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Use of cash in France:
the payment method of choice for low-value purchases

This article exploits French data from a survey of cash usage in the euro area, which was published in 2017 on behalf of the European Central Bank (ECB).

Cash is the preferred method of payment at the point of sale in the euro area, accounting for three out of every four transactions and more than half of the total value of purchases. The survey results nonetheless vary across countries, with France in particular showing a high concentration of cash usage for small purchases, coupled with a strong predilection for cashless means of payment.

Among the determinants of cash usage, sociodemographic criteria (gender, age, income and profession of consumers) are found to have very little impact. However, transaction characteristics play a predominant role, with the share of cash payments diminishing as the value of the purchase rises, and increasing for purchases in shops for day-to-day items.

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68%
share of point-of-sale (POS) transactions paid for in cash in France (by number of transactions)
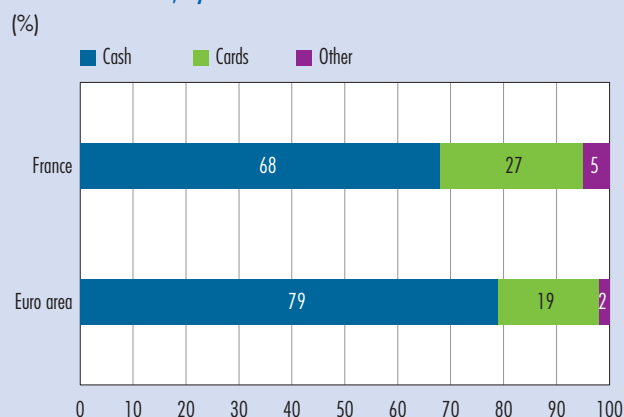
73.5%
share of purchases made in cash by French consumers aged 55 to 64

90%
share of purchases under EUR 5 paid for in cash

Market share of payment instruments at the point of sale in France and the euro area, by number of transactions
(%)

Source: ECB, SUCH survey (2016).

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1 Cash usage remains significant in France despite consumers declaring a preference for cards

Cash was the most frequently used payment instrument among French participants in the SUCH survey:[1] 68% of purchases at the point-of-sale (POS) were made with banknotes and coins, 27% by card and 5% using another method of payment (mainly cheques). France nonetheless has one of the lowest rates of cash usage in the euro area, alongside Luxembourg, Belgium, Finland, Estonia and the Netherlands (see Chart 1). By comparison, aggregate survey figures show that cash accounts for 79% of POS transactions in the overall euro area, with cards accounting for 19%.

In value terms, cash is used for 28% of POS spending in France, which is the second-lowest share in the euro area, after the Netherlands (27%), while the average for the euro area is 54%. The average value of a cash transaction is EUR 7.5 in France compared with EUR 12.4 for the euro area. These low figures indicate that French consumers tend to use cash primarily for small purchases. France also ranks second-to-last in the euro area, after Portugal, for the amount of cash carried by consumers in their wallets (EUR 32 compared with an average of EUR 65 for the euro area).

In response to the supplementary questionnaire distributed to a portion of survey participants, 1,434 individuals indicated whether they preferred cash or cashless instruments (card or other cashless instruments such as cheques), or had no clear preference.[2] French consumers expressed a particularly strong preference for cashless instruments, including cards and cheques: 66% of respondents said they favoured these instruments (the highest share, alongside Belgium), compared with an average of 43% for the euro area, while only 17% said they preferred paying in cash.

2 An analysis of payment instrument use according to sociodemographic and transaction characteristics

The academic literature has identified various explanatory factors

There is an abundant literature on the topic of payment economics (Bagnall et al., 2016). Studies focus in particular on identifying the determinants of payment choices, with the aim of informing estimates of future demand for cash. As well as examining the role played by the characteristics of individual payment instruments (security, speed, etc.) or payment environments (network of branches or ATMs, etc.), the literature looks at

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C1 Average market share of cashless and cash payments in the euro area, by number of transactions
(%)
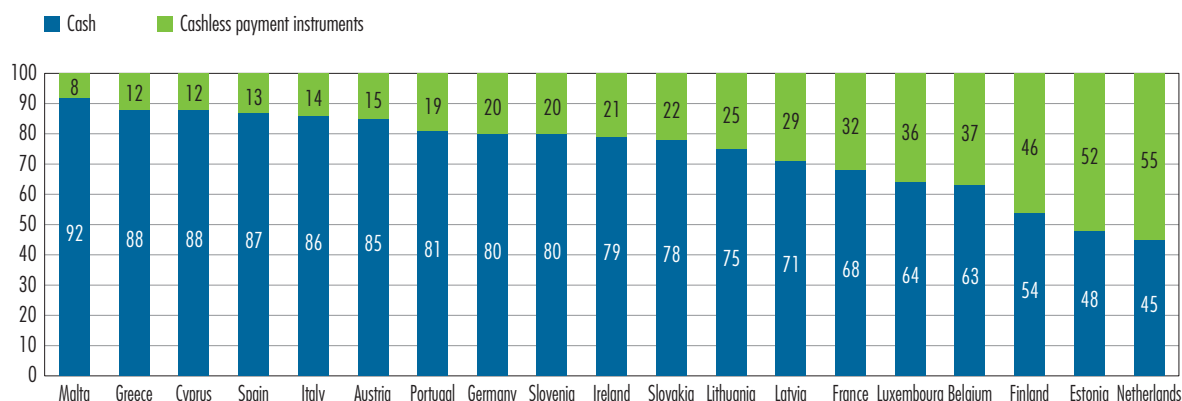
Source: ECB, SUCH survey (2016).

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1 SUCH survey (Study on the Use of Cash by Households in the euro area). For further information on the main results, see: Banque de France (2018), *La lettre du fiduciaire*, No. 10, May. https://publications.banque-france.fr/liste-chronologique/la-lettre-du-fiduciaire

2 The question asked was: "Assuming you were offered various payment methods in a shop, what would be your preferred payment method?"

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BOX 1

Survey methodology

In 2016, the European Central Bank commissioned a vast Study on the Use of Cash by Households in the euro area (SUCH),[1] covering 65,281 residents aged 18 and over in 17 countries. To ensure the representativeness of the findings, the sample populations were selected using the quota method, based on three variables: gender, age and region of residence. The quotas were set to reflect the theoretical population structures for each country, which were defined using data compiled by Eurostat. The main results were published in November 2017 (Esselink and Hernandez, 2017).

The survey comprised a "payment diary" and a questionnaire. For the payment diary, respondents were asked to record the characteristics of all payments made over a single day; a total of 128,677 transactions were recorded using this method. For the questionnaire, a subset of 28,099 individuals were asked to provide details of their behaviour and preferences regarding payment methods, ATM withdrawals or precautionary savings.

In France, 4,932 individuals kept a payment diary, reporting a total of 7,299 transactions, and a subset of 1,994 participants filled in the questionnaire. The study was conducted in three waves from October 2015 to June 2016. Respondents were mainly questioned online, but individuals aged 55 and over were interviewed by telephone.

1 The survey was conducted by Kantar Public Brussels. Germany and the Netherlands did not take part but, where possible, the results of their own national payment surveys were incorporated into the SUCH findings.

two other types of determinants: sociodemographic criteria and transaction characteristics (see Table 1).

With regard to the main sociodemographic criteria identified in the SUCH survey, the literature typically finds the following effects:

• gender: men make significantly more cash payments than women (Schuh and Stavins, 2011; Bounie and François, 2006);

• age: older people tend to make more cash payments (Bounie and François, 2006), and significantly fewer card payments than young people (Stavins, 2016);

• income: the lower an individual's income, the more likely he/she is to use cash (Bounie et al., 2008);

• professional status: there is no clear-cut finding in the literature on this variable.

With regard to transaction characteristics, the value of the purchase is often cited as one of the most important determinants of payment choice. The higher the value of the purchase, the less likely it is to be paid for in cash (Hayashi and Klee, 2003). The literature thus points to a specialisation effect in payment instrument use, according to transaction size: cash is used more for low-value purchases, whereas cards are the predominant method for purchases over EUR 23 (Bounie et al. 2008). The same studies also show that in France, purchases at shops for day-to-day items are more often paid for in cash. Cash usage is also higher when alternative forms of payment are not accepted – the "payment constraint" (Bounie and François, 2006).[3]

3 The "payment constraint" is understood here to mean a refusal by a merchant to accept a non-cash form of payment. The SUCH survey did not take into account the possibility of non-acceptance of cash by merchants. Moreover, certain countries, such as France, have imposed maximum limits on cash payments.

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T1 Expected impact of demographic and transaction variables on cash usage

Variables	Expected impact
Sociodemographic variables	
Gender	Men are more likely to pay in cash than women
Age	Use of cash increases with age
Income	Use of cash decreases as income levels rise
Professional status	Uncertain: it is possible that professionals receiving their income in cash may use more cash
Transaction variables	
Value of the payment	Use of cash decreases as the value of the payment rises
Type of shop	Use of cash is higher in shops for day-to-day items
Payment constraint	Use of cash increases when there is a payment constraint

The survey confirms the determinants of cash usage

Sociodemographic criteria

SUCH survey data for France confirm that cash usage tends to increase with the age of the consumer (see Chart 2). Those aged under 40 use cash in 64% of transactions, while those aged 40 and over[4] pay for at least 71% of purchases in cash. The biggest users of cash at the POS are individuals aged 55 to 64 (73.4% of transactions). By contrast, card use is higher among younger consumers (27.6% of transactions for 18-24 year-olds, 28.4% for 25-39 year-olds) and lower among older cohorts (notably 55-64 year-olds who use cards for fewer than 20% of transactions).

Regarding the gender of individual consumers (see Chart 3), the survey results confirm the findings of the empirical literature, i.e. that cash use is more prevalent among men: male survey respondents said they used cash for 72.2% of transactions, compared with 67.4% for women.

In line with the empirical literature, the survey also shows that consumers on lower incomes use cash more frequently than cards (see Chart 4 below).

With regard to socioprofessional categories, for which the literature finds no clear-cut conclusions, the survey responses for France (see Chart 5 below) show that

C2 Share of cash and card payments in France, by number of transactions and by age bracket

(%)

■ Share of cash payments   ■ Share of card payments
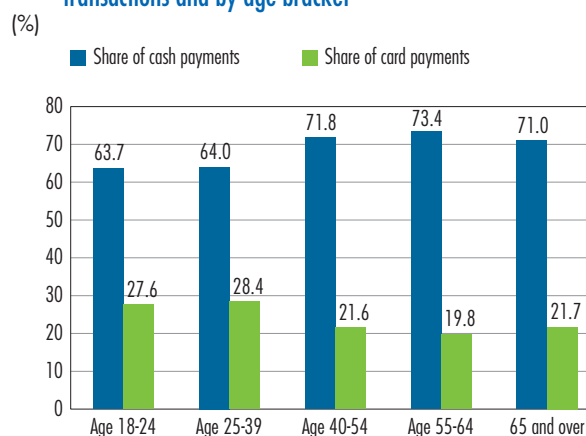
Sources: ECB, SUCH survey (2016) and authors' calculations.

C3 Share of cash and card payments in France, by number of transactions and by respondent's gender

(%)

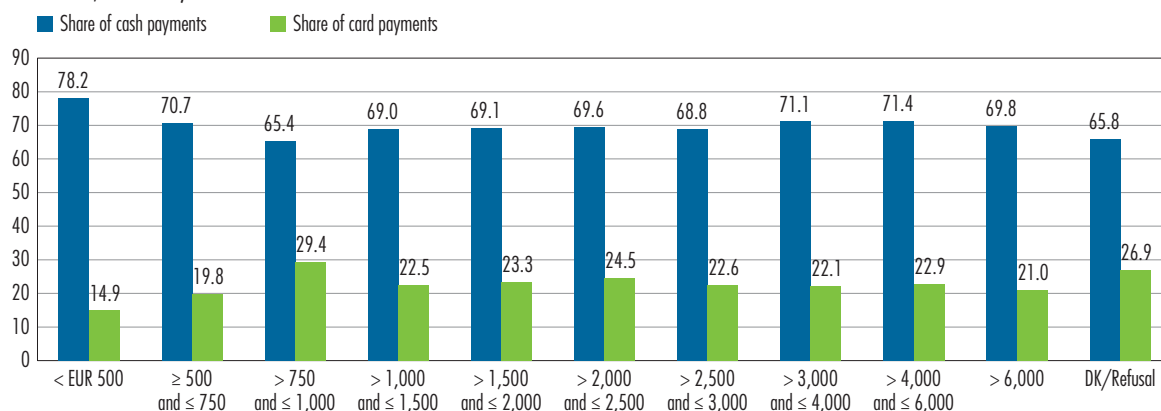■ Share of cash payments   ■ Share of card payments
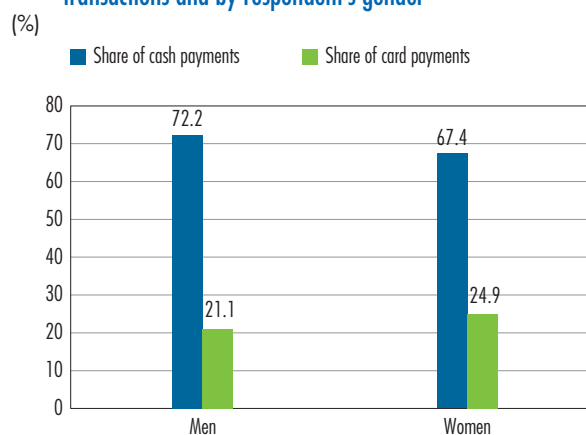
Sources: ECB, SUCH survey (2016) and authors' calculations.

4 According to INSEE data, there were 34,050,434 people aged 40 and over in France at 1 January 2018, and 17,552,014 18-39 year-olds.

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C4 Share of cash and card payments in France, by number of transactions and by respondent's household income level
(income in euro; % share)

Share of cash payments · Share of card payments

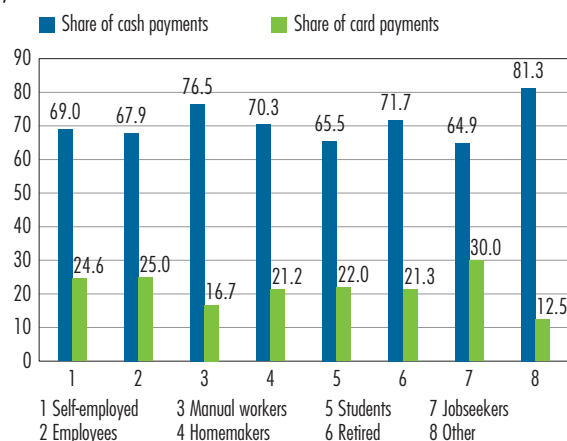| Income	Cash	Card
< EUR 500	78.2	14.9
≥ 500 and ≤ 750	70.7	19.8
> 750 and ≤ 1,000	65.4	29.4
> 1,000 and ≤ 1,500	69.0	22.5
> 1,500 and ≤ 2,000	69.1	23.3
> 2,000 and ≤ 2,500	69.6	24.5
> 2,500 and ≤ 3,000	68.8	22.6
> 3,000 and ≤ 4,000	71.1	22.1
> 4,000 and ≤ 6,000	71.4	22.9
> 6,000	69.8	21.0
DK/Refusal	65.8	26.9

Sources: ECB, SUCH survey (2016) and authors' calculations.

C5 Share of cash and card payments in France, by number of transactions and by respondent's socioprofessional category
(%)

Share of cash payments · Share of card payments

Category	Cash	Card
1 Self-employed	69.0	24.6
2 Employees	67.9	25.0
3 Manual workers	76.5	16.7
4 Homemakers	70.3	21.2
5 Students	65.5	22.0
6 Retired	71.7	21.3
7 Jobseekers	64.9	30.0
8 Other	81.3	12.5

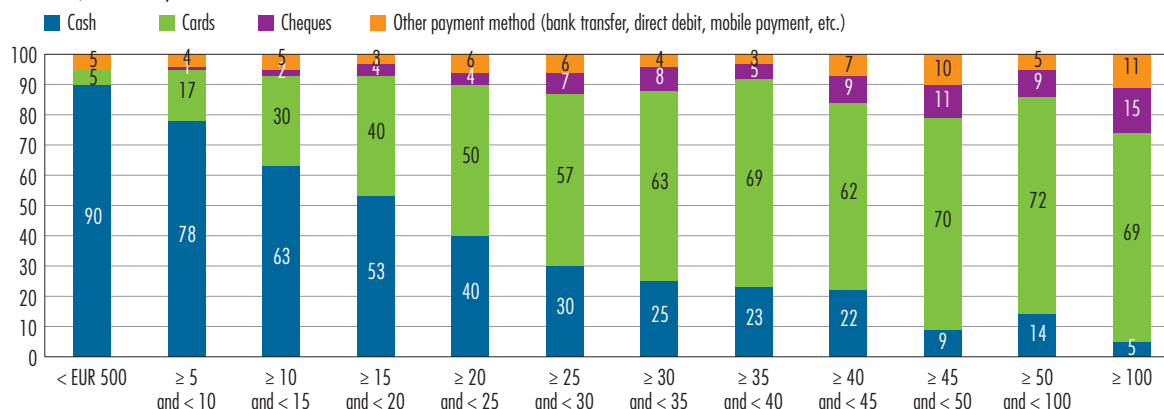Sources: ECB, SUCH survey (2016) and authors' calculations.

cash usage is higher among manual workers (76.5% of transactions), the retired (71.7%) and homemakers (70.3%), and lower among jobseekers (64.9%), students (65.5%), employees (67.9%) and self-employed professionals (69%).[5]

Transaction characteristics

According to the survey results for France, cash is used in over half of all POS payments of under EUR 20, and in 90% of purchases under EUR 5 (see Chart 6). For purchases over EUR 20, however, the predominant payment method is the card. Cheques also begin to rival cash when the purchase value exceeds EUR 45.

C6 Market share of payment instruments in France, by number of transactions and by transaction value
(value in euro; % share)

Cash · Cards · Cheques · Other payment method (bank transfer, direct debit, mobile payment, etc.)

Value	Cash	Cards	Cheques	Other
< EUR 500	90	5		5
≥ 5 and < 10	78	17	1	4
≥ 10 and < 15	63	30	2	5
≥ 15 and < 20	53	40	4	3
≥ 20 and < 25	40	50	4	6
≥ 25 and < 30	30	57	7	6
≥ 30 and < 35	25	63	8	4
≥ 35 and < 40	23	69	3	3
≥ 40 and < 45	22	62	9	7
≥ 45 and < 50	9	70	11	10
≥ 50 and < 100	14	72	9	5
≥ 100	5	69	15	11

Sources: ECB, SUCH survey (2016) and authors' calculations.

5 The SUCH survey uses occupational categories that are assumed to apply to a maximum number of euro area countries. In some cases, however, this approach makes it difficult to analyse data at the national level. For example, the SUCH survey separates workers into two categories: "manual workers" and "employees", whereas in France these generally make up a single category.

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French survey respondents said that the factor most often influencing their choice of payment instrument at the POS was the amount of the purchase (67%), ahead of the amount of cash they had in their wallet (55%).

The SUCH survey results for France also show a correlation between payment method and the place of purchase. Some 76% of transactions in shops for day-to-day items are settled in cash, and just 23% by card.[6] Conversely, cash accounts for only 37% of purchases in shops for durable goods in France (clothes, toys, electronics, furniture, car dealers, etc.), compared with 56% in the broader euro area.

3 Transaction characteristics play a major role in determining the choice of payment instrument

Sociodemographic criteria have very little incidence on the choice of payment instrument

Our estimations of the share of purchases paid for in cash and by card (see Table 2) show that sociodemographic criteria have a limited impact on payment behaviour, confirming the expected findings. Women, for example, are considerably less likely than men to use cash and more likely to use cards. These results are similar to the findings of the US studies by Schuh and Stavins (2011) and Stavins (2016), and confirm that payment behaviour differs depending on the gender of the consumer.

The level of income has very little influence, and significant coefficients are only found for incomes between EUR 751 and EUR 1,000. The share of card payments by individuals in this category is 11.5 percentage points higher than for those earning under EUR 500, while the share of cash payments is 10.8 percentage points lower.

The model finds no statistical evidence that cash use increases with age. However, the use of cards decreases significantly as the age of the consumer rises. Thus, card use among 55-64 year-olds is 9.4 percentage points lower than for individuals aged 18-24. This can be attributed in part to the predominance of cheques among older population cohorts.

BOX 2

The econometric model used

The aim of our analysis was to explain the respective shares of cash and card payments in the total number of transactions.

Using a linear regression model and the extended least square method[1] we estimated the impact of the following explanatory variables: sociodemographic characteristics and transaction characteristics.

The sociodemographic variables were those described previously (age, gender, income level and professional status). The transaction characteristics, which were obtained from the payment diaries kept by participants in the SUCH survey, were: the total value of payments reported; the share made in shops for day-to-day items (supermarkets and small shops); and the share of "constrained" payments, that is purchases paid for in cash because the merchant did not accept other forms of payment.[2]

1 This involved using the SUR method (seemingly unrelated regression) to capture the fact that the two measurements are related, which can have repercussions on the error terms and on the quality of the estimations.
2 Respondents were asked the following question: "Were other payment methods, such as cards or cheques accepted?"

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6 Shops for day-to-day items include supermarkets, bakeries, pharmacies and tobacconists.

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T2 Estimation of the share of purchases paid for in cash and by card in France
(%)

	Cash purchases		Card purchases	
	Coefficient	(Standard error)	Coefficient	(Standard error)
Total value of payments	-0.085***	(0.0060)	0.077**	(0.0057)
Share of purchases in shops for day-to-day items	0.22**	(0.015)	-0.047	(0.014)
Share of constrained purchases	0.37**	(0.018)	-0.250***	(0.017)
Gender (1 for female)	-2.71**	(1.24)	2.02**	(1.18)
Income (reference: income < EUR 500)				
Between 501 and 750 euro	-5.51	(6.38)	1.37	(6.06)
Between 751 and 1,000 euro	-10.80*	(6.13)	11.50**	(5.82)
Between 1,001 and 1,500	-8.31	(5.44)	5.99	(5.17)
Between 1,501 and 2,000	-7.16	(5.36)	5.88	(5.10)
Between 2,001 and 2,500	-7.65	(5.37)	8.30	(5.11)
Between 2,501 and 3,000	-7.44	(5.36)	5.66	(5.09)
Between 3,001 and 4,000	-6.18	(5.32)	5.82	(5.05)
Between 4,001 and 6,000	-5.78	(5.44)	6.95	(5.17)
Over 6,000	-0.82	(6.12)	0.56	(5.82)
Don't know/Refusal	-10.60	(5.72)	10.10*	(5.44)
Age (reference: 18-24 year-olds)				
Aged 25 to 29	-1.11	(2.92)	-2.14	(2.77)
Aged 40 to 54	4.45	(2.89)	-7.96***	(2.75)
Aged 55 to 64	5.31*	(3.14)	-9.43***	(2.98)
65 and over	2.84	(3.57)	-7.58**	(3.40)
Occupation (reference: self-employed)				
Employees	-1.47	(2.78)	0.46	(2.64)
Manual workers	4.53	(3.74)	-5.79	(3.56)
Homemakers	1.63	(3.72)	-4.21	(3.53)
Students	0.62	(4.64)	-7.61*	(4.41)
Retired	-0.95	(3.26)	-0.72	(3.10)
Jobseekers	-1.90	(4.14)	2.91	(3.93)
Other	16.50	(17.70)	-13.30	(16.90)
Constant	59.10***	(6.50)	26.30***	(6.18)
Observations	3,489		3,489	
Adjusted R^2	0.2178		0.1329	

Sources: ECB, SUCH survey (2016) and authors' calculations.
Notes: Statistical significance threshold for the coefficient: 1% "***", 5% "**", 10% "*".
Survey respondents indicated their region of residence using the NUTS 2 classification (nomenclature of units for territorial statistics) which divides France into 21 regions. This information was included in the regression but the results are not shown in the table.

Socioprofessional category also has a limited impact on payment choice, although with some nuances. Employees and jobseekers use less cash but make more card payments than self-employed professionals, whereas manual workers and homemakers make more cash payments. Card usage among students is also 7.6 percentage points lower than for self-employed professionals. The fact that students also use less cash highlights the need to extend the scope of future surveys to new technologies, such as mobile payments.

Transaction characteristics are found to have a clear influence on payment behaviour

The share of payments made in cash or by card is influenced by the transaction value: for every 1 euro increase in transaction value, the share of cash payments

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falls by 0.085 percentage point, while card payments increase by 0.077 percentage point.

Similarly, a 1 percentage point rise in the share of purchases in shops for day-to-day items increases the share of cash payments by 0.22 percentage point and reduces card payments by 0.047 percentage point. This statistically significant result coincides with the findings in the empirical literature (Bounie et al., 2008). This can be attributed to the fact that purchases in shops for day-to-day items are generally low in value and therefore more likely to be paid for in cash.

Lastly, cash usage is also positively correlated with an increase in payment constraints. A rise of 1 percentage point in the share of purchases where there is a payment constraint leads to a 0.25 percentage point fall in the proportion of card payments. This result highlights the fact that a refusal by a merchant to accept cards or cheques has a positive impact on cash usage.

Overall, the correlation between transaction characteristics and cash usage is statistically demonstrated, but the impact on the respective shares of cash and card payments is limited.

To sum up, our econometric analysis tends to confirm that transaction characteristics play a bigger role in determining payment behaviour than sociodemographic criteria.

However, the findings should be interpreted with caution. The invariants found for individual characteristics are compared with consumption information recorded over a single day. Yet purchase behaviour varies according to the day of the week: individuals tend to make larger purchases at the weekend and are therefore more likely to use cards on those days.[7] Due to the survey methodology, it is not possible to accurately retrace the weekly structure of household consumption, which is a major limitation.

Conclusion

The ECB's first ever survey of euro area households confirms that French consumers use cash less frequently than their main European neighbours at the POS, and mainly for low-value purchases. French consumers also have the lowest preference for cash at the POS, and the highest preference for cashless instruments, alongside the Belgians.

A detailed analysis of the responses of French consumers to the SUCH survey shows that men, individuals aged over 40, manual workers, homemakers and the retired are the biggest users of cash.

Using the survey data collected for France, we applied a regression model to the different determinants of cash and card usage among French consumers. Our analysis showed that the main determinants of payment choice at the POS are transaction characteristics, and in particular the size of the payment. Sociodemographic variables, on the other hand, have only a limited impact. This finding suggests that cash is exposed to competition from cashless instruments in the low-value payment segment (e.g. contactless payments, mobile payments).

Due to the limitations of the methodology, any conclusions regarding future cash usage trends in France should be regarded with caution. However, the study can provide a basis for assessing future developments in payment behaviour among French consumers.

A second payment survey will be carried out in 2019 covering the full range of payments (including remote and recurrent payments), and this should enable the calculation of broader, more in-depth results. Given the growing number of electronic payment technologies available as an alternative to cash and the transformations taking place in customer and shopping experiences, it is important to carry out this type of survey regularly to keep abreast of changes in cash usage.

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7 According to the survey data, the average value of a transaction on a Saturday is EUR 20, while on a Thursday it is EUR 16.05.

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