	1.4	4.1	1.0	2.8
Value	2019	2022	2019	2022	2019	2022	2019	2022	2019	2022
Age bracket										
18-24	5.3	6.5	67.2	49.7	30.3	33.9	1.8	13.4	0.7	3.0
25-39	29.5	27.7	56.6	54.2	33.6	28.5	4.5	7.3	5.3	10.0
40-54	31.1	29.4	65.0	47.7	31.9	40.1	1.9	5.5	1.3	6.7
55-64	13.3	15.4	68.3	56.0	29.2	34.5	0.6	4.8	1.9	4.7
65+	20.9	21.0	75.7	48.3	23.1	45.8	0.7	1.9	0.5	4.0
Monthly household income (c)										
<€500	5.3	2.7	50.8	37.2	31.3	16.8	17.1	12.1	0.8	33.8
€501-€1,000	29.5	6.5	74.7	45.4	22.8	32.3	0.5	8.8	2.0	13.5
€1,001-€2,000	31.1	22.7	66.0	57.6	31.3	36.4	1.9	2.6	0.8	3.3
€2,001-€3,000	13.3	37.1	61.8	47.0	30.9	38.9	1.1	7.1	6.2	7.0
>€3,001	20.9	31.0	64.3	53.4	31.8	37.4	2.5	4.8	1.3	4.4
Level of education										
Primary education	31.7	30.8	70.8	47.5	26.4	41.9	2.3	3.4	0.5	7.2
Secondary education	29.7	24.3	63.2	48.4	31.3	38.7	2.1	8.6	3.4	4.2
Higher education	38.5	44.9	60.9	54.9	33.4	32.3	2.3	5.5	3.3	7.3

SOURCES: ECB and Banco de España.

- a Mobile payments include those made with e-payment solutions such as banking applications, wallets, PayPal, Apple Pay and Samsung Pay, among others.
b The "Other" category includes credit transfers, bank cheques and loyalty points or cards, among others.
c The "Income" variable refers to the net income of households. This means that consumers may belong to a higher income group even if their personal income is low.

Table A1.2

Use of payment methods in P2P transactions, by age, level of education and income

% of the total

Transactions	Payments		Payment methods							
	% of the total		Cash		Mobile (a)		Credit transfer		Other (b)	
	2019	2022	2019	2022	2019	2022	2019	2022	2019	2022
Age bracket										
18-24	10.8	11.3	66.1	66.8	14.2	11.0		8.5	19.8	13.7
25-39	18.3	19.1	86.5	71.1	0.2	15.0	1.6	10.7	11.7	3.2
40-54	29.5	35.6	93.5	72.3	1.7	15.4	2.1	5.6	2.7	6.7
55-64	16.8	15.3	97.4	72.9		8.5	1.8	15.5	0.9	3.1
65+	24.6	18.6	97.5	72.0	2.5	11.9		5.8		10.4
Monthly household income (c)										
<€500	1.9	4.7	93.2	58.5		18.5	3.0	19.5	3.8	3.5
€501-€1,000	15.0	5.1	100.0	78.6		8.2		1.7		11.5
€1,001-€2,000	31.9	33.3	88.8	73.7	3.9	8.0	1.6	8.5	5.6	9.8
€2,001-€3,000	30.5	30.4	97.1	72.8	1.9	16.1	0.8	4.0	0.2	7.1
>€3,001	20.6	26.4	78.0	67.9	4.2	16.2	1.8	12.8	16.0	3.1
Level of education										
Primary education	32.0	21.5	88.8	76.9	0.0	9.8	0.9	2.9	10.3	10.4
Secondary education	24.4	31.4	98.0	71.0	1.7	11.9	0.0	10.1	0.3	7.0
Higher education	43.6	47.0	88.4	69.2	5.2	15.4	2.1	9.9	4.3	5.4
Value										
	2019	2022	2019	2022	2019	2022	2019	2022	2019	2022
Age bracket										
18-24	20.6	7.5	11.4	51.8	2.2	14.4		18.7	0.7	15.2
25-39	12.1	29.8	93.1	68.0	0.4	3.0	0.4	28.7	6.0	0.3
40-54	25.4	26.3	76.4	52.1	2.1	19.5	20.8	10.8	0.7	17.6
55-64	29.0	17.2	96.2	46.4		5.0	2.7	43.1	1.1	5.6
65+	12.9	19.1	99.1	45.7	0.9	31.5		11.7		11.1
Monthly household income (c)										
<€500	0.8	2.9	38.8	61.1		7.4	58.1	31.2	3.1	0.4
€501-€1,000	3.8	2.4	100.0	92.1		5.1		0.2		2.6
€1,001-€2,000	21.7	33.7	90.6	44.4	2.9	6.4	3.9	35.1	1.6	14.1
€2,001-€3,000	28.5	21.7	95.1	61.5	0.3	15.6	3.6	8.0	1.0	15.6
>€3,001	45.3	39.3	50.7	56.9	1.0	20.6	8.3	20.3	40.0	2.4
Level of education										
Primary education	46.1	15.3	59.3	50.8	0.0	7.1	1.7	17.3	39.0	24.8
Secondary education	10.1	35.7	95.8	47.9	2.3	20.1		27.9	1.9	4.0
Higher education	43.8	49.1	83.8	60.7	2.1	11.7	12.2	20.1	1.9	7.5

SOURCES: ECB and Banco de España.

- a** Mobile payments include those made with e-payment solutions such as banking applications, wallets, PayPal, Apple Pay and Samsung Pay, among others.
- b** The "Other" category includes credit transfers, bank cheques and loyalty points or cards, among others.
- c** The "Income" variable refers to the net income of households. This means that consumers may belong to a higher income group even if their personal income is low.

Table A1.3

Use of payment methods in online transactions, by age, level of education and income

% of the total

Transactions	Payments				Payment methods					
	% of the total		Credit transfer		Card		e-payments (a)		Other (b)	
	2019	2022	2019	2022	2019	2022	2019	2022	2019	2022
Age bracket										
18-24	14.4	12.0	2.6	2.7	58.4	53.0	34.5	14.4	4.5	17.8
25-39	37.4	32.4	2.6	3.8	61.9	57.6	33.3	37.4	2.2	16.4
40-54	29.9	29.6	2.3	2.3	58.2	64.8	36.6	29.9	2.8	12.7
55-64	9.7	11.8	3.4	6.4	61.7	56.2	32.4	9.7	2.6	15.7
65+	8.6	14.2		1.3	63.5	59.5	22.7	8.6	13.7	24.4
Monthly household income (c)										
<€500	5.5	4.4	0.0	1.8	39.7	59.2	59.1	19.6	1.2	19.4
€501-€1,000	6.7	9.9	2.6	4.6	49.9	56.5	44.1	18.0	3.4	20.9
€1,001-€2,000	31.0	28.8	2.0	3.4	67.6	59.0	29.1	21.4	1.4	16.2
€2,001-€3,000	29.7	33.5	1.6	2.2	59.5	59.1	32.9	23.7	6.0	15.0
>€3,001	27.1	23.4	4.2	4.0	60.0	60.9	31.2	18.4	4.5	16.7
Level of education										
Primary education	23.3	18.2		3.7	55.2	56.1	43.5	27.9	1.2	12.3
Secondary education	26.5	33.2	4.0	1.9	62.1	60.7	29.4	18.2	4.5	19.1
Higher education	50.2	48.6	2.6	3.8	62.0	59.4	30.9	20.4	4.5	16.3
Value										
Age bracket										
18-24	15.4	8.4	15.6	13.5	26.5	46.7	55.3	28.3	2.6	11.4
25-39	27.4	31.6	3.3	2.5	59.7	61.9	35.3	22.2	1.7	13.3
40-54	37.5	29.1	1.9	4.2	66.7	60.5	29.0	22.2	2.4	13.1
55-64	12.9	18.3	9.7	29.7	68.0	46.0	19.5	14.3	2.8	10.0
65+	6.9	12.7	0.0	0.8	68.3	71.1	23.3	11.8	8.5	16.3
Monthly household income (c)										
<€500	2.0	4.0		1.3	66.9	60.9	30.2	32.6	2.9	5.1
€501-€1,000	6.7	10.9	4.6	16.0	39.8	54.2	55.2	19.0	0.4	10.8
€1,001-€2,000	37.0	23.9	4.4	5.9	72.9	60.2	22.3	20.0	0.3	13.9
€2,001-€3,000	23.8	36.0	4.9	11.5	57.5	56.3	30.4	20.5	7.2	11.7
>€3,001	30.6	25.3	6.9	5.3	46.7	61.5	43.8	17.5	2.6	15.6
Level of education										
Primary education	28.3	18.5		7.7	54.2	54.0	45.4	30.3	0.4	7.9
Secondary education	24.2	32.6	12.7	9.7	65.0	61.7	20.4	15.9	1.8	12.7
Higher education	47.5	48.9	4.5	8.4	58.6	58.0	32.3	18.8	4.6	14.9

SOURCES: ECB and Banco de España.

- a** Mobile payments include those made with e-payment solutions such as banking applications, wallets, PayPal, Apple Pay and Samsung Pay, among others.
- b** The "Other" category includes credit transfers, bank cheques and loyalty points or cards, among others.
- c** The "Income" variable refers to the net income of households. This means that consumers may belong to a higher income group even if their personal income is low.

ACCESS TO AND ACCEPTANCE OF MEANS OF PAYMENT IN SPAIN

A key aspect in consumers’ decisions about which means of payment they will use is their availability. Cash is a widely available means of payment in Spain; digital forms of payment are, however, less accessible.

In 2022, 93% of the population aged 18 and above had a bank card. In each age group, the share of the population with access to bank cards is high. However, close to 2.7 million Spaniards aged 18 and above do not reportedly have access to this form of payment.

Access to other digital means of payment is less widespread. By way of example, 56% of the population can make instant payments, via both online banking and mobile apps such as Bizum. The highest share of the population with access to this form of payment is in the 25-39 age group (around 66%). The older the population, the lower the share (and considerably so); 48% for consumers aged 55-64 and 46% for those aged 65 and older.

When choosing between different means of payment, consumers assess their qualities and opt for those with the characteristics they value the most.

The reasons for preferring cash notably include greater awareness of spending (19.7%), followed by anonymity (18.4%) and its wide acceptance (13.8%). In the case of bank cards, consumers value, in first place, not having to carry a lot of cash (24.5%), followed by the fact that it is faster (20.1%) and safer (16.2%) (see Chart 1).

In the current landscape, where cash remains a common means of payment for consumers, it is important that they be able to access cash from different sources and that it continue to be accepted in stores to make purchases. With regard to how cash is accessed for daily purchases, approximately 83% of cash withdrawals are by ATM, 7.8% are from cash reserves and almost 5% are at bank counters (see Chart 2). Cash therefore in the main continues to be sourced from traditional channels. However, close to 3% of cash withdrawals are sourced from non-traditional channels, such as cashback/cash in shop.

Accessibility may be affected by two factors. First, ease of access to the ATM to withdraw and deposit cash. Second, the cost of these transactions.

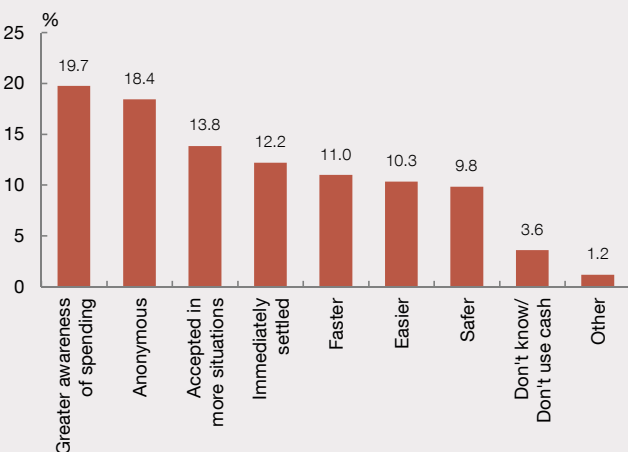
With regard to ease of access, most consumers report that they find it easy to withdraw cash from an ATM or a bank counter: 81% find it fairly easy or very easy to withdraw cash through these channels. However, 12% of consumers find it fairly difficult and 6% very difficult. It should be noted that this perceived difficulty has risen by 4 percentage points since 2019.

Approximately 64% of consumers never pay fees to withdraw cash, 25.5% pay a fee sometimes/rarely and almost 9% pay a fee always/most of the time.

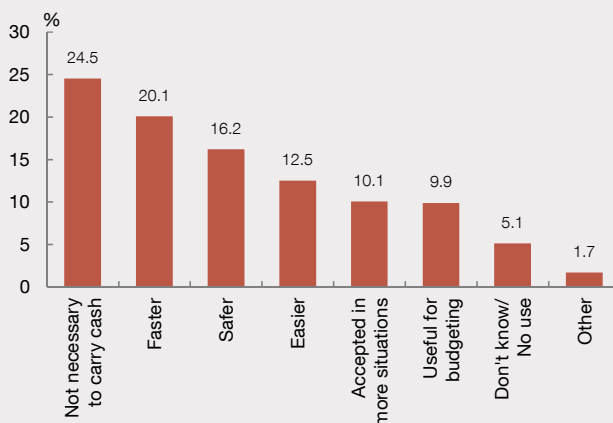
With regard to acceptance of cash, there is a strong relationship between acceptance of the different means of

Chart 1
Perceived advantages of means of payment

1 Advantages of cash over cards



2 Advantages of cards over cash



SOURCE: ECB and Banco de España.

ACCESS TO AND ACCEPTANCE OF MEANS OF PAYMENT IN SPAIN (cont'd)

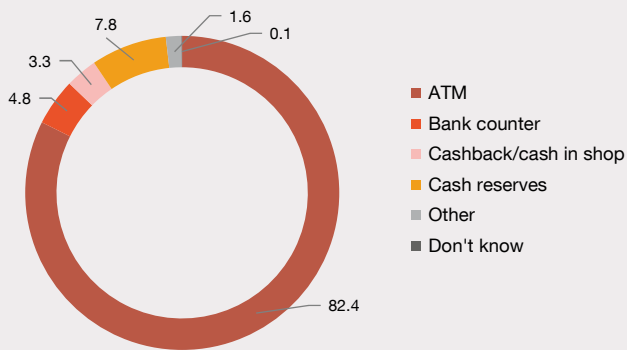
payment and how much consumers use them. Cash currently remains a widely accepted means of payment. It is accepted at 96% of all physical payment locations. This

is a higher degree of acceptance than bank cards, which are accepted at approximately 84% of all physical payment locations.

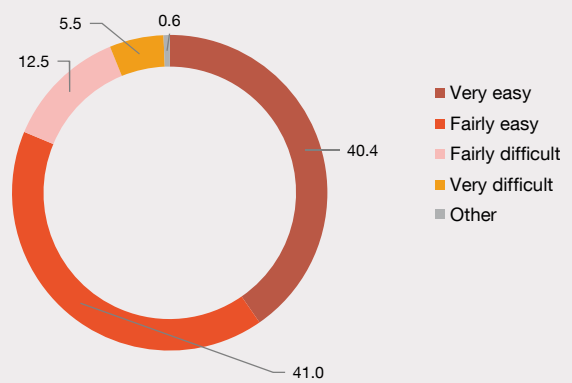
Chart 2

Access to cash

1 Sources of cash withdrawals (% of total)



2 Ease of access to cash (% of total)



SOURCES: ECB and Banco de España.