

## 3 BANKNOTES AND COINS

### 3.1 THE CIRCULATION OF EURO BANKNOTES AND COINS AND THE HANDLING OF CURRENCY

#### DEMAND FOR EURO BANKNOTES AND COINS

In 2005 the value of euro banknotes in circulation increased by €63.9 billion to €565.2 billion (see Chart 42). The annual growth rate declined to about 12.8%, from 15.0% in 2004. The number of banknotes in circulation increased to 10.4 billion at the end of 2005, at an annual growth rate of 7.4%, compared with 6.8% in 2004 (see Chart 43). Statistical analyses indicate that the continuing increase in demand for euro banknotes originates to some extent from markets outside the euro area. It is estimated that, in value terms, between 10% and 20% of the euro banknotes in circulation are held by non-euro area residents, mainly as a store of value or as a parallel currency.

The value of the euro banknotes in circulation continued to grow more strongly than the number in 2005, as it has done every year since the cash changeover. This indicates a lasting strong demand for high-denomination euro banknotes. The growth patterns of the individual denominations were similar to those in 2004: the circulation of €5, €10, €20 and €200 banknotes rose moderately at rates between 3.1% and 3.9%, while the circulation of €50, €100 and €500 banknotes increased strongly, at

11.4%, 10.8% and 20.9% respectively (see Chart 44).

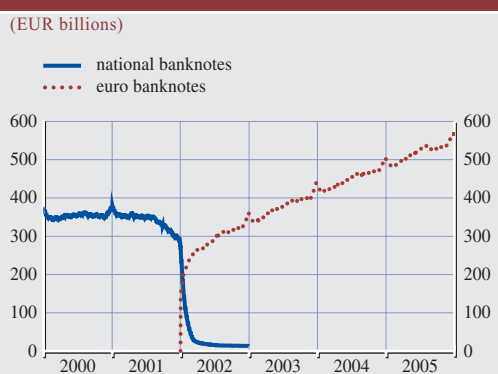
The euro coins in circulation have continued to increase in terms of both volume and value since January 2003. In 2005 the value of euro coins in circulation (i.e. the net circulation excluding stocks held by NCBs) increased by 8.5%, from €15.3 billion to €16.6 billion. The number of euro coins in circulation grew by 12.1%, from 56.2 billion to 63.0 billion. The strong increase in the number of coins was mainly driven by a growing demand for low-value coins.

#### BANKNOTE HANDLING BY THE EUROSISTEM

2005 saw a continuation of the slight upward trend in euro banknote issuance and deposits seen in previous years. The total number of euro banknotes issued amounted to 31.3 billion, while 30.6 billion were returned to the NCBs.

All euro banknotes returned from circulation to the euro area NCBs are authenticated and checked for circulation fitness using fully automated banknote-processing machines. Approximately 1 billion more banknotes than in the previous year were checked in this way in 2005. Some 4.3 billion banknotes were destroyed because they were soiled or worn and thus no longer fit for circulation.

Chart 42 Total value of banknotes in circulation between 2000 and 2005



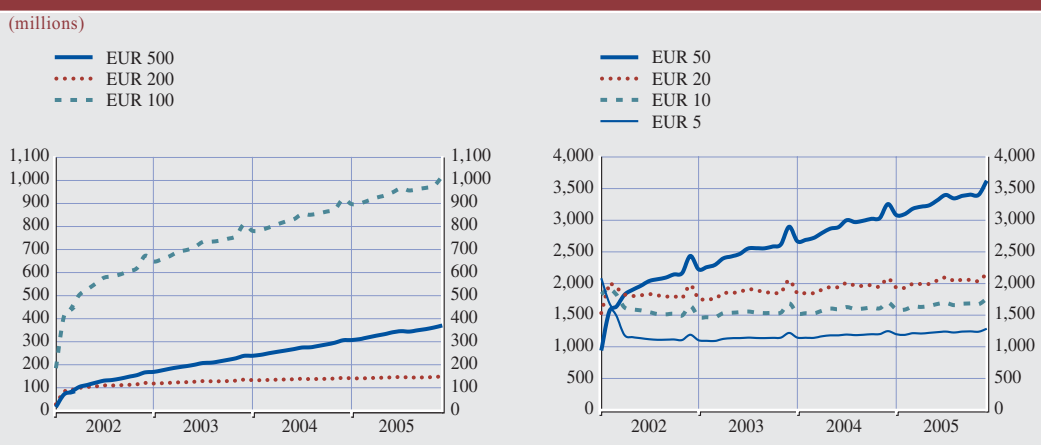
Source: ECB.

Chart 43 Total number of euro banknotes in circulation between 2002 and 2005



Source: ECB.

**Chart 44 Number of euro banknotes in circulation between 2002 and 2005**



Source: ECB.

### 3.2 BANKNOTE COUNTERFEITING AND COUNTERFEIT DETERRENCE

#### COUNTERFEIT EURO BANKNOTES

The number of reported counterfeit euro banknotes remained stable in 2005. From the beginning of 2004 until the end of 2005, around 49,000 counterfeits per month were removed on average from circulation. The total number of counterfeits received by National Analysis Centres<sup>7</sup> in 2005 was around 582,000. This is very similar to the figure for 2004 (594,000). The public can be confident in the security of the euro: it is a well-protected currency, in terms of both the sophistication of its security features and the effectiveness of European and national law enforcement authorities. However, the ECB's advice to the public is to be alert and to remember the "feel-look-tilt" test.<sup>8</sup> Chart 45 shows the trend in counterfeits recovered from circulation, with figures taken at half-yearly

intervals since the euro banknotes were launched. Table 14 shows that the €50 banknote has been the most frequently counterfeited; since 2004 the proportion of €50 counterfeits has risen, whereas the proportion of €100 counterfeits has shown a corresponding fall.

#### COUNTERFEIT DETERRENCE

The ECB continues to work closely with the euro area NCBs, Europol and the European Commission (in particular the European Anti-Fraud Office, OLAF) in the fight against counterfeiting of the euro. The Eurosystem is active, both in the EU and beyond, in training cash-handling professionals in the recognition and handling of counterfeit banknotes.

The International Counterfeit Deterrence Centre (ICDC) evaluates new reproduction equipment and counterfeit deterrence systems and supports the Central Bank Counterfeit Deterrence Group (a group of 27 central banks collaborating under the auspices of the governors of the G10 central banks). The growth in the deployment of counterfeit deterrence systems has resulted in a significant increase in

**Table 14 Distribution of counterfeits by denomination**

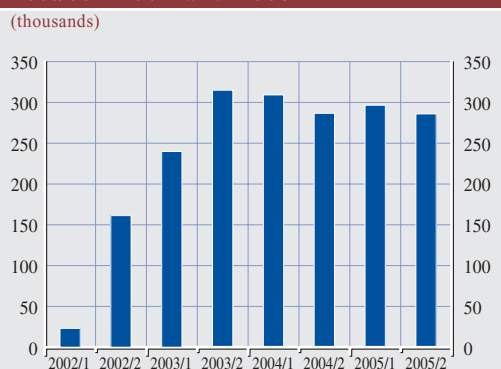
	€5	€10	€20	€50
Percentage	1	7	21	59
	€100	€200	€500	Total
Percentage	7	4	1	100

Source: Eurosystem.

7 Centres established in each EU Member State for the initial analysis of counterfeit euro banknotes at the national level.

8 For details, see <http://www.ecb.int/bc/banknotes/security/html/index.en.html>

**Chart 45 Number of counterfeit euro banknotes recovered from circulation between 2002 and 2005**



Source: Eurosystem.

activity for the ICDC. The infrastructure supporting the fight against counterfeiting continues to be developed and, in particular, the upgraded website [www.rulesforuse.org](http://www.rulesforuse.org) has improved communication between issuing authorities and the public regarding counterfeit deterrence systems.

### 3.3 BANKNOTE ISSUANCE AND PRODUCTION

#### FRAMEWORK FOR THE DETECTION OF COUNTERFEITS AND FITNESS SORTING

In order to ensure that the banknotes in circulation are genuine and in good condition, the ECB in January 2005 published a framework for the detection of counterfeits and fitness sorting by credit institutions and other professional cash handlers. The framework sets out a common policy for the recycling of banknotes received by credit institutions and other professional cash handlers from their customers. In addition, it provides these institutions with assistance in fulfilling their obligations as laid down in Article 6 of Council Regulation (EC) No 1338/2001 regarding the detection and withdrawal of counterfeit euro banknotes. In order to safeguard consistency in the implementation of the framework across the Eurosystem, the Governing Council adopted a manual of procedures in December 2005. The NCBs will be responsible for implementing the

framework, taking into account the national situation (e.g. the economic environment, the banking structure, the existing NCB branch network and the role of the NCB in the cash cycle), at the latest by the end of 2006. In addition, there will be a transition period of two years – finishing no later than the end of 2007 – for the adaptation of procedures and machines currently in operation by credit institutions and other professional cash handlers.

A key element of the framework is the obligation of credit institutions and other professional cash handlers to check for authenticity and, according to minimum sorting standards, for fitness all euro banknotes received from customers and reissued to other customers. Where credit institutions and other professional cash handlers decide against the recycling of banknotes, they will continue to have the option of having their euro banknote requirements met by the NCBs.

Banknotes dispensed by credit institutions through automated teller machines (ATMs) will be checked using banknote-handling machines which have been tested for their compliance with the framework by euro area NCBs. Other organisations which operate ATMs, particularly retailers, are also expected to check banknotes in accordance with these standards. The Eurosystem will follow developments in this area.

The framework also stipulates that credit institutions and other professional cash handlers are to provide NCBs with information regarding their cash-handling activities to enable the Eurosystem to monitor compliance with the framework. The Governing Council decided in December 2004 that the details of this data collection would be developed by the Eurosystem in consultation with the banking sector. To this end, the Eurosystem set up a joint task force in 2005 with representatives from the European Payments Council's Cash Working Group and the European Security Transport Association. In a cost-effective approach, a

limited amount of key information concerning the cash-handling infrastructure and operational data on banknote processing will be collected from institutions that recycle euro banknotes through ATMs.

### THE ESTABLISHMENT OF AN EXTENDED CUSTODIAL INVENTORY PILOT PROGRAMME

The ECB is considering the establishment of an extended custodial inventory (ECI) pilot programme for euro banknotes to facilitate their international distribution and to improve the monitoring of their circulation outside the euro area, given that between 10% and 20% of the total value of euro banknotes in circulation is estimated to be held outside the euro area. An ECI is a cash depot maintained by a private bank (ECI bank) that holds currency on a custodial basis. Under such a programme, ECI banks would report on the destination and origin of banknotes traded, collect information on counterfeits seized and identify any banknotes unfit for circulation, thereby providing the Eurosystem with data on the use of the euro outside the euro area and on counterfeiting. ECI banks could also channel information concerning the introduction of a new series of euro banknotes and facilitate replacement of an old series. Before taking a final decision on the establishment and functioning of such a programme, the ECB will consider launching a one-year ECI pilot programme with two banks located in Asia.

### PRODUCTION ARRANGEMENTS

A total of 3.63 billion euro banknotes were produced in 2005, compared with 1.6 billion in 2004. The production growth in 2005 reflected the following factors: i) the depletion of NCBs' stock levels in 2004, ii) an increase in circulation in 2005, iii) a rise in the number of banknotes in circulation requiring replacement and iv) the decision to produce in 2005 a share of future banknote requirements. This decision should reduce expected future production peaks and allow a more efficient use of the production capacity over the coming years.



The allocation of euro banknote production continued in 2005 to be based on the decentralised production scenario with pooling adopted in 2002. Under this arrangement, each euro area NCB is responsible for the procurement of an allocated share of the total requirement for certain denominations. Table 15 summarises the 2005 production allocation.

### THE SECOND SERIES OF EURO BANKNOTES

Following the Governing Council's approval of the master plan for the development, printing and issuance of a second series of euro banknotes, work on this project has started and is progressing well. The main phases of the

**Table 15 Allocation of euro banknote production in 2005**

Denomination	Quantity (millions of banknotes)	NCB commissioning production
€5	530	FR
€10	1,020	DE, GR, IE, AT
€20	700	ES, FR, NL, PT, FI
€50	1,100	BE, DE, ES, IT, NL
€100	90	IT
€200	-	-
€500	190	DE, LU
Total	3,630	

Source: ECB.

project are the determination of the functional and technical requirements of different groups of banknote users, industrial validation to identify potential problems in large-scale printing, design and origination, pilot production, large-scale printing and phased issuance.

Basic functional requirements for the new banknotes, including a shortlist of security features, are being established on the basis of market research and consultations with European consumer associations and the European Blind Union. The consultation process has also involved the European banking, security transport, retail and vending machine sectors, as well as the association of banknote equipment manufacturers.

The first banknote in the new series is expected to be issued towards the end of this decade. The exact timing and sequence of issuance will depend on the progress made in the security feature innovation process and on the counterfeiting situation. The current denominational range of the euro banknotes will be maintained in the second series and the design will be based on the “ages and styles” theme of the present series.