









Document prepared by Elona Bollano, SPI Director for Analytics and Policy

Note On

The European Experience on the Cash and Non-cash Transactions

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Summary of main findings on trends in using retail payment means in selected EU countries

- The pace of increase in the currency in circulation in Euro Area and in selected European countries is demonstrating a downward slope.
- Non cash payments are increasing fast in all selected countries, these developments are more pronounced in newly developed countries i.e Greece, Bulgaria and Romania.
- In general, credit transfers are the most used mean of payments for large value payments and cards for small value payments.
- The increased use of non cash payments is associated with infrastructure developments, in terms of payments cards typology and quality and in terms of operating machines -ATMs and POS. -
- Countries in the Balkan region are working to integrate with more developed European countries even in the field of payments. These countries are in the early stage of development of the payments system.
- Due to the common background, there are similarities in the development pattern in Balkan countries, but the pace of development is significantly different.
- The level of the currency in circulation in these countries is higher compared to developed European countries and the Euro area. By the end of 2007, the level of

currency in circulation in Albania was 63%, considerably higher when compared to Serbia (31%) and Croatia (28%).

- In selected Balkan countries, in general, debit cards are the most used form of cards payments, but various national strategies have induced the usage of credit cards.
- Developments in non cash payments are followed by developments in the infrastructure, ATMs, POS, but the coverage ratio is not uniform for all the countries.

Summary of main findings on pricing of the cashless retail payments in selected EU countries

- In a world wide base, in 2008 compared to 2007, users paid in average €7 less for the banking services.
- World wide banks are reducing the prices of their products. In average the prices of the products were reduced yearly by 0.1 % for the period 2006-2008.
- Banks are building policies to attract new consumers and increase loyalty by decreasing the prices of the products. These strategies are mainly focused on reducing the prices of the products that the consumers have in the first contact with banks, current accounts, debit/credit cards, and on channeling the consumers' demand to low cost innovative products that affect the behavior of the consumers: on-line banking, deposits and withdrawals at ATMs, direct debits.
- In Euro area the structure of core banking product fees is not homogenous. In aggregated terms, most fees are generated by payments and account management.
- Many banks reduced their cost of operations by influencing clients' behavior, using the prices of products to move their customers towards less expensive channels or payment means

Cash utilization fees have increased steadily over the past three years. The share of fees from payments is decreasing from 2006 in favor of share of fees from cash utilization.

1. Trends in using retail payment means in selected EU Countries

The retail payments are generally grouped into cash payments and non-cash payments.

2.1 Cash payments

The level of currency outside the monetary financial institutions in Euro Area in 2006 accounted for 14.43% of the narrow money (M1).

75
50
39
27
8
0
Euro area Bulgaria Romania UK Albania

Chart 1. Currency in circulation outside financial institutions, December 2006

Source: ECB, respective central banks.

The pace of growth of currency in circulation in Euro area, since 2002, has shown a clear trend of decrease. By the end of 2006 the level of currency in circulation in term of the monetary aggregate M1, is 14.4%. The level currency in circulation in the new EU member states (illustrated Bulgaria and Romania) as might be expected, is much higher compared to Euro area. Developments outside EU are more diverse. In UK the level of currency in circulation as percentage of M1 is 8.4%, lower compared to Euro area, while in Albania this ratio is 65.9%, considerably higher.

2.2 Non-cash payments

The main non-cash payment instruments are: cheques, credit transfers, direct debits and payment cards.

The cross-border use of cheques is decreasing and is expected, ultimately, to be phased out. The banking industry in the euro area has defined a strategy – The Single Euro Payments Area (SEPA) for promoting the use of alternative electronic instruments for cross border payments in Europe. The launch of SEPA project will have major implications for the characteristics and use credit transfers and direct debits.

The next most common retail payment instruments are remittance transfers¹, e-money² and traveler's cheques³.

¹ Remittance transfers are cross-border person-to-person payments of relatively low value, typically recurrent payments by migrant workers.

² E-money is a store of monetary value on an electronic device that may be widely used for making payments to undertakings other than the issuer of e-money. Such transactions do not necessarily involve bank accounts, with the device instead acting as a prepaid instrument. E-money is stored either on a card or on a central computer, and the holder must pay the value to the card issuer in advance.

In 2006 in European Union were performed more than 73 billon cashless payments with a value of EUR 243,093 billion. In average each EU citizen was involved in 158 transactions with more than 6% increase compared to 148 transactions that were performed in average in 2005.

Relative importance of payment instrument, 2006 100 % of total no. of 80 transactions) 60 40 20 0 UK EU Germany Greece France Italy Credit transfers Direct Debit Card payments (except e-money) Cheques Others ■ E-money

Chart 2. The structure of non-cash payment in EU and selected European Countries.

Source: Blue Book 2007.

In EU for large payments, credit transfers are the most used mean of payment. In 2006 the value of credit transfers in EU was EUR 222,355 billion generated by 21,834 million transactions, with an average value per transaction of EUR 10,184. Credit transfers have traditionally been the predominant form of payment transaction in Germany. However, their share of the total volume of payment transactions has decreased slightly in recent years, as more convenient payment instruments, especially direct debits, are being used.

For small scale payments, card payments are the most commonly used method of payment. In 2006 were recorded 25,150 million transactions with a value of EUR 1,498 billion. In all selected countries, but Germany, cards payments account for the largest number of non-cash transactions.

Among selected countries, card payments are showing the fasted increase in Greece. From 2001 to 2006 the number of cards transactions has increased by 11 % per year in average and the value has increased by 27% per year in average. The fast increases in cards payments, in addition to the low base effect, reflect the public's growing familiarity with the use of cashless payment instruments and the intensive promotion of such payment instruments by banks, the ease with which they can be used by consumers and the benefits of their automation with regard to execution times. In the rest of selected countries debit cards are the most used type of card. **The number of cards transactions has increased in average by nearly 8 % per year.**

³ Traveler's cheques are essentially prepaid paper-based instruments issued in specific denominations and currencies for general purpose use in business and personal travel. They do not specify any particular payee, are non-transferable once signed, can be converted into cash only by their specified owner, and are generally accepted by banks, and often by large retailers, hotels and restaurants.

In EU, during 2006, the average value of a transaction with a card was 60 euro (chart 2). Greece has the largest value of a transaction of EUR 104, with an average yearly increase of 13.6%. Italy is ranked second, the average value of a transaction is EUR 97 but the rate of increase is at 3% per year in average.

2001 2006 2006 avg 120 100 80 60 40 20 0 Germany France Greece UK Bulgaria Romania Italy EU Non - EU

Chart 3. Average value of all cards transactions except e-money, in euro.

Source: Blue Book 2007.

Regarding the type of card, in EU cards with a payment function are the most spread and used type of card. In 2006, for every EU inhabitant there are issued 1.38 cards with a payment function⁴, with almost 10 % increase to 2002.

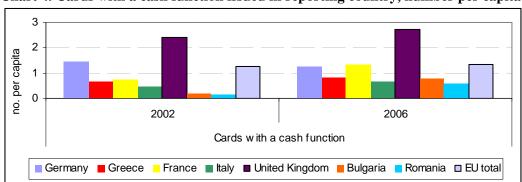


Chart 4. Cards with a cash function issued in reporting country, number per capita

Source: Blue Book 2007

Regarding other types of cards, for every EU inhabitant are issued 1.35 cards with a cash function. United Kingdom has the largest number of cards with a payment and a cash function, while **Bulgaria and Romania are experiencing the fastest increase in the number of cards, both cash and payments, per capita from 2002.**

⁴ Payment cards consist of debit cards, debit cards with delayed debit function, credit cards, debit and/or delayed debit function and credit and/or delayed debit function

g o 2002 2006

Cards with a payment function

Germany Greece France Italy United Kingdom Bulgaria Romania EU total

Chart 5. Cards with a payment function issued in reporting country, number per capita

Source: Blue Book 2007

Cards with an e-money function are a new type of card with limited function in developed industrial countries, Germany, France and Italy. Developments in this segment on the market are still in an early stage all across Europe, and exhibit strong fluctuations. In 2006, in average there have been issued 0.3 e-money cards per inhabitant, the same as in 2002.

1 0.75 0.5 0.5 0.25 0 2002 2006

Cards with an e-money function

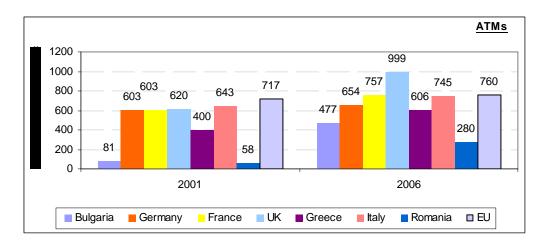
Germany Greece France Italy United Kingdom Bulgaria Romania EU total

Chart 6. Cards with an e-money function issued in reporting country, number per capita

Source: Blue Book 2007

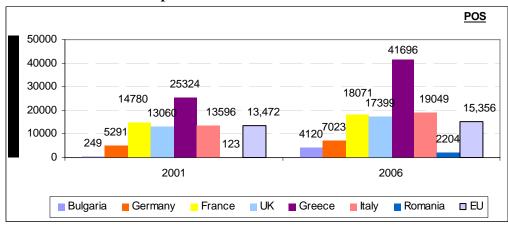
Payment cards can be used for making payments for goods and services at point-of-sale (POS) terminals or remotely (mail order, telephone order or via the internet) and for making cash withdrawals at automated teller machines (ATMs); both functions are usually combined on a single card. During the last years the use of terminal has significantly increased across all Europe. In 2006, there are 5% more ATMs and 13% more POS, in average per million inhabitants, in Europe compared to 2002. In the new member states the rates of increase are significantly higher (480% ATMs and 1552% POS in Bulgaria and 385% ATMs and 1697% ATMs in Romania, to a large extend these rates are due to the low initial base).

Chart 7. Number of ATMs per million inhabitants.



Source: Blue Book 2007

Chart 8. Number of POS per million inhabitants



Note: For EU, the figures are for 2002.

Source: Blue Book 2007

2. Pricing of the cashless retail payments in selected EU countries

World Retail Banking Report, has identified in 2008 In a world wide base, in 2008 local active banking services users⁵ paid an average of €70 a year from €77 a year in 2007, for their day-to-day banking needs. Compared 2007, the prices paid by the users have decreased in all the regions.

Price levels vary considerably among regions. The costs bore by active European consumers are higher than the average global level. In Euro zone countries, the average

⁵ Local banking service users refer to the users of the banking system that reside in a certain country and are active within the system.

price paid by an (averagely) active banking user is €75, almost equal to the costs paid by the same category of users in Non-Euro zone countries, but in the former the less active users have to bear higher prices and the very active lower prices compared to the later.

Charges for core banking services⁶ make up on average 0.55% of GDP per capita, but this share is higher as less developed the country is. From the empirical evidence, the cost of banking services as share of GDP per capita is reduced as an economy matures, at least partly because consumers in a mature economy begin to regard these core banking services as a commodity.

250 200 Very active 150 100 Active 50 Less active 0 2007 2008 2008 EU Eurozone EU Non -Eurozone North America Azia Pacific Average

Chart 9. Average prices for 2007 and 2008, in Euro

Source: World Retail Banking Report, 2007 and 2008.

As identified by the World Retail Banking Report, since 2007 banks have started the process of prices decreases. On average for the period 2006-2008 banks reduced prices by 1% to win new clients and to build loyalty.

Banks offer a wide range of products and services; according to the influence on consumers, these products can be categorized as *sales influencers or behavior influencers*. *Sale influencers* are products whose prices affect primarily consumer's decision to buy banking services or to change banks. These products, such as current accounts and cards, are the first contact point of the consumers with the bank. *Behavior influencers* are products whose prices influence the ongoing consumers – bank relation, apart the initial, direct buying contact.

Table 1. Average yearly change of banks products

Category	Average yearly change 2006 - 2008	Products	Average yearly change 2006 - 2008
Sales influencers	-0.8%	Current account	0%
		Debit card	-1.30%
		Credit card	-1.00%
Behavior influencers,	-0.2%	Call centre	-2.30%

⁶

⁶ As "core banking services" are included; Account management (current account, account management, call center), various means of payments (cheques, debit cards, credit cards, internal and external wire transfer, standing order, direct debit); Cash utilization (deposit at desk, deposit at ATM, withdrawal at desk, at ATM, at other bank's, ATM network); Exceptional handling (debit card stop payment, cheque stop payment document search, bank's draft). Retail banking services include Core banking services; Saving products (such as certificates of deposit, mutual funds, other saving vehicles); Credit products (such as overdrafts, consumer credit, revolving credit, mortgages, loans); and Other products (such as insurance, real estate, concierge services).

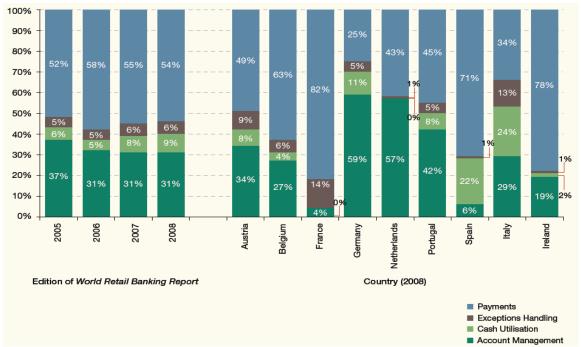
less costly		On-line banking	-0.60%
		Cash deposit at ATM	0.00%
		Withdrawal at bank's	
		ATM	-0.50%
		Direct debit	0.30%
		External transfer	1.10%
		Internal transfer	0.90%
		Standing order	-0.30%
Behavior influencers,	0.9%	Cash deposit at desk	-0.40%
more costly		Withdrawal at desk	0.20%
		Cheque	1.90%
		Withdrawal at other	
		banks' ATM networks	2.00%
Unseen services	0.00%	Banker's draft	0.40%
(exceptions handling)		Cheque stop	1.20%
		Debit card stop	-1.60%
		Document search	0.10%
All products	-0.10%		

Source: World Retail Banking Report 2008

During 2006-2008, banks all over the world were focused on reducing the prices of sales influencers with the aim to attract more new clients. The largest reduction in prices of this category was on the credit cards, with a yearly decrease of 1.3%. In average, the prices of this category were reduced by 0.9%, yearly. In addition, many banks reduced as well the prices of services that influence clients' behavior, particularly the less costly products with aim to increase the attractiveness of these products to build loyalty. The strategy followed in this regard was a yearly increase with 0.9% of prices of expensive products and services (such as call centers, deposits and withdrawals at desk, withdrawals at other banks' ATM networks, cheques) accompanied with a yearly decrease of 0.2% of the less expensive products prices (such as: on-line banking, deposits and withdrawals at ATMs, direct debits, transfers, and standing orders). This strategy was followed to move customers towards less expensive channels or payment means and away from the more expensive.

Euro area fee structure

The Euro area fee structure is not homogeneous, although a slow price convergence trend is evident in some countries. For example, the progressive reduction of account management fees is evident in Germany, Italy, and the Netherlands (chart 10), while cash utilization fees have increased steadily over the past three years in almost all the countries.



Source: World Retail Banking Report 2008

The fee structure in Euro area is dominated by the fees generated through the payments and account management. The share of fees from payments is decreasing from 2006 in favor of share of fees from cash utilization. Spain and Italy are the two countries with the highest share of cash utilization fees, while in Germany and Netherlands account managements generates more fees.

Chart 11. Product and Service Price Variations current vs. previous year for the Local Active User in Europe - Eurozone (€)

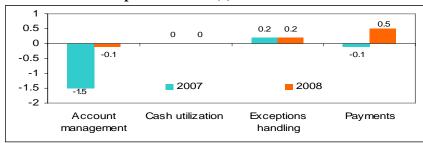
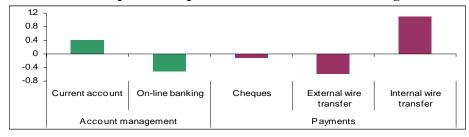


Chart 11.1 Decomposition of price variation for account management and payments



The changes in Euro area were small and most were related to payments. Banks raised the price of internal wire transfers at desk to compensate for the development of Internet origination (generally free), while the price of external wire transfers decreased under the influence of SEPA (for more on SEPA see Box 1). Account management prices remained essentially stable due to a price increase in current accounts offset by a cut in the price of on-line banking.

Box 1. Single Euro Payment Area - SEPA

The SEPA initiative aims to create a domestic payments market across the Eurozone by 2010. It should encourage competition, price transparency and homogeneity, and is likely to spur the development of new retail euro payment services. The revenue structure of banks will certainly be affected by these changes.

The basket of products that will progressively be governed by SEPA's pan-European standards and regulations includes internal and external wire transfers, direct debits, credit and debit cards, and their underlying current accounts.

In 2008, consumers in the SEPA area (same as Eurozone) paid an average of €48 for electronic means of payment, compared to €45 in 2007. Banks are lowering fees for electronic payments products in an effort to move customers towards these alternatives instead of traditional payments products.

3. Developments in selected Balkan countries

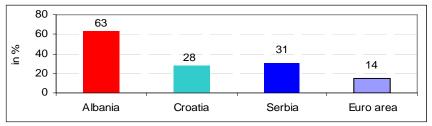
In this section, the main developments on various means of payments in Albania, Croatia and Serbia⁷ are described. These countries are in the early stage of development of the payments system. Due to the common background, there are similarities in the pattern of development anyhow, the pace of development is significantly different.

3.1 Cash transactions

The level of the currency in circulation in these countries, as might be expected, is higher compared to developed European countries and the Euro area. Accordingly, cash payments account for a significant share of the total payments, although the general trend has shown a downward slope. Among the selected countries, it seems that cash in Albania has shown more persistency. By the end of 2007, the level of currency in circulation in Albania was 63%, considerably higher when compared to Serbia (31%) and Croatia (28%).

⁷ Among the countries in the Balkan region were selected Croatia and Serbia due to the (existence) public available published data. Regarding the information on the prices of banks products and services, to our knowledge, there are no domestic or regional market survey reports were to extracts the information.

Chart 12. Currency in circulation outside financial institutions, December 2007



Source: National Central Banks websites.

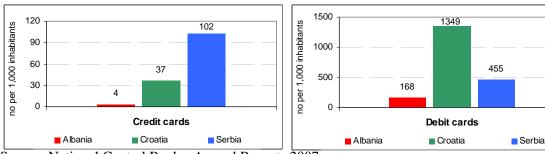
3.2 Non cash transactions

The changes in the national payment systems of these countries during the past five years and the introduction of new technical and technological solutions has supported the introduction of more advanced and new means of payment. The most used means of non cash payments in the three countries are the credit transfers and cards, while cheques' relevance has decreased constantly.

The pace of development and usage of non cash payments has not been equal among the selected countries. In Croatia and Serbia the penetration, distribution and use of non cash payments is extensively higher compared to Albania. This is the result of several factors. Croatia and Serbia inherited from the former Republic of Yugoslavia the most active payment cards market in East and Southeast Europe. In this system the major world card systems were present alongside local bank and merchant cards. In addition to this favorable initial factor, the market participants in these countries have been more active to undertake reforms in order to modernize the system and means of payments.

In the three countries the use of card payments has increased during the last 2-3 years. Croatia has the larges usage and penetration indicators of these payments. In the market there are various types of payments cards, such as debit, charge, revolving and credit, with the debit cards taking the lead. Payments with debit cards account for 75% of bulk of card payments and by the end of 2007 there were 1.3 cards for every inhabitant.

Chart 13. Credit cards and debit cards issued in the reporting country, per 1,000 inhabitants, December 2007.



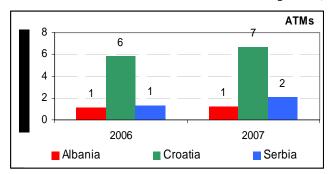
Source: National Central Banks, Annual Reports 2007.

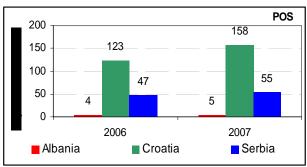
In Serbia debit cards are the most used type of card as well, and the launch of the domestic card system, DinaCard, by the central bank in collaboration with the

commercial banks in 2003 accelerated the development of cashless payments, especially credit cards. The creation of a national card enabled many banks, which at that time were not included in international systems, to offer a payment card that could be used in the largest acceptance network in Serbia, without having to make large material investments. In addition, this card was very affordable for people, with merchant fees adapted to the conditions prevailing in the Serbian market. As a result, Serbia has the largest number of credit cards issued, one credit card for 10 inhabitants, compared to Croatia and Albania. In Albania developments in the cards payments have not been as pronounced as in Croatia and Serbia, while the trend has followed the same pattern. Debit cards are the most spread and used type of card, and account for 95% of the total bulk of cards payments.

Development in the payment cards require a similar evolvement of the infrastructure, ATMs and POS, to be used. In Croatia, special legal entities can be owners of ATMs and POS in addition to commercial banks. For 2007, out of the total number of ATMs in the country, 82% were owned by banks and the remaining 18% by other legal entities, while for the POS terminals, 69% were owned by banks and the rest was owned by other legal entities.

Chart 14. Number of ATMs and POS per 10,000 inhabitants, December 2007.





Source: National Central Banks, Annual Reports 2007.

Regarding the coverage of the country, there are similar developments in Serbia and Albania. Despite the fast rate of increase in the number of ATMs and POS, with the latter taking the lead, the coverage ratio is not uniform for all the country, as few large cities are better equipped.

Annex

Retail payment means in selected EU countries

Germany

In Germany, cashless payments are mainly effected by means of credit transfers (42.2% of the total number of cashless payment transactions in 2005) and direct debits (41.9%). The use of card payments (except for e-money cards) is steadily increasing, reaching a total share of around 15% while the use of cheques has decreased. E-money payment transactions are still insignificant (less than 1%).

Credit transfers have traditionally been the predominant form of payment transaction. However, their share of the total volume of payment transactions has decreased slightly in recent years, as more convenient payment instruments, especially direct debits, are being used. In 2005, 6.7 billion credit transfers were processed by the banking industry and 1 billion of these were submitted to banks by customers via a PC or terminal.

The direct debit, introduced by the banking industry in 1963, has considerably simplified the collection of periodically payable monetary claims. In 2005, 41.9% of all cashless payments in Germany were affected by direct debit. Its relative importance compared with other payment instruments is still increasing.

Card payments

The use of cards at retailers is increasing steadily. In 2005 debit card payments accounted for approximately 27%, credit/delayed debit cards for 5%, while cards with an e-money function have very little importance.

a) Debit cards. Payment cards in the form of debit cards are usually issued by banks. The number of these cards has grown rapidly over the past decade. Nowadays, the vast majority of bank cards are equipped with a payment functionality. Recently many card issuers have extended the range of tools available on debit cards. A chip on the card makes offline authorization of guaranteed card payments possible. In addition, bank cards can be used as prepaid cards (as in the GeldKarte⁸ system of the CCC).

⁸ The GeldKarte is a prepaid rechargeable electronic purse scheme operated by the CCC. By the end of 2005 there were around 64.5 million cards with the GeldKarte feature, not all of them, however, being actively used. There are cards linked to accounts, where the GeldKarte chip is integrated into a bank card, as well as cards not linked to an account ("white cards"), which have only an electronic purse function. The GeldKarte can be used nationwide. The average value per transaction has decreased to €2.38, which proves that the aim of use for low-value payments is being achieved. The range of acceptance points is diverse, including retailers, public transport ticket machines, parking ticket machines, vending machines and the Deutsche Post (e.g. stamp machines and payment for express parcels), as well as acceptance points on the internet.

Prepaid payment services are also based on scratch cards (Paysafecard, Deutsche Telekom Micromoney, etc.) and – very recently – also on other existing debit and credit card products. These cards are offered as gift cards or as an electronic form of a formerly paper-based traveller's cheque, etc. These cards might be available in various currencies and can be used for direct payments for purchases and services in stores and restaurants worldwide, or for cash withdrawals at ATMs worldwide and are rechargeable from all over the world by telephone or via the internet.

- b) Credit cards. The use of credit cards has increased over the past few years, but not as significantly as the use of debit cards. The number of cards which are issued by banks and licensed by the major card organizations grew from approximately 20.4 million at the end of 2004 to 21.1 million at the end of 2005. At the same time, the number of acceptance points has increased. In 2005 German cardholders made payments by credit card with a total value of approximately €37.3 billion. But credit cards are still used far less than other payment instruments (e.g. debit cards) in Germany. Owing to the commission charges (a deduction from the credit card turnover of the acceptor, which is payable by the latter only) and the procedures for authorization and processing of these payments, credit cards are not always popular in the retail trade. Thus, their use tends to be restricted to more "upmarket" retail outlets. In addition, the debit cards issued by banks provide retailers with a less expensive payment option.
- c) Retailer cards. Retailer cards with a payment function, which are issued by some major stores with the aim of increasing customer loyalty, are now competing with traditional credit cards. With the largest issuer in Germany, for example, the use of retailer cards is free of charge. Cardholders can usually take advantage of a payment period of between one and two months or pay in installments. At present there are around 9.3 million retailer cards with payment functions in circulation. Retailer cards provide the retail trade with exact information on customer and purchasing profiles.
- d) Cash dispensers. In Germany, banks offer both their own customers and the customers of other banks the possibility of obtaining cash up to a certain limit from 53,361 cash dispensers nationwide (as at end-2005) using bank or other debit/credit cards in combination with a PIN. For all transactions at cash dispensers, an online connection to the authorisation centre of the bank concerned is established and a block and limit check is made in order to prevent fraudulent or other inadmissible withdrawals. Settlement of transactions at cash dispensers is effected using the technical standards and infrastructures for direct debits.

Greece

The number of non-cash payments has been increasing constantly, reflecting the public's growing familiarity with the use of cashless payment instruments. This development can be attributed to the promotion of such payment instruments by banks, the ease with which they can be used by consumers and the benefits of their automation with regard to execution times.

Over the last five years, the average volume of cashless transactions has increased by 55.8% per year on average, with the average value of transactions increasing by 7.8%. With regard to internet-initiated credit transfers, 6.7 million transactions were effected in 2005, accounting for 23.4% of the total volume of credit transfers, while the value of transactions amounted to €794.3 billion, accounting for 3% of the total value.

Direct debits

Direct debits are offered by banks as an alternative cost-effective payment instrument. The number of enterprises, either public or private, offering their customers the possibility to make payments using the direct debit instrument has been increasing constantly. During the last five years direct debits have increased by 28.7% per year on average in terms of volume, and by 35.8% per year in terms of value.

Payment cards

Payment cards have evolved into a common and widely accepted payment instrument throughout the country. The majority of card transactions are effected with credit cards. Over the last five years the number of payment cards has increased by 7.9% per year on average. The volume of transactions with payment cards has increased by 8.6% per year on average, and the respective value by 28.5% per year.

- a) **Debit cards.** The number and use of debit cards has increased substantially during the last five years, owing mainly to the replacement of cash cards⁹ with cards incorporating a debit function in addition to the cash function. In the period 2001-05 the number of debit cards in circulation increased by 7.2% per year on average. The respective increase in the volume of transactions was 37%, while the increase in the value of transactions was 64.2%.
- b) Credit and delayed debit cards. The number and usage of credit and delayed debit cards has constantly increased over the last five years. In addition to the promotion by the banks and the demand form the public, credit cards constitute the main payment instrument used in electronic commerce. Their extensive use is also closely related to incentives provided to cardholders, such as payments in interest-free installments and retailer loyalty schemes. During the period 2001-05 the number of credit and delayed debit cards in circulation increased by 8.7% per year on average. The volume of transactions increased by 7.4% on average, and the respective value by 27.2% per year.

Recent developments

During these last years many credit institutions have introduced payment services based on internet technology, i.e. web/mobile banking and electronic commerce, allowing the use of cashless payment instruments. However, at the present time the number of internet payments is still low. European developments in payment technology and practices have also affected cards, POS and ATMs, which are gradually migrating to the EMV

⁹ The CashCard is a stored-value card made by NETS. It was launched in Singapore in 1996. Cashcards can be purchased with an initial fixed stored value. When the card is used for a transaction, the amount to be paid will be deducted from this value. Once the initial value has been completely used up, customers can top up the value in the card at any ATM or designated terminal.

standard¹⁰. All banks have adopted and offer their customers the IBAN and BIC standards, while the majority of credit institutions adhere to the Credeuro¹¹ and ICP (Interbank Conventions on Payment) conventions.

France

The use of non-cash payment instruments is traditionally very widespread in France. In 2005 the average number of transactions was 228 transactions per person.

Credit transfers

Credit transfers are mainly used for payments by companies, government agencies and local authorities, but rarely by individuals. At 2,408 million operations in 2005, accounting for 16.87% of all payment transactions, this instrument ranked fourth among the payment instruments used in France in terms of the number of transactions. The average value of credit transfers made in that year was €5,590. However, this included only credit transfers executed for clients but not credit transfers between banks. The interbank exchange of all credit transfers now takes place in paperless form.

Since their introduction in 1955, direct debits have been very successful. Over 2.5 billion direct debits were exchanged in 2005, with an average value of €360 per transaction. They accounted for 17.6% of payment transactions processed in the course of that year. They are generally used for recurrent payments such as electricity, gas, telephone, insurance and water bill payments, and for monthly income tax payments. Direct debits offer advantages to banks (in that processing costs are relatively low thanks to automation), utility companies (by simplifying their accounting administration) and individuals (by simplifying payment).

In addition to this general type of direct debit, two other instruments are available to users: interbank payment orders (Titres Interbancaires de Paiement; TIPs) and telepayments, which have grown steadily since their introduction.

Card payments

There are many types of card available on the French market. First, there are payment cards issued by credit institutions or other assimilated entities that enable their holder to withdraw or transfer funds. These cards may be four-party cards if the institution that issues the cards is not the same as that acquiring the card transactions. These interbank cards are mainly represented in France by the GCB, very often co-branded with Visa or MasterCard.

There are also three-party cards where the same institution issues the cards (for the holders) and acquires the card transactions from the merchants. Such cards may be

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¹⁰ EMV is derived from the first letter of the world's three main payment organizations: EUROPAY (EPI), MASTERCARD (MCI) and VISA. The objective of this group is to define a common set of standards (EMV standards) for smart card based payment applications. These standards allow the card and the acceptance device to work seamlessly and securely together.

The Credeuro Convention establishes a standard for the execution of a "basic" bank-to-bank pan European credit transfer, which allows participating banks to give guarantees to their customers as regards information requirements, execution time and remittance information transmitted.

international (e.g. American Express, Diners Club) or national, as is the case with some credit cards (e.g. Cofinoga and Cetelem). Lastly, by derogation from the banking monopoly, a single-purpose card may be issued by an undertaking if it is accepted as means of payment by that undertaking only or by a limited number of acceptors that have financial and commercial links with the issuer. There are a large number of such "store cards" in France.

Recent developments

Beyond these traditional means of payment, new developments have recently taken place on the market. Two main trends may be identified.

The first concerns cards. While the electronic money purse used to be based on solutions whereby the monetary value was stored on the device, an increasing number of products use cards only as a tool for accessing prepaid accounts held centrally with the issuer. The former type of product is still present, largely in the form of Moneo cards (generalpurpose e-purses). The electronic money used with these cards is issued by the Société Financière du Porte-monnaie Électronique Interbancaire (SFPMEI), whose role is to collect and manage the funds received in the issuing process.

In recent years, however, other cards based on accounts have developed more rapidly on the market. These reflect an important trend in France, namely that traditional paper-based products, such as traveller's cheques or gift cheques, are increasingly tending to be offered on electronic devices, such as cards. Traveller's cards (modelled on traveller's cheques) and gift cards (modelled on gift vouchers) have thus been issued by banks, stores and third-party card schemes.

The second trend is towards the use of new devices for payments. The number of payments via the internet or by mobile telephone is thus increasing rapidly. The market for prepaid cards for payments on the internet also appears to be taking off, with several cards now being offered on the French market.

Italy

In Italy, during 2005 an average of 60 transactions per capita were performed using instruments other than cash (compared with 45 in 1999). At the end of 2005 there were more than 38 million current accounts. The number of postal current accounts stood at 4.5 million at the end of 2005, representing a significant increase. Moreover, for every 10,000 inhabitants there were more than 5 bank branches (and around 2.4 post office branches). Bank instruments account for approximately 97% of the value and 70% of the volume of non-cash payments. Cheques and banker's drafts are no longer the most commonly used bank instruments in Italy. Their importance is declining, while the use in transactions of direct debits, credit transfers and cards is growing, with payment cards accounting for 34.6% of the volume of non-cash payments. In recent years increases have been observed in both the number and use of payment cards, although the number of payment card transactions per inhabitant is still some way below the European average.

Credit transfers

In 2005 were effected 416 million bank credit transfers, with a total value of €5,546 billion. These instruments are used widely throughout the economy, even for retail transactions (e.g. for the direct crediting of wages, salaries and pensions).

Collection orders (direct debits and bank receipts)

In 2005 the number of payments made by direct debit was 463 million (compared with 277 million in 1999). This instrument is mainly used by firms to collect recurrent low-value payments (e.g. utility bills). Bank receipts are used by firms to collect trade and other credits. Bank receipts perform an economic function similar to that of bills of exchange, but do not have the same legal protection (they cannot, for example, be disputed). In 2005 approximately 309 million commercial bills and paper-based and paperless bank receipts were collected through the banking system.

Payment cards

- a) Cards with a debit function. At the end of 2005 there were over 32 million debit cards (bank and postal cards) in circulation which could be used to make cash withdrawals at ATMs. The majority of these could also be used to execute payments through a nationwide network of POS terminals.
- b) Cards with a credit function. In recent years growing competition among suppliers of payment services and a change in consumers' habits have led to an increase in both the number of credit cards in circulation and the use of those cards. At the end of 2005, 28.8 million credit cards issued by banks or non-banking intermediaries were in circulation, compared with 12.3 million in 1999. Nevertheless, in 2005 only 49% of the credit cards in circulation were used at least once every six months. There were more than 463 million credit card operations in that year, representing an average of 16 operations per card in circulation.

Recent developments

The Banca d'Italia, together with the rest of the banking and financial community, is engaged in further initiatives to improve the efficiency and reliability of payment instruments and to facilitate the transition towards the use of the most efficient instruments for each type and size of transaction. Against this background, particular attention is being paid to the need to migrate national payment instruments to European schemes and, consequently, to adjust the regulatory frameworks.

Bulgaria

Cash payments

The monetary unit of the Republic of Bulgaria is the lev. Cash payments are widely used in Bulgaria. At the end of 2005 banknotes and coins in circulation accounted for 47.15% of the monetary aggregate M1 and represented 13.99%

Non-cash payments Credit transfers This is the most widely used form of non-cash payment between entities in the corporate and public sectors. It is also used for the payment of salaries, taxes, duties, subscription fees, etc.

Payment cards

- a) Debit cards and credit cards. The use of this instrument is increasing from year to year. Most widely used are debit cards issued by domestic banks. By the end of 1997 eight banks were issuing bank cards. By the end of 2006, 25 banks were issuing bank cards compared to 8 banks in 1997. Some banks offer an overdraft facility to selected customers. Bulgarian banks, which are members of the international card organizations, issue the domestic and international debit and credit cards. In recent years more customers have been paying their utility bills through ATMs using their debit cards. In 2006 were effected 582,477 transactions.
- **b) Prepaid cards.** Telecommunications companies and petrol station chains issue prepaid cards. The use of these cards has increased very rapidly. The coin-operated telephone network has, to a large extent, been replaced by a large network of telephones that can be operated using prepaid chip-cards.

Recent developments

There is significant interest in Bulgaria in making payments via the internet. A system called ePay.bg was developed in 1999. It allows a cardholder to pay for services or goods via the internet after registering the card. The technology for making payments via the internet is based on a third-party trusted payment server connected to the host of the BORICA card system. This enables the authorisation of each transaction via the internet in real time. Most cardholders use this system for transferring money from their card accounts to other accounts at the same or another bank. By the end of 2006 there were 268 electronic shops and companies offering goods and services connected to ePay.bg, and 1,746,102 transactions, with a total value in excess of BGN 63,074 million, were made through this system in 2006.

Romania

Cash payments

The monetary unit of the Republic of Romania. BNR is the only institution in Romania authorized to issue banknotes and mint coins.

Cash remained the predominant retail payment means, accounting for 47.1% of M1 (RON 11,555 million, approximately €3.2 billion). M1 amounted to RON 24,551 million (approximately €6.8 billion) at end- December 2005.

Non-cash payments

The following payment instruments and means of payment are used: credit transfers, cheques, bills of exchange and promissory notes, as well as cards, direct debits and standing orders. Bills of exchange and promissory notes are both payment and financing instruments. Moreover, the postal system provides payment services using a specific instrument - the postal money order.

Credit transfers

The credit transfer is the cashless payment instrument most commonly used for commercial payments by legal entities. It can also be used by individuals. Since the introduction of ReGIS and SENT, interbank credit transfers have been processed electronically only. As a result of the major infrastructure changes, the settlement period for interbank credit transfers has been considerably reduced, from 3.67 days for a funds transfer between the payer's account and the beneficiary's account to a maximum of 2 days.

Direct debits

The direct debit is not regulated as a payment instrument, but rather as a means of making payments. Direct debits for intrabank payments are based only on arrangements between the customer and the bank. Their main use is to make payments for services and utilities. In 2005 there was no interbank processing of direct debits.

Cards payments

At the end of 2005 there were 27 banks which issued debit and credit cards denominated in various currencies and were issued more than 7 million cards, representing an increase of 26% year on year. In terms of volume, card payments grew by 32%.

Debit cards and Credit cards. Debit cards and credit cards have several functions. They can be used for both cash withdrawals at ATMs and payments at POSs. They can also be used to pay telephone bills and government taxes directly at ATMs. Most debit cards also have an overdraft facility, with limits set by the issuing bank depending on the type of guarantee provided by the cardholder (i.e. bank deposits, agreement between bank and cardholder for the latter's salary to be paid into the debit card account, etc.). Debit and credit card payments are processed in a similar way.

Recent developments

In order to develop a payment system in Romania in line with other EU payment systems, BNR carried out a project for the implementation of an integrated electronic payment system, including the related communication infrastructure. The Electronic Payment System (EPS) consists of: a real-time gross settlement system (ReGIS – Romanian electronic Gross Interbank Settlement), an automated clearing house (SENT – Romanian acronym for "Electronic Net Settlement System managed by TRANSFOND SA"), the government securities registration and settlement system (SaFIR – Settlement and Financial

United Kingdom

Cash payments

The Bank of England has the sole right to issue banknotes in England and Wales. At the end of 2006 the value of banknotes in circulation totalled GBP 41.1 billion (€61.3 billion). In 2006, cash payments accounted for 63% of all transactions by volume (down from around 67% in 1999).

Non-cash payments Credit transfers

The usage of paper-based credit transfers has fallen in recent years. The total volume of interbank paper credits cleared in the United Kingdom, for example, declined from 177 million in 1999 to 111 million in 2006, while the values processed declined from GBP 95 billion (€139 billion) to GBP 61 billion (€11 billion). Paper-based credits are often used for making consumer payments to large organisations, such as utilities and mail-order companies. They can also be used for payments to individuals, but this is increasingly rare.

Cards payments

- a) **Debit cards.** The total volume of debit card purchases in the United Kingdom has risen markedly in recent years and reached 4,512 million payments in 2006, up from 2,062 million in 1999. The number of debit card transactions is now over double the number of credit card transactions. The average value of domestic debit card transactions (approximately GBP 43 (€4) in 2006) tends, however, to be lower than those where payment is effected with credit cards (approximately GBP 59 (€8) in 2006). A number of retailers offer "cash back" facilities operated through the EFTPOS systems in their stores. These facilities enable debit cardholders to obtain cash as well as goods. It is estimated that there were 284 million cash back transactions in 2006.
- b) Credit cards. Credit cards issued by banks and building societies generally have a credit facility with a pre-set limit ranging from GBP 200 (€293) upwards. Customers' credit card accounts are separate from their bank accounts, which may well be with another bank or building society, and cardholders receive a statement of the outstanding balance on their credit card account on a regular basis (usually monthly). Cardholders may either pay off the full amount of the balance, or they may choose to pay a portion (usually a minimum of 5%) of the total amount outstanding.

Recent developments

Faster payments. In 2005 the UK payments industry and user representative groups considered the case for shortening clearing cycles for BACS payments. This work took place under the aegis of the Payment Systems Task Force, led by the OFT. The work of the Task Force identified a clear demand for a faster payments service offering same or next-day clearing for telephone and internet banking payments. In response to the Task Force's findings, the payments industry committed itself to creating a new, faster payments service, for delivery by the end of 2007. This service is being developed on the basis of a near real-time service for users, with multiple settlement cycles occurring during the course of a processing day.

Remote banking. Remote banking services enable customers to view their account balances and recent transactions, move money between their accounts, pay bills, set up, amend or cancel standing orders and regular payments, and request and amend overdraft facilities. Use of remote banking services has increased rapidly. In 2005 over half of the adults in the United Kingdom (around 25 million people) used an internet or telephone banking service. Internet banking has increased most rapidly: use of internet banking

services was eight times higher in 2005 than in 1999. Similar remote banking services are being developed using the WAP (Wireless Application Protocol) technology within modern mobile phones, which would enable banks to offer wireless, mobile phonebased, personal banking facilities.

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