



EUROPEAN CENTRAL BANK

EUROSYSTEM

Study on the payment attitudes of consumers in the euro area (SPACE) – 2024

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Foreword

Ensuring that citizens are able to make payments in efficient, safe and inclusive ways is key to maintaining trust in the euro and is at the heart of both the Eurosystem's retail payments strategy and its Cash 2030 strategy. Consequently, the Eurosystem closely tracks developments in the payments landscape and how consumers in the euro area make payments.

To get a better understanding of evolving payment practices, the ECB has carried out surveys since 2016 to investigate the payment attitudes and behaviours of euro area consumers. This report sets out the results of the latest survey round, completed in 2024, and confirms that digitalisation is also affecting the way people make payments.

Consumers are increasingly using digital payments and the share of cash payments is continuing to decline as a result. This trend is being supported by a shift from purchases at the point of sale to online purchases. At the same time, cash remains the payment instrument used most often at the point of sale and for person-to-person payments in the euro area. The survey results also show that although most people prefer to use cards or other electronic means of payment, nearly two-thirds wish to keep cash as a payment option and that share has increased recently. This underlines the importance of having a choice of different payment options. In this respect it is also good to see that consumers have increased access to, and are making greater use of, instant payments, which further enriches the payments landscape.

At the same time, we are aware that the increasing digitalisation of payments may cause difficulties for some people. Therefore, in the 2024 survey wave we explored for the first time whether consumers need assistance when making digital payments. The results show that almost one in ten respondents reported that they did indeed need assistance.

All these results underline not only the importance of ensuring continued access to and acceptance of cash, but also the need for digital means of payment to be accessible to all euro area consumers, regardless of their age, income, place of residence or other circumstances.

The ECB is committed to ensuring that consumers have the freedom to choose how they make payments – including in a time of digital transformation. And by supporting both the use of cash and the development of a digital euro we want to guarantee that citizens can always choose to pay with public money, now and in the future.

Piero Cipollone

ECB Executive Board Member

Executive summary

This report presents the key findings of a study conducted by the European Central Bank (ECB) on the payment attitudes of consumers in the euro area (SPACE) in 2024. It compares these findings with those of the previous SPACE studies (in 2019 and 2022) and, where relevant, with an earlier ECB study on the use of cash by households in the euro area (SUCH), conducted in 2016.¹ The payment behaviour and, to a lesser extent, the stated preferences of consumers have evolved over this time span. Euro area consumers have been using non-cash instruments more frequently and cash less often to pay at the point of sale (POS), although cash is still widely used to pay smaller amounts. The stated preference for cash over non-cash payments has decreased, but cash is still considered an important payment option by the majority of consumers.

The SPACE 2024 results are summarised below.

- The share of online payments in consumers' day-to-day payments has continued to increase. In 2024, 75% (80%²) of day-to-day payments were made at the POS and 4% (4%) were person-to-person (P2P) payments, while 21% (17%) of consumers' day-to-day payments were made online.
- In terms of payment value, 58% (68%) of day-to-day payments were made at the POS, 6% (5%) as P2P payments and 36% (28%) online.
- Cash was the most frequently used payment method at the POS in the euro area and was used in 52% (59%) of transactions, but the share of cash payments has declined.
- In terms of value, the most important single payment instrument was cards, with a share of 45% (46%). Cash had a share of 39% (42%).
- Cash was the most frequently used payment method for small-value payments at the POS, in line with previous surveys. For payments over €50, cards were the most frequently used payment method.
- Cash was the dominant means of payment in P2P transactions, accounting for 41% of such payments. Cards and mobile apps were used for 33%, credit transfers for 9% and instant payments for 6% of P2P transactions.
- The most frequently used instrument for online payments was cards, representing 48% (51%) of transactions. The share of e-payment solutions, i.e. payment wallets and mobile apps, was 29% (26%).

¹ See Esselink, H. and Hernández, L. (2017), "[The use of cash by households in the euro area](#)", *Occasional Paper Series*, No 201, ECB, Frankfurt am Main, November.

² Percentages in brackets represent 2022 figures.

- The large majority of recurring payments were made using direct debit, with credit transfers ranking in second place.
- In 2024, 55% of euro area consumers expressed a preference for cards and other cashless payments when paying in a shop, while 22% preferred cash and 23% had no clear preference. Stated payment preferences were unchanged from 2022.
- An increasing majority of euro area consumers, amounting to 62% (60%), considered it important or very important to have cash as a payment option.
- The perceived key advantages of cash were, first, its anonymity and protection of privacy and, second, the perception that it makes consumers more aware of their own expenses.
- The perceived key advantages of card payments were that consumers do not have to carry cash with them, and that card payments are faster and easier.
- A majority of euro area consumers (58%) said they were concerned about their privacy when performing digital payments or other banking activities.
- Most euro area consumers said they were satisfied with their access to cash, but this satisfaction has decreased slightly. A large majority, i.e. 87% (89%) of consumers, find it fairly easy or very easy to get to an ATM or a bank. Most consumers, i.e. 57%, never paid a fee when withdrawing cash from an ATM whereas 11% paid a fee always or most of the time.
- A majority of euro area consumers (57%) said they had the option of withdrawing cash at shop counters.
- The share of euro area consumers holding a payment account increased from 91% in 2022 to 93% in 2024. The share of consumers who own a payment card decreased from 94% in 2022 to 92% in 2024.
- In 2024, 24% of euro area consumers reported that in the past month the payment method they would have preferred to use at physical locations was not always offered by the merchant or payee.

Introduction

The ways in which consumers in the euro area make payments and the payment instruments they prefer are constantly evolving. By monitoring payment behaviour on a continuous basis, it is possible to capture changes in consumer demand and market trends.

The study on the use of cash by households in the euro area (SUCH)³ was the result of the first payment behaviour survey conducted by the ECB, back in 2016. The study on the payment attitudes of consumers in the euro area (SPACE) was conducted in 2019⁴, 2022⁵ and most recently 2024. Results from the SUCH can only be compared with those from the SPACE studies to a limited extent, because the survey modes were different and the output variables only partially overlap.

The results from the SPACE surveys can be used to estimate the share of different payment instruments used by consumers at the POS⁶, and for P2P⁷, online⁸ and recurring payments⁹, including breakdowns by demographics and payment patterns. The surveys also provide an insight into consumers' payment preferences and access to and acceptance of cash and digital payments.

Compared with the previous surveys, SPACE 2024 looked in greater detail at consumers' cash withdrawal behaviour, experiences of technical difficulties while performing payments, preferred authentication methods for online payments and privacy concerns when performing digital payments.

³ The SUCH aimed to shed light on consumers' payment behaviour and improve understanding of consumers' payment choices at the POS. Unlike the SPACE studies, it was conducted mostly via web interviews and focused on POS transactions rather than online payments

⁴ See ECB (2020), *Study on the payment attitudes of consumers in the euro area (SPACE)*, Frankfurt am Main.

⁵ See ECB (2022), *Study on the payment attitudes of consumers in the euro area (SPACE) – 2022*, Frankfurt am Main.

⁶ POS payments include purchases of goods or services at supermarkets, shops selling day-to-day items, street or market selling points, shops selling durable goods, restaurants, bars, cafés, petrol stations, vending and ticketing machines, pick-up stations, cultural, sporting and entertainment venues, offices of public authorities, hotels or similar, and purchases of services outside the home (e.g. hairdressers, dry cleaning, bicycle repair), inside and around the home (e.g. cleaning, babysitting), and at other physical locations.

⁷ P2P payments are private transactions between individuals that are not connected to the purchase of goods and services, e.g. charitable donations, and other payments to private persons such as pocket money or gifts. P2P payments can be made either as physical payments or online.

⁸ Online payments include all day-to-day online transactions, and include purchases of clothes, sportswear and accessories; electronic goods and household appliances; meals and beverages delivered from a restaurant; groceries and daily supplies; medicine, cosmetics and drugstore products; media, games and entertainment; travel and accommodation; furniture and other household items; tickets for events and attractions; luxury goods; financial products; household-related services; and other goods and services.

⁹ Recurring payments are those that a consumer makes on a regular basis, such as rent, mortgage, utility bills, subscriptions, insurance, etc.

1 Summary of research methodology

Data for SPACE 2024¹⁰ were collected through a survey of a random sample of the adult population in all euro area countries. The most important methodological choices – such as the survey mode, sampling strategy and weighting methodology – were identical to SPACE 2022 and 2019, making the results of most indicators comparable. A detailed description of the methodologies used is available in Annex B.¹¹ This section briefly summarises the methodology.

The ECB coordinated the data collection in 18 euro area countries, i.e. all except Germany and the Netherlands. The Deutsche Bundesbank (2024) and De Nederlandsche Bank and the Dutch Payments Association (2024) collected their own data, but their questionnaires were largely harmonised with the one used for the other countries.

The data for all countries except Germany and the Netherlands were collected using an identical questionnaire translated into national languages (included in Annex A¹²). The market research company Ipsos was responsible for data collection. Approximately 50% of the interviews were conducted in computer-assisted telephone interviews (CATI) and 50% in computer-assisted web interviews (CAWI). The CATI sample was drawn using probabilistic methods, while the CAWI sample was drawn from non-probabilistic Ipsos online panels. For both samples, quotas for country, age, gender and day of the week were set. The total sample size achieved in the 18 euro area countries was 40,981 respondents. The German data were all collected using CATI, while most of the data from the Netherlands were obtained via CAWI, with a small portion (2.5%) collected using CATI.

The interview process consisted of three parts: a recruitment interview, the recording period, and the main (follow-up) interview. The payment diary was split into modules covering (i) POS payments, (ii) P2P payments, (iii) online payments, and (iv) recurring payments. Survey respondents were asked to report their POS, P2P and online transactions in a one-day diary, as well as their recurring payments from the past month.

When interpreting the survey results it is important to acknowledge the benefits and limitations of recording payment behaviour in one-day diaries. Transactions are recorded more comprehensively in diaries covering one day than those with a period of several days (Jonker and Kosse, 2013). However, the degree of uncertainty in any survey data is more pronounced for one-day diaries, especially when aiming to draw conclusions about countries and other sub-groups of the population with small

¹⁰ SPACE data are collected every two or three years. The SPACE 2024 wave consisted of two survey rounds, i.e. separate fieldwork periods during which data were collected for different sub-samples. A survey wave refers to the survey every two or three years for which a new questionnaire and sampling strategy are developed.

¹¹ ECB (2024), [Study on the payment attitudes of consumers in the euro area \(SPACE 2024\) – Annex B: methodological information on the survey](#), Frankfurt am Main.

¹² ECB (2024), [Study on the payment attitudes of consumers in the euro area \(SPACE 2024\) – Annex A: survey questionnaire](#), Frankfurt am Main.

sample sizes. Data from a longer diary period include more transactions per sample unit and consequently increase the precision of the estimated indicators (Schmidt, 2014). In particular, indicators relating to the value of POS, P2P, online and recurring payments need to be interpreted with care.

In addition to the diary, respondents were asked questions about their behaviour and attitudes towards cash and cashless payment instruments in the main interview. Further questions aimed to provide insight into the perceived advantages of cash or cards, behaviour regarding cash withdrawals, availability of financial products, access to the internet, etc.

SPACE 2024 interviews were conducted in two survey rounds¹³: 45% of interviews were carried out during the first round, between 26 September and 16 November 2023, and the remaining ones were held in the second round, between 9 April and 3 June 2024. The survey rounds were spread across different months of the year to capture seasonal patterns in people's payment behaviour (see Table 1).¹⁴

In Germany, the data were collected in one survey round between September and December 2023. In contrast to the ECB data collection, German participants were asked to complete a three-day diary. In the Netherlands, the diary data and main questionnaire were collected for different samples; the diary data were collected in the fourth quarter of 2023 and the data for the main questionnaire in the first quarter of 2024.

After the fieldwork period, the data were cleaned, edited and imputed.¹⁵ The sample was weighted to minimise the observable bias of survey estimates and enable solid inferences to be made based on the demographic characteristics.

This report includes figures from SPACE 2019 and SPACE 2022 when comparison with SPACE 2024 results is deemed useful and the data are comparable. In addition, for SPACE 2024 the ECB collected information on additional questions that were not included in previous waves. As such, no comparisons will be included in those sections.

Most of the 2019 and 2022 data are comparable with the 2024 data. The main change from the earlier SPACE survey waves is the inclusion of private payments to another person as a separate category of online payments. Due to this, the data on P2P payments are not comparable with the data from previous SPACE survey waves. In addition, as the payments market is constantly evolving, the response options for payment instruments have been updated, especially for online payments.

¹³ In the context of the SPACE study, we use the term "survey wave" for the data collection period for which a new questionnaire and sampling strategy are developed, and the term "survey round" for separate fieldwork periods conducted within one survey wave for subsets of the sample.

¹⁴ In addition to the samples shown in Table 1, the data include the samples from the German and Dutch national surveys: for Germany there were 5,698 respondents, of whom 4,036 filled in the payment diary, and for the Netherlands there were 5,150 respondents for the main questionnaire and 3,732 for the payment diary.

¹⁵ Imputation was performed for missing observations of variables indicating values of payments and withdrawals and outlier values considered suspicious. Outliers were defined as those higher than the median plus three times the interquartile range.

These changes have no impact on comparability but enable more effective analysis of the 2024 data.

Table 1
Breakdown of sample by country, round and month (euro area 18)

Country	Round 1			Round 2			Total sample size
	September	October	November	April	May	June	
Belgium	57	938	187	717	663	0	2,562
Estonia	9	589	121	324	482	1	1,526
Ireland	18	700	206	556	563	0	2,043
Greece	12	690	290	479	599	0	2,070
Spain	89	1,502	331	1,112	1,025	1	4,060
France	96	1,895	328	1,471	1,285	0	5,075
Croatia	24	912	248	597	764	1	2,546
Italy	95	1,540	300	1,144	1,009	0	4,088
Cyprus	29	403	47	280	277	0	1,036
Latvia	2	401	109	255	276	0	1,043
Lithuania	8	390	82	251	294	0	1,025
Luxembourg	18	422	68	304	257	0	1,069
Malta	5	386	110	197	365	0	1,063
Austria	57	889	220	750	615	0	2,531
Portugal	17	944	251	700	671	0	2,583
Slovenia	12	420	51	267	294	0	1,044
Slovakia	32	932	257	734	600	0	2,555
Finland	56	1,063	226	897	820	0	3,062
Total	636	15,016	3,432	11,035	10,859	3	40,981

2 The way we pay

Consumers make several different types of payment, which can broadly be categorised as recurring and day-to-day (non-recurring) payments. Day-to-day payments can be further broken down into payments at a physical POS, P2P payments and online payments.¹⁶

This chapter looks at how different types of payment were made by euro area consumers in 2024. The first part deals with the structure of day-to-day payments, followed by separate analyses of POS, P2P and online payments, and breakdowns of POS and online payments by value range and location. The final chapter analyses recurring payments.

2.1 Non-recurring day-to-day payments

Non-recurring day-to-day payments consist of (i) payments made to purchase goods and services at a POS, (ii) P2P payments not connected to the purchase of goods and services¹⁷, and (iii) online payments for goods and services ordered and paid for remotely. In cases where consumers ordered goods online but paid when picking up the goods or paid the courier delivering the goods, the transactions were defined as POS payments.

In terms of the number of transactions, the proportion of POS payments has decreased by 5 percentage points since 2022, standing at 75% in 2024 (Chart 1). If calculated by payment value, the share stood at 58%, reflecting a decline of 9 percentage points since 2022. In contrast, the share of P2P payments has remained relatively stable, at 6% in terms of the number of payments and 4% in terms of the value of payments.

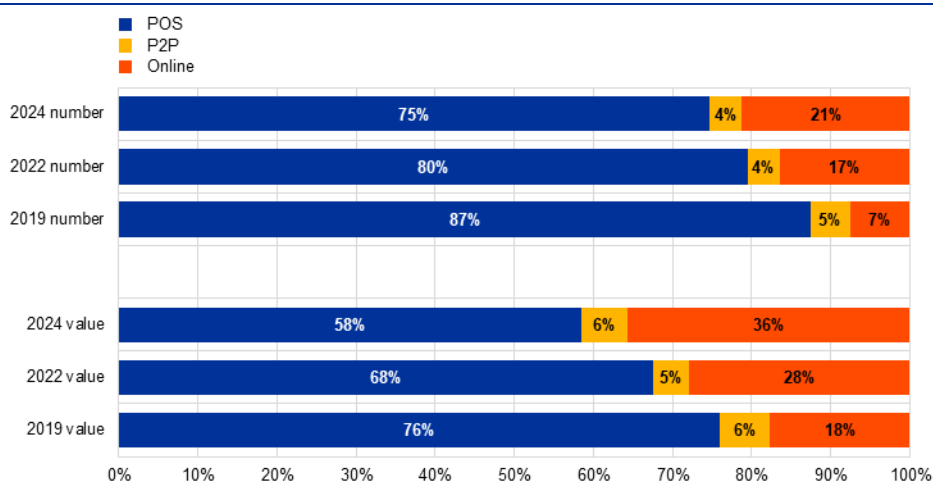
The share of online payments in euro area consumers' day-to-day purchases has increased considerably in the past five years. Online payments accounted for 7% and 17% of day-to-day payments in 2019 and 2022 respectively, while the corresponding share in 2024 was 21%. In terms of value, the share of online payments was 36% in 2024, compared with 18% in 2019 and 28% in 2022. The higher-value share of online payments indicates that online purchases are more frequently used for goods and services with a higher price.

¹⁶ See the Introduction for definitions of the different types of payment.

¹⁷ For the 2024 survey, the "Private payment to another person" category was added to the online payment diary. In 2019 and 2022, the introduction to the POS diary asked consumers to include payments to another person and payments made using a mobile app or internet banking. This change in the questionnaire may have improved the reporting of online P2P payments. The share of online payments in all P2P payments was 32% in 2024.

Chart 1

Number and value of day-to-day payments by payment situation, euro area, 2019-24



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2020, 2022, 2024) and the Deutsche Bundesbank (2018, 2022, 2024).

Note: Percentages may not add up to 100% due to rounding.

The share of online payments in consumers' day-to-day payments (Chart 2) was highest in Lithuania (29%), Croatia (28%) and Austria (28%). In terms of payment value, the highest share of online payments was observed in Estonia (50%) and Croatia (47%).¹⁸

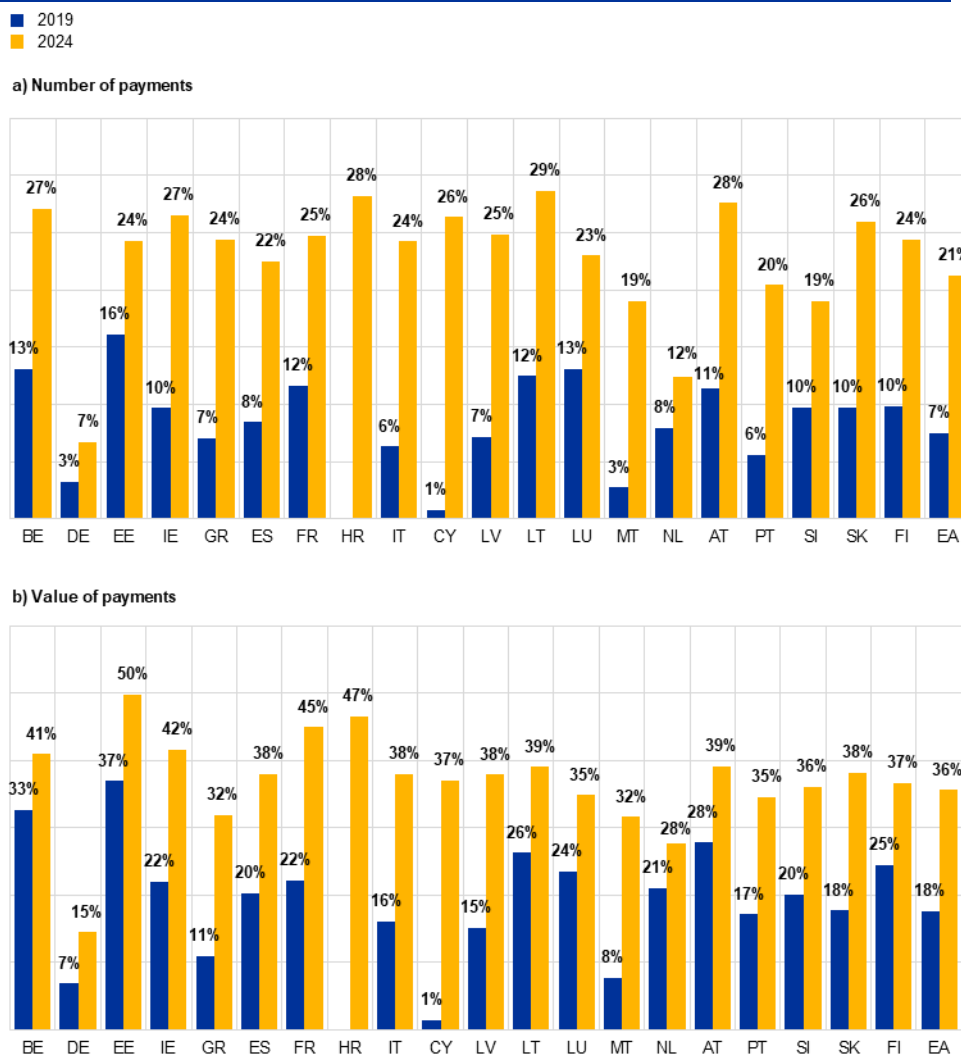
The differences between countries in terms of use of online payments decreased between 2019 and 2024. During that period, the relative standard deviation¹⁹ of the share of online payments in day-to-day payments decreased from 0.44 to 0.23 in terms of the number of payments and from 0.44 to 0.19 in terms of the payment value. Most of this convergence occurred between 2019 and 2022; the relative standard deviations were similar in 2022 and 2024.

¹⁸ A slightly different payment diary questionnaire was applied in Germany and the Netherlands, which may have an impact on the comparisons.

¹⁹ Relative standard deviation is the standard deviation divided by the mean. This indicator is calculated from the country-specific values for online payments/day-to-day payments in various years.

Chart 2

Share of online payments in consumers' day-to-day payments, breakdown by country, 2019-24

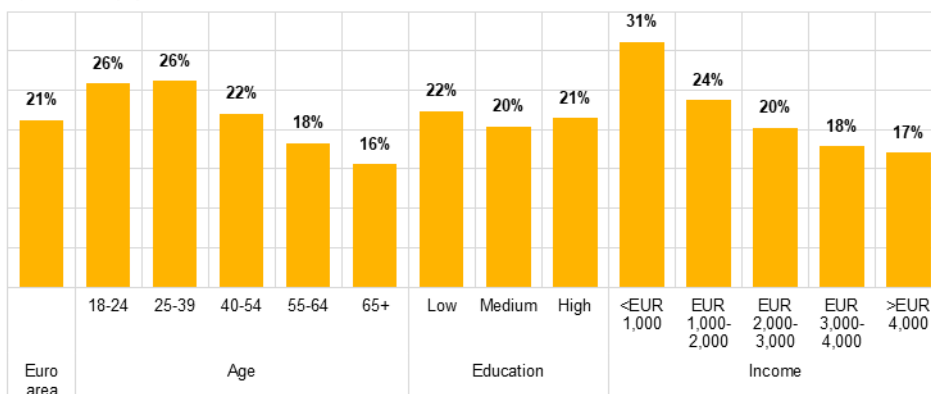
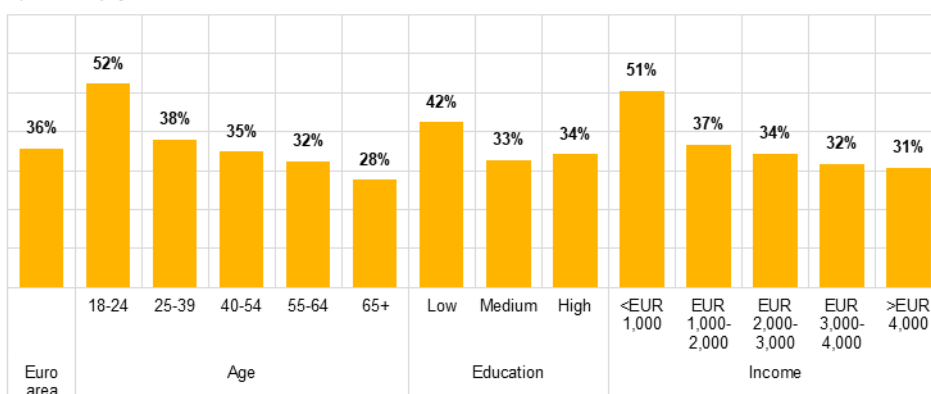


Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2020, 2022, 2024) and the Deutsche Bundesbank (2018, 2022, 2024).

Younger consumers made online payments more frequently than other age groups (Chart 3). The proportion of online payments in day-to-day payments was 26% for consumers under 40 years old, while the corresponding share for consumers aged 65 or older was 16%. There were limited differences between education groups in the share of online payments in 2024. In the previous SPACE survey conducted in 2022, there was a clear positive correlation between level of education and the share of online payments. This suggests that consumers with a lower level of education have become more familiar with online payments in recent years. In 2024, the share of online payments was lower for households in higher income groups.

Chart 3

Share of online payments in consumers' day-to-day transactions, breakdown by demographics, 2024

a) Number of payments**b) Value of payments**

Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2024) and the Deutsche Bundesbank (2024).

2.2 POS transactions

The COVID-19 pandemic in 2020-21 had a large impact on the payment behaviour of euro area consumers and the use of cash declined rapidly. The share of cash payments continued to decline during the first few years after the pandemic, but at a moderately slower speed.

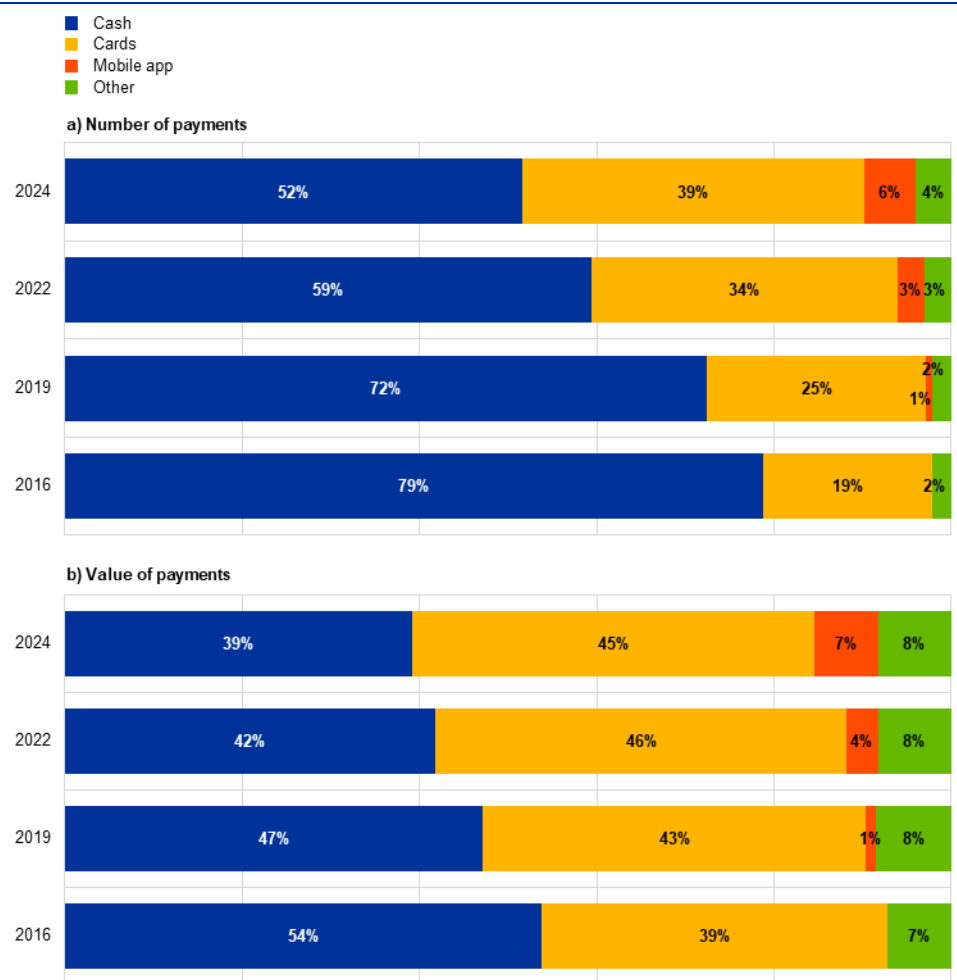
Nevertheless, cash was still the most frequently used payment method in physical locations: more than half (52%) of POS payments in the euro area were carried out using cash in 2024. This share has declined from 59% in 2022, 72% in 2019 and 79% in 2016 (Chart 4). The proportion of card payments increased from 34% in 2022 to 39% in 2024. The share of payments made with mobile devices²⁰ remained quite low (6%) but has almost doubled compared with 2022.

²⁰ In the questionnaire, mobile payments are defined as payments made with a mobile phone, smartwatch or fitness armband, or another smart device.

In terms of payment value, card payments accounted for a larger share (45%) of POS transactions than cash payments (39%). This indicates that the value of card payments was higher on average than that of cash payments. However, the decline in the share of cash payments compared with 2022 was less significant in terms of value than in terms of the number of payments, which could indicate that the decline has been less pronounced for higher-value payments than for small payments. In terms of value, the share of card payments in 2024 was 1 percentage point lower than in 2022, while the share of payments made with mobile devices increased from 4% to 7%.

Chart 4

Share of payment instruments used at the POS, euro area, 2016-24



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2020, 2022, 2024) and the Deutsche Bundesbank (2018, 2022, 2024).
Notes: The "Cards" category includes physical cards (debit and credit cards) and prepaid cards. The "Other" category includes bank cheques, credit transfers, direct debit, loyalty points, vouchers and gift cards and other payment instruments. Mobile payment apps can be based on payment cards.

In 2024, cash was the most frequently used payment method at the POS in 14 out of 20 countries (Chart 5). The share of cash payments varied between 22% in the Netherlands and 27% in Finland to 64% in Slovenia and 67% in Malta. Card payments were used for more than half of POS payments in Finland (57%), the Netherlands (56%) and Belgium (53%). Payments with mobile devices accounted for

more than 10% of POS transactions in the Netherlands, Finland and Ireland. The use of mobile payments has been growing relatively slowly in some parts of the euro area and the share of mobile payments was less than 5% in seven euro area countries.

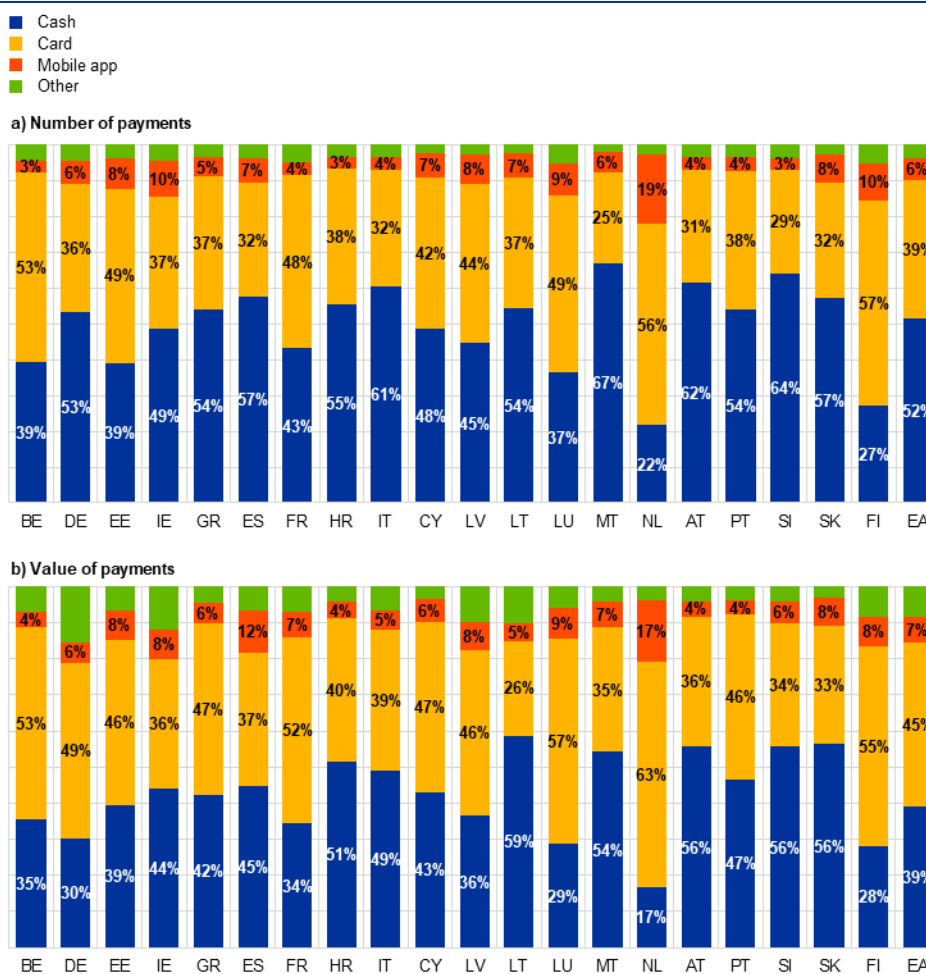
In terms of the value of payments, cash payments accounted for less than one-third of payments in four euro area countries, with the lowest share being observed in the Netherlands (17%). The total value of cash payments exceeded the total value of card payments in 10 out of 20 euro area countries.

The data on payments by value and for countries with a small sample size reflect some uncertainties. In particular, variations between different years and among countries should be interpreted with caution.²¹

²¹ For example, the French figures for payments by value and changes between different years differ from those presented in Banque de France (2023), *Observatory of the security of payments means: Annual Report 2022*, Paris. These discrepancies can be attributed to differing methodologies and time spans.

Chart 5

Share of payment instruments used at the POS, breakdown by country, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2024) and the Deutsche Bundesbank (2024).

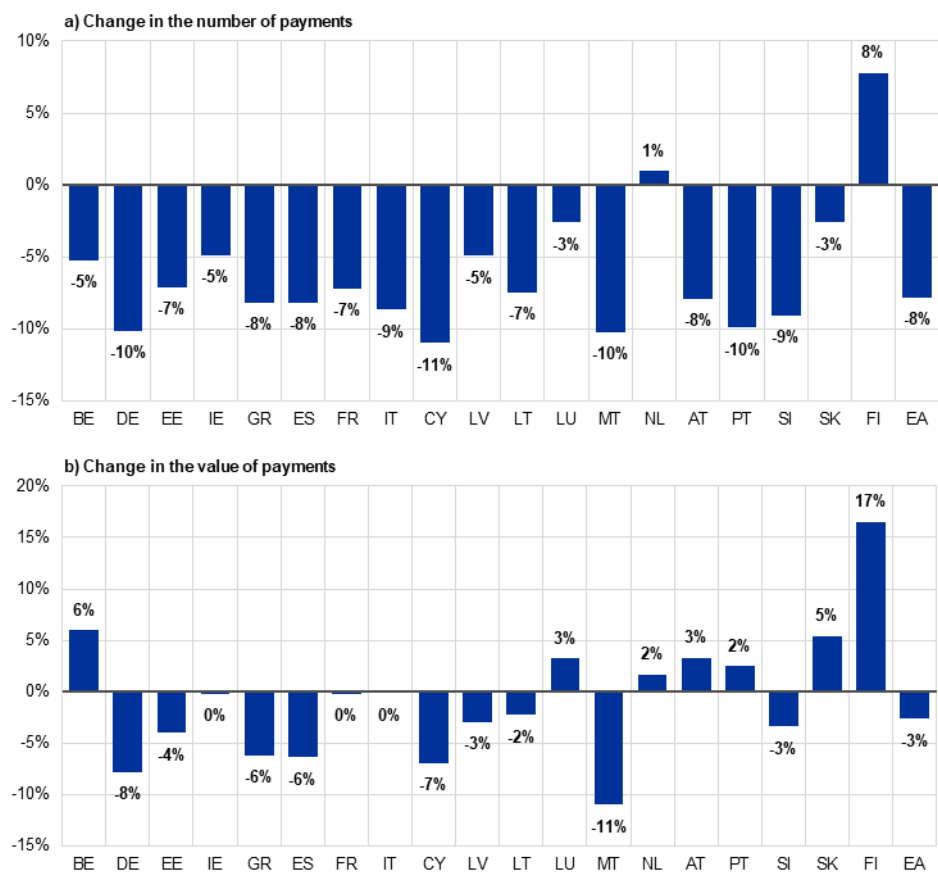
Notes: The "Cards" category includes physical cards (debit and credit cards) and prepaid cards. The "Other" category includes bank cheques, credit transfers, direct debit, loyalty points, vouchers and gift cards and other payment instruments. The definition of POS payments differs from the one used by the Deutsche Bundesbank (2024), which only included payments in supermarkets, local shops, drugstores and petrol stations.

The share of cash payments in POS transactions declined in all euro area countries between 2022 and 2024, with the exceptions of Finland and the Netherlands. Despite these two countries recording the lowest proportions of cash payments in POS transactions, they saw increases of 8 percentage points and 1 percentage point respectively. In both countries, the share of cash payments declined significantly during the COVID-19 pandemic and in 2024 it was still lower than in the pre-pandemic period. The biggest decreases in the share of cash payments at the POS between 2022 and 2024 in terms of the number of transactions were observed in Cyprus (11 percentage points), Germany, Malta and Portugal (10 percentage points). In terms of the value of payments, the share of cash transactions decreased in the euro area as a whole but increased in several of the euro area countries.

The differences between countries in terms of the use of cash at the POS decreased between 2022 and 2024. The relative standard deviation²² of the share of cash payments at the POS decreased from 0.28 to 0.24 in terms of the number of payments and from 0.33 to 0.27 in terms of the payment value. For the share of cash payments in terms of the number of payments, the trend has reversed since 2022. Differences in cash use grew between 2016 – when the relative standard deviation was 0.18 – and 2022. For the share of cash payments in terms of value, cross-country variations were virtually unchanged between 2016 and 2022.

Chart 6

Change in the share of cash used at the POS, breakdown by country, 2022-24, percentage points



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2022, 2024) and the Deutsche Bundesbank (2022, 2024).

Notes: The definition of POS payments differs from that used by the Deutsche Bundesbank (2022, 2024), which only includes payments in supermarkets, local shops, drugstores and petrol stations. The calculation of the change may vary due to rounding.

Younger consumers (aged below 40) used cash for less than 50% of their POS transactions in 2024 (Chart 7). The use of cash increased by age and the highest share of cash payments (57%) was recorded for those aged 65 and older. The share of card payments was broadly similar across different age groups: their share in POS payments varied between 37% and 40%. Younger consumers used mobile

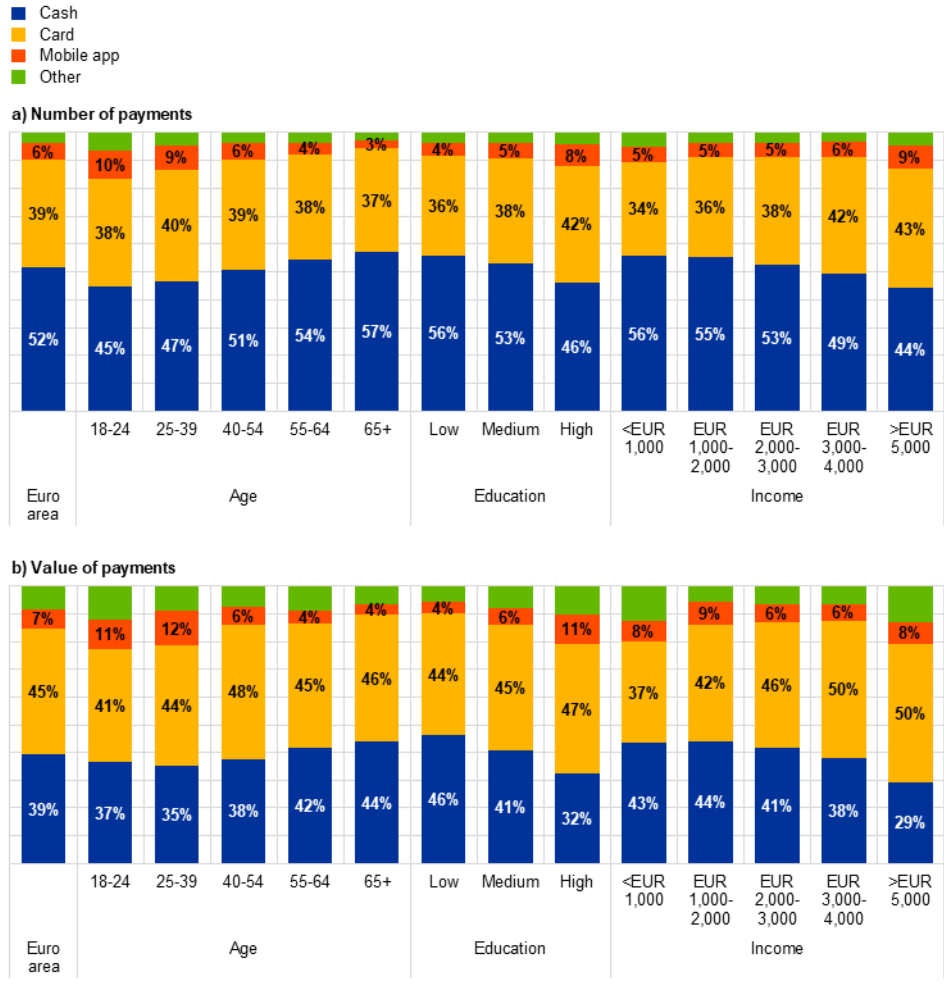
²² Relative standard deviation is the standard deviation divided by the mean. This indicator is calculated from the country-specific values for cash payments/POS payments in various years.

payments significantly more frequently than older consumers. The youngest age group used mobile payments in 10% of their POS transactions, while the corresponding share for the oldest age group was 3%. The share of cash payments in 2024 was lower in groups with higher levels of education and income. The share of payments with a mobile device increased with education level and was also markedly above the euro area average for consumers with a monthly income of over €4,000.

When looking at the share of cash by the value of payments, all age groups used cash for less than 50% of their POS transactions. The differences between age groups in terms of their use of various payment instruments at the POS by value were similar to those observed for the number of transactions. For consumers with a higher level of education or income, the share of cash was particularly low when measured by the value of payments, indicating that these population groups used digital payment methods more frequently for higher-value purchases.

Chart 7

Share of different payment instruments used at the POS, breakdown by demographics, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2024) and the Deutsche Bundesbank (2024).

Notes: The "Cards" category includes physical cards (debit and credit cards) and prepaid cards. The "Other" category includes bank cheques, credit transfers, direct debit, loyalty points, vouchers and gift cards and other payment instruments. The definition of POS payments differs from that used by the Deutsche Bundesbank (2024), which only includes payments in supermarkets, local shops, drugstores and petrol stations.

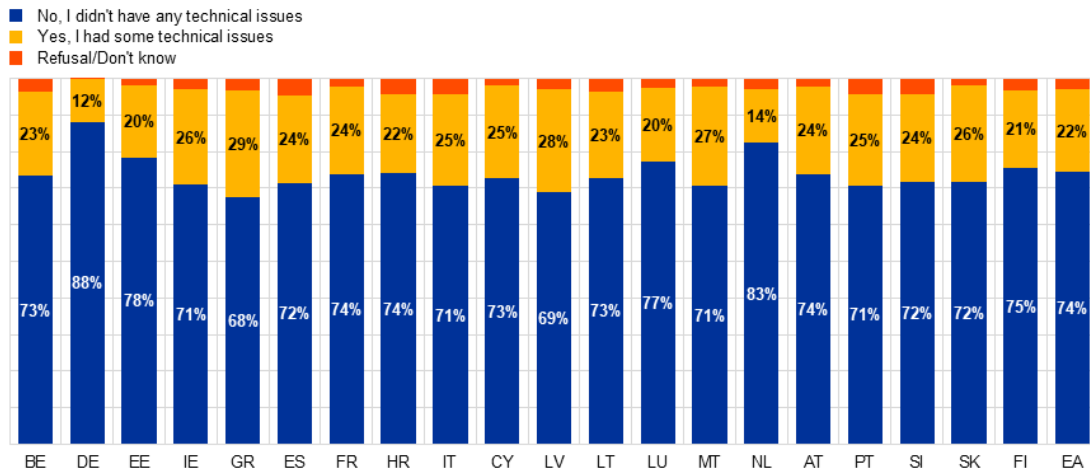
Box 1

Technical issues experienced with POS payments

In the 2024 SPACE survey, participants were asked about any technical issues they experienced when using different payment methods at the POS during the previous month. Most participants indicated that they had not encountered any issues with payments over the previous month. As Chart A shows, an average of 74% of respondents across the euro area reported that they experienced no issues, while 22% did have some technical issues. In all countries, the percentage of respondents who did not have any issues was above 70% but below 80%, with the exception of Germany, which reported a figure of 88%.

Chart A

Technical issues experienced when making POS payments, breakdown by country, 2024

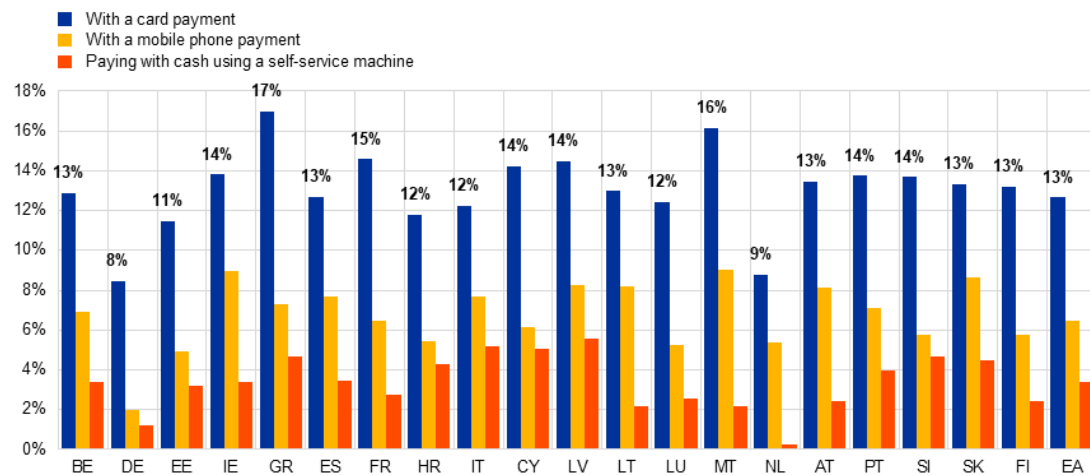


Sources: ECB, calculations based on the Deutsche Bundesbank (2024) and De Nederlandsche Bank and the Dutch Payments Association (2024).
 Note: Question wording: "While paying at a physical location in the past month have you had any technical issues with the payment methods used?"

Chart B shows a breakdown of the issues experienced by respondents. The highest proportion of technical issues were experienced with card payments, both at the euro area level (13%) and in all countries – particularly Greece (17%) and Malta (16%). This reflects the extent to which cards are used for POS payments in comparison with mobile phones and self-service machines for cash payments. Across the euro area, there were only very limited technical issues with mobile phone payments and self-service machines (6% and 3% respectively).

Chart B

Technical issues experienced when making POS payments, breakdown by type of payment and country, 2024



Sources: ECB, calculations based on the Deutsche Bundesbank (2024) and De Nederlandsche Bank and the Dutch Payments Association (2024).
 Note: Respondents were able to choose more than one answer.

2.3 P2P payments

P2P payments are private payments between individuals not connected to the purchase of goods and services, such as giving pocket money to children. In addition to payments to private persons, P2P payments include charity payments both at the POS and online.

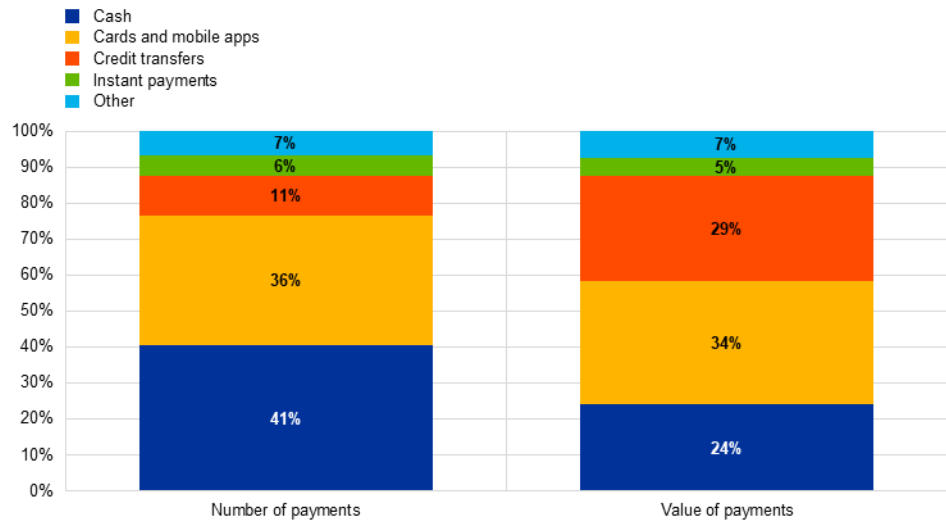
For the SPACE 2024 survey, a “Private payment to another person” category was added to the online payment diary. Even though online P2P payments were mentioned in the 2019 and 2022 surveys in the introduction to the diary for payments at physical locations, these types of P2P payment were potentially under-reported in previous SPACE survey waves, since they were not explicitly included as a response option in the online payment diary. Consequently, the 2024 figures cannot be directly compared with the figures from 2019 and 2022. The change in the methodology does not apply to the German or Dutch data, where the structure and categories for the payment diaries are slightly different compared with the remaining 18 countries.

Cash was still the most frequently used payment method for P2P payments in 2024 (Chart 8), accounting for 41% of all P2P payments, followed by payments with cards and mobile apps (36%). Instant payments were used in 6% of P2P transactions. The share of P2P payments made online was 35%, and the share of physical P2P payments was 65%. Looking at physical P2P payments only, the share of cash was 63%, which shows a decline compared with 2019 (86%) and 2022 (73%).

As was observed for POS payments, cash was used more for lower-value P2P payments: the value share of cash payments in 2024 was 24%. The value share of payments with cards and mobile apps was 34% and the value share of credit transfers was 29%, indicating that credit transfers in particular are used more often for higher-value P2P payments.

Chart 8

Structure of P2P payments, breakdown by payment instrument, euro area, 2024



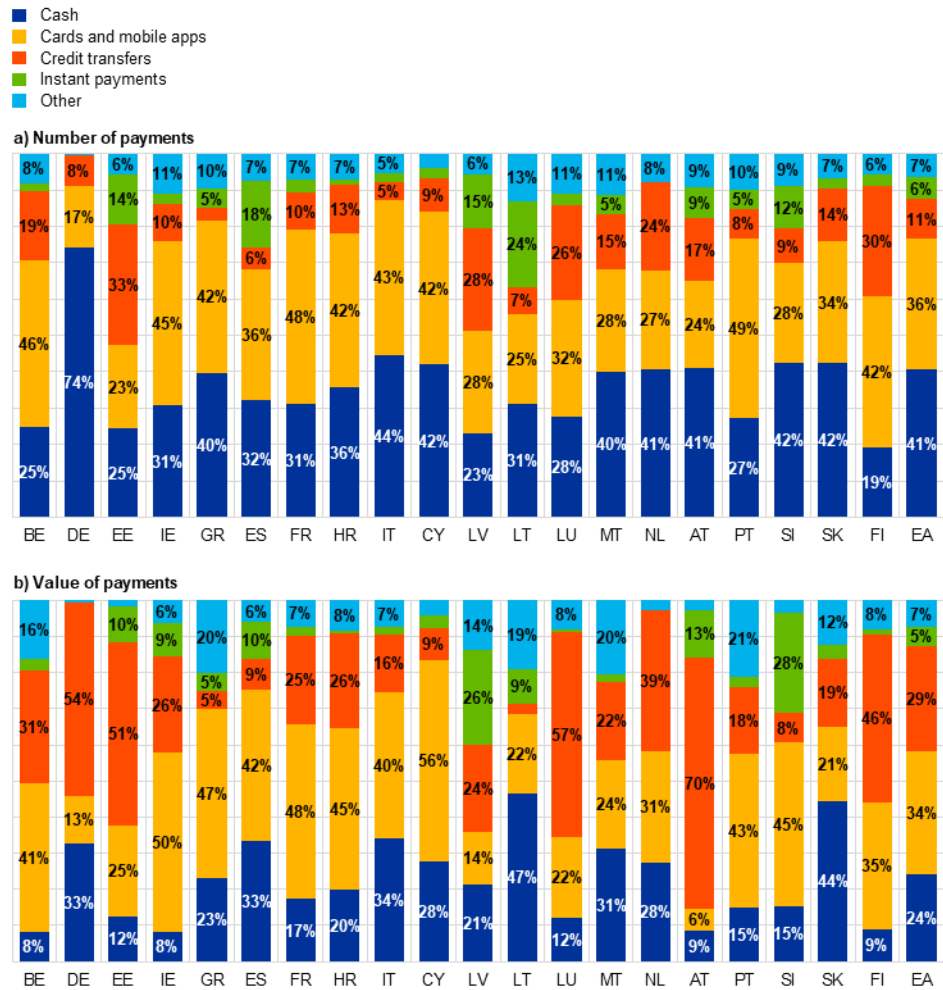
Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2024) and the Deutsche Bundesbank (2024).

Notes: The "Cards and mobile apps" category includes physical cards (debit and credit cards) and prepaid cards (at the POS and online); mobile phone, smartwatch, fitness armband or another smart device (at the POS); payment wallets, PayPal and other mobile apps (online). The "Other" category includes bank cheques, direct debit, loyalty points, vouchers and gift cards, crypto-assets, buy-now-pay-later services and other payment instruments.

As Chart 9 shows, cash was used most frequently for P2P payments in Germany (74%), Italy (44%), Cyprus, Slovenia and Slovakia (all 42%), and least frequently in Finland (19%), Latvia (23%), Belgium and Estonia (both 25%). In Estonia (33%) and Finland (30%), more than 30% of P2P payments were made via credit transfers.

Chart 9

Structure of P2P payments, breakdown by payment instrument, euro area, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2024) and the Deutsche Bundesbank (2024).

Notes: The "Cards and mobile apps" category includes physical cards (debit and credit cards) and prepaid cards (at the POS and online); mobile phone, smartwatch, fitness armband or another smart device (at the POS); payment wallets, PayPal and other mobile apps (online). The "Other" category includes bank cheques, direct debit, loyalty points, vouchers and gift cards, crypto-assets, buy-now-pay-later services and other payment instruments.

2.4 Online payments

Online payments, as defined in this report, include any payments made online, excluding regular bill payments such as electricity bills or rent (these are analysed separately as recurring payments in Section 2.7).

As introduced in SPACE 2022, the 2024 diary clearly distinguished between online payments and online purchases, meaning that any orders made online but paid for at the POS (e.g. when picking up food from a restaurant or paying a courier at the door) were reported as POS payments.

As indicated in Chart 2, the share of online payments in non-recurring payments increased significantly between 2019 and 2024, in terms of both number and value. In 2024, consumers made over four times more online payments than in 2019.

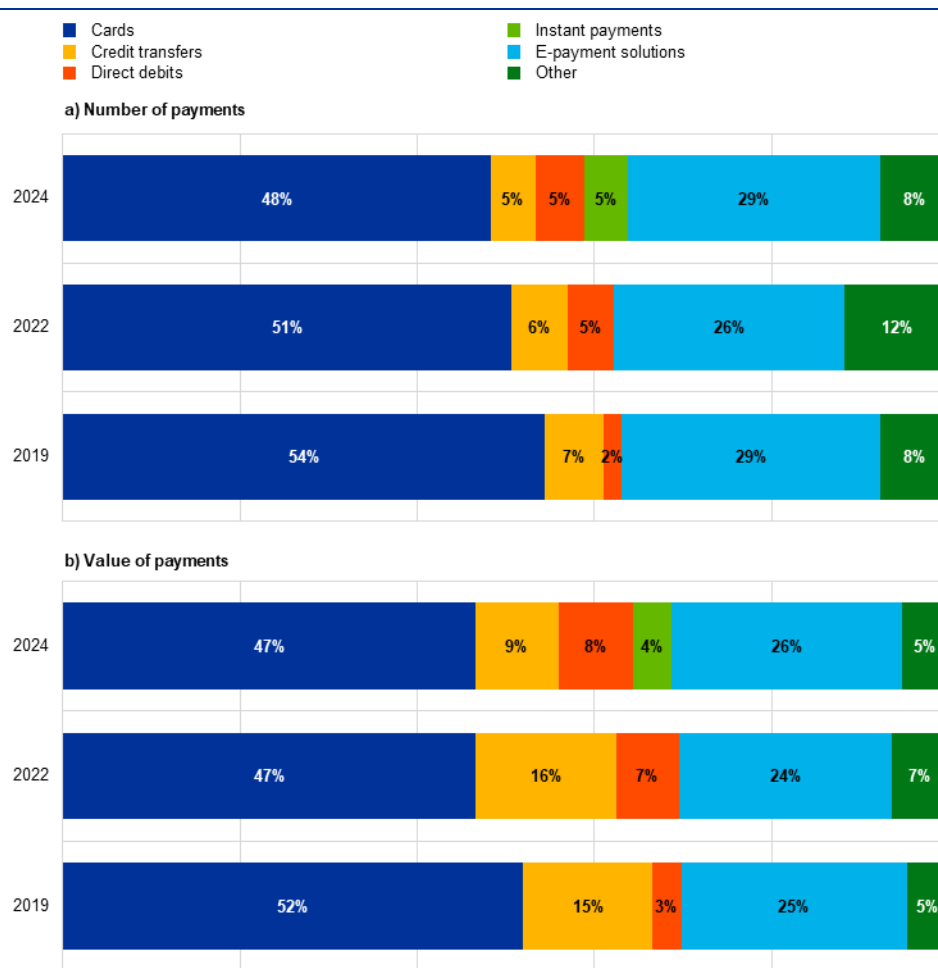
The breakdown by payment instrument (Chart 10) shows that 48% of online payments were made by card, followed by e-payment solutions (29%). The share of card payments declined significantly from 54% in 2019 and 51% in 2022, while the proportion of e-payment solutions²³ remained similar to that recorded in 2019. There has been a notable increase in the share of direct debits (5%), which has increased by 3 percentage points since 2019, and of instant payments (5%), which were recorded for the first time as a separate category in SPACE 2024. In previous SPACE surveys instant payments were in most cases reported as credit transfers.

The shares of online payments by instruments in terms of value show roughly the same pattern. However, in all three years the shares of credit transfers are higher in terms of value, while the shares of card payments are lower in terms of value. This points to higher usage of credit transfers for large-value payments.

²³ E-payment solutions include the following answer categories: a payment wallet, PayPal and other mobile apps. For payment wallets and other mobile apps, the questionnaire included national examples of the most frequently used service providers.

Chart 10

Structure of online payments, breakdown by payment instrument, euro area, 2024



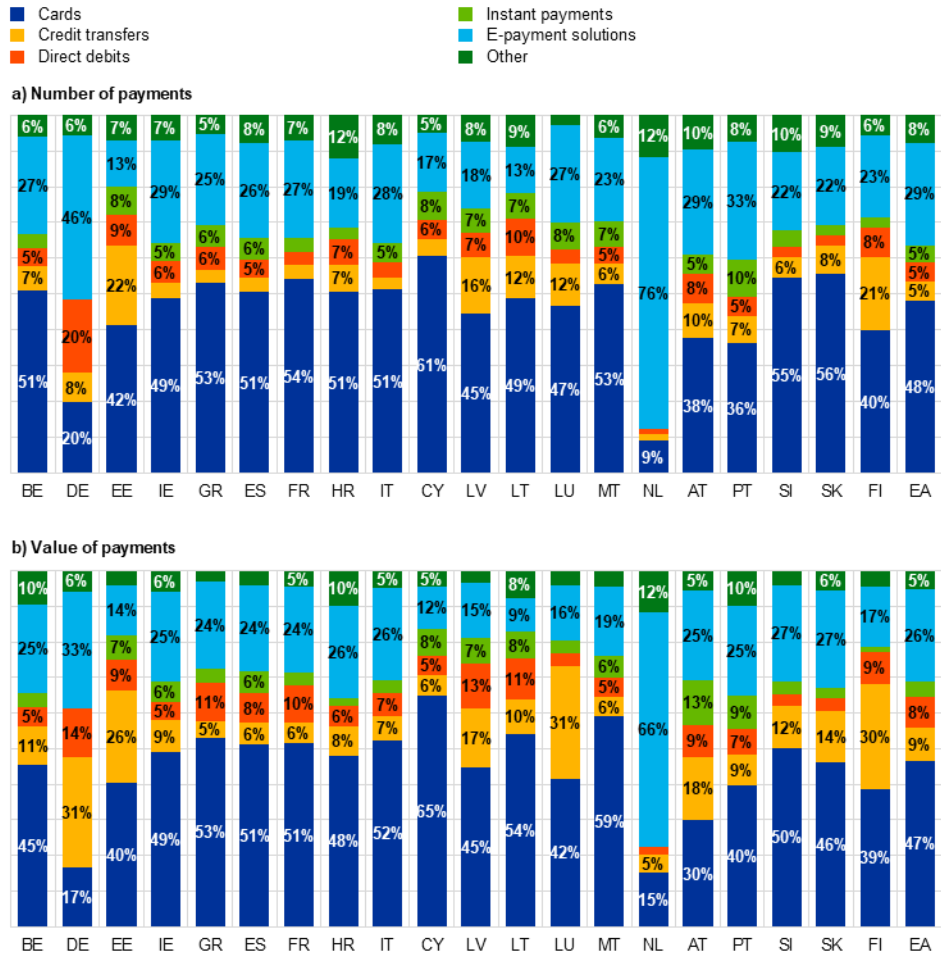
Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2024) and the Deutsche Bundesbank (2024).

Notes: The "Cards" category includes physical cards (debit and credit cards) and prepaid cards; the "E-payment solutions" category includes payment wallets, PayPal and other mobile apps, as well as iDEAL in the Netherlands; the "Other" category includes loyalty points, vouchers and gift cards, crypto-assets, buy-now-pay-later services and other payment instruments.

The breakdown of online payments varies a great deal by country (Chart 11). E-payment solutions were by far the most frequent way to pay for online purchases in the Netherlands (76%). They also accounted for a large share of all online payment methods in Germany (46%) and Portugal (33%). However, card payments were still the most frequently used instrument for online payments for the remaining euro area countries.

Chart 11

Structure of online payments, breakdown by payment instrument and by country, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2024) and the Deutsche Bundesbank (2024).

Notes: The "Cards" category includes physical cards (debit and credit cards) and prepaid cards; the "E-payment solutions" category includes payment wallets, PayPal and other mobile apps, as well as iDEAL in the Netherlands; the "Other" category includes loyalty points, vouchers and gift cards, crypto-assets, buy-now-pay-later services and other payment instruments. In Estonia and Lithuania, direct debits are not available but consumers have the option of e-invoices with automatic payments, which offer the same customer experience.

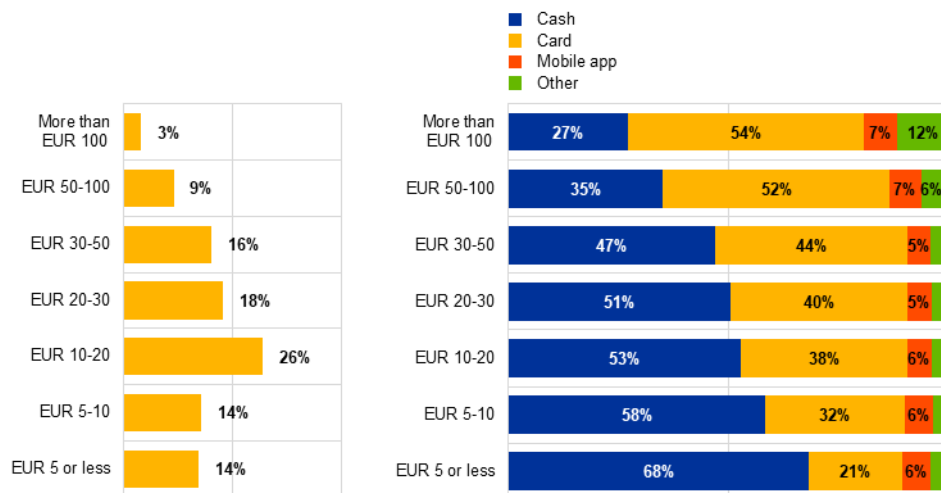
2.5 POS and online payments by value range

According to the SPACE data, smaller-value purchases were more often paid for at the POS in 2024, with higher-value payments more often made online (Chart 12). The share of POS payments with a value of €20 or less was 53%, while 12% of POS payments had a purchase amount higher than €50. Looking at online payments, 35% had a value of €20 or less, while 30% had a purchase amount over €50.

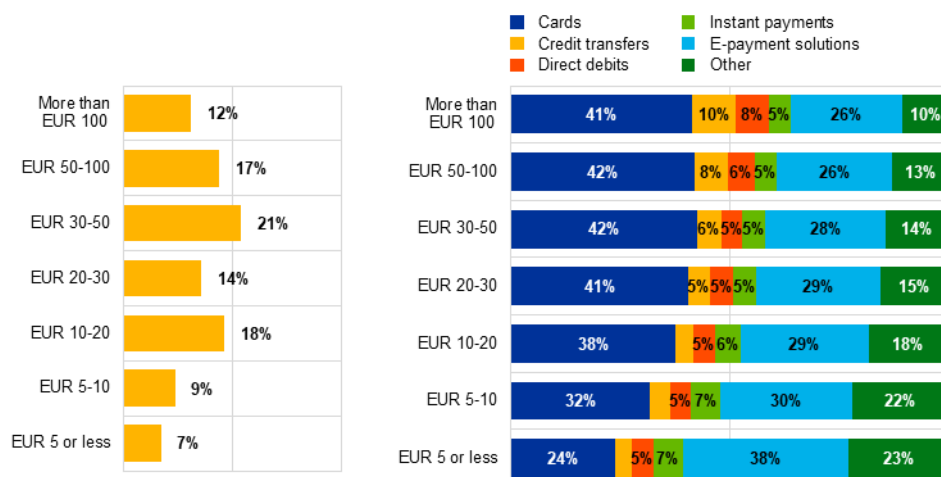
Chart 12

Breakdown of POS and online payments by value and payment instrument, euro area, 2024

a) POS transactions



b) Online payments



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2024) and the Deutsche Bundesbank (2024).
 Notes: Includes P2P payments made in person (in POS payments) or online (in online payments). In POS payments, the "Cards" category includes physical cards (debit and credit cards) and prepaid cards; the "E-payment solutions" category includes payment wallets, PayPal and other mobile apps, as well as iDEAL in the Netherlands; the "Other" category includes loyalty points, vouchers and gift cards, crypto-assets, buy-now-pay-later services and other payment instruments.

The shares of the various payment instruments varied significantly, depending on whether they were used for high- or low-value payments at the POS. Cash payments accounted for 68% of payments with a value of €5 or less, and for more than half of payments with a value between €5 and €30. The share of digital payment methods, and cards in particular, increased with the value of the payment, and more than half of payments with a value above €50 were card payments. The share of cash payments for higher-value payments remained similar between 2022 and 2024, but for small-value purchases the share of payments with cards and mobile devices increased. This is probably partly attributable to the fact that it is now easier to use contactless payments for lower payment amounts too. For payments with a value of

€5 or less, the share of card payments increased from 15% to 21% and the share of payments with a mobile device from 2% to 6%. Overall, the share of POS payments with a mobile device was stable – between 5% and 7% – across all value ranges.

In the case of online payments, e-payment solutions (PayPal, payment wallets and other mobile applications) were most frequently used for small-value purchases, accounting for 38% of payments with a value less than €5. For online payments above €5, cards were the most frequently used payment instrument. Credit transfers were used in 10% of payments with a value of more than €100.

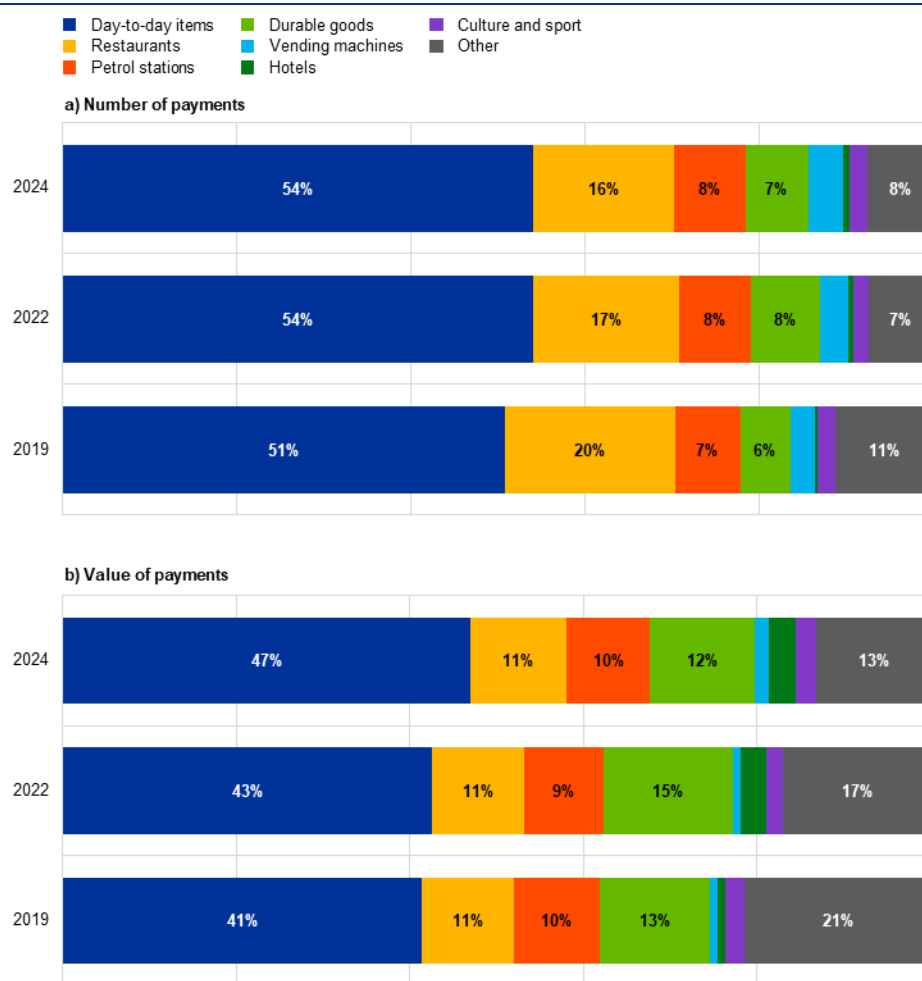
2.6 POS and online payments by location and purpose

2.6.1 POS payments by location

Payments at the POS include very different kinds of purchases. For example, consumers can buy day-to-day goods at a supermarket or consumer durables, make purchases in petrol stations, hotels, restaurants, cultural and sporting venues, or buy tickets and other goods from vending machines. SPACE 2024 aimed to capture different payment situations as accurately as possible, in order to understand how consumers' payment behaviour differs across a variety of locations and purposes (see Chart 13).

Chart 13

Breakdown of POS payments by location, euro area, 2019-24



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2020, 2022, 2024) and the Deutsche Bundesbank (2018, 2022, 2024).
 Notes: "Day-to-day items" include purchases from supermarkets, shops selling day-to-day items and street markets or vendors.
 "Other" includes services outside, inside or around the home, at public authorities and post offices, and payments at pick-up stations and other physical locations.

Most POS transactions, in terms of both number and value, were made in supermarkets and other shops selling day-to-day goods (Chart 13). The share of day-to-day items in the total number of purchases was 54%, which was unchanged from 2022. The value share of payments for this category has increased from 43% in 2022 to 47% in 2024. In terms of the number of transactions, 16% of payments were made in restaurants, bars and cafés, which represents a slight decline since 2022 (17%). Overall, the structure of POS payments by location has not changed much between 2022 and 2024.

Payment location also affects how consumers pay (Chart 14). In 2024, more than half of purchases were made with cash in restaurants, bars and cafés (57%), at vending machines (55%), in shops selling day-to-day items (53%) and in cultural and sporting venues (52%). Cards were used most frequently for payments in shops selling durable goods (47%), and in hotels and petrol stations (both 46%).

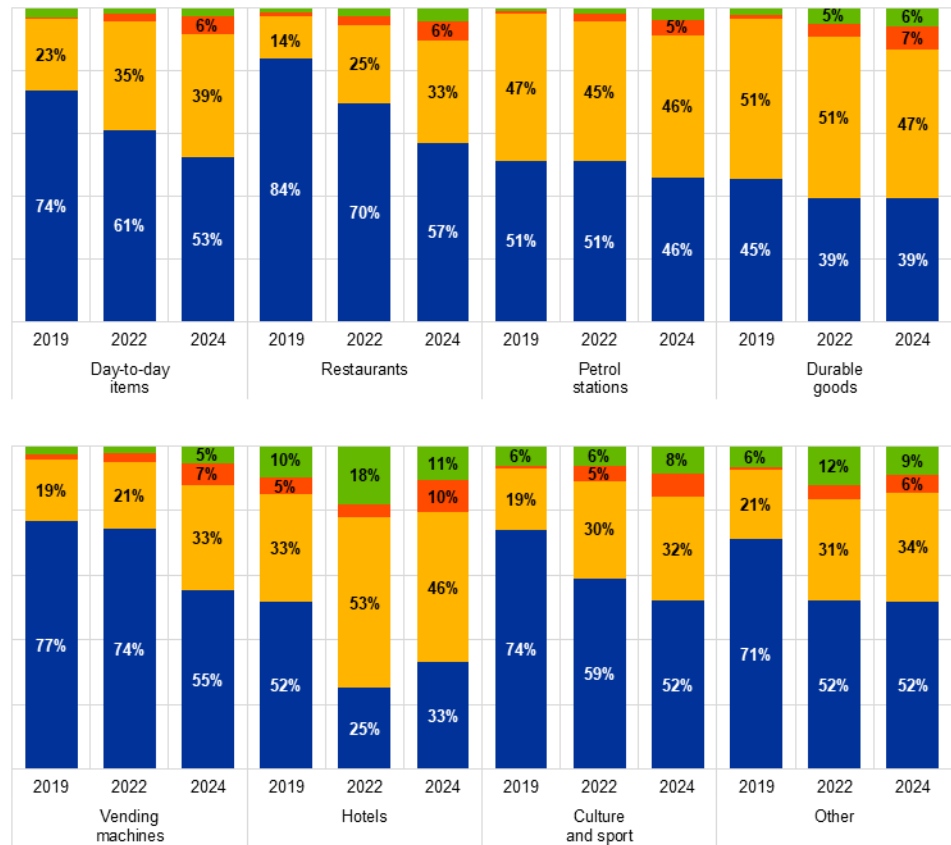
The share of cash payments declined in most payment locations. The biggest decrease was observed for payments at vending machines, from 74% in 2022 to 55% in 2024. In restaurants, the share of cash payments decreased by 13 percentage points between 2022 and 2024. There was no change in cash payments between 2022 and 2024 in shops selling durable goods and, in the “Other payment locations” category (39% and 52% respectively). The number of cash payments in hotels has increased (from 25% in 2022 to 33% in 2024). Payments with mobile apps have become more frequent, particularly in hotels (from 4% in 2022 to 10% in 2024).

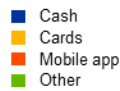
Chart 14

Breakdown of POS payments by location and payment instrument, euro area, 2019-24

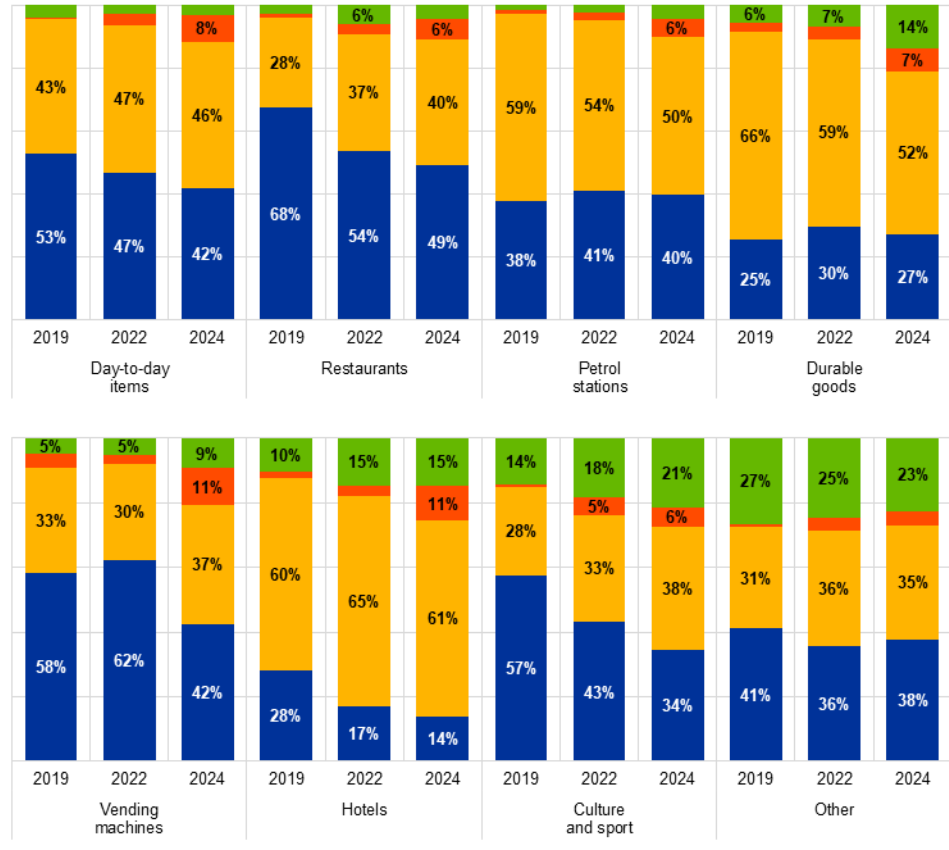
- Cash
- Cards
- Mobile app
- Other

a) Number of payments





b) Value of payments



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2020, 2022, 2024) and the Deutsche Bundesbank (2018, 2022, 2024).
 Notes: "Day-to-day items" include purchases from supermarkets, shops selling day-to-day items and street markets or vendors. "Other" includes services outside, inside or around the home, at public authorities and post offices, and payments at pick-up stations and other physical locations.

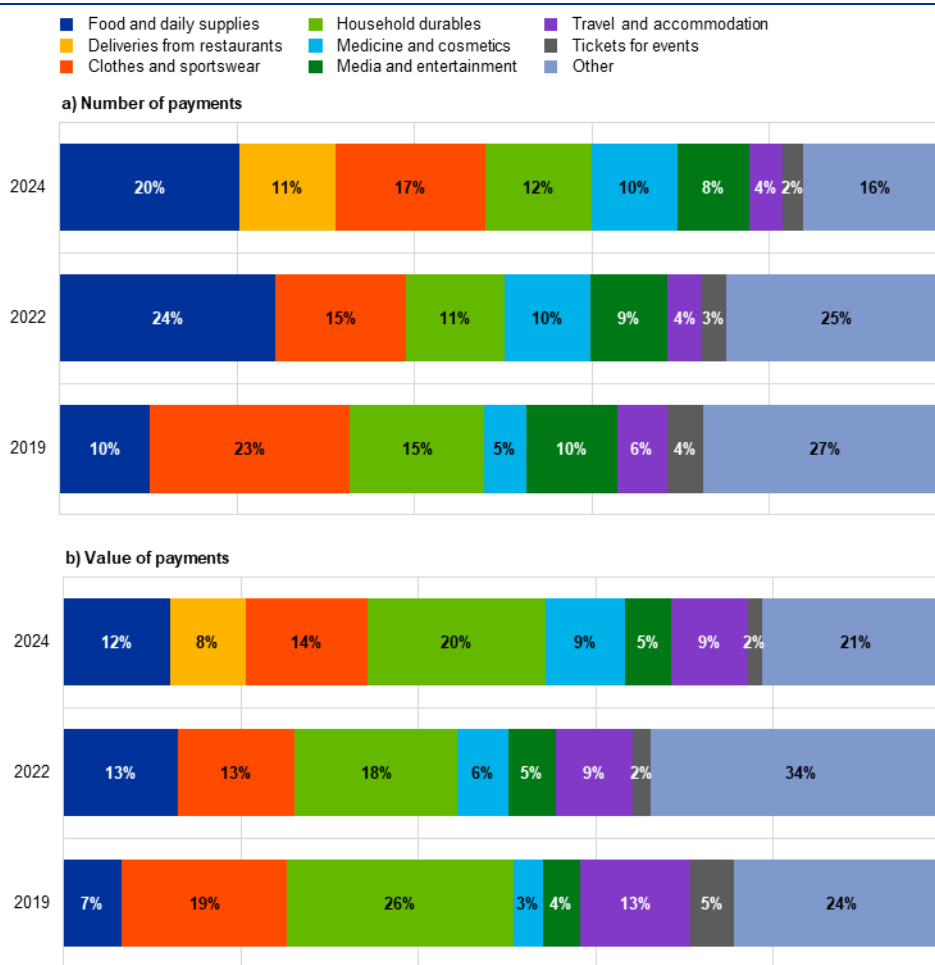
In terms of payment value, the share of cash payments was highest in restaurants, bars and cafés (49%) and lowest in hotels (14%). There was a general increase in the value share of mobile payments, with the highest proportion being attributable to payments at vending machines and hotels (both 11%).

2.6.2 Online payments by purpose

In recent years, consumers have significantly increased the amount they shop online. SPACE collects data on online payments that distinguish between the most frequent purposes of non-recurring payments, such as food and daily supplies, restaurant deliveries, clothes, household durables and media and entertainment (Chart 15).

Chart 15

Breakdown of online payments by purpose, euro area, 2019-2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2020, 2022, 2024) and the Deutsche Bundesbank (2018, 2022, 2024).
 Notes: The “Household durables” category includes electronic goods or household appliances, furniture and other household items. The “Other” category includes luxury goods, financial products, household-related services and other online payments.

Online shopping for food and daily supplies, including restaurant and grocery store deliveries, has become much more frequent. In SPACE 2024, “Food and daily supplies” and “Meals and beverages deliveries from a restaurant” were included as separate categories for the first time. The combined share of the two items in all online payments continued to increase, from 10% in 2019 and 24% in 2022 to 31% in 2024. Food and daily supplies accounted for 20% of online payments and deliveries from restaurants for 11%.

In addition to food and daily supplies, euro area consumers made online payments most frequently in 2024 for clothes and sportswear (17%, compared with 15% in 2022) and household durables (12%, compared with 11% in 2022). In terms of value, the share of payments for household durables was 20%, which was the highest of all categories and similar to the combined share of food and daily supplies and restaurant deliveries.

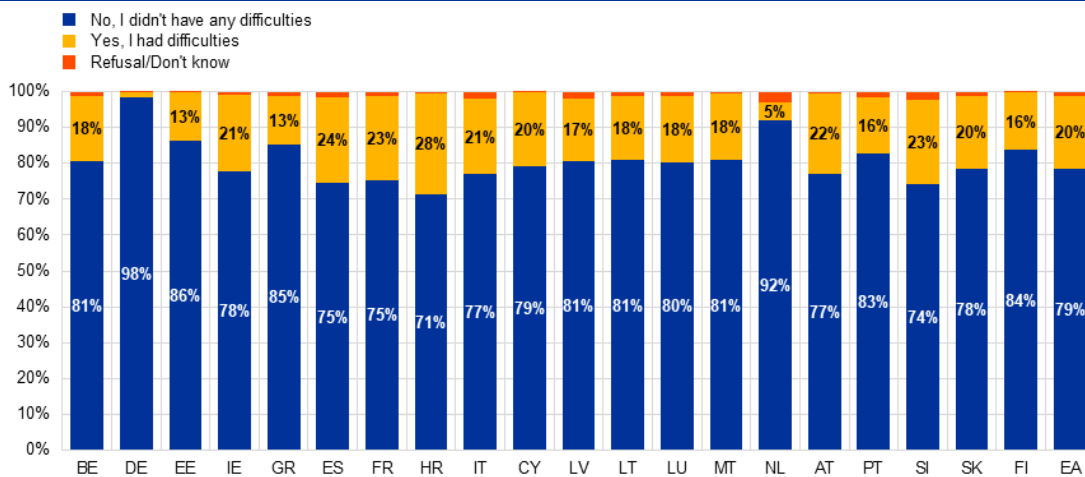
Box 2

Technical difficulties during online payments

In the 2024 edition of SPACE, in line with the information included in Box 1, participants were also asked whether they had experienced any difficulties when performing online payments. The majority indicated that they had encountered no issues, averaging 79% across the euro area (Chart A).

Chart A

Technical difficulties experienced when making online payments, breakdown by country, 2024

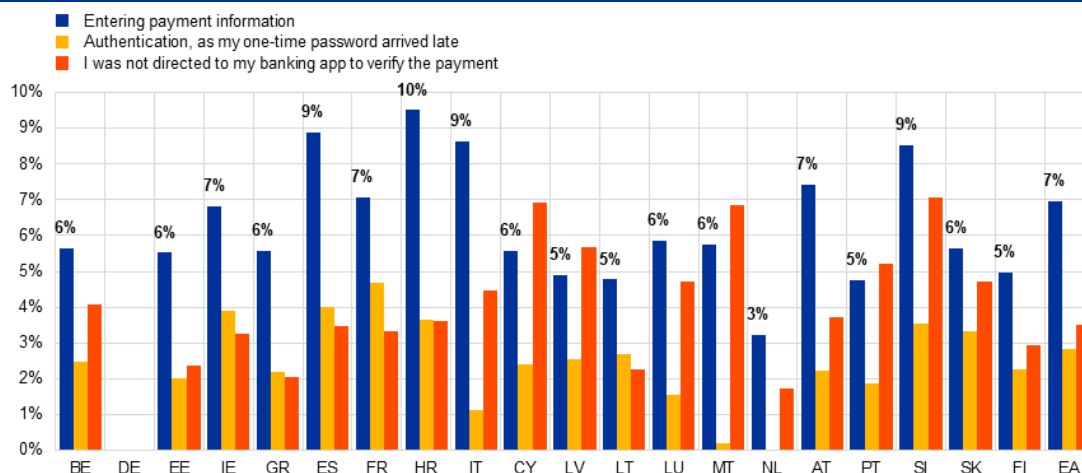


Sources: ECB, calculations based on the Deutsche Bundesbank (2024) and De Nederlandsche Bank and the Dutch Payments Association (2024).

Among those who did report having problems, the most common issue related to complications when entering the payment information (Chart B): this was noted by an average of 7% of respondents across the euro area. More respondents reported technical difficulties when entering the payment information in Croatia (10%), Spain, Italy and Slovenia (all 9%).

Chart B

Main types of technical difficulty experienced when making online payments, breakdown by country, 2024



Sources: ECB, calculations based on the Deutsche Bundesbank (2024) and De Nederlandsche Bank and the Dutch Payments Association (2024).
Notes: Respondents were able to choose more than one answer. Data exist for Germany; however, values are either very low or 0% for the answer options shown in Chart B.

Box 3

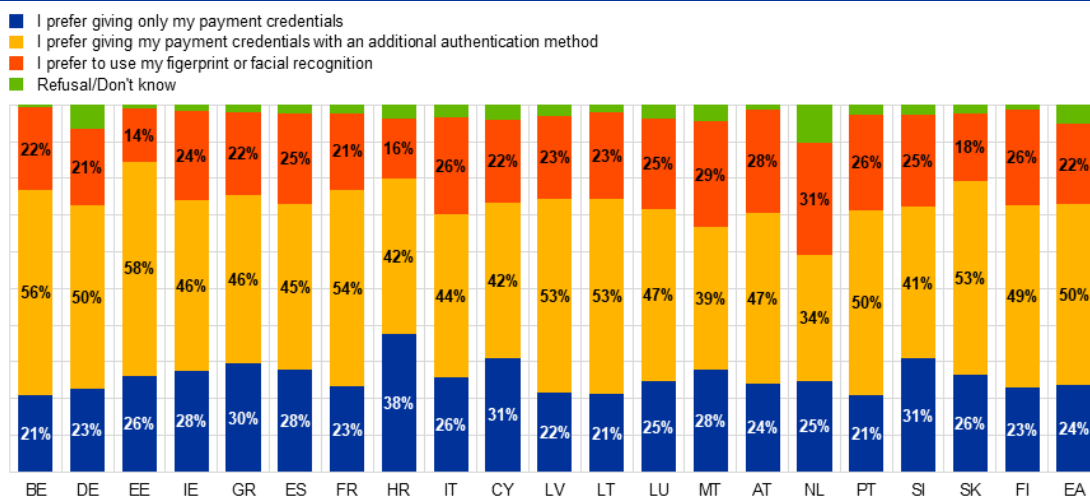
Preferred authentication methods when making online payments

In terms of preferences for online payment authentication (Chart A), the majority of the euro area population (50% on average) favours the use of payment credentials accompanied by additional authentication measures (via a PIN, a one-time password, a code from an authentication card, an authentication app, or 3D Secure). Other methods highlighted in the survey, such as the use of payment credentials alone (if falling under the exemptions for strong customer authentication under the revised Payment Services Directive²⁴) and biometric authentication such as fingerprint or facial recognition, were also relatively popular, with 24% and 22% of respondents in the euro area selecting these options respectively. These methods were preferred by over 20% of the population in virtually all reporting euro area countries.

²⁴ Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC (OJ L 337, 23.12.2015, p. 35–127).

Chart A

Authentication of online payments, breakdown by country, 2024



Source: ECB.

Note: In Germany, respondents who reported that they generally pay online were asked this question; in other countries, all respondents who reported an online transaction in their payment diary were asked.

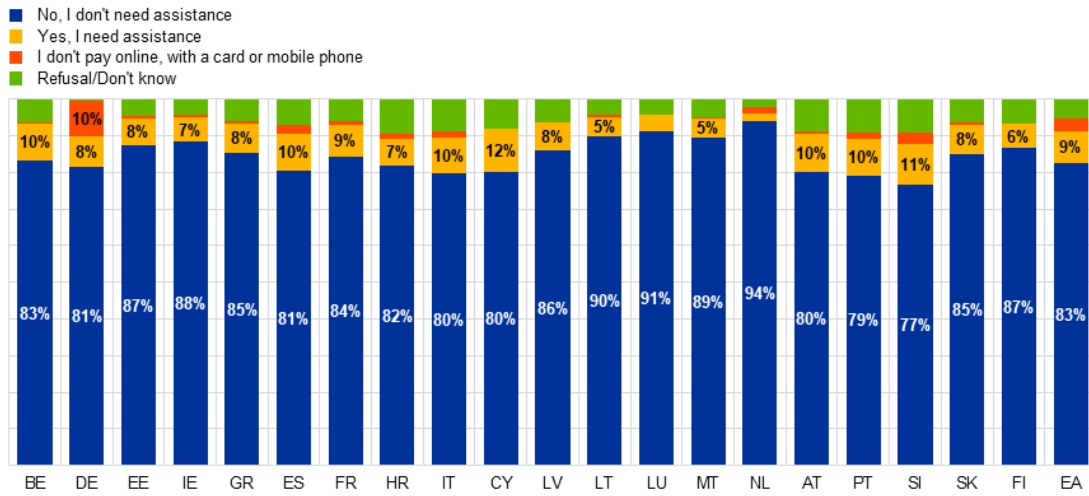
Box 4

Assistance needed for making online payments (with a card or a mobile phone)

In 2024, respondents were asked for the first time if they needed assistance when paying online, or with a card or mobile phone. Across the euro area, 83% reported that they did not need any assistance, while 9% said that they did, and 3% answered that they do not make payments online, or with a card or a mobile phone, and so the question did not apply to them. The share of those who needed assistance when making online, card or mobile payments was lowest in the Netherlands (2%), followed by Luxembourg (4%), Lithuania (5%) and Malta (5%), and highest in Cyprus (12%), Slovenia (11%), and Austria, Belgium, Spain, Portugal and Italy (10%).

Chart A

Assistance with digital payments, breakdown by country, 2024

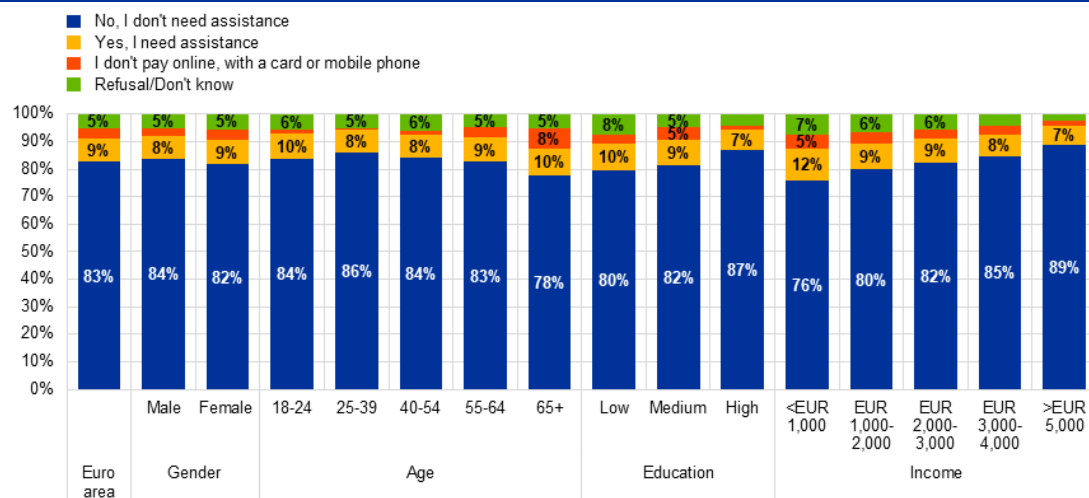


Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2024) and the Deutsche Bundesbank (2024).

Looking at age cohorts (Chart B), the share of those who need assistance was highest in the youngest and oldest groups (aged 18-24 and 65+ respectively), at 10%. However, this was only slightly higher than the share for the remaining age groups. The choice not to make online, card or mobile payments may stem from a lack of knowledge or ability, so these respondents could be merged with those who require assistance. When the two groups are combined, their share is by far the largest in the 65+ age group (18%), followed by the 55-64 age group (13%). Their share in younger age groups is significantly lower. The survey did not address the reasons for requiring assistance or avoiding digital payment methods. However, the increased prevalence of these issues among older groups could be attributable to some form of digital illiteracy or a lack of access to devices. This phenomenon is particularly evident in the groups with the lowest level of education and income below €1,000, who show the greatest need for assistance (10% and 12% respectively).

Chart B

Assistance with digital payments, breakdown by demographics, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2024) and the Deutsche Bundesbank (2024).

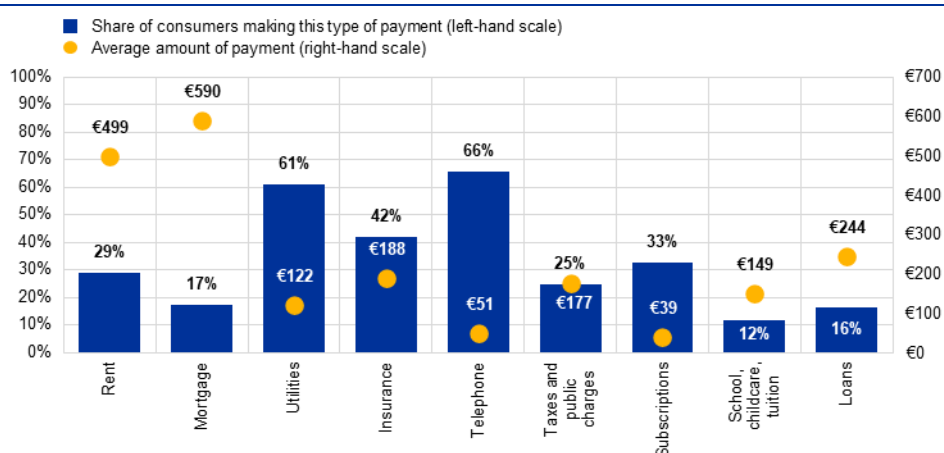
2.7 Recurring payments

As well as collecting data on day-to-day payments via one-day diaries, SPACE also records recurring payments. These payments are recorded for the 30 days before the interview and include rent, mortgage, utility bills, insurance, telephone and internet bills, taxes and public charges, subscriptions, repayments of debt/consumer loans, and school, childcare and tuition fees.

Chart 16 shows that the most frequent recurring payments in the euro area were telephone and internet bills (66% of consumers), utility bills (61%) and insurance payments (42%). Almost half of euro area consumers paid either their rent (29%) or mortgage (17%) during the month before the interview.²⁵ Recurring payments with the highest average amounts were mortgages (€590), rents (€499) and loan repayments (€244). The lowest average amounts were recorded for subscriptions (€39) and telephone and internet bills (€51).

Chart 16

Number of recurring payments by type, euro area, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2024) and the Deutsche Bundesbank (2024).

The most frequently used payment method for all types of recurring payment was direct debit (Chart 17). Euro area consumers used this method for more than two-thirds of their telephone and internet bill payments (70%), insurance payments (68%) and loan repayments (67%). They used it least frequently for school, childcare and tuition fees (30%), but even for these payments it was used more frequently than any other payment method. Direct debit has become more popular since 2022. Its share has increased in particular for telephone and internet bills (from 51%) and insurance payments (from 45%).

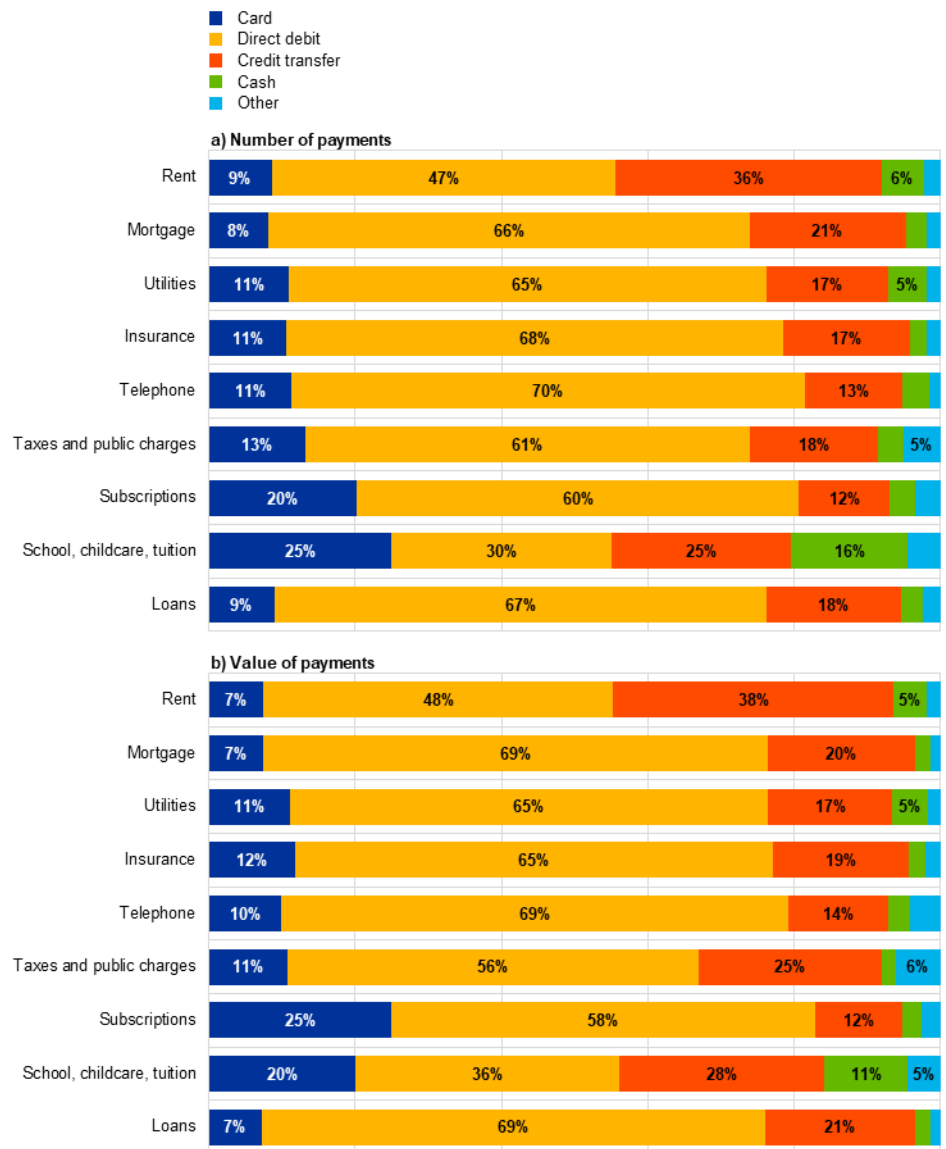
Credit transfers were the second most popular payment method in both number and value for most kinds of recurring payment, except for subscriptions, for which card payments were used more frequently and for higher values. Recurring payments

²⁵ Data were collected at the individual level, which is why the results, e.g. for indebtedness ratios, cannot be directly compared with household surveys, such as the Household Budget Survey or the Household Finance and Consumption Survey.

were not often made with cash, although this method was used more frequently for school, childcare and tuition payments.

Chart 17

Breakdown of recurrent payments by payment instrument, euro area, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2024) and the Deutsche Bundesbank (2024).

The choice of payment instrument did not depend on the amount of the recurring payment. The payment method shares for each type of recurring payment were in most cases very similar, regardless of whether they were calculated by the number of transactions or the payment value.

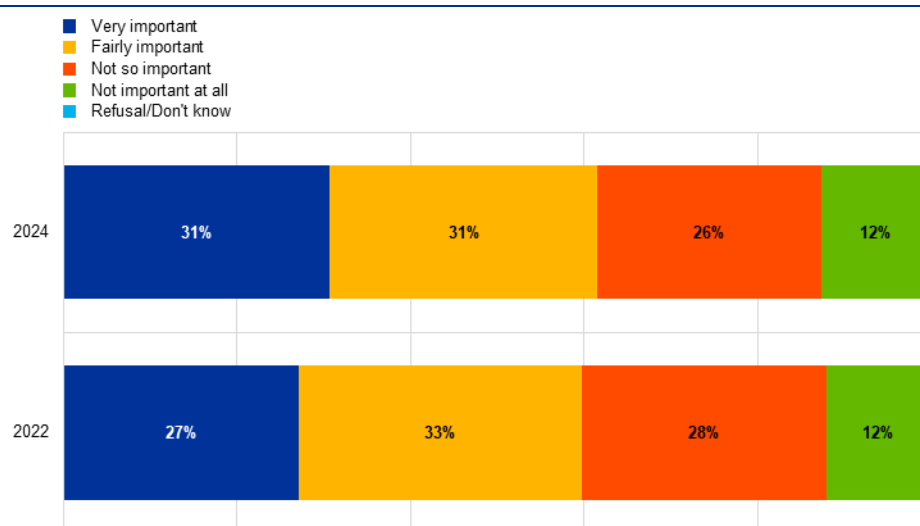
3 Payment preferences and advantages of cash and cashless payments

3.1 The importance of having the option to pay with cash

Having the option to pay with cash remains very or fairly important for 62% of the euro area population (Chart 18). This figure has increased by 2 percentage points since the previous SPACE survey in 2022, which shows that European citizens continue to see cash as a relevant and important way of paying despite using it less.

Chart 18

The importance of having the option to pay with cash, euro area 2022-24



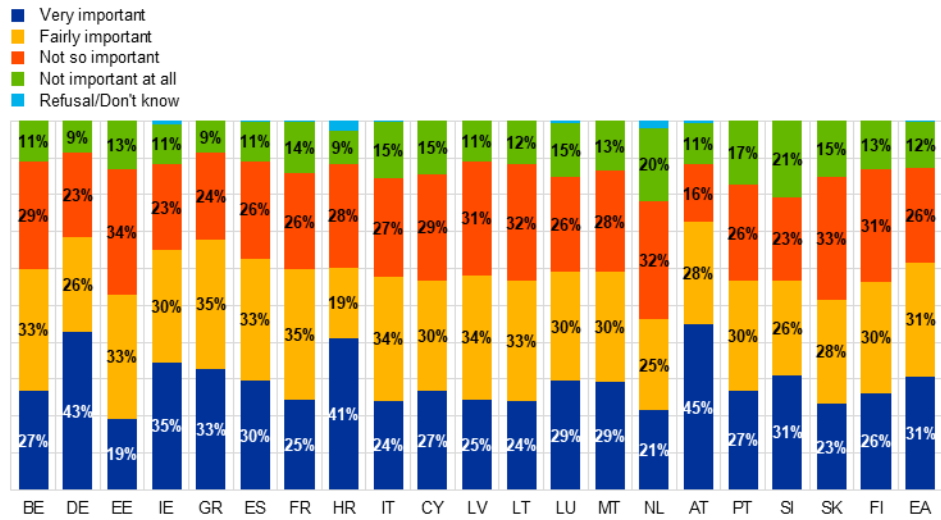
Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2020, 2023) and the Deutsche Bundesbank (2022, 2024).

3.1.1 Importance of having the option to pay with cash by country

More than half of the respondents in each of the euro area countries, with the exception of the Netherlands (46%), considered the option to pay with cash very or fairly important (Chart 19). This includes countries like Belgium, Luxembourg and Finland, where consumers used other payment options for the majority of POS purchases. This share has remained more or less stable since the previous survey in most countries. Cyprus is an exception with a decrease of 7 percentage points, while Luxembourg recorded the highest increase of 8 percentage points.

Chart 19

The importance of having the option to pay with cash, breakdown by country, 2024



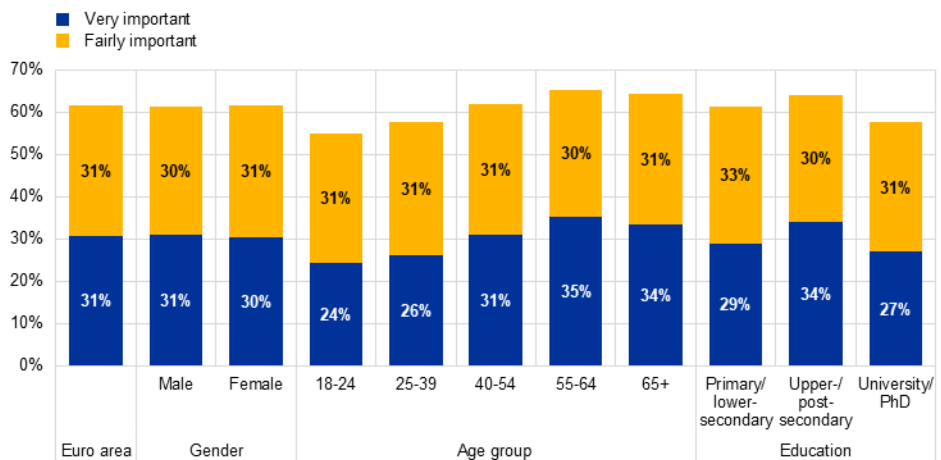
Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).

3.1.2 Importance of having the option to pay with cash by demographics

Looking across the different demographic groups, the option to pay in cash seems to be more important for respondents who are older than 55 and those with upper/post-secondary education, with no differences identified by gender (Chart 20). Nevertheless, the option to pay with cash remained important for the majority of the youngest age group.

Chart 20

The importance of having the option to pay with cash, breakdown by demographics, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).

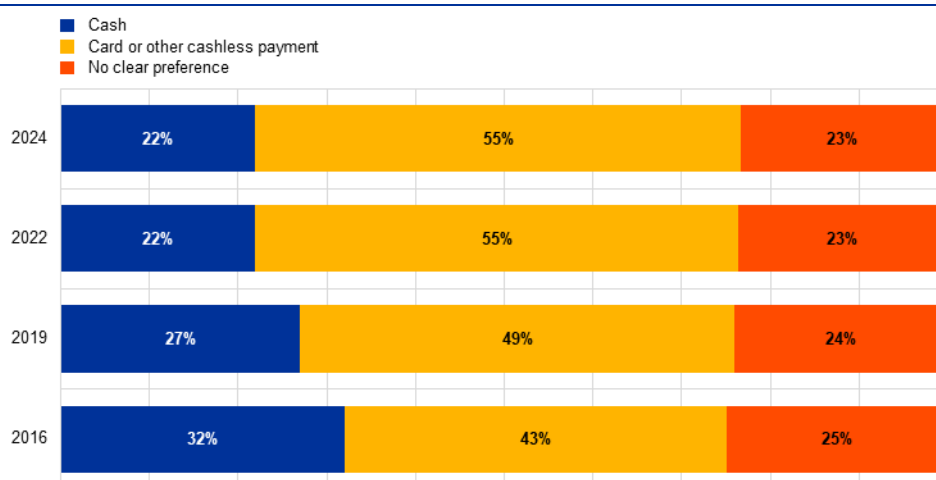
3.2 Preferences at the POS

The payment methods that consumers use at the POS are influenced by various factors, including revealed preferences. Payment preferences play a major role in guiding consumers' use of different payment methods and are influenced by several factors: age, income, habits, education, job, etc.

Overall, at the euro area level, the general preferences for cash and cashless payments have remained constant since 2022 (Chart 21). If we analyse the evolution in the preference for cash since 2016, strict cash preference has witnessed a steady decline – from 32% in 2016, down to 27% in 2019 and 22% in 2022 and 2024, which might suggest that it has now stabilised. Meanwhile, card and other cashless payment preferences have increased from 43% in 2016 to 49% in 2019 and 55% in 2022 and 2024. The share of consumers with no clear preference has remained relatively stable since 2016.

Chart 21

Preferred payment instrument at the POS, euro area, 2016-24



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2020, 2022, 2023) and the Deutsche Bundesbank (2018, 2022, 2024).

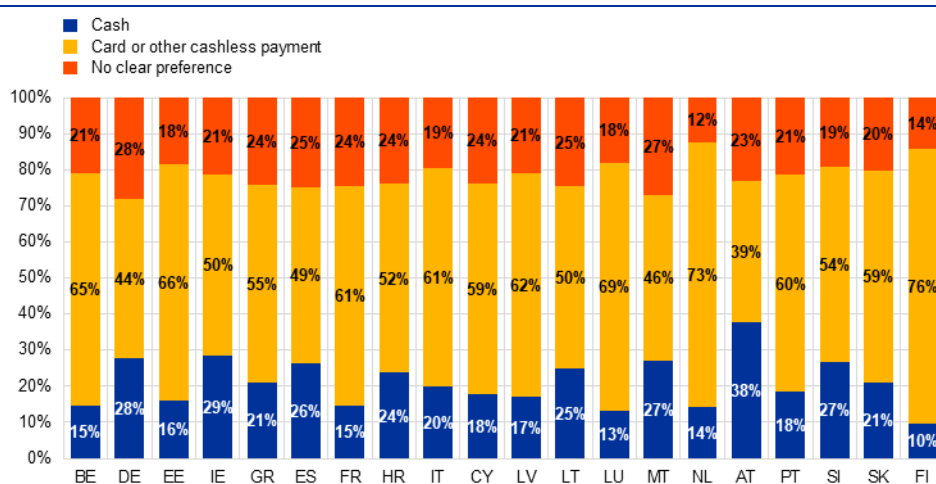
Despite the evolution in cash preferences in recent years, cash has remained the most popular payment instrument for POS transactions, being used in 52% of them (see Chart 4). This highlights that there are differences between consumers' stated preferences and their actual behaviour, as previous SPACE studies have already identified. The question on which this finding is based is asked in a general way ("If you were offered various payment methods in a shop, what would be your preference?"), and no distinction is made in the question between higher-volume and lower-volume payments. This means that if respondents had a preference for cash specifically when making low-value payments, for example, their answers would not show this. Another reason for the disparity could be merchants' acceptance of different payment methods.

3.2.1 Preferred payment instrument at the POS by country

There are pronounced differences between countries in terms of the preference for paying with cash, card or other cashless payment methods (Chart 22), with Finland having the lowest cash preference (10%) and Austria the highest (38%). In general, however, card or other cashless means of payment are the most popular methods in all euro area countries, varying from 39% in Austria to 76% in Finland.

Chart 22

Preferred payment instrument at the POS, breakdown by country, 2024



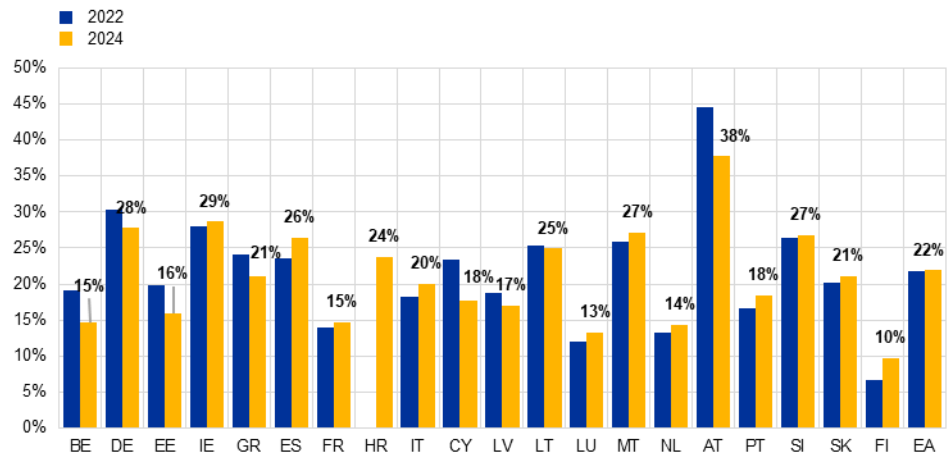
Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).

3.2.2 Preferences for cash by country

Taking a closer look at cash preferences by country and their evolution since SPACE 2022 (Chart 23), they have remained more or less stable in most countries, with a decrease of 7 percentage points in Austria and 6 percentage points in Cyprus. Finland has recorded a rather significant increase, although cash preference remains the lowest of all the euro area countries.

Chart 23

Evolution of preference for cash at the POS, breakdown by country, 2022-24



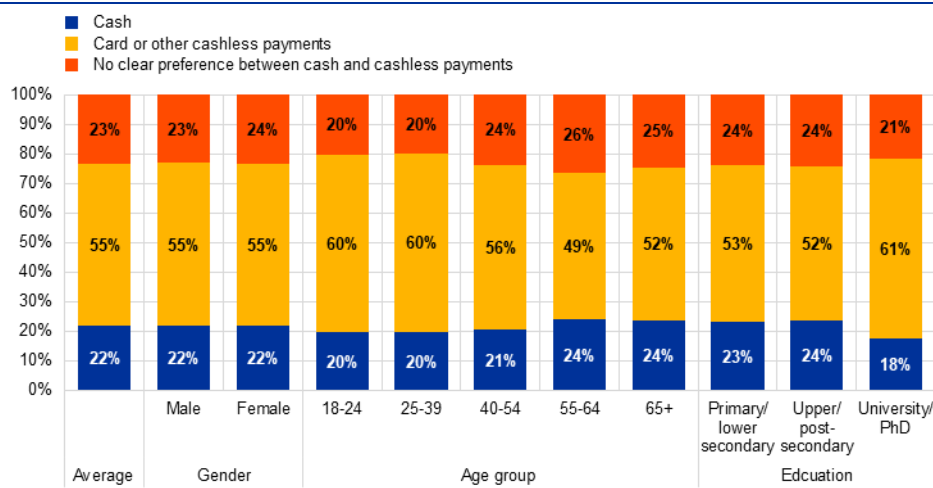
Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2020, 2023) and the Deutsche Bundesbank (2022, 2024).
Note: Croatia joined the euro area in January 2023, so no data were collected for Croatia in the 2022 and previous surveys.

3.2.3 Preferred payment instrument by demographics

Looking at euro area results by demographics (see Chart 24), there are no differences between male and female behaviour: 22% of both male and female respondents prefer cash, compared with 55% of respondents of both genders who prefer cashless payments. A more significant difference can be seen between the attitudes of people in the younger and older age groups. In the 18-39 age group, 20% of respondents answered that they prefer cash, compared with 21% in the 40-54 age group and 24% for those aged 55 and older. In terms of education level, 23% of respondents with a primary or lower-secondary education level declared that they prefer cash, against 18% of people holding a university-level education or PhD.

Chart 24

Preferences for cash or cashless payment methods in shops, breakdown by demographics, 2024



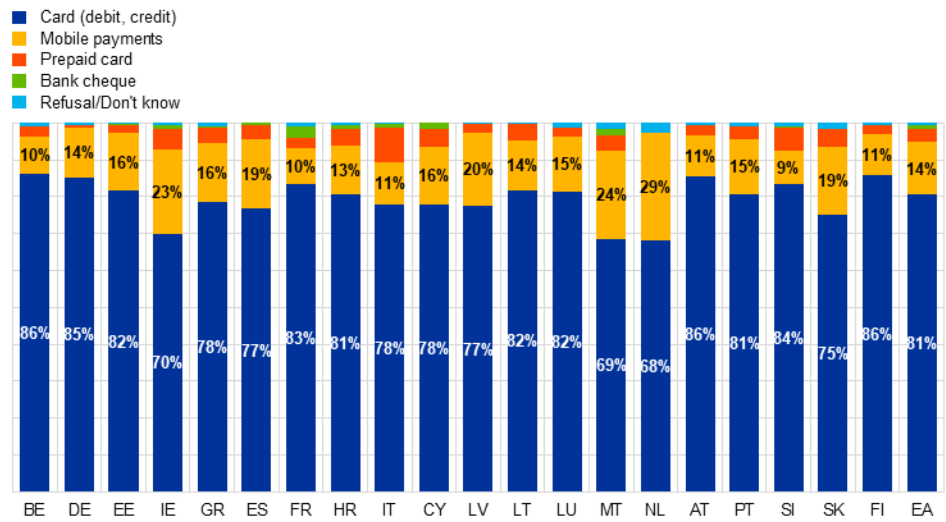
Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).

3.2.4 Preferred non-cash payment instrument by country

For all the respondents who stated that they preferred cashless means of payment, a follow-up question was asked to better understand what type of non-cash payment they preferred. In every euro area country, the preferred cashless payment method is debit and credit cards: at least 68% of respondents who preferred cashless payments preferred to pay with these cards (Chart 25). The next most popular non-cash payment method were mobile payments, which were preferred by 10% of respondents in France and Belgium compared with 29% of respondents in the Netherlands. Additionally, prepaid cards seem to be a relevant payment choice in Italy, as 9% of respondents said they prefer this cashless option.

Chart 25

Preferences for cashless payments in shops, breakdown by country, 2024



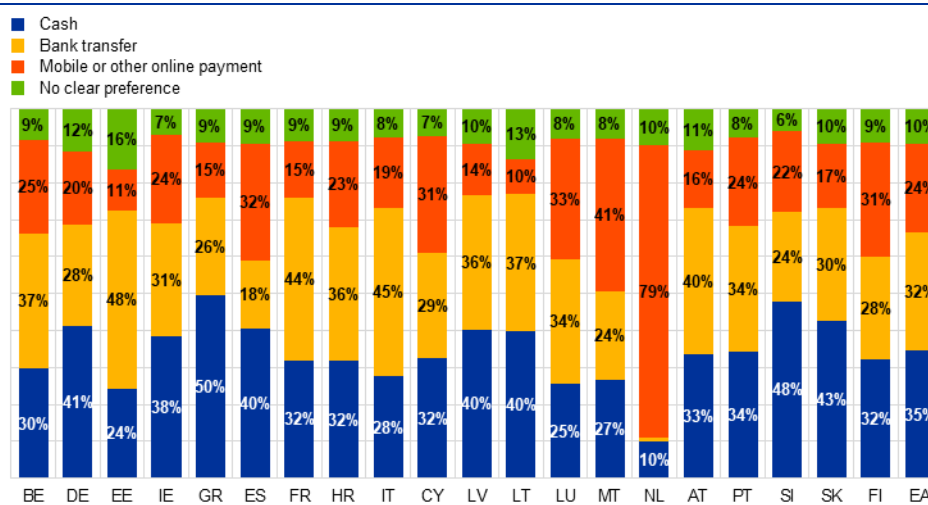
Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).

3.2.5 Preferred P2P payment instrument by country

In 2024, a new question was added to the questionnaire to obtain further information about preferred methods of paying money to a friend or family (not related directly to a purchase online or in a store). On average, 35% of respondents in the euro area preferred cash (Chart 26). The preference for cash for P2P payments was therefore higher than at the POS, where 22% preferred to pay with cash (Chart 21). After cash, the next preference was bank transfers (32% of respondents), and finally mobile or other online payments (24% of respondents). Looking at the data segregated by country, there are again significant differences. For example, 50% of respondents in Greece preferred to pay peers with cash, while in the Netherlands 79% preferred to use mobile or other online payments.

Chart 26

Preferred instrument for P2P payments, breakdown by country, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).

3.3 Perceived advantages of payment instruments: cash and cards

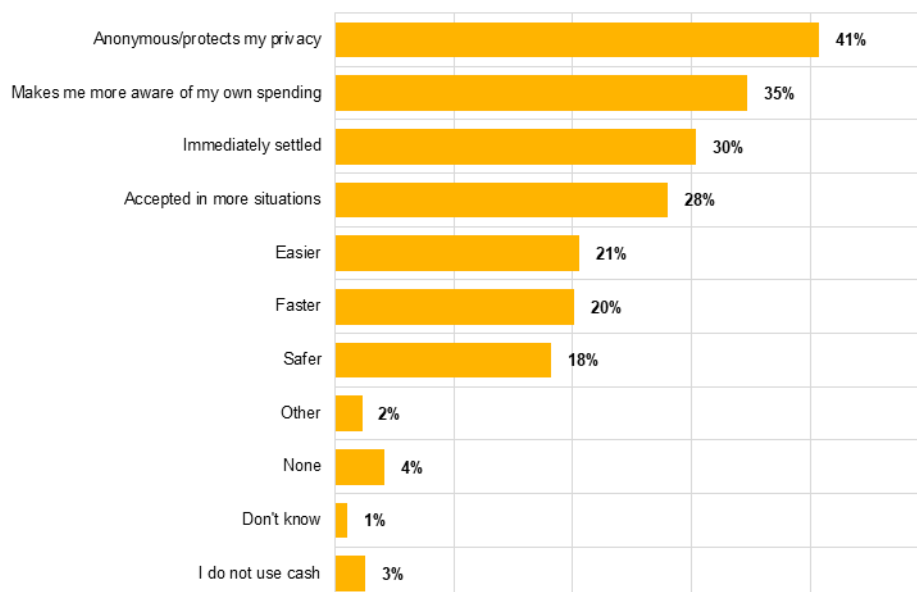
According to Hernández et al. (2017), the way in which consumers perceive payment instruments and their characteristics influences their payment behaviour. The survey collected information on the perceived main advantages of cash and cards by asking, “For you personally, what are the three most important advantages of cash compared with card payments?” and “For you personally, what are the three most important advantages of card payments compared with cash?”.

3.3.1 Advantages of cash in the euro area

When asked about the perceived advantages of cash in comparison with card payments, respondents perceived the following main advantages (Chart 27): (i) cash is anonymous and protects privacy (41%), (ii) cash makes one more aware of one’s own expenses (35%), (iii) cash transactions are immediately settled (30%), and (iv) cash is accepted in more situations (28%). A small share (3%) responded by saying that they do not use cash.

Chart 27

Perceived advantages of cash, euro area, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).

Notes: Percentages do not add up to 100%, as respondents were able to choose up to three answers each. All respondents were asked this question – not only those who prefer cash.

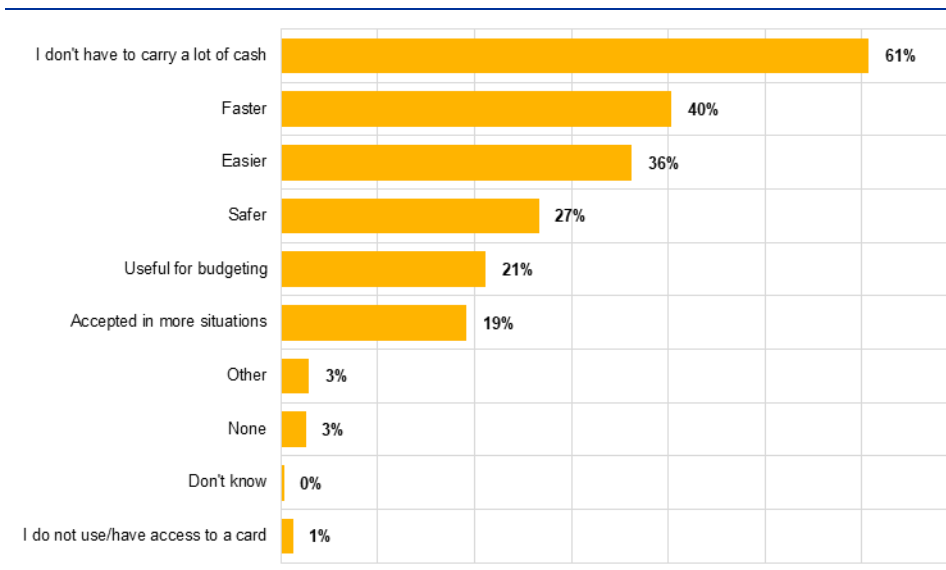
As in SPACE 2022, anonymity and privacy continued to play a significant role in shaping respondents' opinions and are now the most important perceived advantage of cash. The second-ranked advantage has declined steadily since 2016, when 42% of the population stated that using cash gave them a clear overview of their own spending, to 40% in 2022 and 35% in 2024. The remaining advantages have remained more or less constant since 2022.

3.3.2 Advantages of cards in the euro area

When asked about the advantages of card payments, a slight majority (61%) said the main one was not having to carry a lot of cash with them (Chart 28). This was a slightly lower share than in 2022 (62%). Other mentioned key advantages were that card payments are faster (mentioned by 40%) and easier (mentioned by 36%). These figures remain unchanged from or very similar to the previous survey. However, a slightly higher share of consumers (27%) identified the safety of card transactions as being a key advantage, compared with 2022 (26%). More widely, usefulness for budgeting was mentioned by a slightly higher share of respondents (21%) than in 2022 (19%), whereas there was no change in the proportion who saw the wider acceptance of cards as an advantage (19% in 2022 and 2024). A very small share (1%) responded by saying that they do not use cards.

Chart 28

Perceived advantages of cards, euro area, 2024



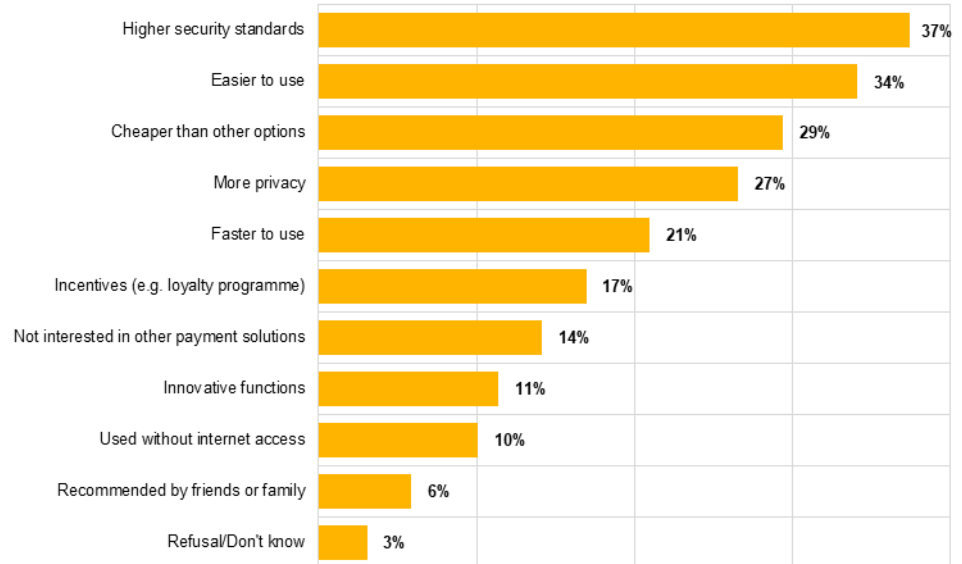
Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).
Notes: Percentages do not add up to 100%, as respondents were able to choose up to three answers each. All respondents were asked this question – not only those who prefer non-cash payments.

3.3.3 Factors that would persuade consumers to try out alternative payment solutions

For the first time, consumers were asked what factors would convince them to try out alternative payment solutions. Higher security standards and ease of use were mentioned by the highest share of respondents (37% and 34% respectively). Cost considerations played a role for 29%, indicating that, for those respondents, cheaper payment solutions would be a key factor in persuading them to try out something new. Privacy was mentioned by 27% of respondents, and speed by 21%. Incentives such as loyalty programmes and innovative functions were preferred by a relatively low proportion (17% and 11% respectively), and the possibility of offline use and recommendations by friends and family were the least relevant reasons to try new payment solutions (10% and 6% respectively). Meanwhile, 14% of respondents showed no interest in trying out new payment solutions.

Chart 29

Main factors that would persuade consumers to try new payment solutions, euro area, 2024

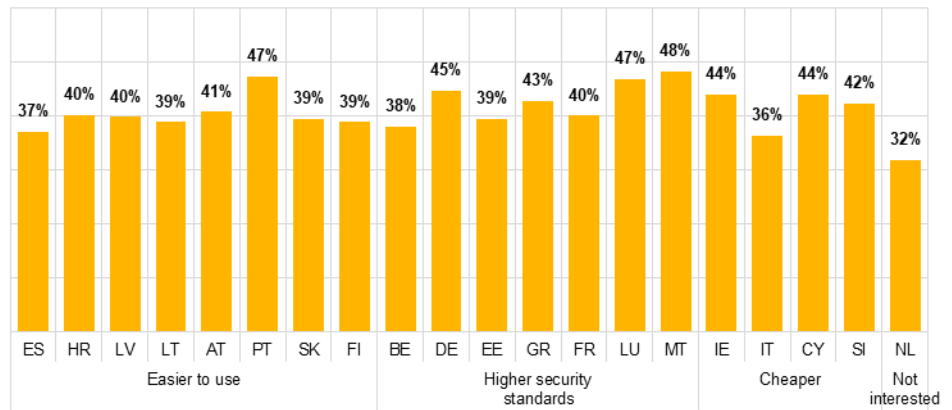


Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).
Notes: Percentages do not add up to 100%, as respondents were able to choose up to three answers each.

If we analyse the main factors that would persuade respondents to try a new payment solution by country (Chart 30), the most frequently mentioned factor in eight countries was ease of use, higher security standards came top in seven countries, and lower costs were the main factor in four countries. The Netherlands was the only country in which the highest proportion of respondents answered that they were not interested in a new payment solution, with higher security standards in second place.

Chart 30

Main factors that would persuade consumers to try new payment solutions, breakdown by country, 2024

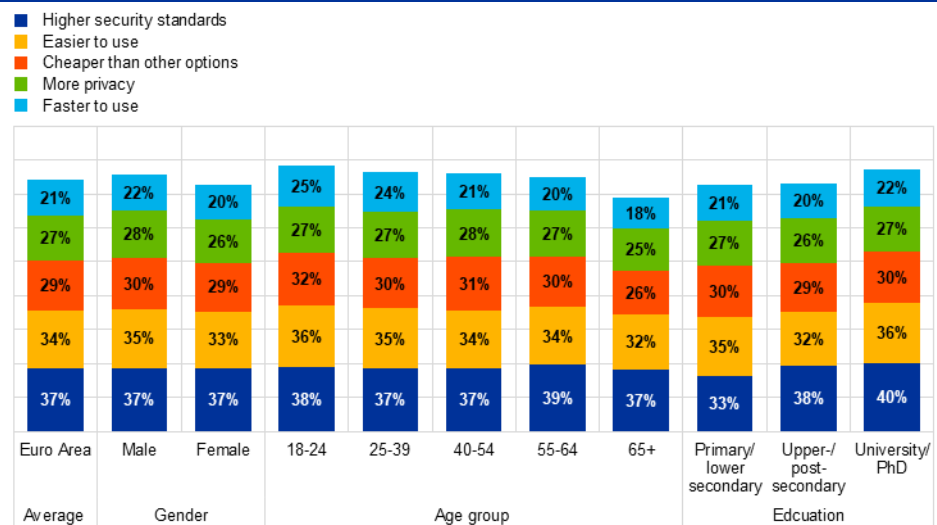


Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).

If the analysis is performed by demographics at the euro area level, higher security standards was the main reason across all genders, age groups and education levels, except for consumers with primary or lower-secondary education, who cited ease of use as the main reason for trying new payment solutions. There were no significant differences between genders for any of the main factors, nor between age groups.

Chart 31

Main factors that would persuade consumers to try new payment solutions by demographics, euro area, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).
 Note: Percentages do not add up to 100%, as respondents were able to choose up to three answers each.

3.3.4 Privacy concerns on digital payments

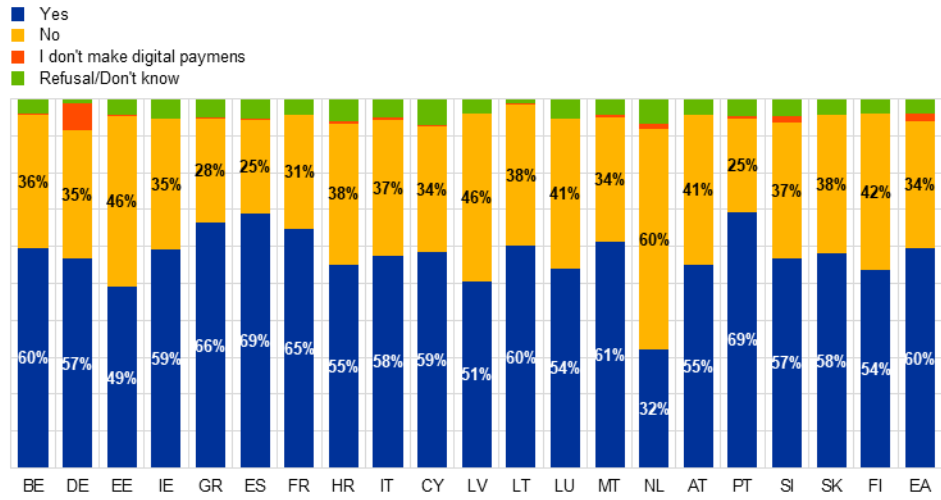
SPACE 2024 asked respondents whether they were concerned about their privacy when performing digital payments or other banking activities, either because they wanted their transactions to be more private or because they were concerned about their data being used for commercial or other purposes without their consent. The majority (60%) of consumers said they were indeed concerned about privacy (Chart 32).

Examining the distribution by country, over half of the population in every euro area country except for the Netherlands and Estonia conveyed concerns about privacy. Portugal particularly stands out: 37% of respondents wished their transactions were more private, while 32% were concerned about the usage of their data. Spain is another notable example, as 34% of interviewees conveyed a desire for more privacy in their transactions and 35% voiced concerns about the use of their data. Meanwhile, 60% of respondents in the Netherlands said they had no concerns about privacy.

Interestingly, Germany was the only country in which a significant proportion (7%) of respondents said they do not make any digital payments, whereas this percentage was close to zero in all other countries.

Chart 32

Privacy concerns about digital payments, breakdown by country, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).

4 Access to and acceptance of means of payment

4.1 Access to cash

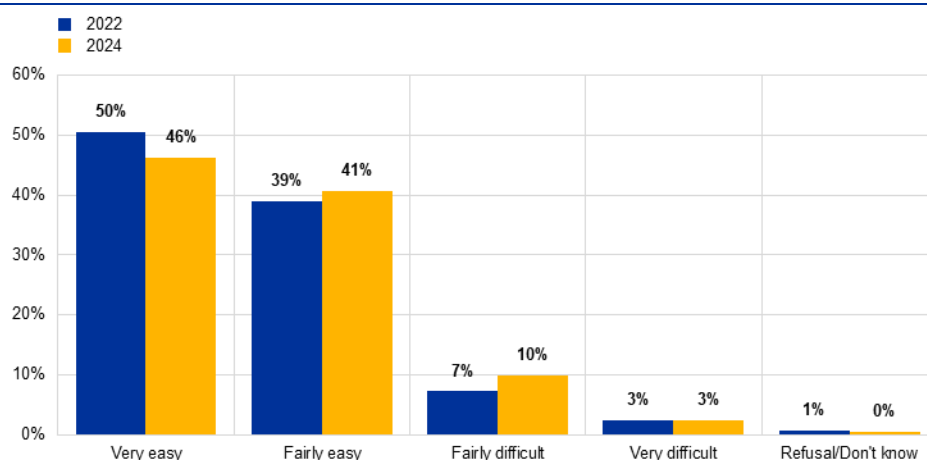
The Eurosystem has a retail payments strategy and a separate cash strategy. The retail payments strategy is designed to ensure that everyone has access to safe, efficient and convenient means of payment, including in times of increasing digitalisation. One of the main pillars of the Eurosystem cash strategy is to ensure that cash remains widely available, as people's choice of how to pay may be influenced by how easily they can withdraw money from their bank accounts. As part of its retail payments strategy, the Eurosystem also looks into how the payment sector can ensure access to cash for all citizens and accessibility of digital payment methods. With the payment mix constantly in flux, it is the Eurosystem's role to ensure that people continue to have the freedom to pay however they want, irrespective of their geographical location. By anticipating trends in payment behaviour and the logistical requirements needed to continue to provide access to cash, the Eurosystem can guarantee people's universal right to public money should they choose to use it. Citizens can access cash from various sources: withdrawals in bank branches, from ATMs and, in some countries, from retailers via cashback and cash-in-shop services.

4.1.1 Ease of access to cash withdrawals in the euro area

The ease with which consumers can access cash withdrawals is key to how much freedom of choice they ultimately have when making a payment. This will likely influence consumers' propensity to choose cash when deciding what option to use from the range of payment methods available. When asked about their views on ease of access to cash withdrawals (Chart 33), almost half (46%) of respondents said access to cash withdrawals was very easy, which is 4 percentage points lower than in 2022. Another 41% assessed it as fairly easy, while 10% said it was fairly difficult and 3% found it very difficult. The proportion of people who found it fairly difficult to access to cash increased 3 percentage points from the survey in 2022, which suggests that perceived access to cash in the euro area has deteriorated slightly.

Chart 33

Ease of access to cash withdrawals, euro area, 2022-24



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2020, 2023) and the Deutsche Bundesbank (2022, 2024).

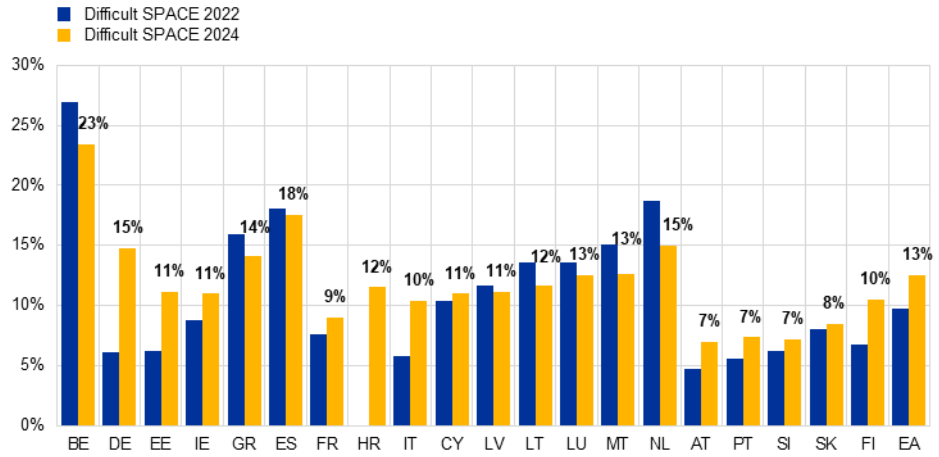
4.1.2 Ease of access to cash withdrawals by country

Ease of access to cash withdrawals was analysed by country, taking into account only those respondents who consider it fairly difficult or very difficult to withdraw cash from an ATM or a bank branch (Chart 34). Belgium and Spain stand out, with 23% and 18% of consumers respectively stating that access to cash is very or fairly difficult.

Perceived access to cash deteriorated at the euro area level, with the share of consumers who consider it difficult to access cash withdrawals increasing by 3 percentage points since 2022. This change is driven by Germany (up 9 percentage points), Estonia and Italy (both up 5 percentage points), and Finland (up 4 percentage points). However, consumers in some other euro area countries perceived that access to cash withdrawals had improved: the share of consumers who consider it difficult to access cash withdrawals has decreased by 4 percentage points in Belgium and the Netherlands, and by 2 percentage points in Greece, Lithuania and Malta.

Chart 34

Share of respondents who perceive access to cash withdrawals as fairly difficult or very difficult, breakdown by country, 2022-24



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2020, 2023) and the Deutsche Bundesbank (2022, 2024).

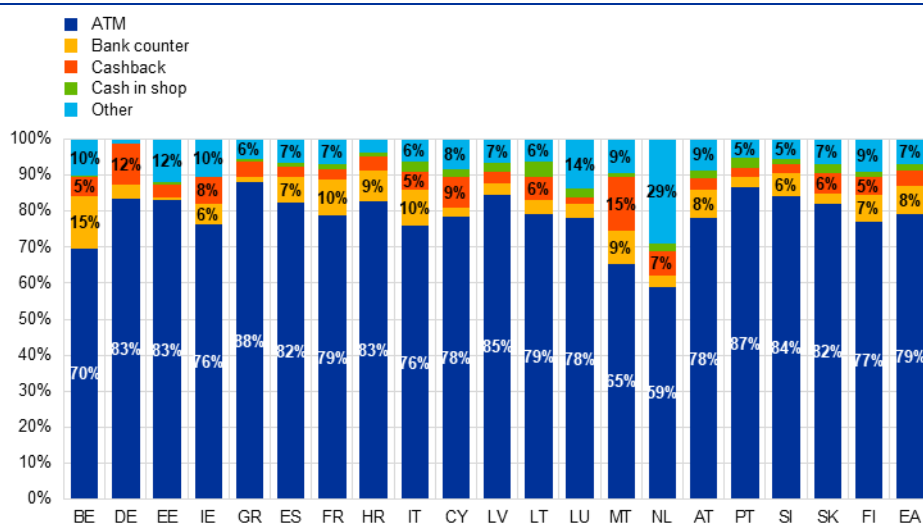
Note: Croatia joined the euro area in January 2023, so no data were collected for Croatia in the 2022 survey.

4.1.3 Source of withdrawals by country

Cash can be accessed or withdrawn from various sources such as bank branches, ATMs, or cashback and cash-in-shop services when retailers offer them. As was the case in SPACE 2022, ATMs remained the preferred method of withdrawing cash (Chart 35), with over 79% of citizens using this option. Withdrawals via bank counters were the next preferred option at the euro area level (which includes post offices in countries where this is applicable). Cashback was the second preferred option in Malta (15%), Germany (12%), Cyprus (9%) and Ireland (8%).

Chart 35

Sources of cash withdrawals, breakdown by country, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).

Notes: In the SPACE survey, withdrawals are defined as "taking cash money out of an account". The questionnaire in the Netherlands also includes the category "Money found, taken from savings, received when returning a purchase, etc.", which is classified under the "Other" category in this chart. Because of the different definition, the data for the Netherlands are not fully comparable with the other countries. The bank counter option also includes saving banks and post offices in the countries where this is applicable.

4.1.4 Journeys to make cash withdrawals by country

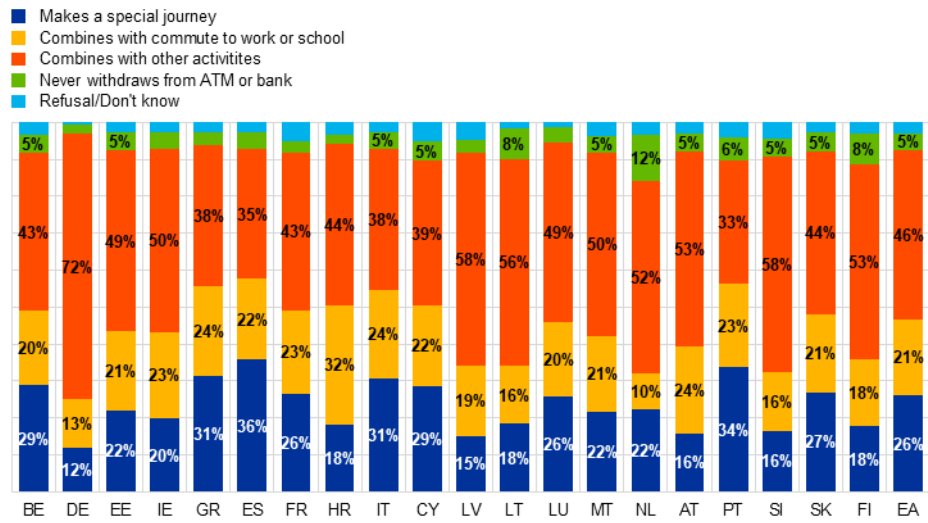
To better understand people's patterns when withdrawing cash from an ATM or a bank, SPACE 2024 included the following question for the first time: "When you withdraw cash from an ATM or a bank, do you normally combine this with other business, or do you make a special journey from home to the ATM or a bank?".

At the euro area level (Chart 36), the highest percentage of respondents indicated that they normally withdrew cash in combination with other activities (e.g. shopping, leisure activities, etc.). Almost half (46%) of respondents selected that option, while 26% said they usually make a special journey to withdraw cash and 21% stated that they normally combine it with their commute to work or school.

In Spain and Portugal, the majority of respondents said they make a special journey to obtain cash (36% and 34% respectively). In Croatia (32%), Austria (24%), Ireland (23%), Latvia (19%) and Germany (13%), the second most popular option was to combine the journey to obtain cash with the commute to work or school.

Chart 36

Journeys to make cash withdrawals, breakdown by country, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).

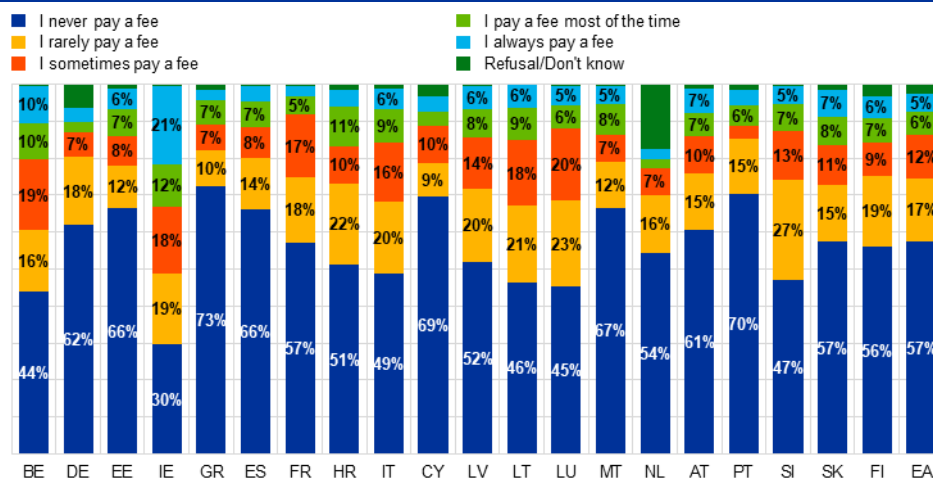
Note: The "Combines with other activities" category is split into several subcategories in the German questionnaire, which may have had an impact on the share of respondents who chose this option.

4.1.5 Frequency of ATM fees paid by country

As with ease of access, the fees to be paid for ATM withdrawals may influence consumers' cash withdrawal patterns and, in the absence of an alternative source of cash, may exacerbate access-related problems. Chart 37 shows the frequency at which consumers reported having to pay fees, which highlights perceptions of the different fee structures across countries. In 16 of the euro area countries, more than half of respondents reported not having to pay a fee at all. One exception is Ireland, where 30% of respondents reported never having to pay a fee, but 21% said they always pay a fee when withdrawing cash and 12% that they pay a fee most of the time. In Belgium – the country in which the highest proportion of respondents perceive it as difficult to access cash (Chart 34) – 10% of respondents said they always pay a fee and 10% that they pay a fee most of the time.

Chart 37

Proportion of consumers likely to pay fees for cash withdrawals, breakdown by country, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).

4.1.6 Reactions to ATM fees for cash withdrawals by country

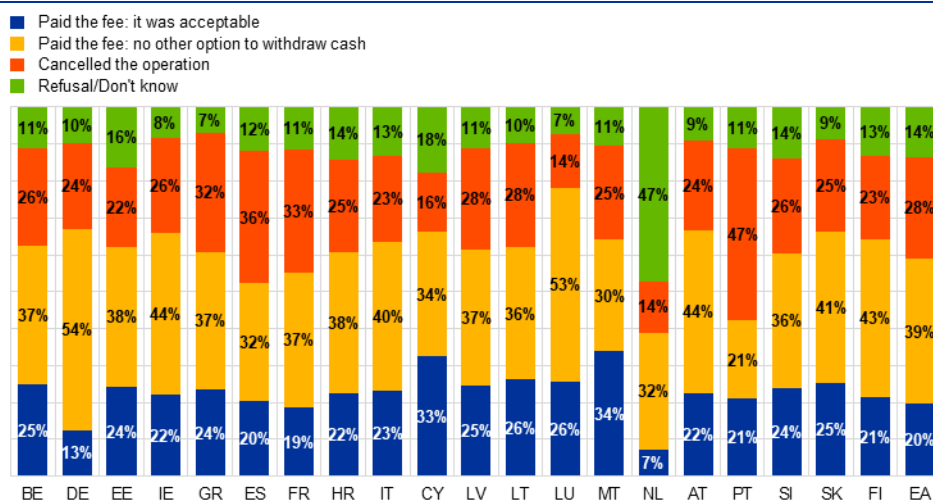
Since withdrawal fees, especially at ATMs, play a significant role in the availability of cash to citizens, it is important to understand the main reasons why consumers paid the fees. In particular, it is relevant to establish whether they were considered reasonable or whether there was an option to withdraw cash from another ATM. To understand how consumers feel when they are charged a fee, SPACE 2024 asked respondents to recount their reaction the last time this happened to them.

At the euro area level (Chart 38), 39% of respondents answered that they paid the fee because there was no other option to withdraw cash, while 28% cancelled the transaction and 20% paid the fee because they considered it acceptable.

In Germany and Luxembourg, over half of respondents said they paid the fee because they had no other option to withdraw cash. This result for Germany corresponds with the perception that it is becoming more difficult to access cash in the country, as indicated in Chart 34. Conversely, 34% of interviewees in Malta answered that they paid the fee because they felt it was acceptable. In Spain and Portugal, 36% and 47% of respondents respectively said they had cancelled the transaction. Consumers in these two countries pay ATM fees less often than across the euro area on average.

Chart 38

Reaction to ATM fees for cash withdrawals, breakdown by country, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).

Box 5

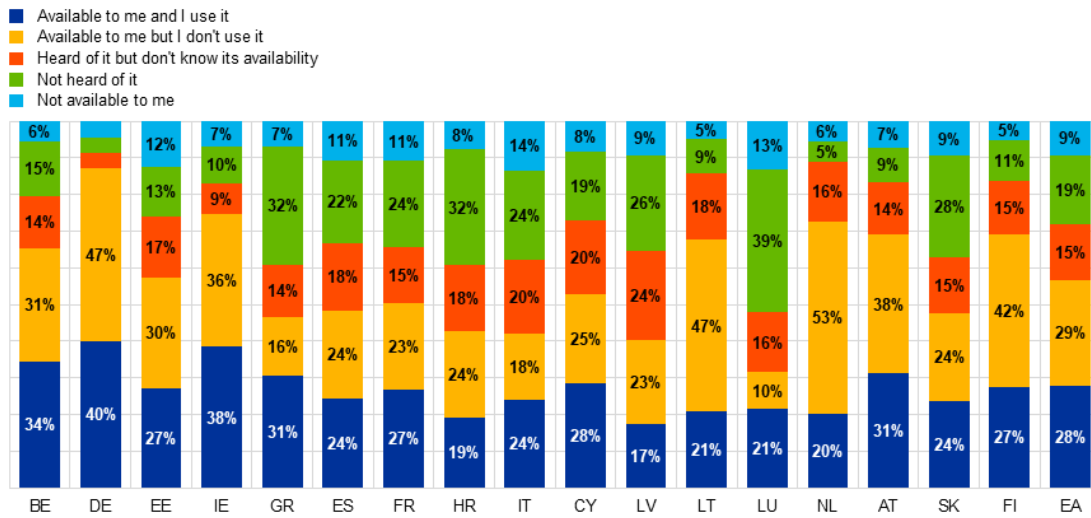
Cashback and cash-in-shop

SPACE 2024 included questions about cashback and cash-in-shop services, to assess their accessibility and explore the underlying reasons for their limited utilisation.

Respondents from countries where these options are available were asked whether they had the possibility to withdraw cash at shop counters. As Chart A shows, slightly more than 50% of the euro area population from analysed countries indicated that this option was available to them, with 28% stating that they used it, while 29% said it was available but they did not use it. A high proportion of respondents in Germany and Ireland said they both had access to and used this service (40% and 38% respectively). In some countries, a significant percentage said that the option was available but they did not use it; these included the Netherlands (53%), Germany (47%), Lithuania (47%) and Finland (42%). Around one-third of the population remained unaware of this service, as observed in Luxembourg (39%), Greece (32%) and Croatia (32%).

Chart A

Availability of the option to withdraw cash at shop counters, breakdown by country, 2024

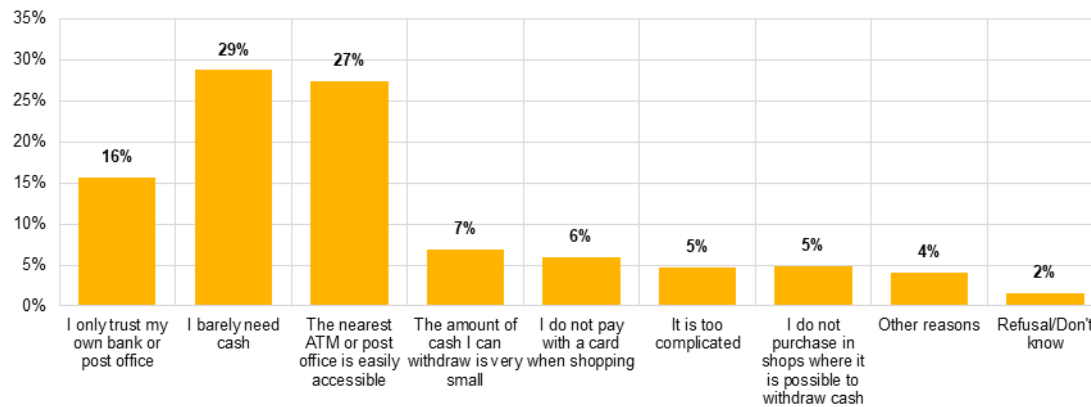


Sources: ECB, calculations based on the Deutsche Bundesbank (2024).
 Note: This question was not included on the questionnaire in Malta, Portugal and Slovenia, and as such no results have been presented for these countries.

In Chart B, an analysis at the euro area level reveals that the most popular reasons for not using cashback or cash-in-shop services included a lack of necessity for cash (29% of respondents) and the accessibility of ATMs or post offices that provide cash access (27% of respondents). A significant portion of individuals (16%) stated that they only trusted their own bank or post office.

Chart B

Reasons for not using cashback or cash-in-shop, euro area, 2024

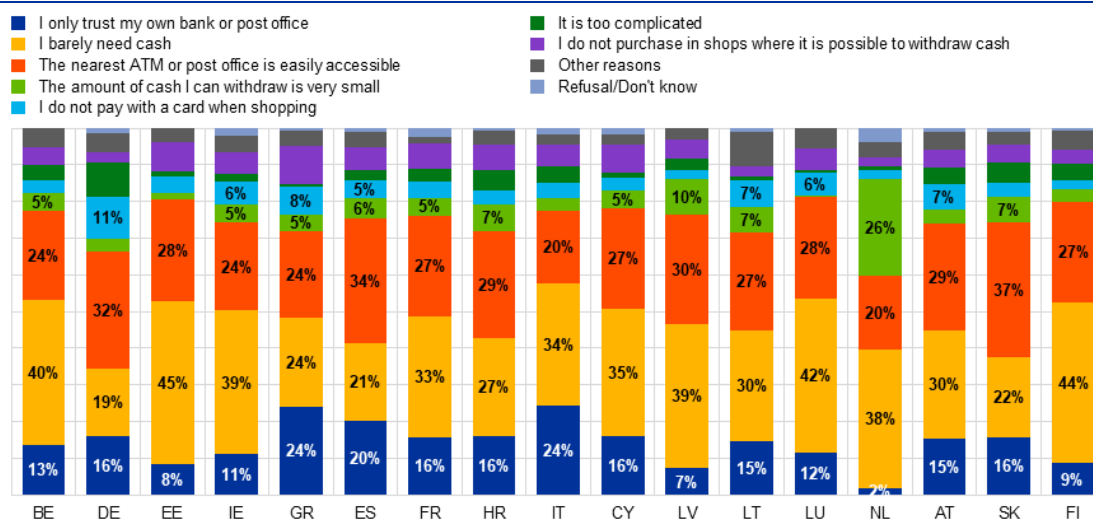


Sources: ECB, calculations based on the Deutsche Bundesbank (2024).
 Note: This question was not included on the questionnaire in Malta, Portugal and Slovenia, and as such these countries have not been taken into account in the euro area calculations.

In all countries, the most popular reasons for not using cashback or cash-in-shop matched those recorded for the euro area (Chart C). At the same time, a significant proportion of respondents in some countries reported that they do not trust these services, for example in Greece and Italy (both 24%) and Spain (20%).

Chart C

Reasons for not using cashback or cash-in-shop, breakdown by country, 2024



Sources: ECB, calculations based on the Deutsche Bundesbank (2024).

Note: This question was not included on the questionnaire in Malta, Portugal and Slovenia, and as such no results have been presented for these countries.

4.2 Access to non-cash means of payments

Since availability of different payment options is important for financial inclusion, the survey inquired whether people had a payment account and/or a payment card. It is necessary to hold a payment account in order to pay by credit transfer or direct debit, and a payment card is required to make card payments.

The survey also addressed ongoing trends relating to ownership and use of crypto-assets.

4.2.1 Ownership of payment accounts and cards by country

Chart 39a shows that, on average, the share of respondents in the euro area reporting ownership of a payment account increased from 91% in 2022 to 93% in 2024.²⁶ Conversely, Chart 39b indicates that the share of respondents who own a payment card decreased from 94% in 2022 to 92% in 2024.

Looking at the breakdown by country, Germany has maintained its position as the country with the highest share of respondents who own an account for payments (99% in both 2022 and 2024²⁷). The lowest share of account holders in 2024 was found in Cyprus (85%), whereas Greece held this position in 2022 (79%). In Greece and Portugal, there has been remarkable growth in reported ownership of payment accounts since 2022, with increases of 13 percentage points and 12 percentage

²⁶ For SPACE 2022, respondents were asked about access to payment accounts, which could include using someone else's (for example a family member's) account.

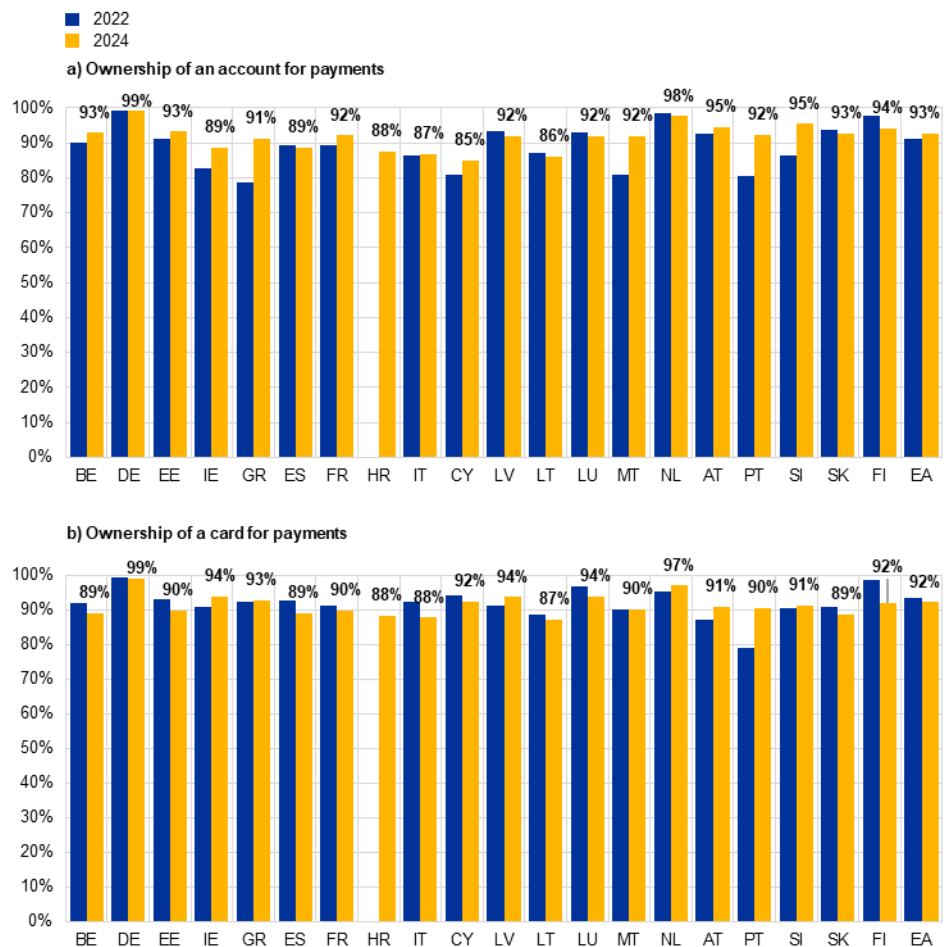
²⁷ The data for Germany include the share of respondents who own a payment account (97%) plus those who have access to a payment account.

points respectively. The largest decrease since 2022 occurred in Finland (down 4 percentage points).

The highest percentage of consumers who own a payment card was recorded in Germany (99% in both 2022 and 2024), whereas Lithuania reported the lowest share in 2024 (87%). There were significant variations from the 2022 figures in both Portugal and Finland: Portugal recorded an increase of 11 percentage points in payment card ownership, while Finland reported a decrease of 7 percentage points.

Chart 39

Share of consumers who have a payment account or card, breakdown by country, 2022-24



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2022, 2023) and the Deutsche Bundesbank (2022, 2024).
 Note: Croatia joined the euro area in January 2023, so no data were collected for Croatia in the 2022 survey.

4.2.2 Access to payment accounts and payment cards by demographics

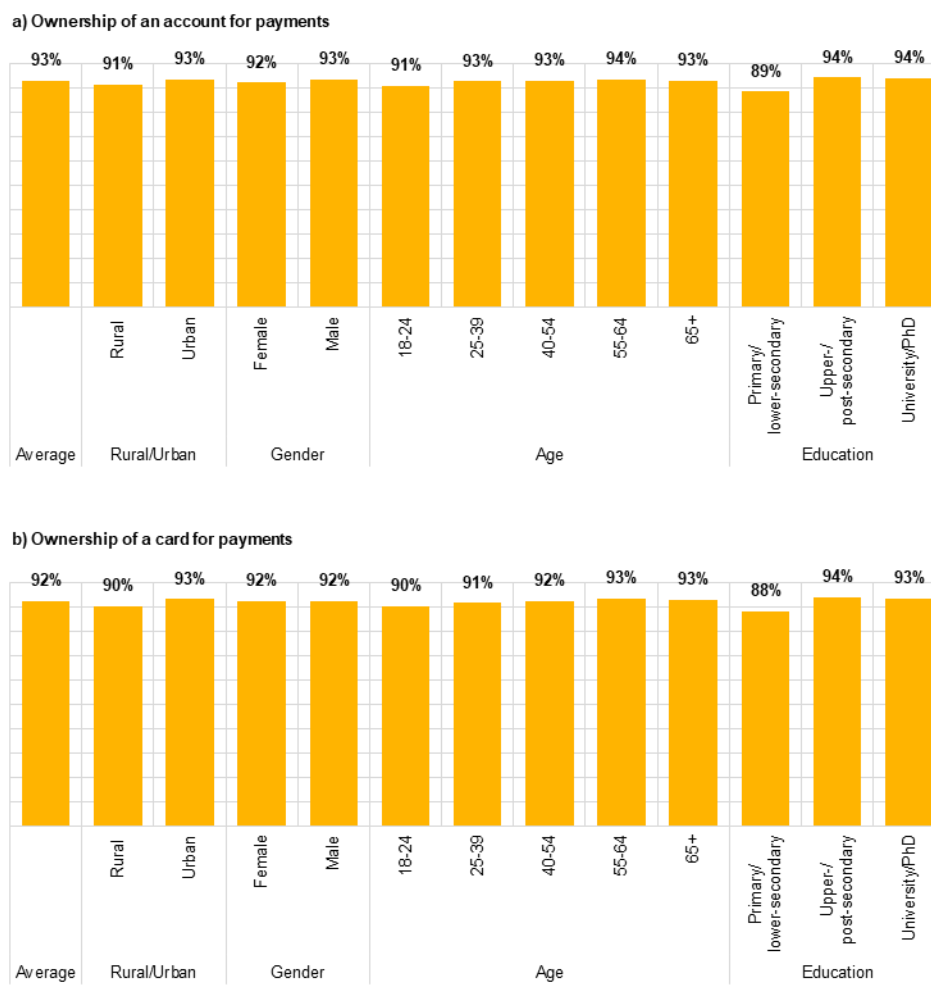
There is usually a direct link between access to payment accounts and payment cards. However, it is possible to have one without the other, even though available payment methods may be restricted in such cases. Looking at the euro area as a whole, the difference between individuals with payment accounts (93%) and those

with cards (92%) is small (Chart 40). Some people could possess a payment card without holding an account for payments. This can be explained by the use of prepaid cards, which do not require an associated account, or credit cards that are connected to accounts owned by other family members. In most countries and across most demographic groups, only a small fraction of individuals reported not having either a payment account or a card. It seems likely that these individuals rely heavily on cash for transactions, seeking third-party assistance when making purchases that cannot be completed with cash, such as online shopping. In the 2022 survey, it was noted that the younger segment of the population (aged 18-24) were less likely to hold a payment account than older age groups. However, as Chart 40 shows, differences between age groups with regard to ownership of a payment account have become very small in 2024. Divergence between age groups is also very small for card ownership (as it was in 2022). Overall, in the 2024 survey, a greater or equivalent share of age groups had payment accounts compared with those who had payment cards.

Looking at gender, females reported a slightly smaller share of payment account and card ownership (92% in both cases) than males (93% and 92% respectively). Looking at the differences between rural and urban populations, individuals living in urban areas are more likely to have a payment account and card (both 93%) than those based in rural areas (91% for payment accounts and 90% for cards). In terms of education levels, there is a gap between those with a primary/lower-secondary education level and the other groups in terms of ownership of payment accounts and cards. However, almost no differences in ownership of payment accounts and cards were observed between those with upper/post-secondary and university/PhD studies. Among the population with a primary/lower-secondary education level, 89% held an account for payments, while 88% had a payment card. In contrast, 94% of individuals with an upper/post-secondary education level, as well as those with university/PhD degrees, had an account for payments. Furthermore, 94% of those with upper/post-secondary studies and 93% of university/PhD graduates had a payment card.

Chart 40

Share of consumers who have a payment account or card, breakdown by demographics, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).

4.2.3 Ownership of crypto-assets by country

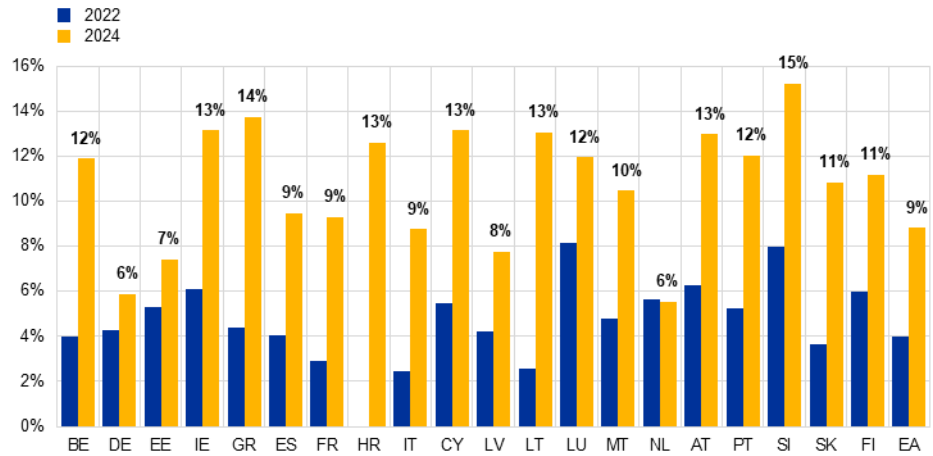
Chart 41 illustrates ownership of crypto-assets by country.²⁸ Individuals were asked whether they had crypto-assets. The share of respondents in the euro area who own crypto-assets has more than doubled between 2022 and 2024, although it remains at a rather low level: 4% in 2022 versus 9% in 2024. Of the 20 euro area countries, 13 reported shares higher than 10%, with the most significant percentages registered in Slovenia (15%) and Greece (14%). In terms of age, individuals aged 25-39 were most likely to own crypto-assets, followed by those aged 18-24. Despite the growing

²⁸ In 2022, the question on ownership of crypto-assets was a sub-item of the question about ownership of payment accounts and cards in all countries except for Germany and the Netherlands. In 2024, ownership of crypto-assets was covered as a separate question. This change in the questionnaire could have had an impact on reporting of crypto-asset ownership.

interest in crypto-assets, the adoption rate among the public remains comparatively low.

Chart 41

Possession of crypto-assets, breakdown by country, 2022-24



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2022, 2023) and the Deutsche Bundesbank (2022, 2024).
 Note: Croatia joined the euro area in January 2023, so no data were collected for Croatia in the 2022 survey.

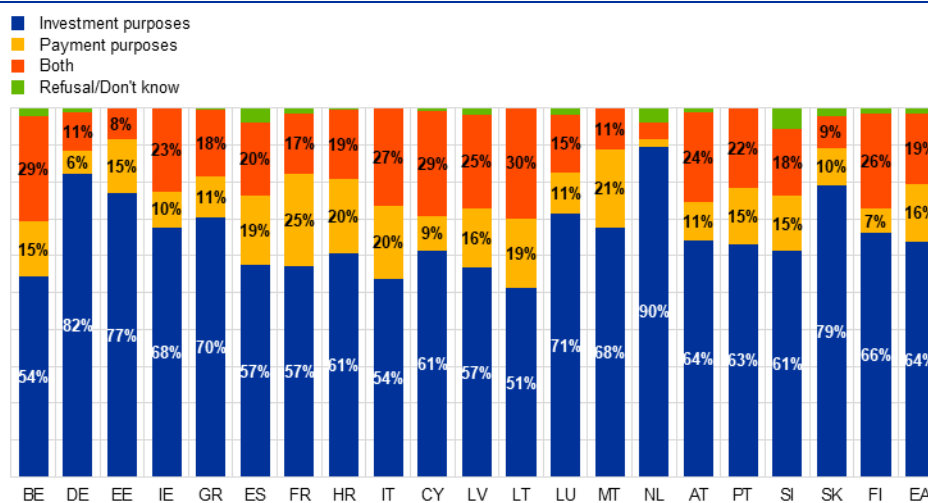
4.2.4 Use of crypto-assets by purpose and by country

Individuals who reported that they own crypto-assets were subsequently asked whether they held them for payment, investment or both purposes. Despite the variations found among different demographic groups, the results indicate a clear preference for using crypto-assets only as a means of investment (Chart 42). A country analysis reveals significant disparities in the use of crypto-assets for investment compared with payment. In the Netherlands, 90% of respondents reported using crypto-assets only for investment, while 2% utilised them only for payment. A total of 82% of respondents in Germany declared that they use crypto-assets for investment purposes only, but just 6% use them solely as a payment method. France recorded the smallest difference between the two uses, with 57% using them exclusively for investment and 25% solely for payment.

There are also significant variations between countries when analysing the use of crypto-assets for both payment and investment purposes. For instance, 30% of respondents in Lithuania and 29% in both Cyprus and Belgium reported that they use them for both purposes. In contrast, only 4% in the Netherlands said the same.

Chart 42

Use of crypto-assets, breakdown by country, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).

4.2.5 Access to instant payments

More than half (62%) of respondents across the euro area reported having access to instant payments in 2024, and 45% said they had used that service (Chart 43). Availability varies significantly across countries: the Netherlands has the highest availability at 88%²⁹, while availability in Greece is just 46%. Across the euro area, 15% of interviewees had heard of the service but did not know if it was available to them, 9% had not heard of it, and 14% believed it was not available to them.

Results from the survey on the topic of instant payments have to be interpreted with caution, because there are several instruments that may be perceived as offering “instant payments”. However, the concept of instant payments refers to a specific payment instrument: instant credit transfers where the funds reach the beneficiary within a few seconds, at any time of the day and year.³⁰ Additional information on instant payments can be found in Annex B (Chapter B.2.4)³¹.

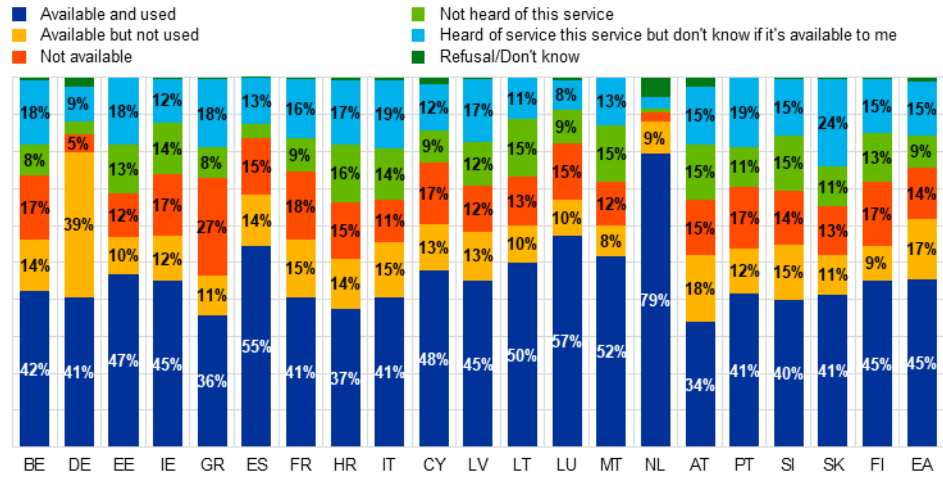
²⁹ In the Netherlands, funds are by default transferred within seconds in all credit transfers. Consumers may not be aware of this and therefore the graph may not accurately reflect the availability of instant payments.

³⁰ Instant payments were defined in the questionnaire as follows: “Can you pay money from your bank account, without using your card, so that the person you are paying receives the payment within seconds, also during weekends, even if their account is in a different bank? This service can be provided by your bank through your online or mobile banking. Payments within organisations, such as PayPal and Revolut, should not be considered in your response to this question.”

³¹ ECB (2024), [Study on the payment attitudes of consumers in the euro area \(SPACE 2024\) – Annex B: methodological information on the survey](#), Frankfurt am Main.

Chart 43

Share of consumers who have access to instant payments, breakdown by country, 2024

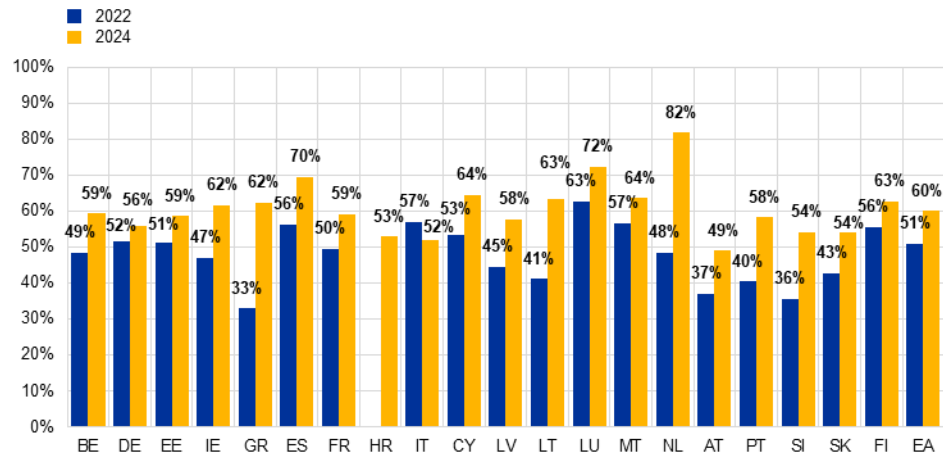


Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).

Availability of instant payments has increased rapidly in all countries since 2022 (Chart 44), with the highest increases recorded in the Netherlands (33 percentage points), Greece (29 percentage points) and Lithuania (22 percentage points).

Chart 44

Share of consumers who have access to instant payments, breakdown by country, 2022-24



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2022, 2023) and the Deutsche Bundesbank (2022, 2024).
 Note: Croatia joined the euro area in January 2023, so no data were collected for Croatia in the 2022 survey.

4.3 Acceptance of cash and cashless means of payments

Research has shown that merchants' acceptance of certain payment methods influences the means of payment chosen by consumers (Arango-Arango et al., 2018). This relationship is not unidirectional: it is also possible that a merchant's

decision to accept specific payment options is determined by how many customers opt to use those methods (McAndrews and Wang, 2012; Huynh et al., 2018).

The two-sided nature of payment markets (Huynh et al., 2022), which means that the decisions made by consumers and merchants are mutually dependent, could have an impact on the payment methods used for POS transactions.

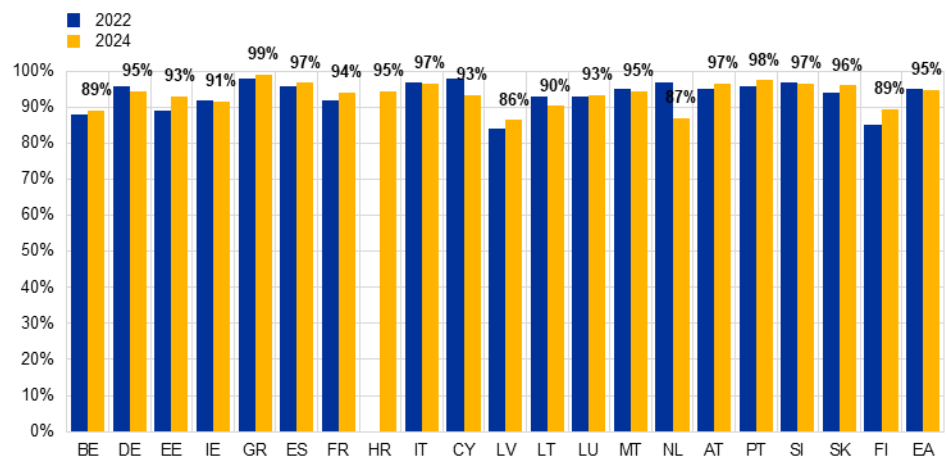
4.3.1 Share of POS transactions where cash is accepted, by country

SPACE 2024 shows that cash is still accepted in most POS transactions performed in all euro area countries (Chart 45).

Compared with 2022, respondents from all countries included in the survey experienced variations in acceptance, both positive and negative. In Estonia, acceptance has increased by 4 percentage points, whereas it has dropped by 10 percentage points in the Netherlands. Interviewees across the euro area as a whole reported that 95% of POS transactions either were completed or could have been completed using cash, which is identical with the share reported in 2022.

Chart 45

Change in the share of POS transactions where cash is accepted, breakdown by country, 2022-24



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2022, 2023) and the Deutsche Bundesbank (2022, 2024).
 Note: Croatia joined the euro area in January 2023, so no data were collected for Croatia in the 2022 survey.

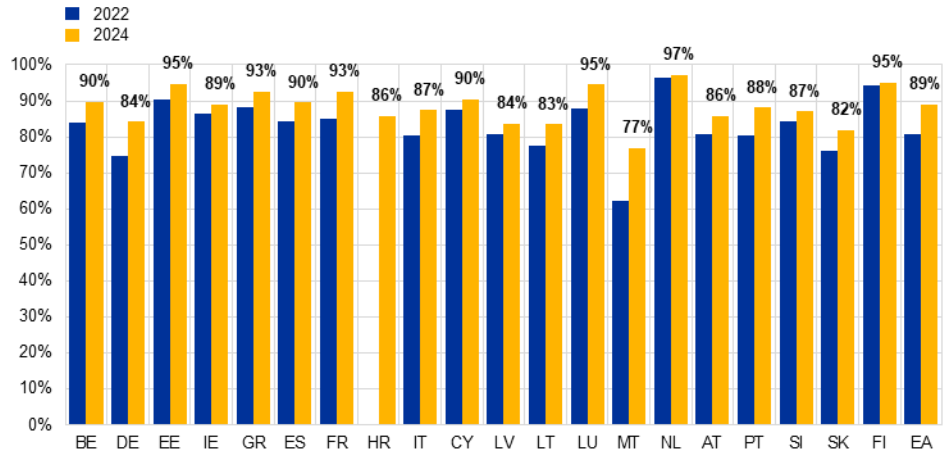
4.3.2 Share of POS transactions where cashless payments are accepted, by country

Chart 46 indicates that 89% of POS transactions in the euro area either were completed or could have been completed using non-cash payment instruments. This represents a rise of 8 percentage points since 2022. Reported acceptance of cashless payment methods has grown in all countries, with particularly significant

increases recorded in Malta (15 percentage points) and Germany (9 percentage points).

Chart 46

Change in the share of POS transactions where cashless payments are accepted, breakdown by country, 2022-24



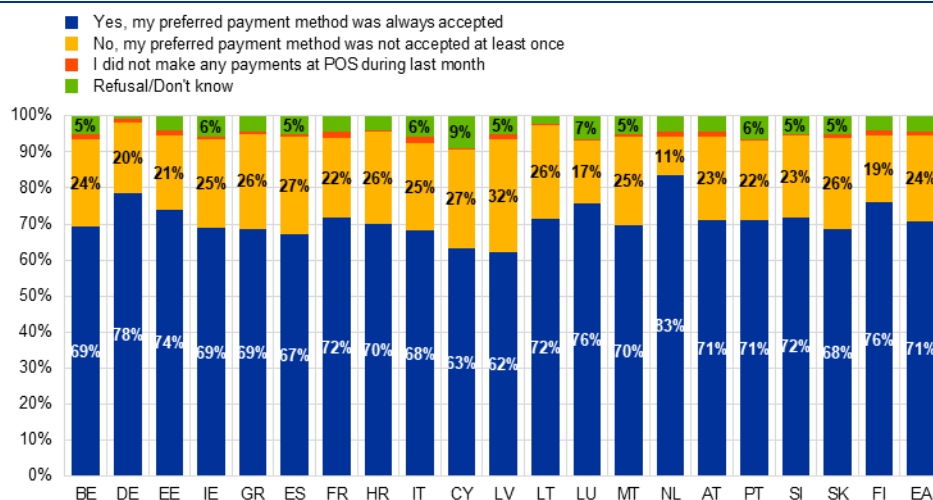
Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2022, 2023) and the Deutsche Bundesbank (2022, 2024).
 Note: Croatia joined the euro area in January 2023, so no data were collected for Croatia in the 2022 survey.

4.3.3 Experiences of payment acceptance

Participants were asked to reflect on all the transactions they had conducted at physical locations over the past month. They were asked whether the merchant or payee always offered the payment method they would prefer to use. The findings indicate that most consumers (71%) were always able to use their desired payment method (Chart 47).

Chart 47

Acceptance of preferred payment method, breakdown by country, 2024

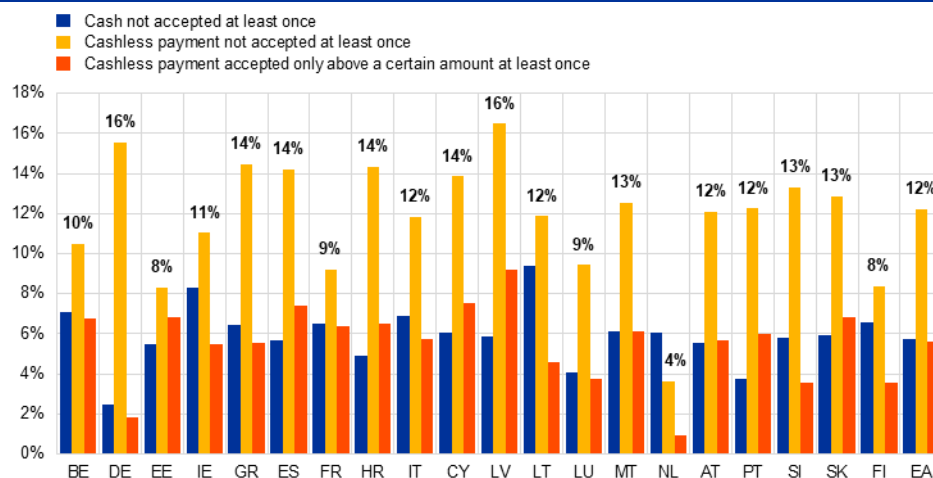


Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).

In all euro area countries, at least 10% of consumers had experienced non-acceptance of mobile or card payments for any amount at least once during the month preceding the survey, with the exceptions of the Netherlands (4%), Finland and Estonia (both 8%) and France and Luxembourg (both 9%). In addition, 6% of euro area consumers said that cards and mobile payments were not accepted below a certain amount. Meanwhile, 6% of respondents in the euro area reported that cash was not accepted at least once in the month preceding the interview. Lithuania recorded the highest proportion (9%) of respondents who said that cash was not accepted at least once, while Germany had the lowest share (2%).

Chart 48

Non-acceptance of cash and cashless payments in the past month, breakdown by country, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).

Note: Respondents were able to choose more than one answer.

Box 6

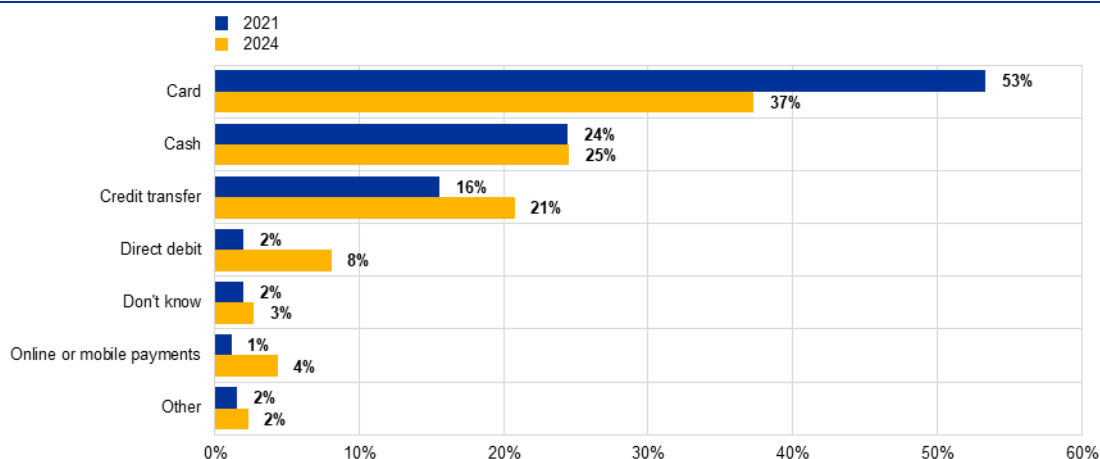
Summary of the ECB Companies' Survey on Cash 2024

During the first half of 2024 the ECB conducted the Companies' Survey on Cash (ECB, 2024). The purpose of the survey was to understand companies' views on the current and future use and acceptance of cash, and to analyse how cash compares with other means of payment. The survey collected data from 7,700 companies across the euro area, operating in sectors that have mostly private customers, i.e. retail trade, restaurants and cafés, hotels, and arts, entertainment and recreation. The results of the survey provide insight into companies' acceptance of and preferences for various payment instruments, and offer an interesting comparison with the SPACE results, which measure the same phenomena from consumers' point of view.

The majority of companies preferred their customers to pay with digital payment instruments (Chart A). The share of companies that said they would prefer their customers to pay in cash was 25% in 2024. As with consumers (Chart 21), the cash preferences of companies have remained stable since 2021, when 24% of companies preferred cash to digital payments. Preference for card payments has decreased, while credit transfers have become more popular. One reason for this shift could be that almost half of the companies (45%)³² sold their goods online in 2024.

Chart A

Preference for payment instruments by companies, euro area, 2021-24



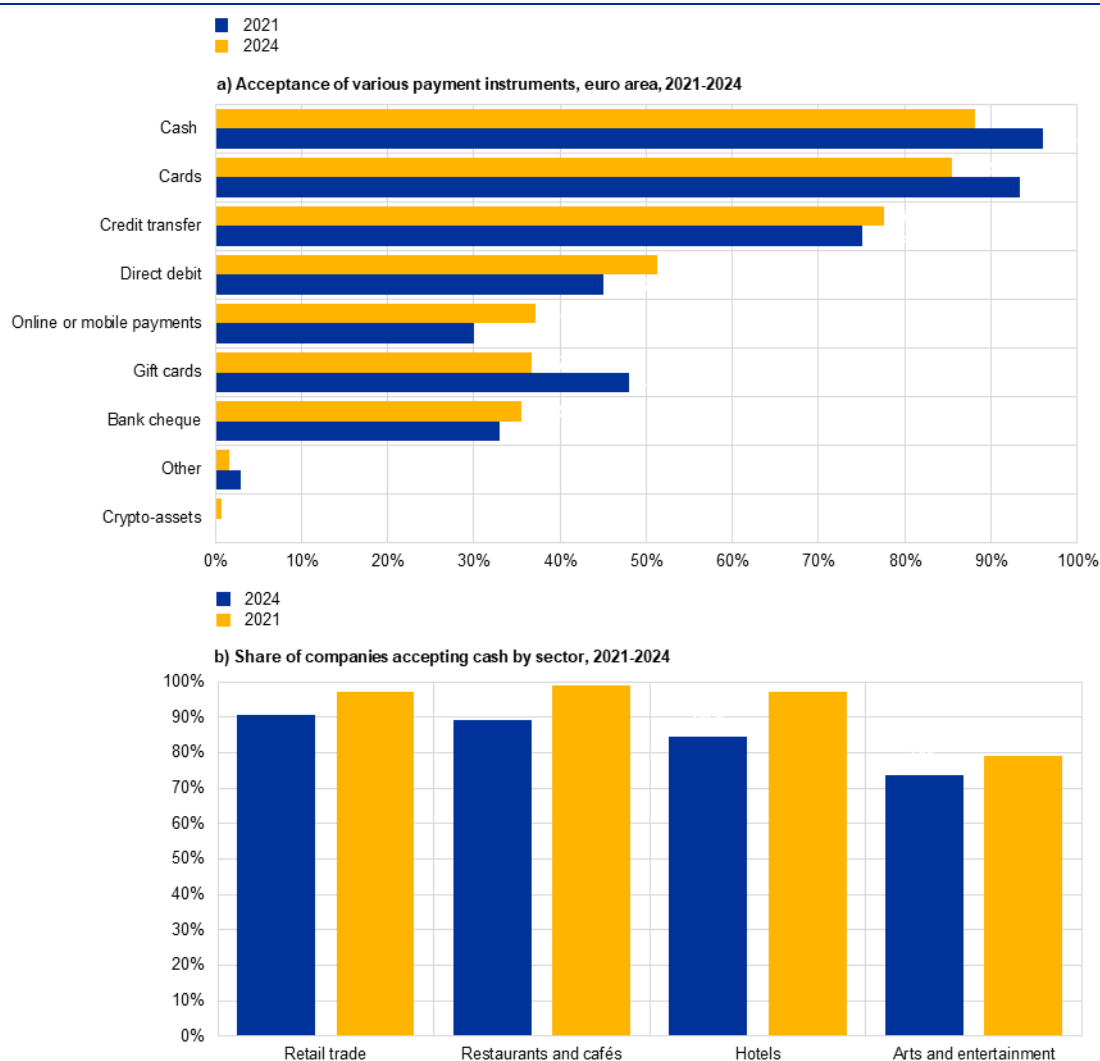
Source: ECB 2024.

One of the main findings of the Companies' Survey on Cash is that acceptance of cash has declined (Chart B). According to the survey, 88% of companies accepted cash in 2024, compared with 96% in 2021. The acceptance rate of cash was lower and the decline was steeper than the perceived acceptance rate of cash reported by consumers at the POS. According to the SPACE study, cash was accepted in 95% of transactions at the POS in 2024, 95% in 2022 and 98% in 2019.

³² 39% of companies offer online sales in addition to having a physical sales location, while 6% of companies sell their goods and services exclusively online.

Chart B

Acceptance of payment instruments by companies, euro area, 2021-24



Source: ECB 2024.

However, there are significant differences in how the two studies measure acceptance. SPACE measures perceived acceptance of cash, while the Companies' Survey on Cash measures reported acceptance by companies. More importantly, SPACE measures acceptance at payment level, while the Companies' Survey on Cash measures the share of companies that accept cash. Consumers make more payments in shops and restaurants, where cash is accepted more frequently according to data from the Companies' Survey on Cash, than in hotels, museums, theatres and sports facilities, where cash is accepted less frequently. There are also differences in cash acceptance within the retail trade sector. The cash acceptance rate was 99% in supermarkets and 97% in petrol stations, but only 87% in shops selling durable goods. Finally, 6% of the companies in the Companies' Survey on Cash sell their goods exclusively online, and are therefore not included in the SPACE data on POS payments.

The results of the Companies' Survey on Cash 2024 on cash acceptance therefore do not contradict the SPACE findings. Nevertheless, the survey provides an interesting additional

viewpoint on developments in payment markets. In particular, it reveals that acceptance of cash has decreased rapidly in certain sectors of the economy.

4.4 Cash in wallet and cash reserves

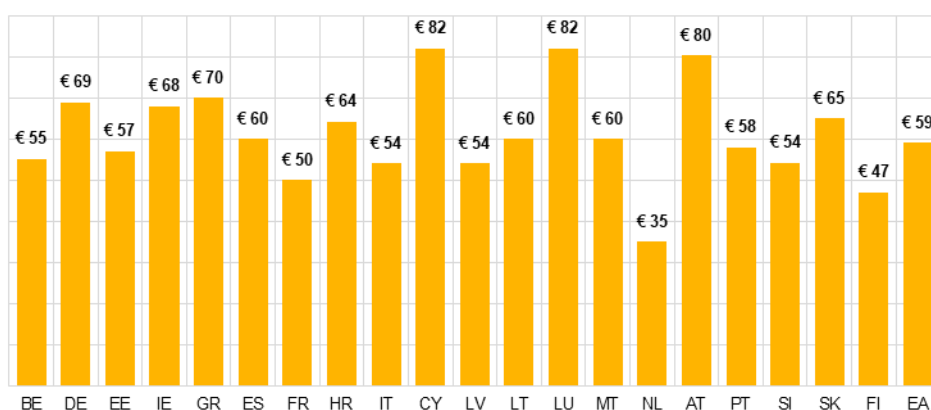
The amount of cash held in reserves influences the use of cash when carrying out transactions: the higher the reserves, the higher the probability of using cash for transactions (Bagnall et al., 2016; Arango et al., 2015). This section will therefore analyse both readily available cash, such as that stored in wallets, pockets or bags, and cash reserves kept elsewhere.

4.4.1 Average amount of cash in wallet at the beginning of the day by country

Survey participants were asked about the amount of cash they had at the start of the day. As illustrated in Chart 49, individuals in the euro area indicated a median of €59 readily available to them, whether stored in wallets, pockets or bags. The reported median cash amounts varied across different countries. Cyprus and Luxembourg had the highest median cash holdings (€82 for both), whereas the Netherlands and Finland recorded the lowest (€35 and €47 respectively).

Chart 49

Median amount of cash in wallet at the beginning of the day, breakdown by country, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).

4.4.2 Share of consumers keeping cash reserves by country

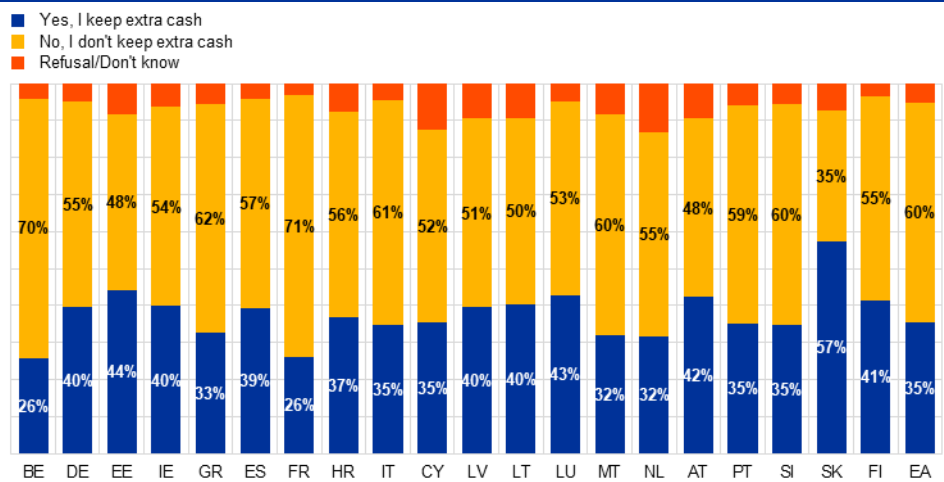
Respondents were asked whether they kept extra cash stored somewhere other than in their wallet, purse or pocket. The results from 2024 are in line with those

observed in 2019 and 2022, indicating that cash continues to serve as a store of value within the euro area. However, as illustrated in Chart 50, the share of respondents who keep cash reserves has shrunk from 37% of euro area consumers in 2022 to 35% in 2024.

The highest shares of respondents maintaining extra cash as a store of value were found in Slovakia (57%) and Estonia (44%). France and Belgium reported the lowest percentages (26% for both). As in 2022, Cyprus recorded the largest percentage of interviewees who refused to disclose whether they had extra cash holdings (12%). This indicates that some people view the use of cash as a matter of great privacy.

Chart 50

Share of consumers keeping extra cash reserves, breakdown by country, 2024



Sources: ECB, calculations based on De Nederlandsche Bank and the Dutch Payments Association (2023) and the Deutsche Bundesbank (2024).

Concluding remarks

Following its predecessors – starting in 2016 with SUCH (Esselink and Hernández, 2017) and continuing with SPACE 2019 and 2022 (ECB, 2020 and 2022) – SPACE 2024 describes the evolving payment behaviour of consumers across all 20 euro area countries, including Croatia for the first time since it adopted the euro in January 2023. It sheds light on the trends affecting payment behaviours, self-stated payment preferences and perceived advantages of different payment methods such as cash and card payments. It also addresses differing levels of access to and acceptance of cash and non-cash payment methods.

Insights into the evolution of payment behaviour and payment attitudes yield important information for the ECB and the Eurosystem, especially for the retail payments and cash strategies. The results allow the ECB to implement timely policy measures and continue to ensure equitable access to public money. The information is also helpful for monitoring trends on the use of new means of payment as they gain increasing relevance across the euro area.

It is therefore of fundamental importance to repeat the SPACE study every two years, while further improving its consistency, coverage and methodology and continuing to adjust some of the survey questions in line with trends in the retail payment landscape.

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