

processed various interest and fee payments in relation to loans under the EFSF. The ECB also processed ESM member contributions and various interest and fee payments in relation to the loans under this mechanism.

Finally, the ECB is responsible for processing all payments in relation to the loan facility agreement for Greece.⁷⁸ As at 31 December 2017 the total outstanding amount under this agreement was €52.9 billion.

5.2 Eurosystem Reserve Management Services

In 2017 a comprehensive set of financial services continued to be offered within the Eurosystem Reserve Management Services (ERMS) framework established in 2005 for the management of customers' euro-denominated reserve assets. A number of Eurosystem national central banks ("the Eurosystem service providers") offer the complete set of these services, under harmonised terms and conditions in line with general market standards, to central banks, to monetary authorities and government agencies located outside the euro area, and to international organisations. The ECB performs an overall coordinating role, promoting the smooth functioning of the framework and reporting to the Governing Council.

The number of customers maintaining an ERMS business relationship with the Eurosystem was 278 in 2017, compared with 286 in 2016. With regard to the services themselves, in the course of 2017 the total aggregated holdings (which include cash assets and securities holdings) managed within the ERMS framework increased by approximately 7% compared with the end of 2016.

6 Banknotes and coins

The ECB and the euro area national central banks (NCBs) are responsible for issuing euro banknotes within the euro area and for maintaining confidence in the currency.

6.1 The circulation of banknotes and coins

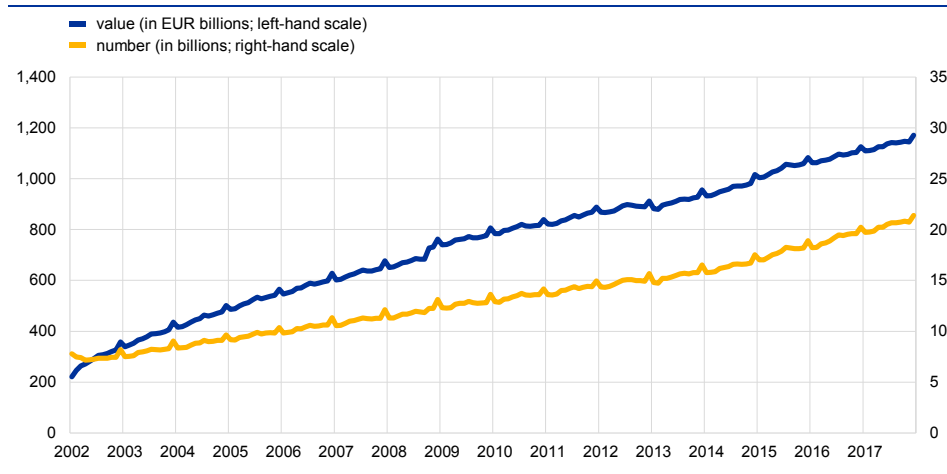
In 2017 the number and value of [euro banknotes in circulation](#) grew by around 5.9% and 4.0% respectively. At the end of the year there were 21.4 billion euro banknotes in circulation, with a total value of €1,171 billion (see Charts 30 and 31). The €100 banknote showed the highest annual growth rate, which reached 7.9% in 2017.

⁷⁸ In the context of the loan facility agreement between the Member States whose currency is the euro (other than Greece and Germany) and Kreditanstalt für Wiederaufbau (acting in the public interest, subject to the instructions of and with the benefit of the guarantee of the Federal Republic of Germany) as lenders and the Hellenic Republic as borrower and the Bank of Greece as agent to the borrower, and pursuant to Articles 17 and 21.2 of the Statute of the ESCB and Article 2 of [Decision ECB/2010/4](#) of 10 May 2010.

Growth in the €50 banknote remained dynamic, at 6.4%, but was slower than in the previous year.

Chart 30

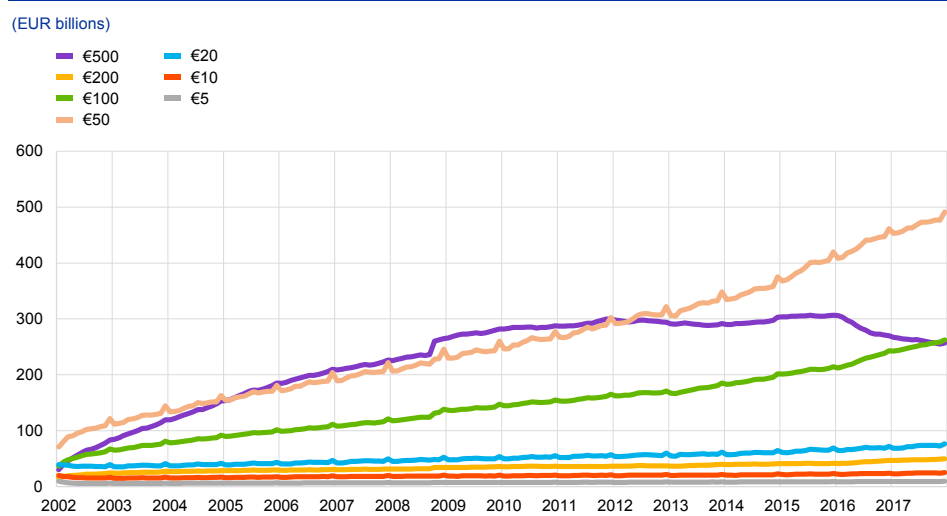
Number and value of euro banknotes in circulation



Source: ECB.

Chart 31

Value of euro banknotes in circulation by denomination



Source: ECB.

Following the decision to stop issuing €500 banknotes with the completion of the ES2 series, the circulation of the €500 banknote decreased further in 2017. This decrease was partly offset by a higher demand for the €200, €100 and €50 banknotes.

It is estimated that, in terms of value, around one-third of the euro banknotes in circulation are held outside the euro area. These notes are predominantly held in neighbouring countries and are mainly the higher denominations. They are used as a store of value and for settling transactions on international markets.

The production of euro banknotes is shared between the euro area NCBs, which were altogether allocated the production of 5.72 billion banknotes in 2017.

In 2017 the total number of euro coins in circulation increased by 4.2%, standing at 126.0 billion at end-2017. At the end of 2017 the value of coins in circulation stood at €28.0 billion, 4.0% higher than at the end of 2016.

In 2017 the euro area NCBs checked the authenticity and fitness for circulation of some 32.3 billion banknotes, withdrawing around 6.1 billion of them from circulation as unfit. The Eurosystem also continued its efforts to help banknote equipment manufacturers to ensure that their machines meet the ECB's standards for checking euro banknotes for authenticity and fitness prior to recirculation. In 2017 credit institutions and other professional cash handlers checked some 36 billion euro banknotes for authenticity and fitness using such machines.

Box 9

The use of cash by households in the euro area

With the increase in card payments and the rise of alternative payment methods, the future of cash is under discussion and the relevance of cash in society is being challenged. However, although euro banknotes and coins have been in circulation for 15 years, not much is known about the actual use of cash by households. Therefore, the ECB conducted a comprehensive study⁷⁹ to analyse the use of cash, cards and other payment instruments at points of sale⁸⁰ (POS) by euro area consumers in 2016. The study is based on the findings of a survey for all euro area countries except Germany and the Netherlands, which carried out similar surveys independently in 2014 and 2016 respectively. The results for these two countries have been integrated with the ECB survey findings to present an estimation of the numbers and values of payments for all 19 euro area countries.

In 2016, in terms of the number of transactions, 79% of all POS transactions in the euro area were carried out using cash, 19% using cards and 2% using other instruments such as cheques, credit transfers or mobile means of payment. In terms of the value of transactions, 54% of all POS transactions were conducted using cash, 39% using cards and 7% using other payment instruments (e.g. cheques). However, large differences in payment behaviour are evident across the different countries, both in terms of the number and the value of transactions (see Chart A).

⁷⁹ See Esselink, H. and Hernández, L., “[The use of cash by households in the euro area](#)”, *Occasional Paper Series*, No 201, ECB, November 2017.

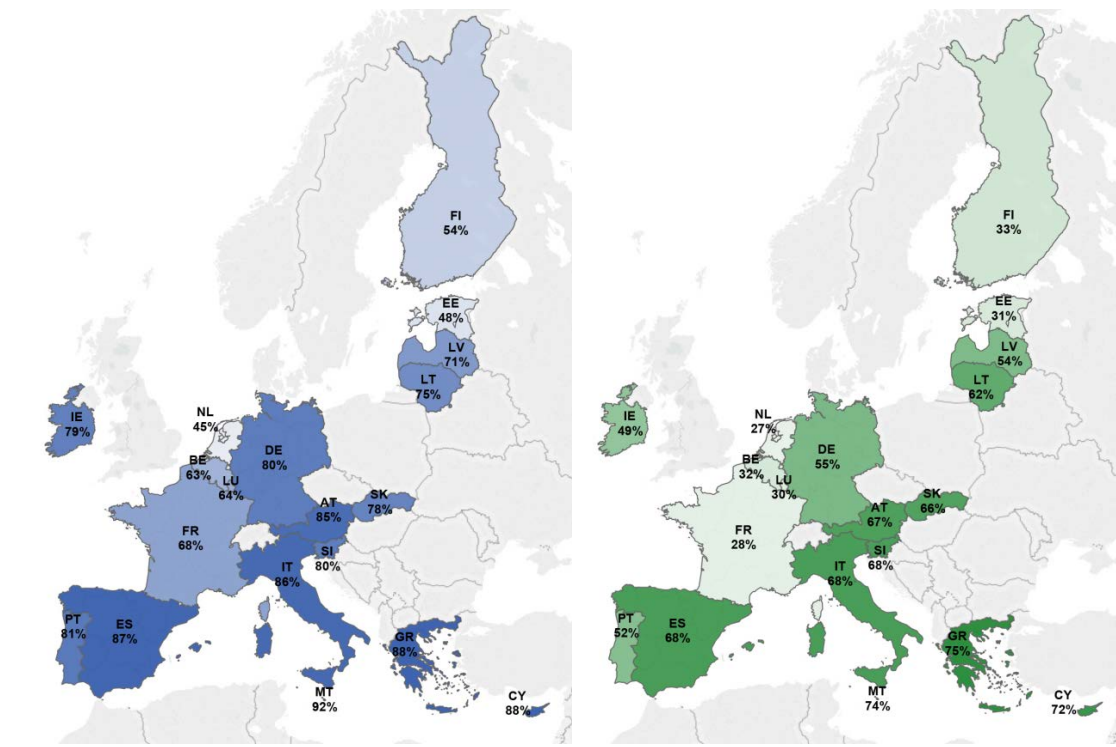
⁸⁰ Points of sale are all physical places where consumers can buy products or services (see Chart B).

Chart A

Share of cash transactions at points of sale by country

(number of transactions)

(value of transactions)



Sources: ECB, Deutsche Bundesbank and De Nederlandsche Bank.

Cash was the most commonly used payment instrument in the euro area for transactions of up to €45. For amounts above €45, cards were the most frequently used means of payment. However, only 9% of all recorded payments had a value above €45. Indeed, the results show that consumers spent on average only €18 every time they made a payment at a POS using cash, cards or other means of payment. Over one-third of payments were even lower than €5, and two-thirds were lower than €15.

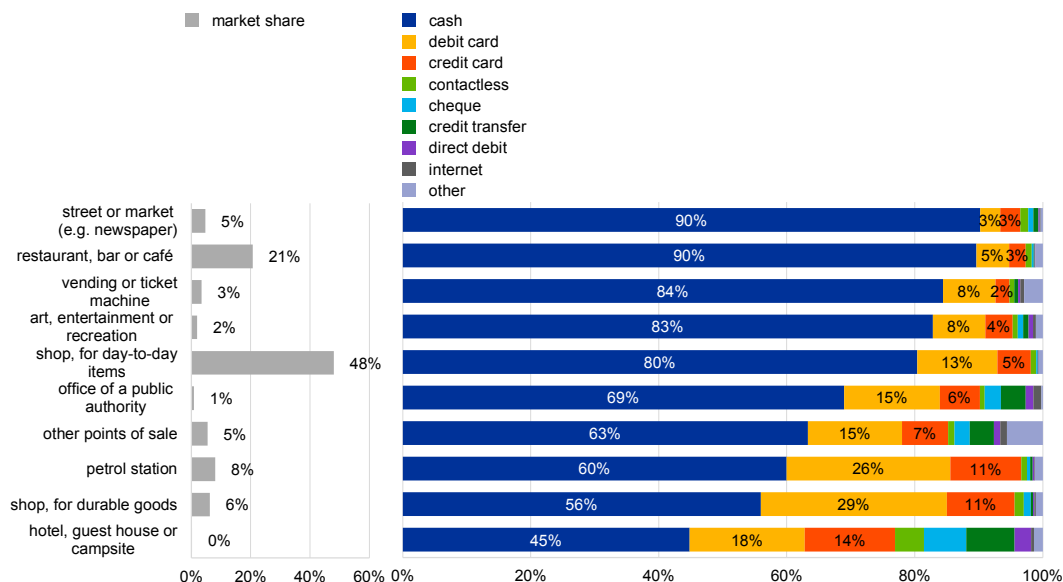
Most of the transactions took place in shops for day-to-day items (48%), followed by restaurants, bars or cafés (21%), petrol stations (8%) and shops for durable goods (6%) (see Chart B). The fact that most of the transactions took place in locations where between 80% and 90% of the payments were made with cash, together with the fact that two-thirds of all transactions were below €15, may explain to some extent why cash is more used than is often thought.

Chart B shows that 5% of all payments were made at other POS. This is typically in the services sector (e.g. for hairdressing, dry cleaning and plumbing services, the repair of cars and bicycles, or household services). For some countries, this item also includes payments which in other countries would typically be made using remote payment methods, such as credit transfers or direct debits. These are mainly recurrent payments, such as for rent, utilities and insurance policies, but also payments for the home delivery of oil or gas, or for medical services. In response to a survey question regarding such payments, on average in the euro area (excluding Germany) 6% of rents, 13% of electricity bills and 31% of medical bills were said to be paid in cash. In general, it can be concluded that in countries where the share of cash in overall payments is high, recurrent payments are more often made in cash.

Chart B

Market share of the main payment instruments used at points of sale – number of transactions

(percentages)



Sources: ECB, Deutsche Bundesbank and De Nederlandsche Bank.

Overall, the results indicate that the use of cash at POS is still widespread in most euro area countries. This seems to challenge the perception that cash is rapidly being replaced by cashless means of payment. Indeed, when asked about their preferred payment instrument, 32% of the respondents said that they preferred cash, 43% said that they preferred cards or other non-cash payment instruments and 25% said that they had no preference. This discrepancy between preferences and actual behaviour may be at least partly explained by the fact that people mostly seem to remember the larger-value payments, which they make less regularly, and tend to forget how frequently they make low-value payments using cash.

6.2 Counterfeit euro banknotes

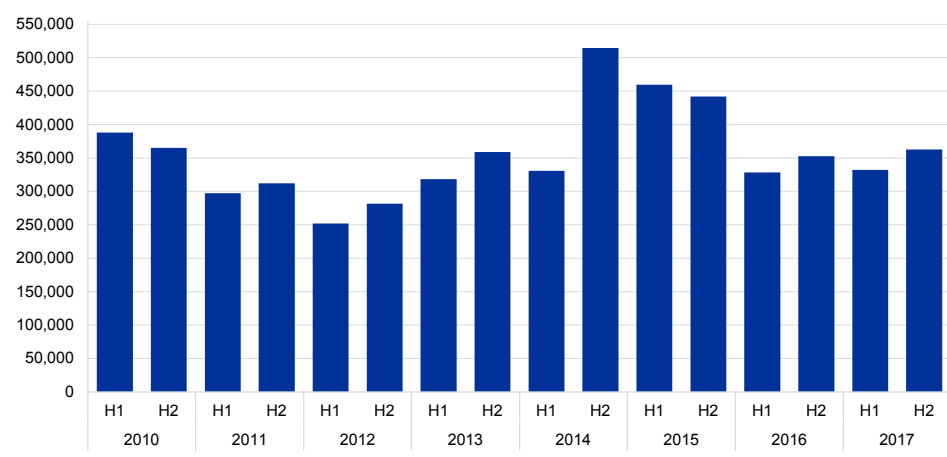
The total number of counterfeit euro banknotes increased slightly in 2017, with around 694,000 counterfeits being withdrawn from circulation. Compared with the number of genuine euro banknotes in circulation, the proportion of counterfeits is very low. Long-term developments in the quantity of counterfeits removed from circulation are shown in Chart 32. Counterfeiters tend to target the €20 and €50 banknotes, which in 2017 accounted together for more than 85% of the total number of counterfeits seized. The share of counterfeit €20 banknotes fell in 2017.

The ECB continues to advise the public to remain alert to the possibility of fraud, to remember the “feel-look-tilt” test, and not to rely on just one security feature. In addition, training is offered to professional cash handlers on a continuous basis, both in Europe and beyond, and up-to-date information material is made available to

support the Eurosystem's fight against counterfeiting. The ECB also cooperates with Europol, Interpol and the European Commission in pursuit of this goal.

Chart 32

Number of counterfeit euro banknotes removed from circulation



Source: ECB.

6.3 The second series of euro banknotes

On 4 April 2017 the new €50 banknote entered into circulation. The introduction of the new note is the latest step in making euro banknotes even more secure. After the €5, €10 and €20, the new €50 is the fourth denomination of the second series of euro banknotes, known as the [Europa series](#), that has been introduced. It contains enhanced security features, including the “emerald number”, which displays an effect of the light that moves up and down when the banknote is tilted and also changes colour, and a “portrait window” – an innovative feature first used on the Europa series €20 banknote. When the banknote is held up to the light, a transparent window near the top of the hologram reveals a portrait of Europa (a figure from Greek mythology), which is visible on both sides of the note. The same portrait also appears in the watermark.

In the first half of 2019 it is planned to issue together the new €100 and €200 banknotes, the last two denominations of the Europa series. Following a review of the denominational structure of the euro banknotes, the Governing Council of the ECB decided to exclude the €500 from the Europa series, taking into account concerns that this denomination could facilitate illicit activities. The ECB and the euro area NCBs will conduct a campaign to inform the public and professional cash handlers about the introduction of the new €100 and €200 banknotes, both of which will have some new security features. The campaign will also include a reminder about the stopping of the issuance of the €500 denomination, which – in view of the international role of the euro and the widespread trust in euro banknotes – will, as with the other denominations of euro banknotes, remain legal tender and can therefore continue to be used as a means of payment and store of value. All of the

banknotes of the first series (including the €500) will always retain their value, as they can be exchanged for an unlimited period of time at the euro area NCBs.

The ECB and the euro area NCBs will continue to help the banknote handling machine industry prepare for the introduction of the new €100 and €200 banknotes.

7 Statistics

The ECB, assisted by the national central banks (NCBs), develops, collects, compiles and disseminates a wide range of statistics which are needed to support the monetary policy of the euro area, the supervisory functions of the ECB, various other tasks of the European System of Central Banks (ESCB) and the tasks of the European Systemic Risk Board. These statistics are also used by public authorities, financial market participants, the media and the general public. In 2017 the ESCB continued to provide regular euro area statistics in a smooth and timely manner. In addition, it devoted considerable effort to fulfilling new demands for very timely, high-quality and more granular statistics at the country, sector and instrument level.

7.1 New and enhanced euro area statistics

In 2017 the ECB began publishing euro money market statistics derived from granular data collected on the basis of [Regulation ECB/2014/48](#). These statistics cover the unsecured market segment, and encompass the total turnover amount and weighted average rate over the reserve maintenance period (RMP), as well as average daily volumes during the RMP, broken down by counterparty sector, transaction type and maturity (63 new series). The purpose of this publication is to enhance market transparency and thereby improve the functioning of the money market.

The ECB also began publishing statistics on insurance corporations collected in accordance with [Regulation ECB/2014/50](#). These statistics, describing the balance sheets of euro area insurance corporations, are updated on a quarterly basis.

In 2017 the ESCB established clear rules for the publication of monetary financial institution (MFI) interest rates and volumes, ensuring adequate and comparable disclosure of national MFI interest rate (MIR) statistics at the ESCB level. This led to an increase of 1,840 in the number of MIR series publicly available in the [ECB's Statistical Data Warehouse](#).

The set of publicly available consolidated banking data was significantly expanded in November 2017 with new items covering balance sheets, profitability, asset quality, liquidity and capital adequacy.

The ECB also began publishing euro area aggregated balance sheet data on financial corporations engaged in lending to households and non-financial corporations resident in the euro area. The data are published annually and, for some countries, are also available at a quarterly frequency. Both outstanding