

THE BANCO DE ESPAÑA'S AUXILIARY DEPOSITORIES

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Introduction

The European Central Bank and the national central banks of the euro area are responsible for issuing euro banknotes in the euro area and for ensuring that banknotes in circulation are in good condition. To discharge this responsibility, the central banks must facilitate the distribution of banknotes and guarantee their integrity. It is the task of the central bank to ensure that the public's demand for banknotes is satisfied with authentic banknotes in good condition.

The logistics and control of banknotes in circulation vary from country to country and depend, among other factors, on the different degree of involvement of central banks in the cash cycle. Intervention in this area by the monetary authority is necessary because market forces do not generate an optimal banknote quality, since agents, in their attempt to minimise handling and transport costs, overuse them before they return to the central bank. Ultimately, only the central bank, as the body responsible for the cash cycle, can ensure a clean circulation of the banknotes it issues, through its physical involvement in the logistics or by regulating their distribution.

The Banco de España, sharing the Eurosystem's concern over the problems mentioned above, has considered how to secure a more effective flow of banknotes and an improvement in their quality. It has concluded that the distribution of banknotes in Spain which, for historical reasons, has certain limitations, needs to be improved.

This is the background to the "auxiliary depositories", an instrument set up in January 2005 to make the movement of cash between the Banco de España itself and credit institutions more fluid and to improve the quality of banknotes in circulation. There is a nationwide network of these banknote depositories, where credit institutions may obtain and return banknotes. They are called "auxiliary" because they supplement the cash service provided by the Banco de España through its own branches. They represent an incentive to return used banknotes to the Banco de España, where those that are fit for circulation can be sorted and re-issued. The Banco de España can thereby perform one of its basic tasks better, namely to ensure the fitness of the banknotes issued by the Eurosystem that circulate within Spanish national territory.

Following this introduction, the section below describes the Spanish banking system for supplying and withdrawing banknotes. The next section summarises the main characteristics of the depositories. Then the implications of the auxiliary depositories for credit institutions, the Banco de España and the general public are analysed. Finally, a number of conclusions are drawn.

The supply and the withdrawal of banknotes from the banking system

The supply, circulation and withdrawal of banknotes varies from one country to another within the euro area. Apart from historical and cultural factors, this diversity stems from national traditions regarding the transport of cash from banks to central banks for sorting, putting back into or possibly withdrawing from circulation.

Broadly speaking, in some countries, such as Germany, the Netherlands and Austria, credit institutions have entered into agreements with the central bank under which they undertake to transport daily to the bank of issue all the banknotes they receive at their counters, delivering to customers only cash provided by the central bank. In other countries, like Italy, Ireland, Greece and Spain, there are no agreements of this kind and credit institutions recycle cash, returning to the central bank both fit banknotes that exceed the desired level of stocks, and cash that is unfit to deliver at the counter or for loading ATMs.

ISSUANCE

The Banco de España generally only operates with the banking system¹. In consequence, banknotes are put into circulation when they are delivered to credit institutions. It is ultimately the latter who introduce the banknotes into the economic circuit.

Credit institutions request from the Banco de España the cash they need to meet the demands of their customers. The Banco de España, for its part, services the requests it receives free of charge and restrictions, there being no limitation on the volume of issuance. It delivers the banknotes requested having always first debited the amount of the notes from the cash account of the institution concerned. Subsequently, the cash-in-transit companies that work for credit institutions collect banknotes from the Banco de España in Madrid and from its branches in Spain that provide cash services. Following the instructions given by credit institutions, the companies convey the banknotes to their own warehouses, to bank branches, to cash dispensers installed outside such branches and to the offices of companies that use cash intensively.

INTRODUCTION OF BANKNOTES INTO THE NON-FINANCIAL ECONOMY

The Banco de España only puts into circulation new banknotes or used notes that have passed the strictest quality controls. Credit institutions introduce such banknotes into the economic circuit when they deliver them to the public, directly or by means of ATMs. Currently, the delivery of banknotes at bank counters is less important than the dispensing of banknotes to the public through ATMs located at their branches and at other places frequented by the public, such as large retail outlets or train or bus stations.

As seen in the adjoining table, Spain is the European country with the greatest density of cash dispensers per inhabitant, with about 55,000 machines, compared to 52,000 in Germany and 39,000 in France. In fact, the ATMs in Spain account for 24% of the total number installed in the euro area and are the world's second largest network.

There are basically two reasons for the proliferation of cash dispensers in Spain. First, consumers prefer to use cash to other means of payment². Second, credit institutions pursue a cost-minimising policy, which has driven the automation of a service that did not directly provide any profit. The abundance of ATMs available, widely spread out among the population, means that in Spain cash can be obtained by the public easily and rapidly, at any time of day, thanks to the extensive network of ATMs and the generally smooth operation of the system. In recent years there has been a notable increase in the number of transactions and, at the same time, a decline in the average amount of cash withdrawn in each transaction.

RECYCLING OF BANKNOTES

“Banknote recycling” is the process whereby banknotes that have been withdrawn from circulation are reused, after being reviewed, checked and recounted, by being returned to the economic circuit. This process is normally performed by central banks using a rigorous checking system, with highly specialised high-technology machines. In some countries, as mentioned above, credit institutions are not permitted to perform this type of activity, while in others, such as Spain, they play a very important role in this activity.

The normal procedure is for the banking sector to examine the banknotes delivered to it by the public and to separate those clearly fit to distribute to customers, at the counter or through ATMs, from those showing some deterioration or ageing. The latter are delivered to cash-in-

1. The only service offered by the Banco de España to the general public is the exchange of coins and banknotes as is standard practice in the Eurosystem in relation to cash. 2. According to the latest available data, for end-2003, the total amount of banknotes in circulation represented 8.5% of GDP, while the total sum of payments made using credit and debit cards was 7.5%.

Country	Population (million) (a)	Number of bank branches (b)	Number of ATMs (c)	Number of distribution points	Bank branches / million inhabitants	ATMs / million inhabitants	Distribution points / million inhabitants
	a	b	c	d = b + c	e = b / a	f = c / a	g = d / a
Belgium	10.4	6,750	6,942	13,692	649	668	1,317
Germany	82.5	49,716	51,129	100,845	603	620	1,222
Greece	11.0	3,328	5,468	8,796	303	497	800
SPAIN	41.6	39,550	50,627	90,177	951	1,217	2,168
France	59.6	26,162	38,975	65,137	439	654	1,093
Ireland	4.0	790	1,300	2,090	198	325	523
Italy	57.3	30,502	34,354	64,856	532	600	1,132
Luxembourg	0.4	396	391	787	990	978	1,968
Netherlands	16.2	3,998	7,000	10,998	247	432	679
Austria	8.1	5,297	7,711	13,008	654	952	1,606
Portugal	10.4	5,882	9,690	15,572	566	932	1,497
Finland	5.2	1,600	2,120	3,720	308	408	715
Total	306.7	173,971	215,707	389,678	567	703	1,271

a. Eurostat Yearbook 2004. January 2003 data.

b. ECB. June 2004 data.

c. ECB. June 2004 data. The number of ATMs in Spain stood at 55,000 in December 2004.

transit companies which, at their purpose-designed operational centres throughout the country, carry out a more rigorous selection between banknotes fit and unfit for circulation. Those of sufficient quality to remain in circulation are sent back to the credit institutions, in accordance with the daily cash demands of the branch network, while the rest are delivered to the Banco de España³, on behalf of institutions, so as that the latter's cash holdings may be reduced and their cash balance made profitable.

Generally, in Spain, the introduction of counterfeit notes into the economic circuit is not a problematic issue, among other reasons because the firms that use cash professionally and, in particular, credit institutions are sensitive to the risks of counterfeiting for legal reasons and because of the direct impact it has on their profit and loss accounts. The same cannot be said of the condition of the banknotes they handle since, to reduce costs, they continue to use them until wear and tear prevents their re-use. This phenomenon is especially marked in the case of low-denomination notes (5 and 10 euro), which are used less in ATMs and where the deterioration is more obvious. In general, the technical operating requirements of ATMs impose a minimum level of quality on the banknotes inserted in ATMs, which means that there is greater quality control in the case of the mid-denomination notes (20 and 50 euro). Accordingly, central banks, following their own traditions, have proposed the need to intervene in the cash cycle to control the process of banknote circulation and to improve their quality and presentation.

WITHDRAWAL OF BANKNOTES

The ageing of banknotes through their use in the economic circuit ends when the Banco de España withdraws and destroys them. In practice, the Banco de España withdraws the used notes presented by cash-in-transit companies for payment into the accounts of credit institu-

3. This is obviously a simplified description of the "recycling" process. In practice, the actions of different banks and of the branch networks of credit institutions are also influenced by the surplus or deficit banknote position of each institution, which, in certain circumstances, results in the shipment to the central bank of excess banknotes in good condition.

tions, submitting them to a rigorous process of verification, quality control, counting, and review of their condition. Only those which successfully pass these controls may be put back into circulation. In its daily activity of putting banknotes into circulation, the Banco de España selects and determines, according to the denomination and the quality of the banknotes in circulation, the appropriate proportions of new and (top-quality) used banknotes delivered to the banking system.

To improve the distribution flow, reduce the rate of re-use, increase the rate of return to its cash department and to increase its control over the quality of banknotes in circulation, the Banco de España has decided to increase its involvement in banknote sorting and recycling operations. In particular, the Banco de España has tried to influence the key factors behind the long use of banknotes, such as the desire of institutions to minimise transport costs and the absence of a close and readily accessible cash services network.

Characteristics of auxiliary depositories

The network of auxiliary depositories for banknotes, which commenced operations in January 2005, is intended to distribute banknotes owned by the Banco de España to the banking system's extensive branch network, using the operational centres of cash-in-transit companies, which currently carry out a large part of the recycling that takes place outside the Banco de España's facilities. This considerably helps the banking sector in the supply of new banknotes and the withdrawal of aged ones. The distribution of banknote stocks to the banking system is fairly customary in the Americas, where the United States, Mexico, Colombia, Argentina, etc. engage in this practice. In Europe, this technique is used by the United Kingdom, Finland, Ireland and Greece. The characteristics of auxiliary depositories are described below.

The *location* of banknotes left in custody is determined by the network of operational centres of cash-in-transit companies in Spain. In the 1980s, credit institutions ceased the direct transport of cash between their branches and the Banco de España, and contracted cash-in-transit companies to carry out this service and, in certain cases, the custody of their central cash reserves. These companies set up a network of operational centres to store the credit institutions' cash reserves, sort the banknote deliveries received from the major users of cash and centralise the transport of funds in each area. This is the network that the Banco de España has used to deposit a small part of its cash stocks.

Legally, the system is underpinned by a contract between the Banco de España and an entity representing a group of credit institutions, under which the former deposits banknotes owned by it in a certain operational centre. This entity, known as the "managing entity" takes responsibility for the custody and management of the funds. In addition to administering the deposit owned by the Banco de España, the managing entity acts as a link between the Banco de España and the member institutions. Member institutions are those banks, savings banks and credit co-operatives that wish to use the relocated cash of the Banco de España and that enter into a services contract with the managing entities.

The *guarantee* of the custody contract consists of the cash accounts that the banking system holds with the Banco de España, since the deposit is backed directly by the managing entity and, secondarily, by the member institutions. A mechanism has been put in place to enable immediate debiting in the cash accounts held by the managing entities and member institutions at the Banco de España, and it can be activated in the event of loss or unavailability of the money deposited.

Also, there is a *control and inspection procedure* by which the Banco de España ensures the integrity of its deposits. This task is carried out by the Banco de España's control and account-

ing services, through the own branches located in the same area as the operational centres of the cash-in-transit companies in which the auxiliary depositories are located.

The *operating procedure* for obtaining banknotes from the deposits consists of the following steps. The member institutions wanting banknotes request them from the managing entity and give it express unconditional and irrevocable instructions to purchase them. The managing entity requests that the Banco de España approve the transaction, the related debit is made in the institution's cash account and the banknotes delivered. The Banco de España records the debit when the transaction is approved. Finally, the managing entity sends the banknotes to the member institutions via the cash-in-transit companies. The procedures for returning and paying banknotes are the same, but go in opposite directions.

The managing entity centralises and co-ordinates the storage and transport by cash-in-transit companies from the operational centres to the member institutions and to/from branches of the Banco de España. The opening (and operating) hours of auxiliary depositories are from 7:00 a.m. to 6:00 p.m., the same hours as TARGET, so the banknotes delivered can be debited and credited in cash accounts "in real time".

The main *restriction* established by the Banco de España is the prohibition on extracting from these deposits any banknotes that have not previously been processed and sorted by the Banco de España. In other words, it does not permit bank "recycling" of the banknotes deposited in these auxiliary depositories, in order to increase the rate at which banknotes are returned to the central bank and enhance its sorting task. In this way, the incentives to the banking system in the form of greater availability of central bank stocks are wide-ranging, through greater absorption of used banknotes by the Banco de España, less bank recycling and, in short, the improved quality of cash in circulation.

Implications of auxiliary depositories

The new network of auxiliary depositories for Banco de España banknotes has had immediate effects on the banking system and on the bank of issue. However, the impact on the general public will take somewhat longer to be noted.

Credit institutions have seen additional costs and benefits since the auxiliary depositories were created. Basically, certain costs have arisen for banknote storage and custody in operating centres and for the administration activities carried out by managing entities. The benefits arise from the reduction of transport costs, from the lowering of the risks associated with the transport of cash, from a smaller balance of banknotes (the so-called "cash reserves") in their central cash departments due to improved supply, from the reduction in the processing and sorting tasks and from the longer hours during which banknotes can be received from or dispatched to the Banco de España. Clearly, the advantages outweigh the additional costs.

In regard to the *Banco de España*, the creation of the auxiliary depositories has meant that it better performs its function of seeing to the quality of banknotes in circulation. Also, the new system entails certain additional costs and benefits. The costs include, apart from the slight decrease in cash reserves, an increased volume of banknotes processed and destroyed and wider control tasks. More banknotes are destroyed because more aged banknotes are returned to the Banco de España and have to be withdrawn from circulation. The Banco de España branches carry out the control and accounting activities in respect of the banknotes deposited at managing entities. Among the benefits are the simplification of banknote inflows and outflows due to the concentration of transport and the centralisation of operations in managing entities.

The impact of auxiliary depositories on the *economy as a whole* will begin to be noted significantly as the new banknote supply logistics are consolidated and the renewal of banknotes in circulation starts to become significant. The Banco de España aims to monitor the quality of a significant portion of the banknotes that pass through the credit institutions and to channel the used banknotes towards its branches. If the quality of banknotes increases, this improvement in a public good, namely money, will directly affect the level of satisfaction of economic agents.

Conclusions

Auxiliary depositories are one of the means by which the Banco de España seeks to increase its role in the cash cycle and in banknote recycling by closer monitoring of the quality of banknotes in circulation and by active co-operation in a more flexible, efficient and less risky distribution process. This objective is consistent with the responsibility of Eurosystem central banks to assure the integrity, quality and fitness of euro banknotes in circulation.

Based on the experience of these first few months, the auxiliary depositories of the Banco de España can be said to be functioning satisfactorily. Although the system is still limited in scope, an improvement is being seen in the banknote distribution systems, the hours of operation have been extended and there is an appreciable improvement in the service and an increase in the number of used banknotes being returned to the Bank. In the near future the procedure will bring an improvement in the condition of banknotes circulating in Spain. Moreover, the auxiliary depositories have enabled simpler and more flexible procedures to be put in place for moving cash, which has been conducive to more effective operations in credit institutions.

The Banco de España has entered into auxiliary depository contracts with Sociedad Española de Sistemas de Pago, SA (SESPA) and with the Confederación Española de Cajas de Ahorro (CECA). As managing entities, these two institutions encompass the great majority of banks, savings banks and credit co-operatives. At the end of June 2005, 35 operational centres were functioning in 15 cities and there are plans to open new centres in the coming months, to which it is estimated that approximately 5% of the logistic stocks of euro banknotes stored at the Banco de España will be moved.

Finally, it should be mentioned that the Banco de España intends to develop a similar mechanism for coins in circulation, in collaboration with the Treasury and credit institutions. The new system will foreseeably be operating by the end of 2005.

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