





# Euro banknotes and coins in France in 2017: continued robust demand

The demand for banknotes and coins in the euro area remains robust despite changes in consumption patterns and the development of new payment instruments that contribute to a reduction in cash use. Consequently, the total value of euro banknotes and coins in circulation worldwide increased by 4% year-on-year.

In 2017, the Banque de France produced 1.1 billion banknotes on behalf of the Eurosystem. Coins are minted by the *Monnaie de Paris* and production in 2017 amounted to 710.8 million units.

Through its network of cash centres, the Banque de France maintains the quality of banknotes and makes them available to the public via cash industry professionals, particularly cash-in-transit companies (CITs). It is also responsible for putting euro coins into circulation and withdrawing them on behalf of the French state. In 2017, CITs withdrew 6.4 billion banknotes and 1.5 billion coins from the counters of the Banque de France and the *Institut d'émission des départements d'outre-mer* (IEDOM – the French overseas departments' note-issuing bank).

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JEL codes E5, E50

# EUR 1,170.7 billion

the total value of euro banknotes in circulation worldwide at 31 December 2017

#### 1,110.2 million banknotes

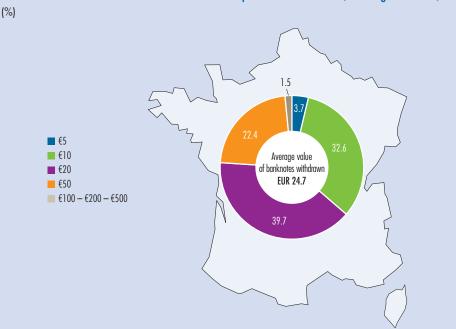
production of euro banknotes allocated to the Banque de France in 2017

### **EUR 24.7**

the average value of banknotes withdrawn from the counters of the Banque de France in 2017 (including IEDOM)

Source: Banque de France.

#### Structure of withdrawals from the counters of the Banque de France in 2017 (including the IEDOM)





# BANQUE DE FRANCE

#### 1 An apparent paradox: robust demand for euro banknotes and coins and an expansion of cash alternatives

In 2017, the demand for euro banknotes and coins remained robust. Consequently, the value of euro banknotes in circulation worldwide at the end of December 2017 was up 4.0% year-on-year to EUR 1,170.7 billion (see Chart 1). Coins in circulation also increased by 4.0% to EUR 28 billion.

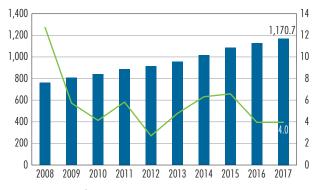
These values correspond to all euro banknotes and coins issued by the central banks, including those held outside the euro area.

The value of banknotes and coins in circulation in French national territory cannot be measured because of their migration between countries. For example, a banknote (or coin) withdrawn in France can be used in other Member States, or even exported outside the euro area where it can be kept as a store of value or used as a means of payment. Equally, a banknote (or coin) held by an individual in France could have been withdrawn in another Eurosystem country. As a result, the difference between the banknotes (or coins) issued and those

# C1 Euro banknotes issued by the Eurosystem in circulation, at year-end 2008 to 2017 and in value terms

(left-hand scale: amount in EUR billions; right-hand scale: rate in %)

Banknotes in circulationAnnual rate of change



Source: Banque de France.

withdrawn from circulation by the Banque de France since 2002, does not correspond to circulation at the national level. This difference is instead reflected in domestic net issuance.

At the end of 2017, French net issuance of banknotes amounted to EUR 129.0 billion, up 7.6% year-on-year, while net issuance of coins in France was up 4.4% year-on-year to EUR 3.5 billion. The growth in net French issuance reflects the demand from both French residents and non-residents (tourists, for example) for banknotes from the Banque de France.

This robust demand for banknotes in France may seem paradoxical given the changes in payment and consumption habits, with cash payments facing ever-greater competition from the growth of online shopping and the continued expansion of cashless means of payment. For example, card payments have increased by 67% over the past 10 years,<sup>2</sup> compared with a 17% growth in household consumer spending.<sup>3</sup> Contactless payments have taken off over the past two years in France, providing an alternative to cash in its primary segment: low-value face-to-face transactions. The decline in the use of cash as a means of payment is also borne out by the reduction in the volume of banknotes passed from the public to professional cash handlers such as credit institutions, cash-in-transit companies and the Banque de France, which is down by 9.9% over the past five years.

This apparent paradox is the result of cash's multiple uses (for transactions and as a store of value) as well as the international role of the single currency. The downturn in the use of cash as a means of payment in France is not incompatible with the growth of balances held abroad or even in France as a store of value. According to a European survey<sup>4</sup> carried out in 2016, almost a quarter of Europeans keep some cash at home as a precaution (see Box). Furthermore, a large part of the demand for euro banknotes comes from countries outside the euro area. The European Central Bank (ECB) estimates that around one-third of euro banknotes in terms of value are currently held outside the euro area, mainly in neighbouring countries.

- 1 French data on coins include Monaco's issuance and half of the coins issued by Andorra (the other half is included in Spain's cash statistics).
- 2 Banque de France data, French issuer and acquirer.
- 3 Insee data
- 4 See Esselink (H.) and Hernández (L.) (2017), "The use of cash by households in the euro area", Occasional Paper Series, European Central Bank, No. 201, November.



EUROSYSTÈME

BANQUE DE FRANCE

#### BOX

#### The use of cash by households in the euro area

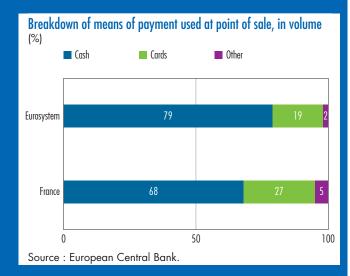
In 2016, a polling institute conducted a survey on the use of cash by households in the euro area on behalf of the European Central Bank.<sup>1</sup> 65,000 participants were questioned in three waves on their point-of-sale purchases. Online purchases, payments between individuals and payments between businesses were excluded from the scope. The objective of the survey was to determine the payment habits of European consumers.

The findings were published at the end of 2017 and show that cash is still the most used means of payment at point of sale (POS) in the euro area, accounting for 79% of all POS transactions (19% were paid with cards and 2% with another means of payment, mainly cheque). In terms of value, cash payments accounted for 54% of spending in shops in the euro area.

The study also highlights substantial differences in the use of cash between euro area countries.

Cash is used less in France than in its main neighbours. In terms of the number of transactions, France ranked 13th out of 19 countries, with 68% of POS transactions paid in cash. In terms of value, France ranked next to last, just above the Netherlands, with only 28% of POS purchases settled in cash. In particular, France, alongside Portugal, recorded the lowest average cash transaction value with EUR 7.5 compared to the euro area average of EUR 12.4.

Consequently, while highlighting the widespread use of cards in France, the findings of this European survey show that in terms of the number of transactions, cash remains the most used payment instrument for



POS transactions. These are mainly small payments, which confirm the predominance of cash in France for small daily purchases.

<sup>1</sup> The European Central Bank survey, "The use of cash by households in the euro area", is available in English on the ECB website: https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op201.en.pdf



# BANQUE DE FRANCE

# 2 Production of banknotes and coins: two distinct organisations

Every year, the Banque de France supplies itself with new banknotes and coins in order to meet public demand and replace banknotes and coins that are unfit for circulation. In 2017, the Banque de France took delivery of 1.6 billion new banknotes and 753 million new coins.

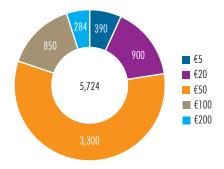
The production of euro banknotes and coins follows two different patterns.

Banknote production is coordinated by the ECB and carried out by the national central banks (NCBs). Each year, the ECB and the 19 euro area NCBs agree on the quantity of banknotes to be produced over the next two years. Production is then allocated between the euro area NCBs in proportion to their shares in the ECB's paid-up capital. In this system, each NCB can either choose to manufacture the banknotes that it is responsible for producing itself or outsource to private printers.

For 2017, the Eurosystem agreed on the need to produce 5.7 billion banknotes worth EUR 326.7 billion in order to meet the requirements of the 19 Member States (see Chart 2).

As part of this system, the Banque de France produces itself the banknotes allocated to it through the mechanism discussed above. At Vic-le-Comte (Puy-de-Dôme),

C2 Production of euro banknotes for 2017 (in millions of banknotes)



Source: European Central Bank.

Europafi, the paper manufacturing subsidiary that is majority-owned by the Banque de France alongside its minority shareholding partner central banks,<sup>5</sup> produces the security paper to be used by the Banque de France's printing works in Chamalières. The Banque de France prints between 1 billion and 2 billion banknotes every year.

The euro banknotes produced by the Eurosystem are then shared between the euro area central banks according to their requirements. In 2017, 4.2 billion banknotes were exchanged between the NCBs.

In contrast to banknotes, producing euro coins and putting them into circulation remains the responsibility of the Member State governments. In France, three operators act on the government's behalf:

- the Monnaie de Paris (Paris Mint), a governmentowned industrial and commercial body, which is responsible for the manufacture of euro coins;
- the Banque de France, which puts coins into circulation and withdraws them from use in metropolitan France;
- the Institut d'émission des départements d'outre-mer (IEDOM the French overseas departments' note-issuing bank), which puts coins into circulation and withdraws them from use in the areas within its remit.

#### 3 Making banknotes and coins available to the public: a French preference for small denominations

Once the banknotes and coins have been produced and delivered, the Banque de France is responsible for putting them into circulation through its network, which at end-2017 incorporated 50 cash centres in metropolitan France and six overseas IEDOM branches.

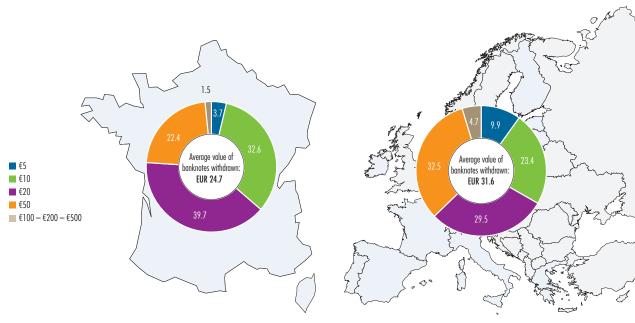
Cash-in-transit companies collect banknotes and coins from the counters of the Banque de France and the IEDOM on behalf of credit institutions, which then make the cash available to the public. In 2017, withdrawals from the counters of the Banque de France and the

<sup>5</sup> The Europafi paper mill produces the security paper used by the Banque de France's printing works, and also by its new shareholders, the Oesterreichische Nationalbank, the Central Bank of Ireland, the Banca d'Italia and the Banco de Portugal.





# C3 Structure of withdrawals from the counters of the central banks, France and the Eurosystem, in volume terms in 2017 (share in %)



Sources: Banque de France and European Central Bank.

IEDOM amounted to 6.4 billion banknotes with a value of EUR 156.8 billion and 1.5 billion coins with a value of EUR 647.2 million.

Demand for banknotes in France reflects the public's relative preference for small banknote denominations. Indeed, the average value of banknotes withdrawn in France amounts to EUR 24.7, compared with an average of EUR 31.6 for the euro area as a whole (see Chart 3), and is thus significantly lower than for its main Eurosystem partners: EUR 34.6 in Italy, EUR 32.5 in Germany and EUR 30.2 in Spain.

French citizens mainly settle their face-to-face and low-value purchases in cash. According to the European survey mentioned above, the average cash transaction value in France is EUR 7.5, which, alongside Portugal, represents the lowest average value of all the participating countries.

This preference for small denominations is reinforced by the credit institutions' choice of banknotes that are loaded into automated teller machines (ATMs). According to a study conducted in 2017 by the Banque de France among the main credit institutions, 39% of the banknotes made available to the public through ATMs were €20 notes, 36% were €10 notes and 24% were €50 notes. €5 and €100 notes were only very marginally distributed via this channel.

As for coin withdrawals, copper coins (1, 2 and 5 cents) predominate, accounting for almost half of all coins withdrawn (46.9%). This is due to the low return rate to central bank counters as a significant proportion of copper coins received by the public are lost or hoarded. This observation is also true of the rest of the Eurosystem. For the euro area as a whole, copper coins account for 50.8% of all withdrawn coins. It should be noted that five countries have introduced measures to limit the use of 1 and 2 cent coins: in Finland (2002), the Netherlands (2004), Belgium (2014), Ireland (2015) and most recently Italy (2018), cash transactions are rounded up or down to the nearest 5 cent.







# 4 Maintenance of banknote and coin quality: reduction in lodgements at the Banque de France

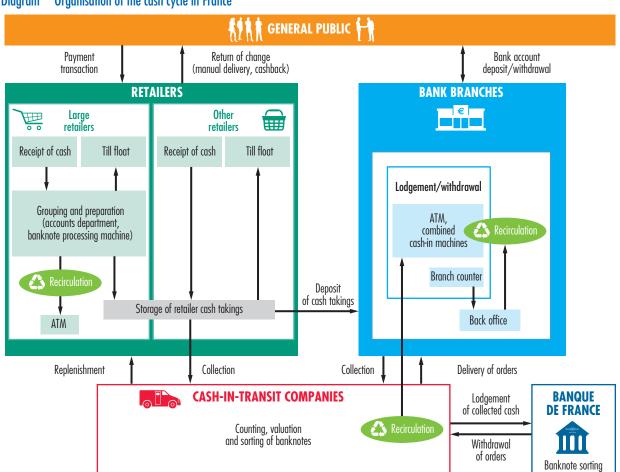
Once banknotes and coins are put into circulation by cash-in-transit companies (CITs), they are exchanged between different economic players, mainly banks, retailers and consumers.

The public obtains banknotes from credit institutions, mainly via their ATMs but also through withdrawals at bank branch counters. In 2016, ATMs accounted for around

three-quarters of all public withdrawals, in terms of value.<sup>6</sup> Once used, banknotes are returned to bank branches or directly retrieved by CITs (the large retail sector, for example). These banknotes can then be passed on to the Banque de France for authenticity and fitness checking. Alternatively, under Banque de France supervision, they can be sorted and authenticated directly by private operators (credit institutions, CITs) for reuse in ATMs (see Diagram).

In 2017, 6.0 billion banknotes were lodged at the counters of the Banque de France and the IEDOM, including 5.7 billion in metropolitan France alone.

Diagram Organisation of the cash cycle in France



Source: Banque de France.

<sup>6</sup> European Central Bank Payment Statistics, September 2017.







In addition, 1.5 billion banknotes were directly put back into circulation by private operators. The Banque de France thus continues to be the main player in maintaining banknote and coin quality within the French national territory despite private operators becoming increasingly involved in banknote processing in France. This increase in recirculation has had an impact on lodgements at the counters of the Banque de France, which have fallen both in terms of volume and value since 2012 and 2013, respectively (see Chart 4).

#### C4 Volume of lodgements at Banque de France counters or banknotes recirculated by private operators

(in millions of banknotes)

- Banknotes recirculated by private operators
- Lodgements at the Banque de France and the IEDOM



Source: Banque de France.

Note: IEDOM – Institut d'émission des départements d'outre-mer (the French overseas departments' note-issuing bank).

Nevertheless, the expansion of private operators' activities is not the only reason for the substantial 7.6% drop in banknote lodgements in 2017. Changing consumption patterns and the expansion of cashless means of payment, particularly cards, also play their part. Consequently, the volume of banknotes passed from the public for processing is falling in line with the decline in public use of banknotes and coins.

At the Eurosystem level, 33.9 billion banknotes with a value of EUR 1,065.1 billion were lodged at NCB counters in 2017. Therefore, more than one in six banknotes lodged at an NCB counter in the euro area is lodged at the Banque de France.

Lodgements of coins at the counters of the Banque de France and the IEDOM in 2017 amounted to 709.0 million units with a value of EUR 500.8 million. Unlike the system in place for banknotes, coins are not maintained by the central bank. Cash-in-transit companies count and sort the coins before passing them to the Banque de France. Unfit or counterfeit coins are then returned to the *Monnaie de Paris*. As part of its corporate charitable and sponsorship initiatives, the Banque de France also counts, sorts and prepares the coins collected as part of the *Pièces jaunes* (small change) fundraising campaign. In 2017, 57.1 million coins were donated, amounting to almost EUR 2 million.

<sup>7</sup> Estimate based on declarations from private operators authorised to recirculate banknotes under distribution and/or processing agreements signed with the Banque de France.

BANQUE DE FRANCE EUROSYSTÈME





# Means of payment and currency in circulation

# **Appendix 1**

# Banque de France cash processing sites in 2017



Source: Banque de France.





# BANQUE DE FRANCE

# **Appendix 2**

## Banknote and coin statistics in 2017

#### TA1 Net issuance and banknote and coin circulation in 2017, France and the Eurosystem

(value in EUR billions; volume in billions; change in %)

	Value	Year-on-year change	Volume	Year-on-year change
Banknotes				
Banque de France and IEDOMa)	129.0	7.6	5.2	7.8
Eurosystem	1,170.7	4.0	21.4	5.9
Coins				
Banque de France and IEDOMa)	3.5	4.4	20.3	4.1
Eurosystem	28.0	4.0	126.0	4.2

a) IEDOM: *Institut d'émission des départements d'outre-mer* (the French overseas departments' note-issuing bank). Source: Banque de France.

#### TA2 Withdrawals of banknotes and coins in 2017, France and the Eurosystem

(value: in EUR billions for banknotes, in EUR millions for coins; volume in millions; change in %)

	Value	Year-on-year change	Volume	Year-on-year change
Banknotes				
Banque de France	147.9	-5.9	6,054.5	-6.5
IEDOM	8.9	-0.1	303.3	-0.3
France	156.8	-5.6	6,357.6	-6.2
Eurosystem	1,112.4	-1.2	35,172.4	-2.1
Coins				
Banque de France	627.0	-6.0	1,431.9	-2.9
IEDOM	20.3	-11.8	80.6	-6.1
France	647.2	-6.2	1,512.6	-3.0
Eurosystem	6,476.9	-1.5	18,732.2	-1.2

Source: Banque de France.

#### TA3 Lodgements of banknotes and coins in 2017, France and the Eurosystem

(value: in EUR billions for banknotes, in EUR millions for coins; volume in millions; change in %)

	Value	Year-on-year change	Volume	Year-on-year change
Banknotes				
Banque de France	139.6	-7.4	5,702.7	-7.8
IEDOM	8.0	-1.6	281.6	-1.6
France	147.6	-7.1	5,984.3	-7.6
Eurosystem	1,065.1	-1.5	33,944.1	-1.9
Coins				
Banque de France	488.3	-12.7	689.8	-16.1
IEDOM	12.5	-19.8	19.2	-12.9
France	500.8	-12.9	709.0	-16.0
Eurosystem	5,407.2	-4.4	13,595.5	-4.0

Source: Banque de France.





BANQUE DE FRANCE EUROSYSTÈME

# **Glossary**

#### Currency in circulation

Since the introduction of euro banknotes and coins on 1 January 2002, this concept has applied only at the Eurosystem level. It corresponds to all euro banknotes and coins in circulation, including those outside the euro area. Currency in circulation is thus measured as the difference between the total amount of banknotes and/or coins put into circulation and that of banknotes and/or coins withdrawn from circulation by all the Eurosystem central banks since they joined the euro area.

At the national level, the concept of "net issuance" is used.

#### Net issuance

Net issuance is defined as the cumulative sum of the difference between withdrawals and lodgements at each NCB's counters since the adoption of the euro for the country in question. At the Eurosystem level, the sum of the net issuance of each Member State is equal to the currency in circulation.

#### Eurosystem

A body comprising the European Central Bank and the national central banks of the EU Member States that have adopted the euro. The Eurosystem comprised 19 countries at 31 December 2017.

#### Withdrawals

Flows of banknotes or coins withdrawn from NCB branches and ultimately delivered to the general public.

#### Recirculation (external recycling)

Recirculation or external recycling consists, for an authorised operator (credit institution, cash-in-transit companies, retailers), in authenticating and checking the quality of banknotes and coins received with a view to putting them back into circulation via ATMs.

The "Framework for the detection of counterfeits and fitness sorting of euro banknotes by credit institutions and professional cash handlers", adopted in Europe in 2004 and effective in 2006, created a legal framework for the activities of external cash recyclers. In France, parties wishing to carry out this type of activity must sign an agreement with and are supervised by the Banque de France.

#### Lodgements

Flows of banknotes or coins whose deposit is recorded at the counters of an NCB.

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