

Annex A

Methodology

Scope

The study on the use of cash by households (SUCH)¹ in 2017 and the study on payment attitudes of consumers in the euro area (SPACE)² in 2020 analysed consumers' payment behaviour and their payment habits to assess how they use cash and non-cash means of payment.

As cash is still the only form of public money, there is a need to analyse the other aspect of the topic, i.e. the merchants' behaviour. The aim of the Companies' Survey on Cash is to provide an overview of companies' strategic views on the current and future use and acceptance of cash, making sure cash remains a competitive means of payment. A data collection of this type has not previously been conducted at the euro area level in such a comprehensive manner.

All 19 countries in the euro area (Belgium, Germany, Estonia, Ireland, Greece, Spain, France, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Austria, Portugal, Slovenia, Slovakia and Finland) are covered by the survey.

Sample design and data collection

The survey is designed in a way that the statistical unit is the firm, where the firm is considered to have at least one employee. The respondent may, for example, be the owner, the chief financial officer or the head accountant. To improve response rates, the ECB has provided an official letter, on request, to respondents in order to reassure them as to the purpose of the survey.

The survey mode is the telephone interview. To ensure that the survey design is feasible, there was also a pilot phase.

The sample design sought to ensure that size classes were representative. The sample is a quota sample, stratified in each country by sector (as classified in the list of NACE codes by Eurostat³) and, additionally, by enterprise size for the retail trade sector.

The data were collected between October and December 2021, by Kantar Public. Fieldwork was carefully monitored at all stages.

¹ Esselink and Hernandez (2017).

² European Central Bank (2020).

³ NACE Rev. 2, available at: <https://ec.europa.eu/eurostat/documents/3859598/5902521/KS-RA-07-015-EN.PDF>

The sample was selected from an international business database. As mentioned in the introduction, this report focuses on the sectors that are most frequently interact with private customers and are most likely to receive payments from private consumers in cash. For this reason, the enterprises in the retail trade sector (NACE G45+G47) account for 50% of the sample. The retail trade sector sample is stratified by the following size classes: micro (1-9 employees), small (10-49), medium (50-249) and big (250+). Minimum quotas for micro and small enterprises were also applied.

Enterprises in accommodation and food service activities (NACE I) have a quota of 10%, while enterprises in arts, entertainment and recreation (NACE R) have a quota of 5%. Enterprises were covered in all size classes mentioned, and the coverage of large enterprises was only a requirement in countries in which the total sample size was 500 or more.

By the end of the fieldwork, a total of 10,141 interviews had been conducted for all enterprises. Table 1 shows the distribution of the sample per country.

The total sample in the main sectors of interest was 7,271, as shown in the third column.

Table 1
Total sample achieved by country

| Country | Total sample achieved | Total sample achieved in the main sectors of interest |
|--------------|-----------------------|---|
| AT | 492 | 355 |
| BE | 468 | 318 |
| CY | 207 | 68 |
| DE | 1218 | 920 |
| EE | 276 | 194 |
| ES | 1185 | 888 |
| FI | 503 | 366 |
| FR | 1202 | 903 |
| GR | 500 | 363 |
| IE | 301 | 227 |
| IT | 1222 | 892 |
| LU | 203 | 143 |
| LT | 359 | 229 |
| LV | 284 | 202 |
| MT | 174 | 79 |
| NL | 455 | 333 |
| PT | 504 | 367 |
| SI | 294 | 212 |
| SK | 294 | 212 |
| TOTAL | 10,141 | 7,271 |

Source: Companies' Survey on Cash.

Notes: Main sectors of interest comprise retail trade, hotels, restaurants and cafes, and arts, entertainment and recreation.

Weighting and validation of the data

The data have been subjected to quality checks, validation and weighting.

Weighting was carried out to ensure that the net sample was representative of the population, to minimise the bias of the survey estimate and ensure inferences were solid.

The data and the results shown in the paper were weighted using an employee weight. This weight the data in each size class, economic sector and country in relation to population estimates based on the number of employees. The employee weight thereby ensures that the sample is weighted in a way that is proportional to the total number of employees in each weighting cell. Most of the population targets were obtained from Eurostat's two sources of business statistics: 1) [Structural Business Statistics](#) and 2) [Business Demography](#).

The weighting was performed in two stages, the first calculating the weights within each sector that has a specific quota. This ensures compensation for the oversampling of large enterprises. Stage two takes a calibration weight for each sector. This weight simply calibrates the samples for the four specific quotas to their relative employee population estimates.

Annex B

List of sectors sampled in the survey

- Manufacturing
- Construction
- Wholesale trade
- Retail trade (sector included in the report)
- Hotels (sector included in the report)
- Restaurants and cafes (sector included in the report)
- Arts, entertainment and recreation (sector included in the report)
- Transport and storage
- Information and communication
- Real estate activities
- Banks, insurance and cash in transit (excluded from the survey)
- Other

Annex C

Survey screener

D1. In which sector does your company carry out its main activities?

1. Manufacturing
2. Construction
3. Wholesale trade
4. Retail trade
5. Hotels
6. Restaurants and cafes
7. Arts, entertainment and recreation
8. Transport and storage
9. Information and communication
10. Real estate activities
11. Banks, insurance and cash in transit
12. Other (DO NOT READ OUT)
13. Don't know \ No answer

If D1=11, end survey

D2. What exactly is your position in the company?

1. CEO/Managing director
2. Financial director/manager
3. Senior accountant
4. Owner
5. Other
6. Don't know \ No answer

D3. Is your company..?

1. Independent
2. A franchise undertaking
3. A branch of a national group
4. A branch of an international group
5. The headquarters of a national group
6. The headquarters of an international group
7. Don't know / no answer

D4. How many employees (full-time equivalent), including yourself, does your company currently have?

1. 1 to 9 employees
2. 10 to 49 employees
3. 50 to 249 employees
4. 250 to 999 employees
5. 1,000 employees or more
6. Don't know / no answer

D5. On average, how many payments from your customers, both private and business, does your company receive per month?

(NUMERICAL, OPEN ENDED)

€ _____

9999998 Don't know / no answer

(If the respondent does not know exactly, insist on getting an estimate and use the ranges below.)

1. Less than 100
2. 100 to 999

3. 1,000 to 9,999
4. 10,000 to 49,999
5. 50,000 to 99,999
6. 100,000 to 999,999
7. 1 million or over
8. Don't know / no answer

D6. What proportion of the payments from customers, both private and business, does your company receive each month in cash?

1. None
2. 1-10%
3. 11-25%
4. 26- 50%
5. 51-75%
6. 76-99%
7. 100%
8. Don't know / no answer

If D1 and D2 and D3 and D4 and D5 and D6=9999998, end survey

Survey Questionnaire

Q1. Which means of payment does your company accept?

1. Cash
2. Debit card
3. Credit card
4. Contactless card payments
5. Bank cheque [only in countries that have bank cheques]
6. Credit transfer
7. Direct debit

8. Gift cards or vouchers / loyalty points
9. PayPal
10. Other online or mobile payment methods (e.g. Klarna Sofort, iDEAL, Afterpay)
11. Crypto-assets (e.g. virtual currencies, such as Bitcoin, Ethereum)
12. Other (DO NOT READ OUT)
13. Don't know / no answer

Ask Q2a if Q1 = 1 (company does not accept cash)

Q2a. Have you stopped accepting cash temporarily or permanently?

1. Temporarily
2. Permanently
3. We have never accepted cash (DO NOT READ OUT)
4. Don't know / no answer

Ask Q2b if Q2a=2 (stopped accepting cash permanently)

Q2b. How long has it been since you permanently stopped accepting cash?

1. Less than 1 year
2. 1 to 2 years
3. 3 to 5 years
4. More than 5 years
5. Don't know / no answer

Ask Q2c if Q1≠1 (company does not accept cash)

Q2c. What are your reasons for not accepting cash?

1. It requires specialist knowledge or equipment to handle
2. It is expensive
3. It is time consuming
4. It is risky in terms of internal fraud

5. It poses a security risk
6. It is inconvenient or difficult to deposit or withdraw (short working hours, long travel distance)
7. It has a high risk of counterfeiting
8. It is not used often enough by our customers
9. It might pose a risk of infection with COVID-19
10. Company policy related reason not listed so far
11. Other
12. None
13. Don't know / no answer

Ask Q3 if Q1=1

Q3. Do you think you will continue accepting cash in the future?

1. Yes
2. No
3. Don't know / no answer

Ask Q4 and Q5 if Q3=0

Q4. When do you think you might stop accepting cash?

1. In less than 1 year from now
2. In 1 to 2 years from now
3. In 3 to 5 years from now
4. In more than 5 years from now
5. Don't know / no answer

Q5. Why would you not accept cash in the future?

1. It requires specialist knowledge or equipment to handle
2. It is expensive
3. It is time consuming

4. It is risky in terms of internal fraud
5. It poses a security risk
6. It is inconvenient or difficult to deposit or withdraw (short working hours, long travel distance)
7. It has a high risk of counterfeiting
8. It is not used often enough by our customers
9. It might pose a risk of infection with COVID-19
10. Company policy related reason not listed so far
11. Other
12. None
13. Don't know / no answer
- 14. Ask Q6 if Q1=1**

Q6. What aspects of the cash supply do you think needs improvement?

1. Logistics costs associated with depositing and withdrawing cash
2. Availability (more frequent) of cash depositing and withdrawing services
3. Storage solutions on-site
4. Automatic counting or balancing the cash register
5. Safety
6. Supply of coins
7. The characteristics of banknotes (size, denomination, material)
8. Other
9. None
10. Don't know / no answer

Q7. How important are the following criteria for your company when choosing to accept a means of payment?

| | | Not important at all | Fairly unimportant | Fairly important | Very important | Don't know / no answer |
|---|---|----------------------|--------------------|------------------|----------------|------------------------|
| 1 | Overall costs | 1 | 2 | 3 | 4 | 9999998 |
| 2 | Transaction speed | 1 | 2 | 3 | 4 | 9999998 |
| 3 | Ease of handling | 1 | 2 | 3 | 4 | 9999998 |
| 4 | Reliability/sensitivity to malfunctioning | 1 | 2 | 3 | 4 | 9999998 |
| 5 | Security (e.g. hacking, robbery) | 1 | 2 | 3 | 4 | 9999998 |
| 6 | Consumer preference | 1 | 2 | 3 | 4 | 9999998 |
| 7 | Use by competitors | 1 | 2 | 3 | 4 | 9999998 |

Ask Q8a if Q1=1 & Q1=2 (company accepts cash and debit card)

Q8a. How does cash compare with debit card used without contactless technology in terms of...?

| | | Much better | Slightly better | No difference | Slightly worse | Much worse | Don't know / no answer |
|---|---|-------------|-----------------|---------------|----------------|------------|------------------------|
| 1 | Overall costs | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 2 | Transaction speed | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 3 | Ease of handling | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 4 | Reliability/sensitivity to malfunctioning | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 5 | Security (e.g. hacking, robbery) | 1 | 2 | 3 | 4 | 5 | 9999998 |

Ask Q8b if Q1=1 & Q1=2 & 4 (company accepts cash and debit card & contactless card payments)

Q8b. How does cash compare with debit card using contactless technology in terms of...?

| | | Much better | Slightly better | No difference | Slightly worse | Much worse | Don't know / no answer |
|---|---|-------------|-----------------|---------------|----------------|------------|------------------------|
| 1 | Overall costs | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 2 | Transaction speed | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 3 | Ease of handling | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 4 | Reliability/sensitivity to malfunctioning | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 5 | Security (e.g. hacking, robbery) | 1 | 2 | 3 | 4 | 5 | 9999998 |

Ask Q8c if Q1=1 & Q1≠2 & Q1=3 (company accepts cash, does not accept debit card, but accepts credit card)

Q8c. How does cash compare with credit card used without contactless technology in terms of...?

| | | Much better | Slightly better | No difference | Slightly worse | Much worse | Don't know / no answer |
|---|---|-------------|-----------------|---------------|----------------|------------|------------------------|
| 1 | Overall costs | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 2 | Transaction speed | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 3 | Ease of handling | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 4 | Reliability/sensitivity to malfunctioning | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 5 | Security (e.g. hacking, robbery) | 1 | 2 | 3 | 4 | 5 | 9999998 |

Ask Q8d if Q1=1 & Q1≠2 & Q1=3 & 4 (company accepts cash, does not accept debit card, but accepts credit card & contactless card payments)

Q8d. How does cash compare with credit card using contactless technology in terms of...?

| | | Much better | Slightly better | No difference | Slightly worse | Much worse | Don't know / no answer |
|---|---|-------------|-----------------|---------------|----------------|------------|------------------------|
| 1 | Overall costs | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 2 | Transaction speed | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 3 | Ease of handling | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 4 | Reliability/sensitivity to malfunctioning | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 5 | Security (e.g. hacking, robbery) | 1 | 2 | 3 | 4 | 5 | 9999998 |

Ask Q8e if Q1=1 & Q1≠2 & Q1≠3 & Q1=9 (company accepts cash, does not accept debit card, nor credit card, but accepts mobile payment)

Q8e. How does cash compare with mobile payment in terms of...?

| | | Much better | Slightly better | No difference | Slightly worse | Much worse | Don't know / no answer |
|---|---|-------------|-----------------|---------------|----------------|------------|------------------------|
| 1 | Overall costs | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 2 | Transaction speed | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 3 | Ease of handling | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 4 | Reliability/sensitivity to malfunctioning | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 5 | Security (e.g. hacking, robbery) | 1 | 2 | 3 | 4 | 5 | 9999998 |

Ask Q8f if Q1=1 & Q1≠2 & Q1≠3 & Q1≠9 & Q1=7 (company accepts cash, does not accept debit card, credit card, nor mobile payment, but accepts direct debit)

Q8f. How does cash compare with direct debit in terms of...?

| | | Much better | Slightly better | No difference | Slightly worse | Much worse | Don't know / no answer |
|---|---|-------------|-----------------|---------------|----------------|------------|------------------------|
| 1 | Overall costs | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 2 | Transaction speed | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 3 | Ease of handling | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 4 | Reliability/sensitivity to malfunctioning | 1 | 2 | 3 | 4 | 5 | 9999998 |
| 5 | Security (e.g. hacking, robbery) | 1 | 2 | 3 | 4 | 5 | 9999998 |

Q9. Which means of payment would you prefer your customers to use when paying you?

1. Cash
2. Debit card
3. Credit card
4. Contactless card payments
5. Bank cheque [only in countries that have bank cheques]
6. Credit transfer
7. Direct debit
8. Gift cards or vouchers / loyalty points
9. PayPal
10. Other online or mobile payment methods (e.g. Klarna Sofort, iDEAL, Afterpay)
11. Crypto-assets (e.g. virtual currencies, such as Bitcoin, Ethereum)
12. Other
13. Don't know / no answer

Ask Q10 to Q15 if (D1=3 or 4 or 5 or 6) and Q1=1 (retailers, hotels and restaurants that accept cash)

Q10. Have you automated your cash operations?

1. Yes, we have cashier desks with smart cash tills
2. Yes, we have self-check-out terminals that accept cash
3. Yes, we have both cashier desks with smart tills and self-check-out terminals that accept cash
4. Yes, we have another automatization system
5. No
6. Don't know / no answer

Ask Q11 if Q10= 5 (no automated cash operations)

Q11. Do you plan to automate your cash operations in the future?

1. Yes, we plan to introduce cashier desks with smart tills
2. Yes, we plan to introduce self-check-out terminals that accept cash
3. Yes, we plan to introduce both cashier desks with smart tills and self-check-out terminals that accept cash
4. Yes, we plan another automatization system
5. No
6. Don't know / no answer

Ask Q12a and Q12b if (D1=3 or 4 or 5 or 6) and Q=1 (retailers, hotels and restaurants that accept cash)

Q12a. Cashback means that when making the purchase a customer can request to withdraw some cash. Do you offer this service to your customers?

1. Yes
2. No
3. Don't know / no answer

Q12b. Cash-in-shop means that a customer can ask to withdraw cash without purchasing anything. Do you offer this service to your customers?

1. Yes
2. No
3. Don't know / no answer

Ask 13a if Q12a=0 (no cashback services)

Q13a. Why are you not offering cashback services to your customers?

1. The service would not be used by your customers
2. The set-up costs are too high
3. The fees charged by the providers are too high
4. There is not enough excess cash for supplying these services
5. You are not familiar with this type of service
6. Security reasons
7. Other
8. Don't know / no answer

Ask 13b if Q12b=0 (no cash-in-shop services)

Q13b. Why are you not offering cash-in-shop services to your customers?

1. The service would not be used by your customers
2. The set-up costs are too high
3. The fees charged by the providers are too high
4. There is not enough excess cash for supplying these services
5. You are not familiar with this type of service
6. Security reasons
7. Other (DO NOT READ OUT)
9999998 Don't know / no answer

Ask Q14 if Q12a=1 or Q12b=1

Q14. How much do cashback or cash-in-shop reduce your cash stocks (deposited at the end of the day)?

1. Not at all
2. 1-10%
3. 11-25%
4. 26- 50%
5. 51-75%
6. 76-99%
7. 100%
8. Don't know / no answer

Ask Q15 if Q12a=0 or 9999998 and Q12b=0 or 9999998 (no cashback/ no cash-in-shop services)

Q15. Do you plan to offer cashback or cash-in-shop services to your customers in the next 5 years?

1. Yes, only cashback
2. Yes, only cash-in-shop
3. Yes, both
4. No
5. Don't know / no answer

ASK ALL

Q16. What would you say is your company's approximate annual turnover?

1. Less than €10,000
2. €10,000 to €99,999
3. €100,000 to €999,999
4. €1 million to €4,999,999
5. €5 million or more
6. Don't know / no answer

Ask Q17 to Q32 if Q1=1 (if company accepts cash), otherwise end the interview

Q17. Thinking of your annual turnover, what proportion of your income from customers is in cash?

1. None
2. 1-10%
3. 11-25%
4. 26- 50%
5. 51-75%
6. 76-99%
7. 100%
8. Don't know / no answer

Q18. What is the average amount of cash that you hold (e.g. in the till, in a vault or safe)?

1. Less than €1,000
2. €1,000 to €4,999
3. €5,000 to €9,999
4. €10,000 to €49,999
5. €50,000 to €99,999
6. €100,000 to €999,999
7. €1 million or more
8. Prefer not to say
9. 9999998 Don't know / no answer

Q19. Does your company do any of the following...?

(READ OUT – ONE ANSWER PER LINE)

| | | Yes | No | Don't know / no answer |
|---|--|-----|----|------------------------|
| 1 | Withdraw cash | 1 | 0 | 9999998 |
| 2 | Deposit cash | 1 | 0 | 9999998 |
| 3 | Use services provided by a cash-in-transit (CIT) company | 1 | 0 | 9999998 |

Ask Q20 if Q19_1=1 (company withdraws cash)

Q20. How does your company withdraw cash?

Ask Q20 item 3 (“by using a cash-in-transit”) if Q19_3=1

1. Over the bank counter
2. Via an ATM
3. By using a cash-in-transit company
4. Other
5. Don't know / no answer

Ask Q21a if Q20=1 (use bank counter for withdrawal)

Q21a. How easy or difficult is it for you or someone else from your company to get to a bank to withdraw cash?

(READ OUT – ONE ANSWER ONLY)

1. Very easy
2. Fairly easy
3. Fairly difficult
4. Very difficult
5. Don't know / no answer

Ask Q21b if Q20 =2 (use ATM for withdrawal)

Q21b. How easy or difficult is it for you or someone else from your company to get to an ATM to withdraw cash?

1. Very easy
2. Fairly easy
3. Fairly difficult
4. Very difficult
5. Don't know / no answer

Ask Q22 if Q19_1 = 1 (company withdraws cash)

Q22. Why does your company withdraw cash?

1. To have change
2. To pay suppliers
3. To pay salaries
4. To pay taxes or other bills
5. Other
6. Don't know / no answer

Ask Q23 to Q26 if Q19_2=1 (company deposits cash)

Q23. How does your company deposit cash?

1. Over the bank counter
2. In a bank night vault (sealed-bag machines)
3. Via a cash-in machine
4. By using a cash-in-transit company
5. Other
6. Don't know / no answer

Ask Q24a if Q23=1 (use bank counter for deposit)

Q24a. How easy or difficult is it for you or someone else from your company to get to a bank to deposit cash?

1. Very easy
2. Fairly easy
3. Fairly difficult
4. Very difficult
5. Don't know / no answer

Ask Q24b if Q23=2 (use bank night vault for deposit)

Q24b. How easy or difficult is it for you or someone else from your company to get to a bank night vault (sealed-bag machine) to deposit cash?

1. Very easy
2. Fairly easy
3. Fairly difficult
4. Very difficult
5. Don't know / no answer

Ask Q24c if Q23=3 (use cash-in machine for deposit)

Q24c. How easy or difficult is it for you or someone else from your company to get to a cash depositing machine to deposit cash?

1. Very easy
2. Fairly easy
3. Fairly difficult
4. Very difficult
5. Don't know / no answer

Ask Q25 and Q26 if Q19_2=1 (company deposits cash)

Q25. On average, how often does your company deposit cash?

1. More than 5 times per week
2. 3 to 5 times per week
3. Once or twice per week
4. Less than once a week
5. About once every second week
6. About once a month
7. Less often
8. Don't know / no answer

Q26 What percent of the cash generated by your activities is deposited at a bank?

1. None
2. 1-10%
3. 11-25%
4. 26-50%
5. 51-75%
6. 76-99%
7. 100%
8. Prefer not to say
9. Don't know / no answer

Ask Q27 if Q20=1 or 2 (cash withdrawal via bank counter or ATM) or Q23=1 or 2 or 3 (cash deposit via bank counter, night vault, or cash-in machine) (company uses banks)

Q27 How satisfied or dissatisfied are you with cash services provided by commercial banks?

| | | Completely dissatisfied | Fairly dissatisfied | Fairly satisfied | Completely satisfied | Don't know / no answer |
|---|---|-------------------------|---------------------|------------------|----------------------|------------------------|
| 1 | Range of products in the offer | 1 | 2 | 3 | 4 | 9999998 |
| 2 | Quality of the service | 1 | 2 | 3 | 4 | 9999998 |
| 3 | Fees | 1 | 2 | 3 | 4 | 9999998 |
| 4 | Accessibility (distance, opening hours) | 1 | 2 | 3 | 4 | 9999998 |

Ask Q28 and Q29 if Q19_3 =1

Q28. Please indicate for which services you use a cash-in-transit (CIT) company?

1. Cash transportation services
2. Cash handling services
3. Security services
4. Other
5. Prefer not to say
6. Don't know / no answer

Q29 How satisfied or dissatisfied are you with cash services provided by cash-in-transit (CIT) in terms of...?

(READ OUT – ONE ANSWER PER LINE)

| | | Completely dissatisfied | Fairly dissatisfied | Fairly satisfied | Completely satisfied | Don't know / no answer |
|---|--------------------------------|-------------------------|---------------------|------------------|----------------------|------------------------|
| 1 | Range of products in the offer | 1 | 2 | 3 | 4 | 9999998 |
| 2 | Quality of the service | 1 | 2 | 3 | 4 | 9999998 |
| 3 | Fees | 1 | 2 | 3 | 4 | 9999998 |