

VI PAYMENT SYSTEMS

■ Settlement System of Interbank Payments

In the second and third quarter of 2004, an average of 180 payments per day were settled in the **Real Time Gross Settlement System (RTGS)** (see Figure 6.1). The number of payments increased 53% year-on-year. The main reason behind the rise in RTGS payments were customer payments (77% growth), which accounted for 76% of all real-time payments.

The average RTGS turnover in the given period was 2.2 billion kroons per day. Most of the turnover (62%) accounted for payments related to the collateral account of the designated time net settlement system. The turnover of payments settled through RTGS grew by 4% year-on-year.

The average value of customer payments settled through RTGS in the second and third quarter of 2004 stood at 2.1 million kroons, having reduced by 31% in a year.

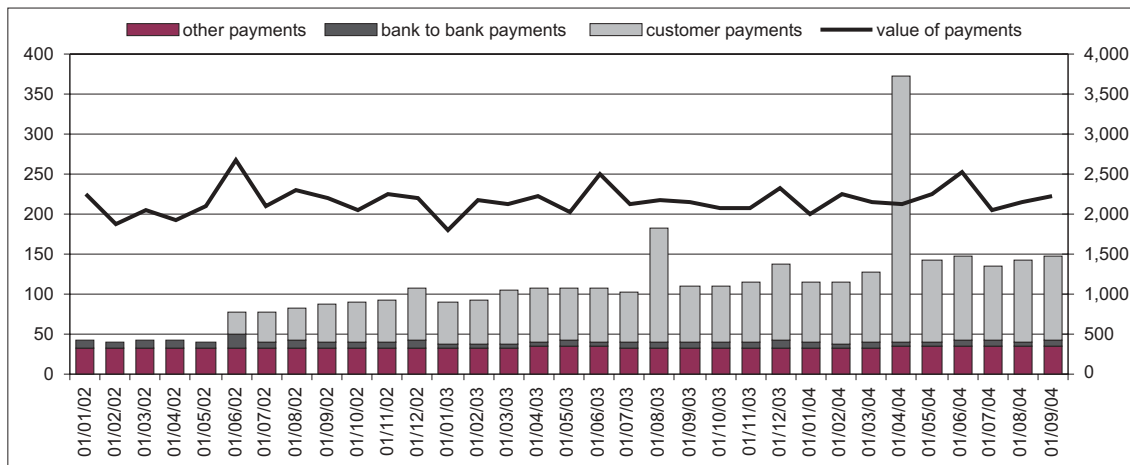


Figure 6.1. Daily volume (left scale) and value (EEK m; right scale) of payments processed in the RTGS System (monthly average)

In the Designated Time Net Settlement System (DNS) an average of 63,000 payments a day were settled in the second and third quarter of 2004 (see Figure 6.2). The number of payments diminished by 1%,

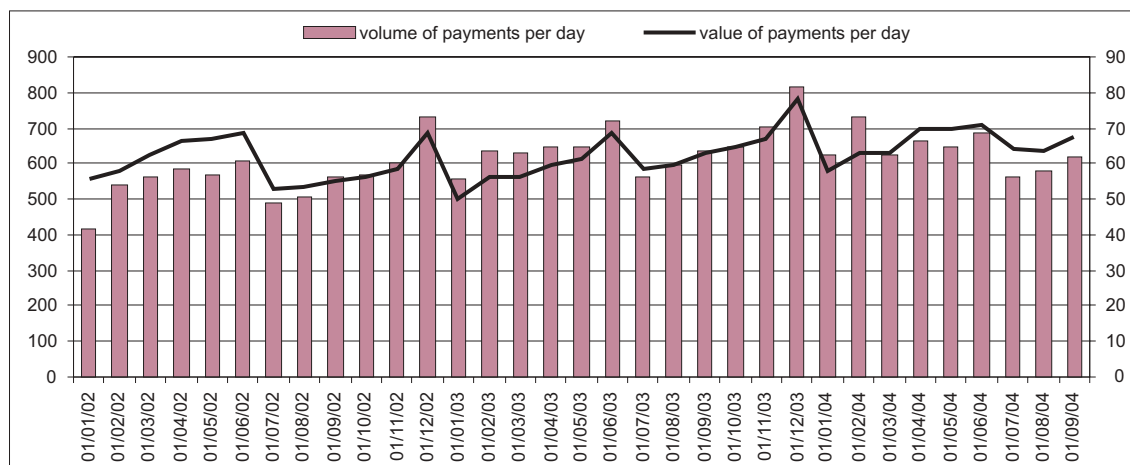


Figure 6.2. Daily volume (thousands; right scale) and value (EEK m; left scale) of payments processed in the DNS System (monthly average)

year-on-year. The average daily sum settled through DNS in the given period was 676 million kroons. DNS turnover increased 10% year-on-year. The average value of a DNS payment in the given period was 10,800 kroons, having grown 11% in a year.

■ Payment Intermediation

Payment Environment

In 2004 there were no major changes in the payment environment and thus the trends of previous years continued.

Similarly to earlier periods, the position of credit institutions operating in Estonia is strengthening in the daily lives of individuals. **Receipt of income as well as making payments through credit institutions has increased** (see Figure 6.3). The use of cash has reached a level where the share of those receiving income in cash and those who prefer to continue receiving cash income is levelling (14% of wage earners received pay in cash in 2004 and 11% of those would prefer such a method also in the future¹). Income receipt and payments are related. A person whose wages are paid into an account most likely also makes payments using non-cash payment methods.

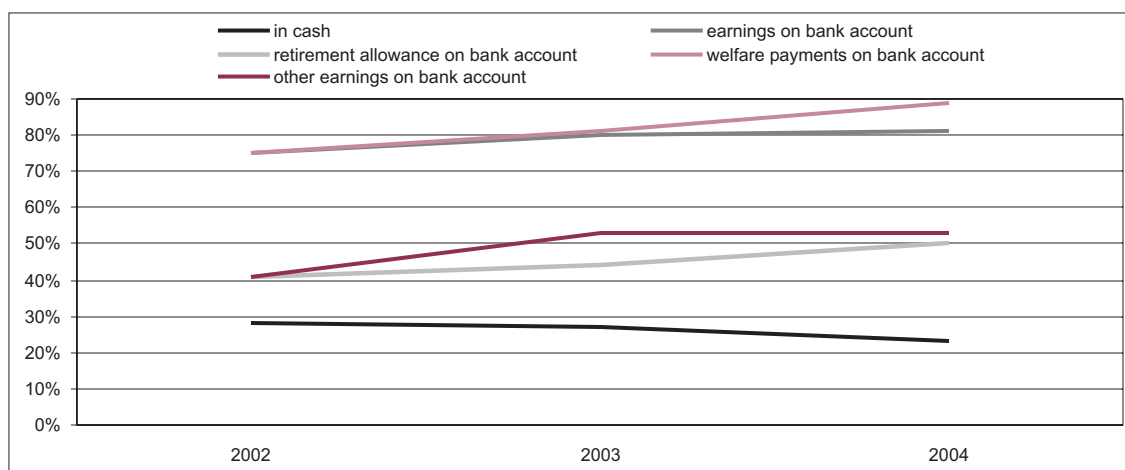


Figure 6.3. Means of earnings between 2002 and 2004

Source: TNS Emor

The payment environment in Estonia is mainly electronic and the number of less efficient channels, such as bank offices and post offices, has remained at the same level for the last four years or has even dropped slightly² (see Figure 6.4). It is safe to conclude that the network of bank offices and electronic payment channels³ developed for satisfactory servicing of bank customers has reached the level that meets the market demand.

As regards electronic payment channels, largest growth occurred in the number of subscribers for the **Internet banking** service, i.e. 11% (see Figure 6.4). The growth rate was slower compared to the previous two years when the number of subscribers increased by more than a third. The use of the Internet banking service for payment transactions depends on the level of computerisation and Internet connection availability. The growth in the number of **ATMs and points of sale accepting card payments** (4% and 3%, respectively) is related to the opening of new shopping and service centres.

¹ Research on payment habits and preferences by TNS Emor, September 2004.

² According to the data of Eesti Post.

³ Internet banking, ATMs and points of sale.

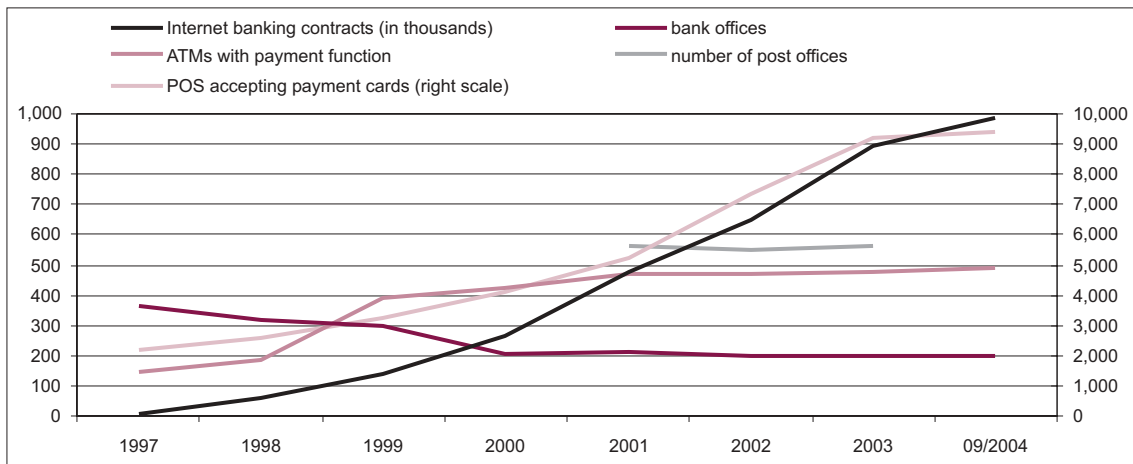


Figure 6.4. Bank channels for retail payments in Estonia (end-of-period figures)

1,525 points of sale accept **mobile phone payments** for goods and services; this number increased by 205 from May through September 2004. In Estonia there are 52,000 customers using the mobile payment service⁴. Individuals make up to 4,500 mobile payments per month between themselves, and the turnover of their transactions stands at 1.2 million kroons. Individuals make less active use of mobile phones when paying to merchants; hence the average number of such payments is 600 transactions per month⁵.

As for the number of ATMs (per million inhabitants), the leading countries among the new Member States are Slovenia (551) and Cyprus (494) while Estonia (468) ranks third (see Figure 6.5). The respective aggregate euro area indicators are higher than those of the new member states.

Adjusted for the nominal GDP per capita and based on the respective Estonian indicator, the sum of money withdrawn from ATMs in the euro area and Slovenia is 25 euros on average, in Cyprus 34 euros and in Estonia 51 euros; in Latvia the respective figure stands at 103 euros and in Lithuania at 80 euros. In the euro area, there are on average 20 ATM withdrawals per person per year, whereas the respective indicators in Slovenia are 26, in Cyprus 8 and in Estonia 34.

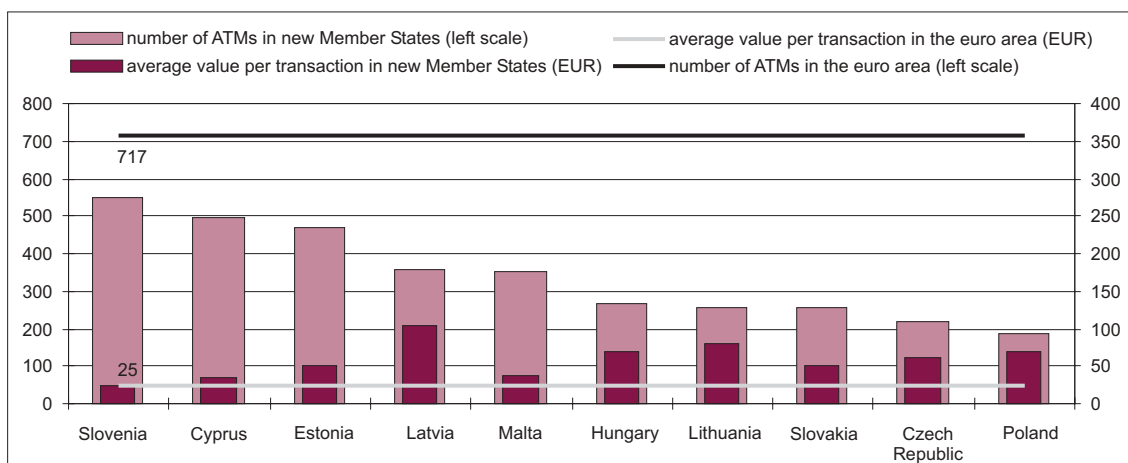


Figure 6.5. Number of ATMs and average value per transaction per million inhabitants in the new Member States and the euro area (adjusted with nominal GDP per capita; EUR) at the end of 2002

Source: ECB

⁴ The leading mobile communications operator EMT has the total of 349,600 contractual clients, which indicates that there is room for growth in the mobile payments service sector.

⁵ According to BNS, 14 October 2004.

The number of points of sale accepting payment cards per million inhabitants in Estonia (5,395) is smaller than the respective average indicator in the new Member States (6,851) as well as in the euro area (13,320) (see Figure 6.6).

When analysing the number of points of sale as well as the average value of card payments a relationship with tourism as well as with people's payment habits can be noted. For example, Malta and Cyprus are countries that make a living out of tourism and have multiple accommodation facilities, which is also reflected in the great number of points of sale in these countries (see Figure 6.6). It is customary to use a payment card to settle the hotel bill. Adjusted for the nominal GDP per capita and based on the respective Estonian indicator, the average value of a card transaction in the euro area is 13 euros. In Hungary, where card payment facilities are scarce and such transactions are made infrequently but when paying for expensive goods and services, the respective indicator is 70 euros. The average number of card transactions per resident is 13 in the new Member States and 25 in Estonia. In Estonia payment cards are used in order to pay for low-value purchases – the average value of a transaction is 21 euros, while the average in the new Member States is 31 euros⁶.

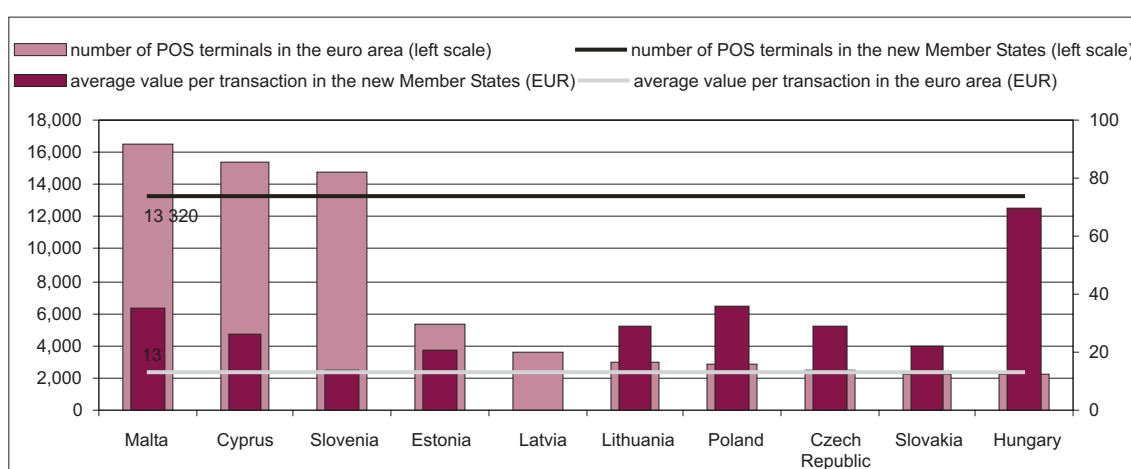


Figure 6.6. Number of POS per million inhabitants and average value per card payment in the new Member States and the euro area (adjusted with nominal GDP per capita; EUR) at the end of 2002

Source: ECB

Payments via Credit Institutions

Estonia is famed for the extensive use of electronic payment methods and in the given period no significant changes occurred in people's payment habits (see Figure 6.7). Consistently fewer payments were made through the telebank and by paper-based credit orders in bank offices. One of the reasons behind the decline in the number of telebank credit orders is the higher price compared to that of the Internet banking services⁷, which is why small companies that used to be telebank clients have given it up and joined a more cheaply priced Internet bank. At the end of September 2004, credit institutions had 988,000 Internet banking contracts with customers. The popularity of direct debits is increasing and further development thereof depends on the establishment of a common direct debit based functioning scheme between credit institutions.

As far as non-cash payment methods are concerned, Estonia does not really resemble any other new Member State⁸. In Hungary, for example, the relative importance of direct debit is bigger than in Estonia

⁶ Due to different data-collecting methods the data gathered by the European Central Bank may in some parts be incomparable.

⁷ One-off telebanking subscription is a fee-charging service and there is a monthly fee, which is calculated per account. Charges for credit orders are based on the price list. Subscription to the Internet bank and account maintenance is free of charge while charges for credit orders are based on the price list.

⁸ The structure of non-cash payment methods in Estonia resembles that of Finland and Sweden where mainly payment cards and credit orders are used (Financial Stability Review, May 2004).

(22% in Hungary and 8% in Estonia) and that of card payments two times smaller (22% in Hungary and 44% in Estonia; see Figure 6.8). We differ from Slovenia by the fact that cheques are not used in Estonia. In the euro area the structure of non-cash payment methods is the following: credit orders 28%, direct debits 25%, card payments 32%, and cheques 14%.

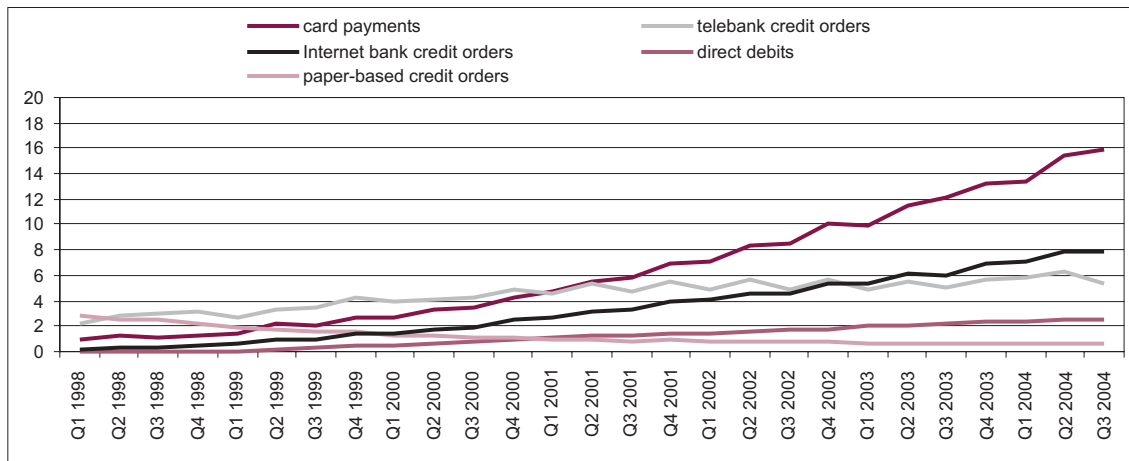


Figure 6.7. Widely used payment instruments in Estonia by number of payments (millions)

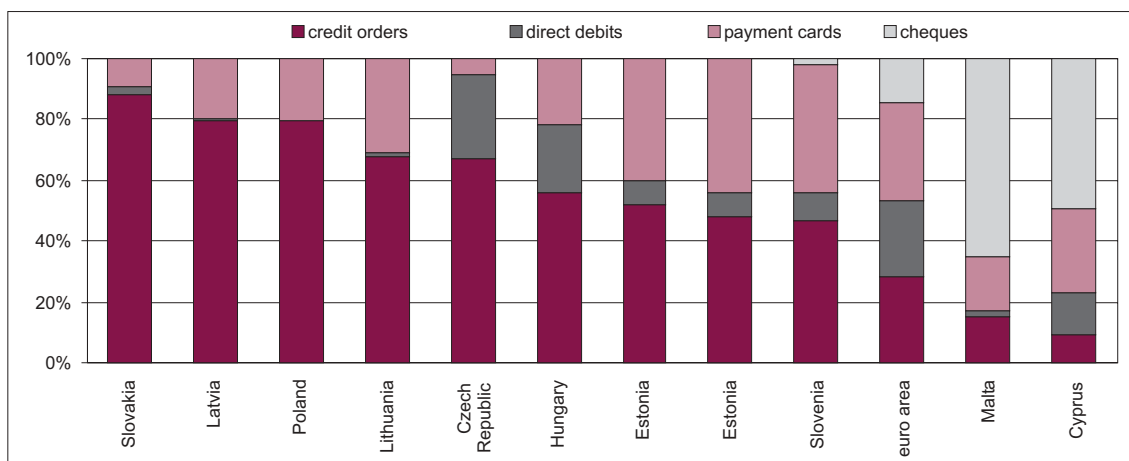


Figure 6.8. Share of non-cash payment instruments in the total number of non-cash payments in the new Member States and the euro area at the end of 2002

Source: ECB

Use of Payment Cards

By the end of the third quarter the credit institutions operating in Estonia had issued 1.3 million payment cards (1.2 million in March). The share of passive payment cards grew consistently, accounting for 23% of the cards issued. In the second as well as the third quarter about 20,000 debit cards and 20,000 credit cards were issued per quarter. During that period the share of credit cards grew from 17% to 19%. Every fifth resident on average held a credit card while every tenth made active use of it.

The number of actively used payment cards per 1,000 Estonian residents was 744; 643 of these were debit and 101 credit cards (see Figure 6.9). In 2004 credit cards were still issued at a stable rate. Compared to September 2003, the number of credit cards increased by 43%; meanwhile the number of actively used credit cards increased by 11%.

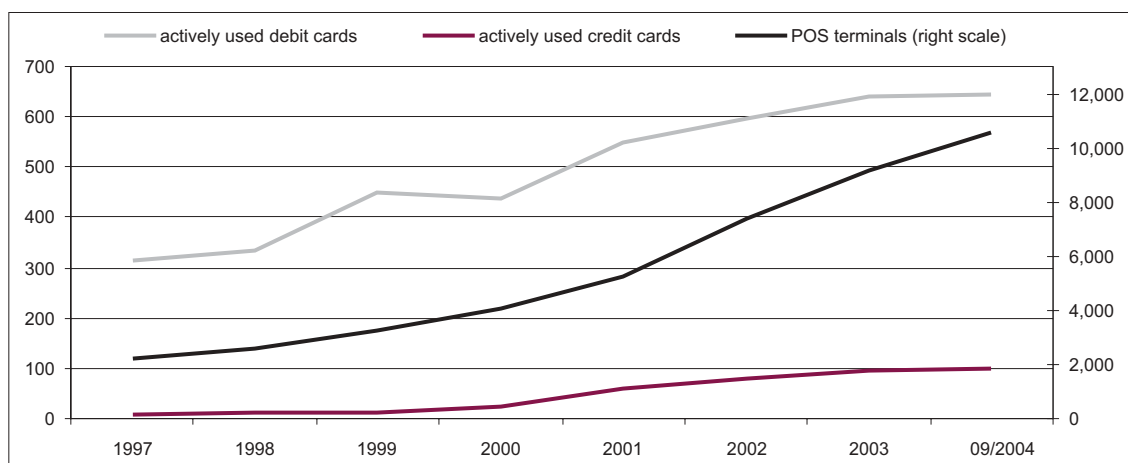


Figure 6.9. Number of payment cards in Estonia (left scale) per thousand inhabitants and number of POS terminals (right scale) at the end of year

BACKGROUND INFORMATION

CHARGES FOR PAYMENTS IN EURO WITHIN THE EUROPEAN UNION

In the European Union, charges for the payments in euro made within the EU are regulated by the regulation adopted in 2001⁹, which establishes rules for euro-denominated payments up to EUR 12,500. According to the regulation, charges for domestic and cross-border euro-denominated transactions within the EU must be equal. It has been planned to extend the scope of the regulation to euro-denominated payments up to EUR 50,000 with effect from 1 January 2006. The regulation also applies to cross-border payments made in the currencies of the Member States that have notified the Commission of their decision to extend the scope of regulation to their currencies. Such a currency is, for example, the Swedish krona.

The regulation is only applied to such cross-border payments within the EU that satisfy the following requirements:

- The sum of payment is up to EUR 12,500;
- The paying bank and the beneficiary's bank are both located in a European Union Member State;
- On the credit order, the beneficiary can be identified by the International Bank Account Number (IBAN) and by the Bank Identifier Code (BIC) of the beneficiary's bank;
- The IBAN of the beneficiary's account and the BIC of the beneficiary's bank indicate one and the same Member State;
- The payer and the beneficiary cover the costs of the money transfer;
- The payment is equipped with an explanation.

If at least one of the requirements above has not been met, the payment does not fall into the category to which the regulation is applied and in that case the charge for the payment may differ from the charge for euro-denominated domestic payments.

⁹ Regulation No 2560/2001 of the European Parliament and of the Council as of 19 December 2001 on cross-border payments in euro.

Results of the Enactment of the Regulation in Estonia

By the moment of accession to the European Union the commercial banks operating in Estonia had unified their charges for euro-denominated domestic and cross-border payments within the EU. Besides, in major commercial banks the charge for payments subject to that regulation is considerably smaller than the **charge for cross-border payments** in any other currencies. For example, the charge for a euro-denominated payment inside the EU in the three largest commercial banks is 30 kroons.

As of the moment of accession to the EU charges for euro-denominated domestic and cross-border payments inside the EU became cheaper for the originator of the payment. The beneficiary of the payment must upon receipt of the payment accept a charge based on the bank's price list in the range of 85 to 100 kroons.

DIRECT DEBITS

Direct Debit Schemes in Estonia

As a result of promoting electronic payment methods in Estonia in recent years, bank customers have started to make more extensive use of direct debits¹⁰. The main reasons behind the rapidly growing popularity of direct debits (see Figure 6.7) are **convenience and simplicity** of using these. Besides, direct debits are free of charge for the payer, while the payee gets an opportunity to manage cash flows more accurately and simplify payment information processing.

Currently there are two different direct debit schemes in use in Estonia: the **intra**bank direct debit scheme and the **inter**bank direct debit scheme (see Figures 6.10 and 6.11).

Intrabank direct debit scheme

1. A contract is made between the payer, the payee and the payer's/payee's bank.
2. The payee sends a payment claim to the payer's/payee's bank and an invoice to the payer.
3. The payer's/payee's bank debits the account of the payer and credits the account of the payee.
4. The payer's/payee's bank forwards debiting results to the payee.

Interbank direct debit scheme

1. A contract is made between the payer, the payee and the payer's bank.
2. The payee sends a payment claim to the payer's bank and an invoice to the payer.
3. The payer's bank debits the account of the payer.
4. The payer's bank sends a credit order to the payee's bank to credit the account of the payee.
5. The payee's bank credits the account of the payee.
6. The payer's bank forwards debiting results to the payee.

Besides the schemes described above, an additional option is used both with interbank and intra

¹⁰ Direct debit is a three-party agreement under which the payer gives the payer's bank the right to debit money from the payer's account to the extent of the sum indicated on the invoice submitted by the payee.

¹¹ Payment information includes payment claim and/or debiting results.

In conclusion it can be said that there is **no single functioning scheme** in the direct debit services market.

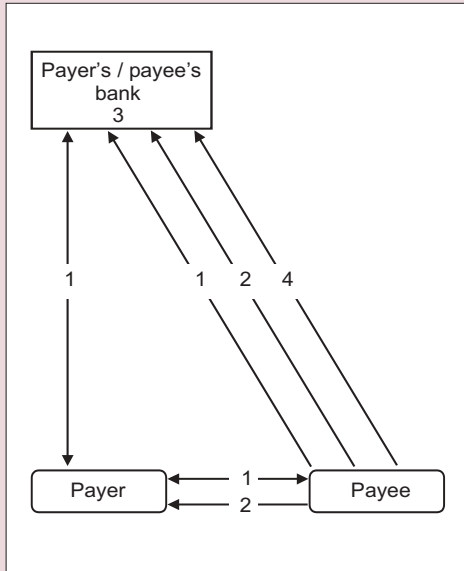


Figure 6.10. Intra-bank direct debit scheme

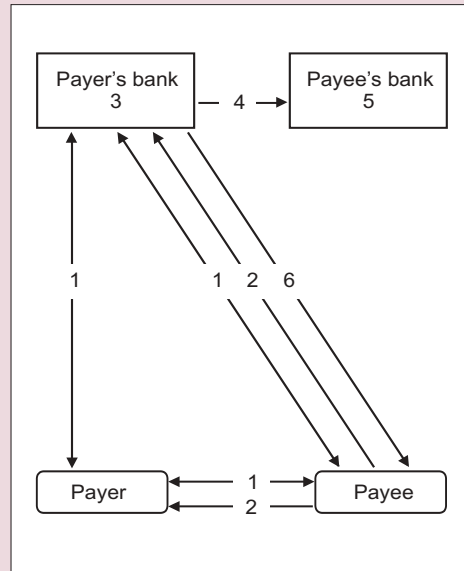


Figure 6.11. Interbank direct debit scheme