

# 6 High cash demand with continued low level of counterfeiting

*The ECB and euro area national central banks (NCBs) are responsible for issuing euro banknotes in the desired volumes and denominational structure, guaranteeing the availability of cash and maintaining confidence in the common currency. The COVID-19 pandemic has had two effects on payment behaviour. First it has underscored the role of cash as a store of value, and second it has reduced some of the transactional demand for cash. This notwithstanding, in 2021 the number of euro banknotes in circulation continued to grow, while the number of counterfeit banknotes removed from circulation remained at a historically low level. As cash continues to be the payment method of choice for many consumers, the Eurosystem is aiming to ensure adequate access to and acceptance of cash in the years to come, as described in the [Eurosystem Cash Strategy](#).*

*Following the completion of the introduction of the Europa series of banknotes in 2019, the Eurosystem has already started its preparations for the development of future banknotes.*

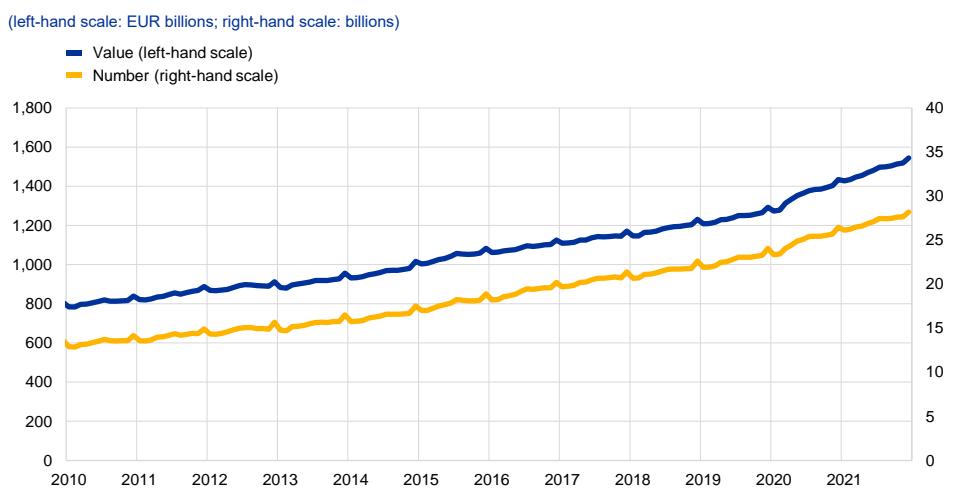
## 6.1

### Circulation of euro banknotes

The number and value of euro banknotes in circulation rose, with the €50 banknote having the highest share

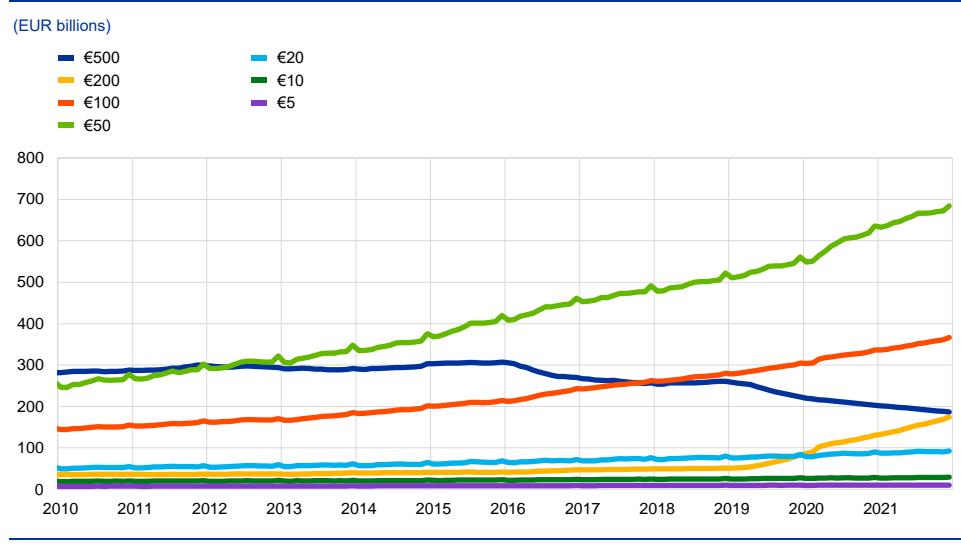
In 2021 the number and value of euro banknotes in circulation grew by 6.5% and 7.7% respectively. At the end of the year there were 28.2 billion euro banknotes in circulation, with a total value of €1.54 trillion (see Chart 6.1). The €50 banknote had the highest share in circulation at 44.3% in value terms, which roughly accounted for the value of the €100, €200 and €500 banknotes combined (see Chart 6.2).

**Chart 6.1**  
Number and value of euro banknotes in circulation



Source: ECB.

**Chart 6.2**  
Value of euro banknotes in circulation by denomination



Source: ECB.

The changes in euro banknote circulation by denomination in 2021 continued to be influenced by the ongoing COVID-19 pandemic and the different functions of cash. The demand for €200 and €100 banknotes remained high, showing annual growth of 33.6% and 9.0% respectively, as they are also used as a store of value. The annual growth in the value of €50 banknotes in circulation stood at 7.5%, and the combined annual growth in the value of €5-€20 banknotes in circulation reached 3.0%.

The ECB and national central banks continue to maintain the high quality of euro banknotes in circulation

The Eurosystem NCBs checked the genuineness and quality of 23.5 billion banknotes worth €759.3 billion, which is only slightly less than the outstanding euro banknote circulation in terms of pieces. Of the checked banknotes, 2.9 billion had been worn out in the cash cycle and needed to be replaced in order to maintain only high quality banknotes in the cash cycle.

Increase in euro coin circulation

At the end of 2021 the total number of euro coins in circulation stood at 141.2 billion with a value of €31.2 billion. Compared with the end of 2020, the value of euro coins in circulation rose by 2.7%.

## 6.2

## Convenience of everyday euro banknote handling

In view of the role of cash in European society, the ECB aims to ensure that euro banknotes remain fit for purpose, easy to use and hard to counterfeit.

As part of this ongoing effort to maintain euro banknotes that are deemed fit for purpose, the regular collection of feedback from euro banknote stakeholders is a central activity to support the development of future euro banknotes and security features. In line with this objective, a “Cash Handler Survey” was launched in 2021 to better understand what cash handlers think about the current design, authentication processes and handling of euro banknotes.

High level of satisfaction with the current euro banknote design and denominations among cash handlers

Speed and ease of checking are important for cash handlers

The cash handler population surveyed consisted of persons aged over 16 from all 19 euro area countries who handle cash regularly as part of their professional activity. In total, more than 22,000 interviews were conducted.

The survey showed high levels of satisfaction among cash handlers regarding the current euro banknote design and denominations. Cash handlers in the euro area only rarely experienced difficulties in telling banknotes apart.

Authenticity checks are very common (six in every ten cash handlers check banknotes), with respondents having recently received training on how to check banknotes almost universally doing so. The use of machines/devices to authenticate banknotes is widespread (56%) among those who check banknotes. Cash handlers manually checking banknotes usually perform quick checks on one (23%) or more (39%) security features.

The main reason driving the choice of which security feature to check is speed. Ease of checking the feature is also important. This finding is consistent across all security features and banknote denominations.

## 6.3

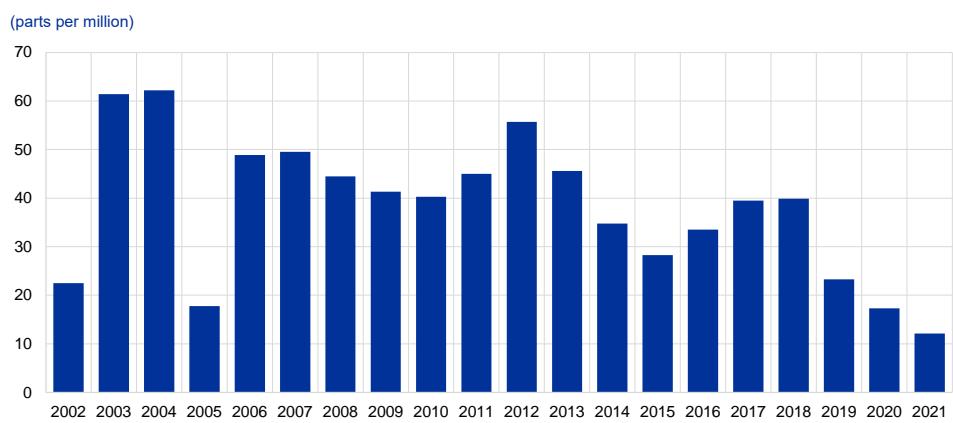
The ECB advises the public to remain vigilant when receiving banknotes and to remember the “feel-look-tilt” test

### Euro banknote counterfeiting at historically low level

The decreasing trend in euro banknote counterfeiting continued into 2021, which saw another historical low in the proportion of counterfeits to genuine banknotes in circulation (see Chart 6.3). The total number of counterfeit banknotes withdrawn from circulation was 347,000, which means only 12 counterfeits were detected in one year per 1 million genuine banknotes in circulation. The quality of the counterfeits continues to be low. Consequently, they can be detected very quickly and easily by applying the “feel-look-tilt” test.

#### Chart 6.3

Number of counterfeit banknotes detected per year per million genuine euro banknotes in circulation



Source: ECB.

## Development of future euro banknotes has started

The ECB expects that euro cash will still be widely used up to 2030 and beyond. Therefore, and in order to stay ahead of counterfeiters, it is necessary to prepare for and be ready to launch improved and up-to-date euro banknotes in order to preserve public confidence in them and ensure that they are safe and convenient to use. Given the length and complexity of the development process for future banknotes, preparations have already started, including research and development work, regular consultation of stakeholders and the general public, and the production of test banknotes with new security features.

The ECB plans to [redesign the future euro banknotes](#). The design process will include several rounds of input from European citizens. The ECB expects to select the final designs for new euro banknotes in 2024.