



Three years after the beginning of the health crisis, cash is holding its own against other means of payment in France

The European Central Bank has published its latest survey on household payment habits in the euro area, covering the period from October 2021 to June 2022. This is the first such survey on the post-Covid period.

Although cash is facing an ever wider range of digital means of payment, it remains the most widely used means of payment in France (and in the Eurosystem) at points of sale.

Furthermore, households tend to value the option of paying in cash. Levels of acceptability and accessibility of cash are also considered very satisfactory.

Sophie Allain Des Beauvais, Louis-Alexandre Bayol, Emmanuelle Laplace,
Raul Novelle Araujo, Isabelle Valdés-Curien
Cash and Retail Payments Oversight Directorate

JEL codes
E4, E41

92%

of consumers find it easy or very easy to access a cash withdrawal point

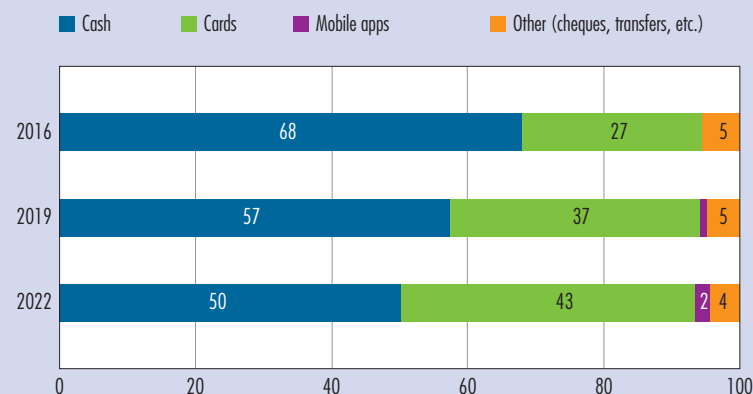
57%

of consumers consider it important to have the option to pay in cash

20%

of non-recurring payments are now made online

Breakdown of means of payment at point of sale by transaction volume, in France (%)



Source: European Central Bank, SPACE II survey (2022); Banque de France calculations.

Note: SPACE – Study on the payment attitudes of consumers in the euro area.



1 Cash use in France continues to decline but to a lesser extent than in the rest of the euro area

Following two initial surveys conducted in 2016 and 2019,¹ the European Central Bank (ECB) commissioned another survey on household payment attitudes in the euro area for the period between the end of 2021 to mid-2022, titled SPACE II.² The relative use of cash continues to decline, losing 7 percentage points in terms of volume³ at points of sale over three years in France, a similar trend to that observed between the first two surveys (down 9 percentage points).

Although significant, this decline appears to be more moderate than in the rest of the euro area (down 14 percentage points, see details by country in Map b).

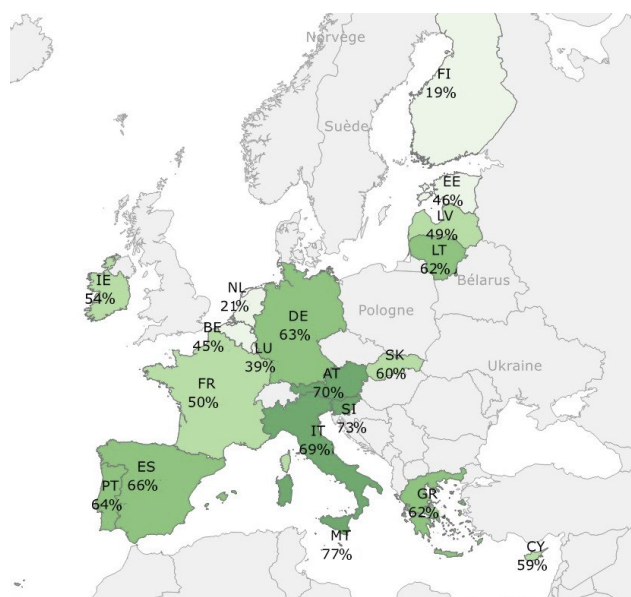
This has become a long-term trend. However, new consumer habits have developed since the health crisis that have also contributed to the continued decline of cash-use at points of sale. In particular:

- Persistent competition from cashless means of payment⁴ requiring less handling or physical contact (see Box 1 below). Thus the use of payment cards continues to rise, recording an increase of 8 percentage points

Share of cash as means of payment in volume terms in the euro area in 2022 and change since 2019

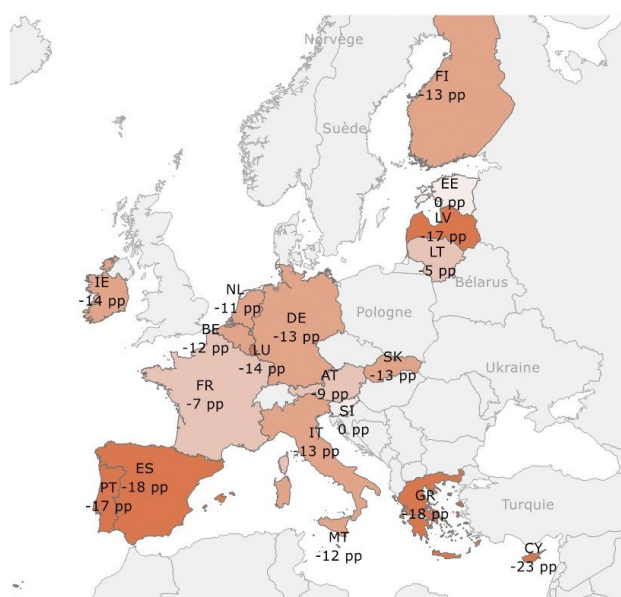
a) Situation in 2022

(%)



b) Change from 2019 to 2022

(percentage points – pp)



AT Austria	ES Spain	IT Italy	NL Netherlands
BE Belgium	FI Finland	LT Lithuania	PT Portugal
CY Cyprus	FR France	LU Luxembourg	SI Slovenia
DE Germany	GR Greece	LV Latvia	SK Slovakia
EE Estonia	IE Ireland	MT Malta	

Sources: European Central Bank, SPACE I (2019) and II (2022) surveys; Banque de France.

Note: SPACE – Study on the payment attitudes of consumers in the euro area.

1 These are, respectively, the SUCH (Study on the use of cash by households in the euro area) and SPACE (Study on the payment attitudes of consumers in the euro area) surveys.

2 The results of a similar survey carried out on the island of Réunion (*Les Réunionnais continuent de privilégier les espèces pour leurs achats du quotidien*, Institut d'émission des départements d'outre-mer [IEDOM – the French overseas departments' note-issuing bank], No. 740, April 2023) are available at: <https://www.iedom.fr/la-reunion/publications/etudes-thematiques>

3 As mentioned in this ECB survey, the data in value terms should be interpreted with caution. They are therefore not included in this *Bulletin*.

4 As opposed to fiduciary money (banknotes and coins).



between 2019 and 2022 in France (against 9 percentage points in the euro area), driven in particular by contactless payment, which now accounts for more than one out of every two card payments at points of sale (51% in France and 62% on average in the euro area, compared with 38% and 41% respectively in 2019).

- Lockdowns and travel restrictions favoured the growth of online shopping (up 8 percentage points in France and up 11 percentage points in the euro area since 2019) as purchases usually made in shops were

made online, due to the closure or non-accessibility of physical sales outlets. Thus, in 2022, 20% (12% in 2019) of non-recurring payments⁵ were made online in France (17% in the euro area), mainly and increasingly for basic necessities (food and daily supplies, see Chart 1) that traditionally were paid in cash.

Cash nevertheless remained the most widely used means of payment in 2022 (see Chart 2) in terms of volume of transactions at points of sale in France (50%) and in the euro area (59%).

C1 Breakdown of online payments in France by volume and type of purchase

(%)

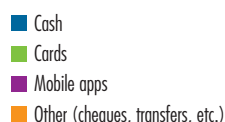


Sources: European Central Bank, SPACE I (2019) and II (2022) surveys; Banque de France calculations.

Note: SPACE – Study on the payment attitudes of consumers in the euro area.

C2 Breakdown by volume of means of payment at point of sale in France and the euro area

(%)



Sources: European Central Bank, SUCH 2016 survey and SPACE I (2019) and II (2022) surveys; Banque de France calculations.

Note: SUCH – Study on the use of cash by households in the euro area; SPACE – Study on the payment attitudes of consumers in the euro area.

⁵ As opposed to payments made on a regular basis, such as rent or electricity bills.



BOX 1

Changes in the use of cashless payment instruments in France

Every year, the Banque de France publishes statistics on the use of cashless payment instruments,¹ as part of the activities of the *Observatoire de la sécurité des moyens de paiement* (OSMP – Observatory for the Security of Payment Means).²

The latest breakdown confirmed that the increasing digitisation of payment habits since the Covid-19 pandemic is here to stay. In 2021, payment cards remained the most used cashless payment method, accounting for almost 61% of the total number of cashless payment transactions. Innovative practices also show steady growth rates. For example, contactless card payments became the preferred cashless payment instrument at point of sale during the pandemic, accounting for more than half of all card transactions (57%). Mobile contactless payments also tripled in 2021 and now account for 3% of in-store transactions, pointing to a sharp increase in use in years to come. Finally, online payments continue to grow sharply (up 21% in 2021), supported by the rise of e-commerce and new consumption patterns.

Alongside payment cards, instant credit transfers are also becoming an important feature of the cashless payment landscape. Their use more than doubled in 2022 to account for almost 6% of total SEPA credit transfers. Although the proportion of instant transfers in France still lags behind the European Union average (where they account for an average of 13% of transfers), their use is set to increase in the next few years, in line with national and European payment strategies and with the development of instant transfer at point of sale and for online payments.

At the same time, traditional means of payment are still in decline. Cheque use continues to fall, albeit less sharply than before the pandemic, with a 6% drop in the number of transactions and a 4% drop in the amounts exchanged.

Uninterrupted innovation and the development of new means of payment, as well as the ongoing digitisation of economic flows, support the growing importance of digital payment instruments in the payments landscape. These means of payment are expected to continue to develop in the coming years, notably with the rise of mobile phone payments and the development of instant payment solutions at point of sale and for e-commerce.

¹ See <https://www.banque-france.fr/stabilitefinanciere/securitedesmoyensdepaiementscripturaux/>

² See Appendix 6 of the *2021 Annual Report of the Observatory for the Security of Payment Means* (Statistics 2021 - Appendix 6 of the Annual Report | Banque de France) which indicates the volume and values of payments by card, direct debit, credit transfer, cheque, bill of exchange and electronic money. For more details, see also the *2021 Annual Report of the Observatory for the Security of Payment Means*.



2 Cash is still valued in France

A slight resurgence in popularity for this means of payment in 2022

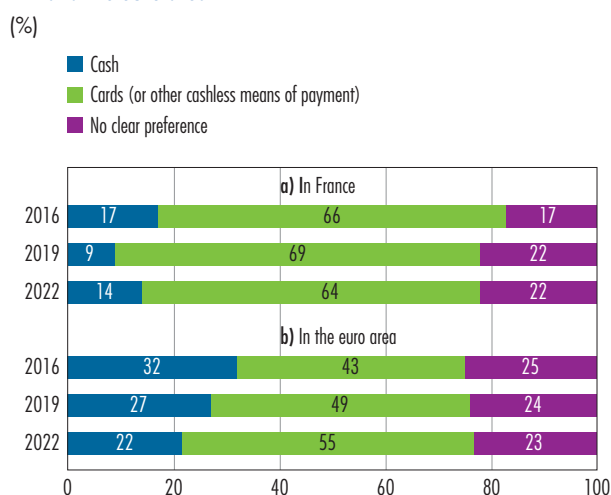
More than one in two consumers prefer to use a payment card or any means of payment other than cash to settle their in-store purchases (64% of consumers in France and 55% in the euro area). However, according to the survey, there has been a resurgence in the popularity of cash in France (up 5 percentage points in preference between 2019 and 2022) which, while not an isolated case, contrasts with the average trend observed in the rest of the euro area (down 5 percentage points over the same period). Nevertheless, the preference for cash in France (14%) remains low and below the average for the euro area (22%).

Most consumers also consider it important (or very important) to have the option to pay in cash (57% in France and 60% in the euro area). Consumers highlight two advantages associated with cash: better awareness of spending and protection of privacy.

However, cards are valued for their practicality (speed and ease of use).

Contrary to what the previous survey,⁶ conducted in July 2020, might have suggested, the health crisis ultimately had only a moderate impact on cash payment habits. The majority of consumers (56% in France and 54% in the euro area) believe that they have not changed the frequency with which they use cash at points of sale since 2019. Among those who say they are using cash less than before, the main reason given (68% in France and 58% in the euro area) is the increased ease of using electronic means of payment since the crisis. Attitudes to hoarding cash reserves do not seem to have changed either, with the amount of cash in wallet at the beginning of the day in France (EUR 61) still below the average for the euro area (EUR 83, with amounts ranging from EUR 46 in the Netherlands to EUR 121 in Austria). Moreover, only 30% of French respondents stated that they had a cash reserve at home (compared to 37% on average in the euro area).

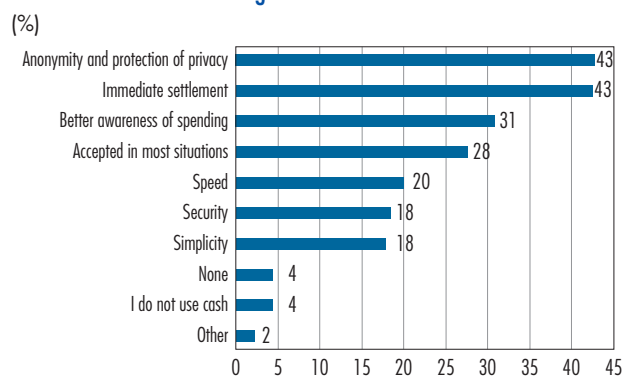
C3 Changes in point-of-sale payment preferences in France and the euro area



Sources: European Central Bank, SUCH 2016 survey and SPACE I (2019) and II (2022) surveys; Banque de France calculations.

Note: SUCH – Study on the use of cash by households in the euro area; SPACE – Study on the payment attitudes of consumers in the euro area.

C4 Main criteria for valuing cash use in France in 2022



Source: European Central Bank, SPACE II survey (2022); Banque de France calculations.

Note: SPACE – Study on the payment attitudes of consumers in the euro area.

⁶ See the results of the July 2020 flash survey (IMPACT - Impact of the pandemic on cash trends) carried out by the ECB as a follow-up to SPACE, to analyse in real time the impact of the pandemic on payment habits in the euro area.



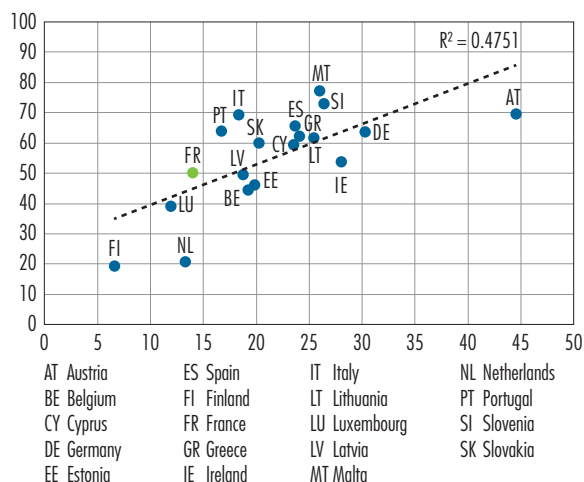
Preference for cash is lower than its actual share of means of payment use

On average, there is a 37 percentage point discrepancy between the declared preference for cash (22% in 2022 in the euro area) and the share of payments actually made in cash at points of sale (59% in volume terms). France is close to this average, showing a discrepancy of 36 percentage points. This discrepancy can be explained in several ways.

- Declarative bias: the questions in the survey are framed generally and make no distinction by type or transaction amount. Therefore, it may be the case that when consumers express their payment preferences they consider major purchases made for a given amount, and do not take into account many smaller purchases settled in cash.

C5 Correlation between stated preference for cash payments and actual payments in cash for households in the euro area in 2022

(x axis: share of households surveyed preferring cash;
y axis: share of point-of-sale payments in cash in volume terms; %)



Source: European Central Bank, SPACE II survey (2022); Banque de France calculations.

Note: SPACE – Study on the payment attitudes of consumers in the euro area.

- The level of acceptability by retailers of other means of payment: while cash is widely accepted throughout the euro area (see Section 3 “Ease of access and widespread acceptance of cash contribute to its enduring appeal”), barriers to cashless payments may still exist, particularly in certain countries, that force consumers to settle in cash despite preferring another means of payment.

As in previous years, the correlation between preference and point-of-sale use of cash is positive (see Chart 5): the greater the preference for cash, the higher the share of in-store cash payments. In this respect, France is at the lower end of the scale, with a rather low preference for cash and a moderate use of cash in volume terms compared to other euro area countries.

The type of purchase and amount are key factors in choosing to pay in cash

As previous studies have shown, socio-demographics have little influence on the use of cash (see table below), with the possible exception of age. The likelihood of an over-55 year old using mainly cash is significantly higher than for a person under 25 years old. “Budgetary vulnerability” also has an impact on cash payment habits: people in a situation of budgetary vulnerability tend to use cash more often (see Box 2 below).

The type of purchase and amount play a more significant role in the use of cash. The tendency to settle in cash is higher for day-to-day purchases (such as from street markets or vendors, or in cafes and restaurants) than for purchases in supermarkets. Cash is very important when transactions take place between individuals. Conversely, purchases of durable goods, petrol, hotel reservations and services outside the home are less likely to be made in cash. And the lower the transaction value, the higher the likelihood of cash settlement.



Expected effects of socio-demographic and transaction variables on cash use

Variable	Expected effects	Results
Socio-demographic variables		
Gender	Men are more likely to use mainly cash than women.	No significant effect on cash payments. Significant effect on card use (the probability of using mainly cards is higher among women).
Age	The probability of using mainly cash increases with age.	Significant effect: the probability of using mainly cash increases with age.
Income	The probability of using mainly cash decreases as income increases.	Low significance (non-linear with income).
Socio-professional category	Professionals who may be paid in cash use it more frequently.	No significant effect.
Transaction variables		
Payment value	Less likelihood of using cash for larger purchases.	Significant effect: the probability of using mainly cash decreases with the amount paid.
Type of shop	The likelihood of using mainly cash is greater in shops for day-to-day items.	No significant effect.
Payment constraint ^{a)}	The likelihood of using mainly cash decreases as a result of a payment constraint.	Significant effect: a 1 percentage point increase in the share of purchases where there is a payment constraint reduces the likelihood of using cash by 5%.

a) A payment constraint is understood to be a material impossibility to make a payment in cash.

Sources: Banque de France for "results"; studies mentioned in the footnote for "expected effects".

Note: The expected effects are derived from studies carried out by: Schuh and Stavins, 2011; Bounie and Francois, 2006; Stavins, 2016; and Bounie et al., 2008.

BOX 2

Focus on the preferred use of cash among vulnerable groups in France

The Banque de France conducted a survey in 2021-22 on the payment habits and quality of access to cash of the "budgetary vulnerable". As part of this initiative, just over 1,000 respondents with difficulties in repaying their loans, paying their bills and covering their living expenses were surveyed between December 2021 and February 2022.

Where possible, the results of this survey were compared with those of other similar surveys targeting the general French population (such as the results for France of the surveys conducted by the European Central Bank in the euro area: SUCH – Study on the use of cash by households in the euro area, and SPACE – Study on the payment attitudes of consumers in the euro area).

It is apparent that:

1 In terms of payment habits:

- "Budgetary vulnerability" affects cash payment habits: the likelihood of people in a financially vulnerable situation using cash is 18% higher than for people who are not in this situation.
- Like the rest of the French population, budgetary vulnerable respondents report a clear preference for cards, despite the fact that they use mainly cash in shops. It emerges that 36% of respondents consider paying with means other than cash for purchases upwards of EUR 10, and 12% of them never pay for their expenses in cash.

.../...



- The various vulnerable groups all share the same main reasons for using cash, i.e. ease or habit, better awareness of spending and, to a lesser extent, the fact that they have no other means of payment. Technological innovations (mobile payments, etc.) are not expected to significantly change the payment habits of these groups in the short and medium term.
- As in the surveys commissioned by the ECB, the socio-demographic characteristics of respondents are not very significant determinants of cash-use behaviour. However, two nuances exist: (i) the level of education (graduates are, on average, between 3% and 5% less likely to use cash than non-graduates); and (ii) the level of income (people with a salary of less than EUR 1,000 tend to use cash more than those earning more).

2 In terms of access to cash:

- For all categories of the population, automated teller machines (ATMs) are still the preferred method of withdrawing cash (this is the case for about three quarters of respondents, see Section 3 “Ease of access and widespread acceptance of cash contribute to its enduring appeal”). The budgetary vulnerable generally withdraw less than EUR 50 per withdrawal and on average make no more than two withdrawals per month.
- However, access to ATMs appears to be less easy for these fragile groups than for the rest of the French population (according to the SPACE survey, 16% of respondents consider that it is “rather difficult” or “very difficult” to find an ATM when they need one, compared to 8% of the French population as a whole).
- Finally, the budgetary vulnerable consider the bank charges associated with a cash withdrawal to be relatively high.

3 Ease of access and widespread acceptance of cash contribute to its enduring appeal

The main source of cash for individuals continues to be the automated teller machines (ATM), at 78% in France and 74% in the euro area.⁷ On the whole, consumers are still satisfied with the cash distribution network in their territory (unchanged since 2019). In France, 92% of consumers (89% in the euro area) feel they have easy or very easy access to an ATM or bank counter and 76% of respondents say they (almost) never pay a fee for a cash withdrawal (compared to 65% on average for the euro area). However, retailers prefer to get their cash over-the-counter at the bank (see Box 3 below).

While cash is accepted in most outlets (96% in the euro area), the situation has deteriorated slightly since the health crisis (down 3 percentage points between 2019 and 2022 in both France and the euro area). The general decline in the use of cash, coupled with concerns about the supposed risk of transmission of the virus through the handling of banknotes and coins, led to situations where retailers refused to accept cash or discouraged consumers from using cash payment. In France, where banknotes and coins are legal tender, the Banque de France, in cooperation with the Ministry of Finance, ensures their proper acceptance throughout the country.

⁷ The survey takes into account, among other things, bank counters, cash withdrawals at retail outlets and the use of personal cash reserves.



BOX 3

Results of the ECB survey on the use and access to cash by companies

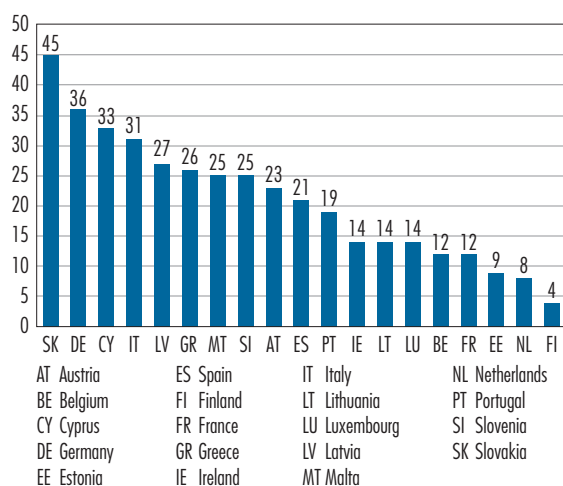
In October 2022, the European Central Bank (ECB) published the results of its survey on the use of cash by companies in the 19 countries of the euro area.¹ The survey prioritised the four sectors of activity most likely to receive payments in cash: (i) retail; (ii) hotels; (iii) restaurants and cafes; and (iv) arts, entertainment and recreation. The survey takes into account the responses of more than 7,000 companies (including about 900 in France) employing at least one employee.

The behaviour of companies in the above-mentioned sectors of activity with regard to cash appears to be consistent with that of private individuals.

- In general, these companies, like consumers, prefer card payments (53% on average in the euro area, compared with 55% for households in the SPACE II survey),² especially contactless (20%), followed by cash (24%, compared with 22% for households in the SPACE II survey). Although national preferences vary, France is also characterised in this study by a lesser overall attachment to cash than its European neighbours, as is the case for private individuals (12% of retailers and 14% of households stated a preference for cash, see Charts a and b).

CA Share of companies preferring cash in the euro area, by country

(%)

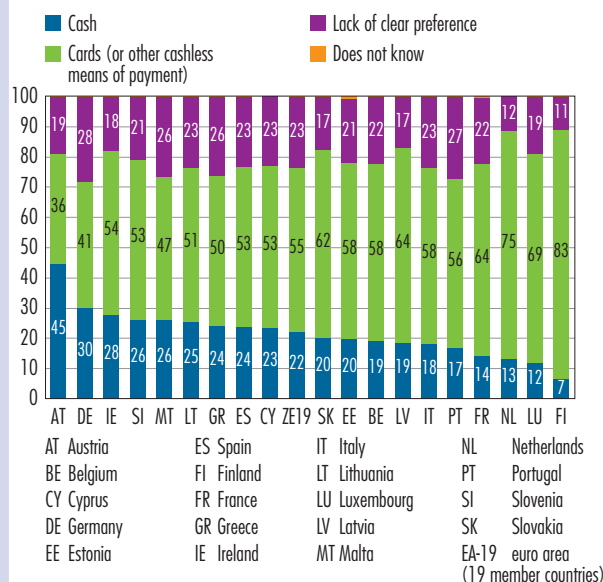


Source: European Central Bank, SPACE II survey (2022); Banque de France calculations.

Note: SPACE – Study on the payment attitudes of consumers in the euro area.

CB Preferred means of payment for households in the euro area, by country

(%)



Source: European Central Bank, SPACE II survey (2022); Banque de France calculations.

Note: SPACE – Study on the payment attitudes of consumers in the euro area.

1 See ECB survey published in October 2022: *Use of cash by companies in the euro area* (europa.eu)

2 SPACE – Study on the payment attitudes of consumers in the euro area.



- Yet cash is more popular with retailers than other means of payment in terms of cost, reliability and speed of transactions. Cash is also widely available and accepted almost everywhere (in 96% of companies in the euro area). In France, euro banknotes and coins are legal tender: except in exceptional cases, they cannot therefore be refused as a means of payment.
- While households mainly use cash withdrawal services – usually from ATMs – to pay for their purchases or build up precautionary savings at home, retailers tend to use deposit services, especially cash-in machines (53% in the euro area and 49% in France), to credit their accounts with cash collected in the course of their business. When necessary, retailers obtain cash mainly over-the-counter at their bank (64% and 68% respectively).
- The impact of technological innovations on payment habits and cash management was still limited throughout Europe in 2022. The new channels for distributing cash by retail service providers (open only to customers of the retailer's partner banking network) are still underdeveloped and, due to a lack of familiarity with the system, 90% of respondents do not plan to develop these services.



APPENDIX – METHODOLOGY

POS (point of sale)/P2P (peer to peer) change of scope

The scope of point-of-sale (POS) and person-to-person (P2P) purchase categories has changed between the first (2019) and second (2022) Studies on the payment attitudes of consumers in the euro area (SPACE

surveys). POS purchases now include the sub-categories “services outside the home” and “services inside or around the home”, which are no longer included in P2P purchases.

Scope of purchases included in SPACE II, at point of sale and peer to peer

Type of shop	Scope
Supermarket Shops for day-to-day items (e.g. bakery, pharmacy, kiosk) Street markets or vendors (e.g. newsagent, florist) Shop selling durable goods (e.g. clothing, toys, electronics, appliances, furniture) Petrol station Restaurant, bar, cafe Hotel or similar (e.g. guest house, holiday apartment) Culture, sport or entertainment venue Vending machine or ticket office Services outside the home (e.g. hairdresser, dry cleaning, car maintenance, doctor, taxi, travel ticket if not purchased) Services inside or around the home (e.g. cleaning, babysitting, home repair) Office of a public authority or post office (for example, to obtain a new passport/identity card/license plate) Other physical location Does not know	POS payments
Charity (e.g. donations, people in need) Private payment to another person (e.g. family members, friends)	P2P payments

Sources: Banque de France; European Central Bank – SPACE II survey (2022).

Note: SPACE - Study on the payment attitudes of consumers in the euro area.



Results of analyses of factors determining cash use

Two logistic regression models were run to determine the factors that explain the following payment behaviour in respondents:

- The primary use of cash (or card) in transactions (strictly above 50% in volume terms);
- The use of cash (or card) to pay for a purchase.

Results of the logistic regression on the binary indicator of making a majority of payments in cash or card (0 or 1)

	Purchases paid in cash			Purchases paid by card		
	Coefficient	(Error type)	Odds ratio	Coefficient	(Error type)	Odds ratio
Transaction characteristics						
nl ^{a)} (total value of purchases)	-0.58 ***	(0.04)	0.56	0.31 ***	(0.03)	1.36
Share of purchases in shops for day-to-day items	0.00	(0)	1.00	0.00	(0)	1.00
Share of constrained purchases	-0.05 ***	(0)	0.95	0.07 ***	(0)	1.08
Gender (1 if female)	-0.11	(0.09)	0.89	-0.05	(0.08)	0.96
Income (reference: income < EUR 500)						
Between EUR 501 and EUR 750	-0.40	(0.45)	0.67	0.33	(0.42)	1.39
Between EUR 751 and EUR 1,000	-0.76 .	(0.4)	0.47	0.79 *	(0.37)	2.20
Between EUR 1,001 and EUR 1,500	-0.38	(0.34)	0.69	0.37	(0.32)	1.44
Between EUR 1,501 and EUR 2,000	-0.47	(0.32)	0.63	0.44	(0.31)	1.56
Between EUR 2,001 and EUR 2,500	-0.57	(0.33)	0.57	0.61 .	(0.31)	1.84
Between EUR 2,501 and EUR 3,000	-0.40 .	(0.32)	0.67	0.61 *	(0.31)	1.84
Between EUR 3,001 and EUR 4,000	-0.60	(0.32)	0.55	0.65 *	(0.3)	1.91
Between EUR 4,001 and EUR 6,000	-0.53 .	(0.33)	0.59	0.70 *	(0.31)	2.01
More than EUR 6,000	-0.70	(0.36)	0.50	1.15 ***	(0.34)	3.15
Does not know/declines	-0.69 .	(0.43)	0.50	1.08 **	(0.42)	2.95
Age (reference: 18-24 years old)						
From 25 to 39 years old	0.52 *	(0.21)	1.68	-0.07	(0.18)	0.93
From 40 to 54 years old	0.59 **	(0.21)	1.81	-0.09	(0.18)	0.91
From 55 to 64 years old	0.97 ***	(0.22)	2.64	-0.16	(0.19)	0.85
65 and over	1.04 ***	(0.25)	2.83	-0.10	(0.22)	0.90
Employment status (reference: self-employed)						
Employees	0.00	(0.14)	2.21	0.20	(0.13)	1.08
Workers	0.30	(0.22)	1.30	0.06	(0.2)	0.89
Homemakers	-0.35	(0.25)	4.87	0.24	(0.23)	0.70
Students	0.22	(0.29)	1.25	-0.04	(0.25)	0.96
Retired	0.08	(0.19)	1.35	0.04	(0.18)	1.06
Jobseekers	0.26	(0.27)	0.70	-0.12	(0.26)	1.27
Other	0.79 .	(0.41)	1.08	0.07	(0.38)	1.04
Does not know	1.58 .	(0.95)	1.00	-0.36	(0.99)	1.22
Constant	5.38 ***	(0.42)		-8.66 ***	0.51	
Comments		4,866			4,866	
AIC		3,712			4,113	
Pseudo R ²		0.62			0.51	

Source: European Central Bank, SPACE II (2022) survey (Study on the payment attitudes of consumers in the euro area); authors' calculations.

a) Natural/nepierian logarithm.

Notes: Statistical significance threshold of the coefficient: 0.1 % "****", 1 % "***", 5 % "**", 10 % ".".

The Akaike Information Criterion (AIC) is a measure of the quality of a statistical model.

The pseudo R² is calculated when the outcome variable is nominal or ordinal, so the coefficient of determination R² cannot be applied as a measure of model robustness. However, the pseudo R² does not represent a proportional reduction in error unlike the R² in linear regression.

Key: Estimated coefficient for the age group 65 and over $\beta_{65 \text{ and older}}^{65} = 1.04$.

Calculation of odds ratios (OR – odds ratio): $OR_{\text{and older}}^{65} e^{1.04} = 2.83$.

Respondents aged 65 and over are 2.83 times more likely to use mainly cash than people under 25. In other words, people aged 65 and over are 183% (2.83 – 1 = 1.83) more likely to use mainly cash than people under 25.



Results of the logistic regression on the binary indicator of payments made in cash or by card (0 or 1)

	Purchases paid in cash			Purchases paid by card		
	Coefficient	(Error type)	Odds ratio	Coefficient	(Error type)	Odds ratio
Transaction characteristics						
nl ^{a)} (purchase value)	-0.57 ***	(0.02)	0.56	0.48 ***	(0.02)	1.61
Type of business (reference: supermarket)						
Shops for day-to-day items	0.21 ***	(0.06)	1.24	-0.25 ***	(0.06)	0.78
Street markets or vendors	0.52 ***	(0.09)	1.68	-0.66 ***	(0.10)	0.52
Shops selling durable goods	-0.36 ***	(0.09)	0.70	0.20	(0.08)	1.22
Petrol station	-0.22 *	(0.09)	0.80	0.25	(0.08)	1.29
Restaurant, bar, cafe	0.18 **	(0.07)	1.20	-0.26 ***	(0.07)	0.77
Hotel or similar	-0.60 *	(0.28)	0.55	-0.39 .	(0.22)	0.68
Culture, sport or entertainment venue	-0.01	(0.15)	0.99	-0.21	(0.15)	0.81
Vending machine or ticket office	0.13	(0.15)	1.14	-0.33 *	(0.16)	0.72
Services outside the home	-0.23 .	(0.12)	0.79	-0.16	(0.12)	0.85
Services inside or around the home	-0.10	(0.19)	0.90	-0.59 **	(0.19)	0.55
Office of a public authority or post office	-0.02	(0.24)	0.98	-0.57 *	(0.24)	0.56
Charity	0.60 *	(0.3)	1.83	-0.75 *	(0.32)	0.47
Private payment between individuals	1.12 ***	(0.13)	3.06	-2.74 ***	(0.23)	0.06
Other physical location	-1.21 ***	(0.18)	0.30	-0.08	(0.15)	0.92
Does not know	-1.77 **	(0.55)	0.17	-1.32 **	(0.45)	0.27
Constant	1.59 ***	(0.08)		-1.51 ***	(0.08)	
Comments		10,904			10,904	
AIC		13,505			13,549	
Pseudo R ²		0.19			0.15	

Source: European Central Bank, SPACE II (2022) survey (Study on the payment attitudes of consumers in the euro area); authors' calculations.

Notes: Statistical significance threshold of the coefficient: 0.1% "****", 1% "***", 5% "**", 10% "*".

The Akaike Information Criterion (AIC) is a measure of the quality of a statistical model.

The pseudo R² is calculated when the outcome variable is nominal or ordinal, so the coefficient of determination R² cannot be applied as a measure of model robustness. However, the pseudo R² does not represent a proportional reduction in error unlike the R² in linear regression.

a) Natural/napierian logarithm.

Key:

Statistics on purchase value: a one percentage point increase in the value of a purchase reduces the likelihood of a respondent paying for that purchase in cash by 44%.

Statistics on payment location: purchases made in shops selling durable goods and at petrol stations are 30% and 20% less likely to be made in cash than purchases made in supermarkets. Conversely, purchases made in shops for day-to-day items, and from street markets or vendors, are 24% and 68% more likely to be made in cash than purchases made in supermarkets.

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