

3 BANKNOTES AND COINS

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

DEMAND FOR EURO BANKNOTES AND COINS

The substantial increase in euro banknotes in circulation which was observed throughout 2002 after the initial cash changeover period continued during 2003. Between January and December 2003, the value of euro banknotes in circulation increased by 21.7%, from €358.5 billion to €436.2 billion. Only in January 2003 did the value of euro banknotes in circulation decrease markedly, by 5.3% compared with December 2002, due to the reduced cash needs of economic agents after the turn of the year in line with the normal annual cycle. In February the value of euro banknotes in circulation picked up again, rising constantly at an average monthly growth rate of around 2.1% during the rest of the year. The increase in demand for euro banknotes is a result of their increased use both as a store of value and as a parallel currency in countries outside the euro area. Statistical analyses have revealed that as at end-December 2003 some 9% of the value of euro banknotes in circulation was held by non-euro area residents.

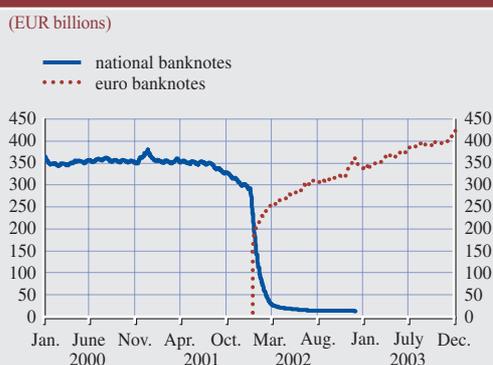
The number of euro banknotes in circulation also rose markedly, by 10.1%, in 2003. Following a drop of 8.6%, from 8.2 billion to 7.5 billion banknotes, in January 2003, the number rose

moderately throughout the year, with seasonal peaks around the summer and towards the end of the year, when a level of 9.0 billion banknotes was reached. Chart 32 shows the development of national banknotes and euro banknotes in circulation in terms of value from 2000 to 2003, while Chart 33 shows the development in terms of volume in 2002 and 2003.

No significant shifts between individual banknote denominations occurred in 2003, as can be seen in Chart 34. A closer look at the development of the annual growth rates for the individual denominations reveals significant growth for the higher banknote denominations. The increase in the issuance of €500 banknotes was strongest, with the number in circulation rising from 167 million to 238 million in 2003, an annual growth rate of 42.5%. The number of €50, €100 and €200 banknotes in circulation also increased significantly, with annual growth rates of 19.0%, 20.3% and 12.1% respectively, while the increase in the lower-value banknotes was moderate: 2.3% for the €5 banknote, 2.5% for the €10 banknote and 4.0% for the €20 banknote.

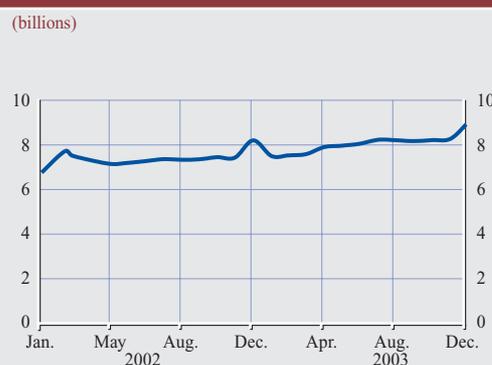
A lasting upswing in the demand for euro coins was observed in all euro area countries from January 2003 onwards, resulting in an increase in the value of coins in circulation of 13.7%, from €12.4 billion to €14.1 billion as at end-December 2003. The number of coins in

Chart 32 Total value of banknotes in circulation between 2000 and 2003



Source: ECB.

Chart 33 Total number of euro banknotes in circulation between 2002 and 2003



Source: ECB.

Chart 34 Number of euro banknotes in circulation between 2002 and 2003

(millions)



Source: ECB.

circulation increased by 9.1 billion in the course of the year, from 39.9 billion to 49.0 billion coins by the end of 2003. The significant rise was mainly due to the increased demand for low-value coins, i.e. 1 cent, 2 cent and 5 cent coins, which accounted for more than two-thirds of this increase. This can be explained by hoarding and the relatively high loss rates for these denominations.

BANKNOTE HANDLING BY THE EUROSISTEM

Banknotes returned to the NCBs are fully authenticated and quality checked with sophisticated banknote-processing machines to establish whether they are fit for further use. Between January and December 2003 the number of euro banknotes crossing NCBs' counters totalled 57.8 billion, with a face value of €1,744 billion, consisting of 28.5 billion banknotes deposited and 29.3 billion withdrawn by credit institutions and other clients. Some 2.7 billion banknotes needed to be destroyed because they were unfit for further use. This proportion is generally in line with NCBs' experience with the legacy banknotes after a similar period from their launch.

3.2 DEVELOPMENTS IN EURO BANKNOTE COUNTERFEITS AND COUNTERFEIT DETERRENCE

EURO BANKNOTE COUNTERFEITS

In 2002, when the euro banknotes were new, the level of counterfeiting was exceptionally low. This was partly because of the sophisticated security elements in the euro banknotes, but also because counterfeiters had not had much time to adjust to the new banknotes. In 2003, the banknotes' second year of use, the number of counterfeits detected was inevitably higher than in the previous year. The total number of counterfeits received by National Analysis Centres (NACs)¹⁵ during 2003 was 551,287. The euro remains a well protected currency. However, the reproduction technology available to counterfeiters gets better and cheaper over time. In addition, the euro is a widely used international currency, which makes it more prone to counterfeiting. Overall, the counterfeiting rate did not show a steady increase in 2003, but there were some seasonal fluctuations coinciding with periods of high circulation of genuine banknotes, namely the Christmas and summer holiday seasons.

¹⁵ Centres established in each EU Member State for the initial analysis of counterfeit euro banknotes at the national level.

The distribution of counterfeiting across the denominations was as follows:

	€5	€10	€20	€50
Quantity	2,733	5,476	152,061	321,623
Percentage	0.5	1.0	27.6	58.3
	€100	€200	€500	Total
Quantity	53,668	14,776	950	551,286
Percentage	9.7	2.7	0.2	100.0

Although the €50 banknote remains the counterfeiters' favourite target, by comparison with last year there has been a significant shift away from the €50 towards the €20 banknote.

The media have drawn attention to the existence of high-quality counterfeits, but the number of such counterfeits is extremely small and the "feel-look-tilt" test for counterfeits remains sufficient to detect almost all cases.

COUNTERFEIT DETERRENCE

In addition to the cooperation agreement concluded with Europol during 2002, the ECB concluded similar agreements in 2003 with Interpol and with several acceding country central banks (ACCBs). The ECB and the NCBs have also been active in training cash-handling professionals, both in the EU and beyond, in recognising and handling counterfeit banknotes.

The Counterfeit Analysis Centre at the ECB and the NACs collaborate with the police in the fight against counterfeiting, and technicians from the NACs provide, upon request, legal authorities with expert advice and technical reports.

Furthermore, the Eurosystem has increased its contribution to the global cooperation on counterfeit deterrence under the auspices of the G10 governors. The ECB has developed a technical support structure called the "International Counterfeit Deterrence Centre" (ICDC) for the international community. The ICDC updates the threat analysis through continuous evaluation of new reproduction equipment and counterfeit deterrence systems.

ENSURING THE FUTURE INTEGRITY OF THE EURO BANKNOTES

Security features "age" from the moment of issue. As counterfeiters' awareness of an initially sound security feature increases, so does the risk of that feature being reproduced. The euro, as other world currencies, experienced this phenomenon after its launch and increasingly during 2003. This threat increases as other banknote design authorities adopt the euro as a technical standard and opt for similar security features. Therefore, the research and development (R&D) of new security features play an important role in ensuring the future integrity of euro banknotes. In the pursuit of new security features that represent a paradigm change in the longer term, the Eurosystem has developed a methodology to assess and fund R&D proposals on the widest possible basis. The research on new security features is supplemented by development programmes that bridge the gap between research and production.

3.3 BANKNOTE ISSUANCE AND PRODUCTION

THE EUROSISTEM'S ROLE IN THE CASH CYCLE

The Governing Council has on various occasions underlined the importance of a level playing-field for cash services. A number of measures have already been taken with a view to contributing to a fair competitive environment. In 2002 a common Eurosystem fee policy was implemented for the cash transactions of professional clients at NCB counters and a common approach to opening hours and debiting/crediting rules for cash services at NCB counters was also defined. In addition, terms of reference for the use of cash-recycling machines¹⁶ in the euro area were published. In 2003 a common procedure for testing such machines was established. Tests conducted according to this common procedure at any euro area NCB are valid in all euro area countries. The test procedures set a high standard for these

¹⁶ Cash-recycling machines are stand-alone, customer-operated devices capable of receiving, processing and dispensing banknotes.

machines concerning the retention of counterfeit/suspected banknotes and the separation of unfit banknotes in order to contribute to the high quality of the banknotes in circulation. Due attention has also been paid to the feasibility and technical capabilities of such machines. Several manufacturers have already successfully completed these tests, thus contributing to high standards for banknote processing and recycling. In addition to the measures already in place, the Eurosystem continues to discuss further aspects of the cash cycle with the objective of ensuring a smooth and efficient supply of cash and maintaining the integrity of the euro banknotes.

The ECB and the European Commission jointly organise biannual meetings in which matters of interest related to the use of cash are addressed. Participants include representatives from the banking industry, from consumer and retail groups, as well as from the vending-machine and cash-in-transit industries. The ECB also participates, as an observer, in the Cash Working Group under the umbrella of the European Payments Council, which has been established by the European Credit Sector Associations and the major banks.

PRODUCTION ARRANGEMENTS AND FUTURE BANKNOTE PRODUCTION

In April 2001 the Governing Council decided that in the following few years production of euro banknotes would take place in accordance with a decentralised production scenario with pooling. This means that each euro area NCB is responsible for the procurement of an allocated share of the total requirement for selected denominations. Table 13 gives an overview of the allocation of the production to the NCBs according to this model.

The total production requirements for 2003 amounted to 3.1 billion banknotes (4.8 billion in 2002).

Significant work has been undertaken to develop a future banknote procurement policy. The Governing Council has carried out a

Table 13 Allocation of euro banknote production in 2003

Denomination	Quantity (millions of banknotes)	NCB commissioning production
€5	110	FR
€10	999.1	DE, GR, IE, AT
€20	1,071.1	FR, ES, NL, PT, DE
€50	657	IT, BE, ES, NL
€100	122	IT, FI
€200	133	DE, LU
€500	0 ¹⁾	
Total	3,092.2	

Source: ECB.

1) The logistical stocks of €500 banknotes resulting from the launch production were deemed to be sufficient to cover the needs for 2003.

thorough analysis of whether tender procedures might be applied in the medium term for the procurement of raw materials and the production of euro banknotes. The Governing Council has decided that a common Eurosystem competitive approach with tendering will be fully implemented by 2012 at the latest. The NCBs with in-house/public printing works will be allowed to opt out of this common approach.

SUPPORT FOR THE PRODUCTION OF EURO COINS

The Member States are responsible for the production of euro coins. The ECB continued to act as an independent assessor of the quality of minted coins. This included the continued support and maintenance of a common quality management system in all mints producing euro coins. The production of coins in 2003 was 4.8 billion (6.2 billion in 2002).

SECOND SERIES OF EURO BANKNOTES

The main aim of upgrading currency designs is to keep pace with technical developments in order to make sure that the banknotes have a continually high level of protection against counterfeiting, while containing security features that the public can recognise. Banknote-issuing authorities therefore tend to gradually upgrade banknotes after a few years of circulation. In line with this practice, the ECB has started planning a second series of euro banknotes, which will take several years to produce and issue.

An issue date for the second series of euro banknotes has not yet been defined, but it is expected to be towards the end of this decade. The banknotes will be issued denomination by denomination, with certain intervals between releases, so that it will take several years before all denominations have been introduced. The design of the second series will be based on the “ages and styles” theme of the current series in order to signal continuity.

VERY LOW-DENOMINATION BANKNOTES

Since the completion of the cash changeover, there have been suggestions that it would be useful to introduce very low-denomination banknotes, i.e. of €1 and/or €2. It has been argued that in some countries the population was accustomed to using low-value banknotes with their former currencies and has found it difficult to adapt to the comparably high banknote/coin boundary between the €2 coin and €5 banknote. It has also been argued that consumers tend to associate coins with low values.

The Governing Council has agreed to reassess the possible issuance of very low-denomination banknotes in autumn 2004, when more experience regarding the use of euro banknotes and coins has been gained, both inside and outside the euro area.