

V PAYMENT AND SETTLEMENT SYSTEMS

Interbank payment and settlement system

Eesti Pank is managing three interbank settlement systems: the Settlement System of Ordinary Payments (ESTA) for domestic payments, the Real-Time Gross Settlement System (EP RTGS) and TARGET2-Eesti for pan-European euro payments.

The most significant change in the settlement systems of Eesti Pank in the past six months was the implementation of **TARGET2-Eesti** on May 19, 2008. With the introduction of the new and more efficient cross-border system the activity of its predecessor, the TARGET system, was terminated.

In the first six months of TARGET2-Eesti, banks operating in Estonia¹ have used it quite modestly: about 15 payments are processed daily with the average value of 12.3 million euros (see Figure 1). Nearly half of them (49%) are pan-European euro payments initiated by customers.

Although the introduction of TARGET2 expanded the opportunities of cross-border settlements, the banks operating in Estonia have not bought into it yet and the use of the alternative channel for express payments has not gained momentum. Payments received via TARGET2, however, exceed those initiated by over ten times. Estonian banks receive an average of 160 euro payments every day with the average value of 12.3 million euros. As major credit institutions started to use TARGET2-Eesti more actively at the end of September, the value of transactions has surged considerably since then.

The number and turnover of payments processed in the **EP RTGS** has diminished with the year: the number of payments has dropped by 19% and the turnover by 4% (see Figure 2). On average, 277 payments with a value of 5 billion kroons per day were settled via the EP RTGS in the second and third quarters of 2008. The 171 payments initiated by bank customers comprised 60% of the total number of payments.

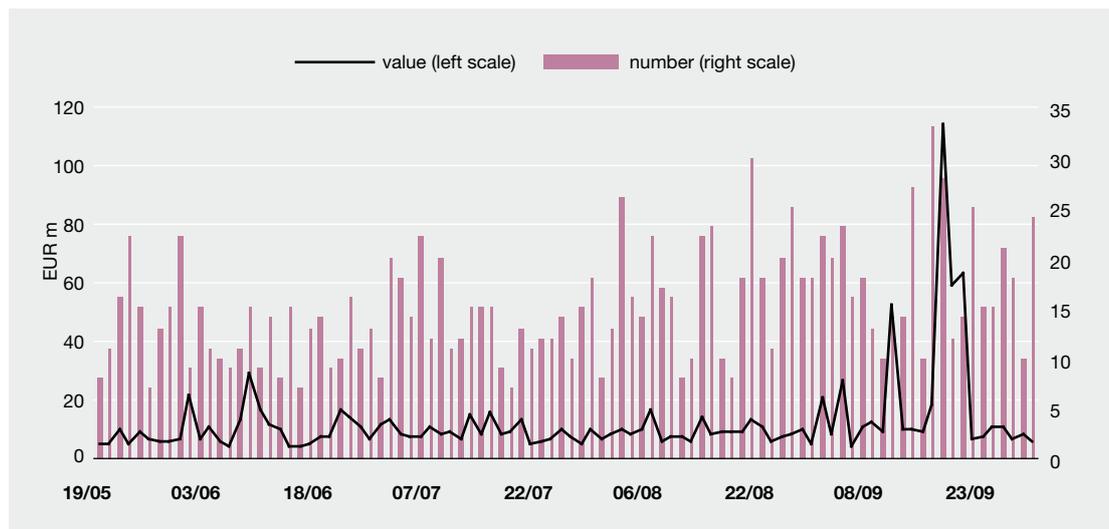


Figure 1. Number of payments processed in TARGET2-Eesti per day and their daily value

¹ The members of TARGET2 are Eesti Pank, Swedbank (former Hansapank), SEB Pank, Sampo Pank, Nordea Bank Estonia, Eesti Krediidipank, Marfin Bank and Tallinn Business Bank.

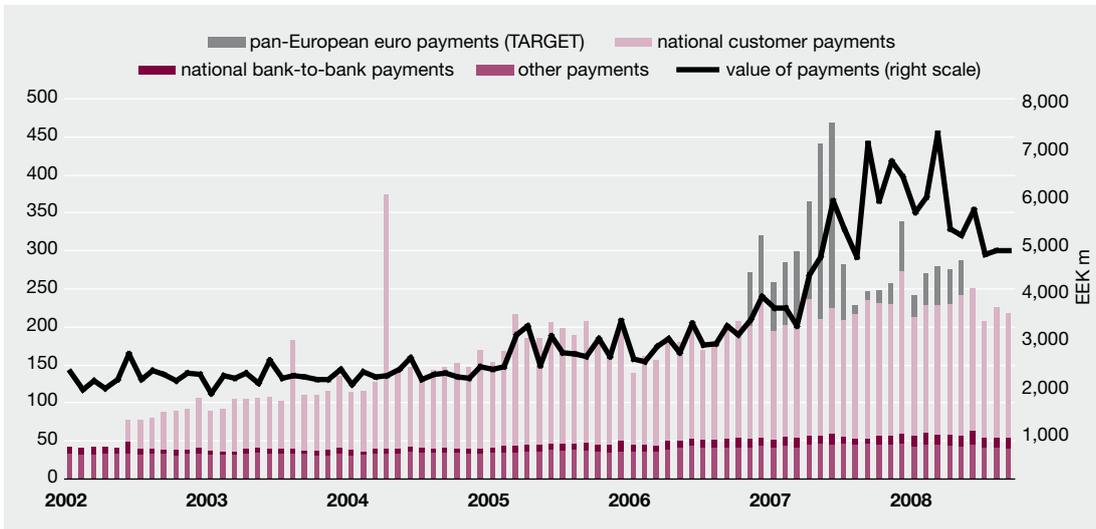


Figure 2. Average number of payments processed in the EP RTGS per day and their average daily value per month

The main reason for the decrease in the number of payments lies in the structural change of the EP RTGS – the transfer of pan-European euro payments from the EP RTGS to TARGET2-Eesti.

As more and more large payments are settled through the ESTA rather than through the EP RTGS, the average daily turnover of the ESTA is also growing. With the year the average turnover increased by 23% and amounted to 1.8 billion kroons per day. The average value of payments processed in the ESTA has increased to 19,000 kroons.

In the second and third quarters of 2008, the **ESTA processed 97,000 payments per day**, which is 10% more than a year ago (see Figure 3).

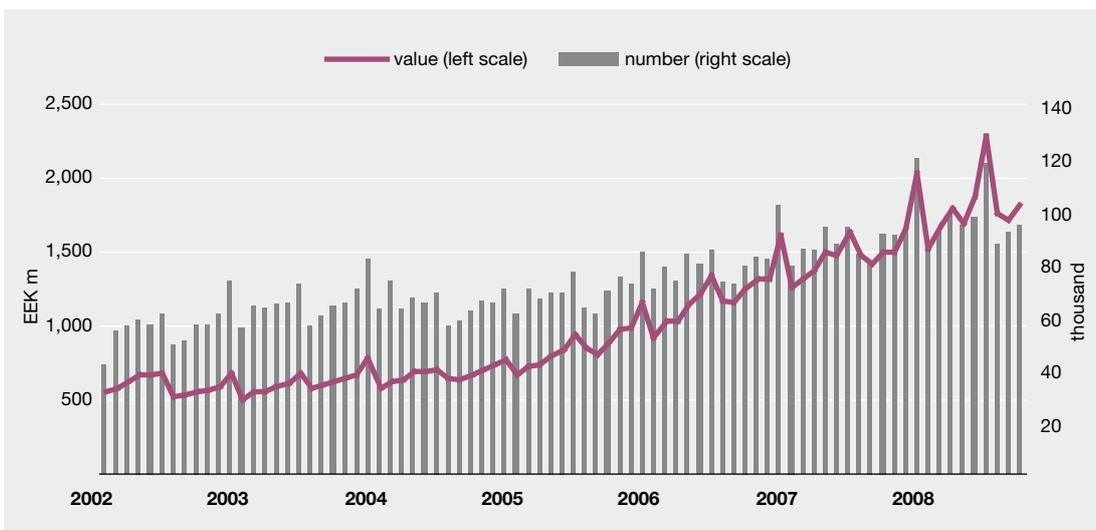


Figure 3. Average number of payments processed per day in the ESTA and their average daily value per month

Payment instruments

Payment environment

The latest survey on financial behaviour, conducted by TNS Emor every autumn, confirms further growth in the use of electronic payment channels. The habits of different population groups still remain different; the use of bank channels is popular with the young and the wealthier. A considerable number of the elderly and people with lower incomes still prefer to make payments in cash or through a post office. The most popular payment instruments are still standing orders and direct debits but also Internet bank transfers.

The popularity of payment cards has surged even further over the last year, especially in the segments where it was above average also in earlier periods, namely among the inhabitants of Tallinn and the young. Most card owners use a debit card to pay for goods and services. Although the share of credit card users has climbed, it still comprises less than a tenth of all payment card users. People with lower incomes

and pensioners still prefer paying in cash.

The payment habits and preferences are strongly related to how incomes are received. The survey results confirmed that, as in earlier years, the number of people who receive their incomes to bank accounts has risen (89% of wages and state allowances are transferred to bank accounts). The share of those who receive incomes in cash has declined to 19% (26% in 2007). These are mostly people whose incomes remain considerably below Estonia's average (under 7,000 kroons per month) and pensioners. However, also the retired have started to prefer the receipt of incomes to bank accounts.

The number of POS accepting card payments (16,001) and ATMs (1,002) has grown over the last year, but mainly owing to the increase in cash dispensers (see Figure 4). Year-on-year, the number of payment dispensers dropped by 25% and by the end of September, only 75 had remained in operation. Furthermore, the number of POS accepting mobile phone payments has plummeted from 2,152 to 796 POS.

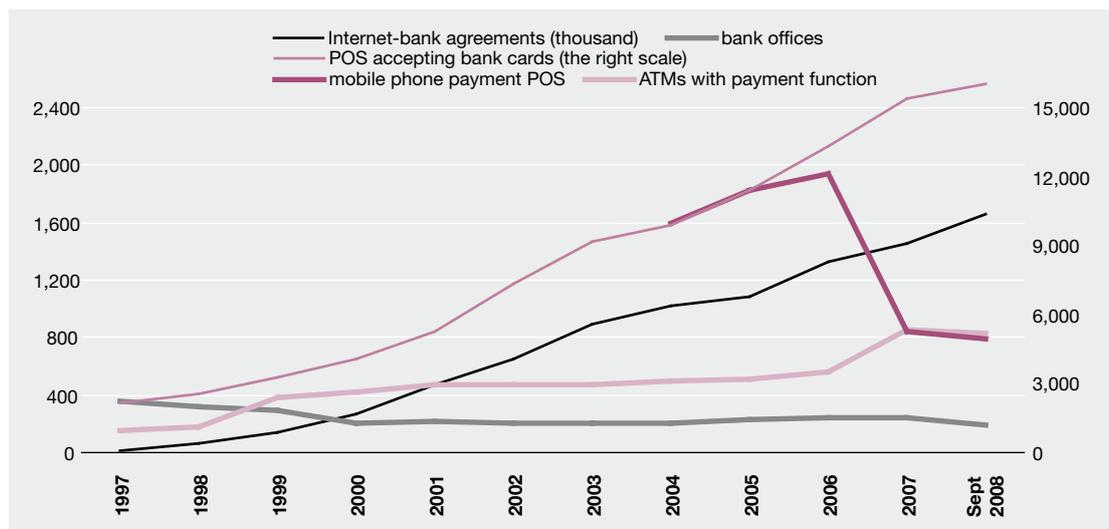


Figure 4. Channels for retail payments in Estonia (end-of-period figures)

Payments intermediated by credit institutions

Similar to previous years, the most popular non-cash payment instruments are card payments and credit orders (see Figure 5). In September 2008 they accounted for 56% and 37% of all non-cash payments, respectively. The most popular channels for credit orders were the Internet bank and telebank, which comprised around 88% of total credit order transactions. Also standing orders have gained more ground, though amounting to only 3.2% of all non-cash payments.

The total turnover of non-cash payments has grown by about 25% over the past year. The turnover of standing orders and direct debits has increased the most – by 120% and 84% – but their share in the total turnover is still small. The situation of card payments is similar, being the most popular in terms of the number of transactions, but boasting a very low turnover that

comprises less than 1% of the total. The majority of the turnover of non-cash payments is produced by paper-based credit orders and payments via the Internet bank and telebank (13.3%, 12.3% and 23.6%, respectively).

Use of payment cards

The number of payment cards issued by credit institutions has grown by approximately 6% over the last year. A total of 1.8 million cards had been issued as at the end of September 2008, most of them debit cards (75%). The share of active debit and credit cards has remained virtually unchanged compared to previous years (80% and 56%, respectively).

Instalment cards and revolving credit cards are the most widespread among credit cards (see Figure 6). The share of charge cards, on the other hand, has been steadily decreasing. By the end of September 2008 it had subsided to 9.6%.

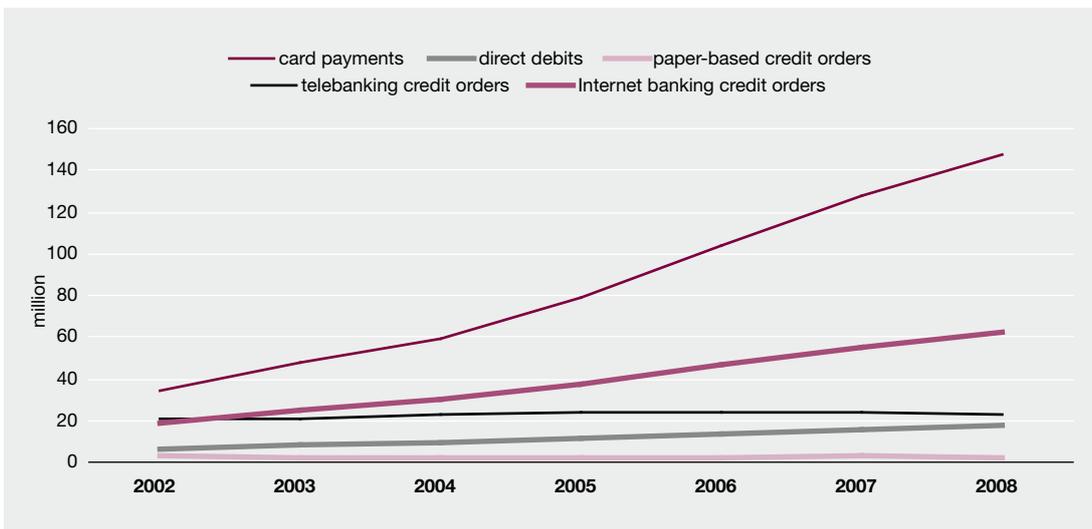


Figure 5. Most common payment instruments in Estonia

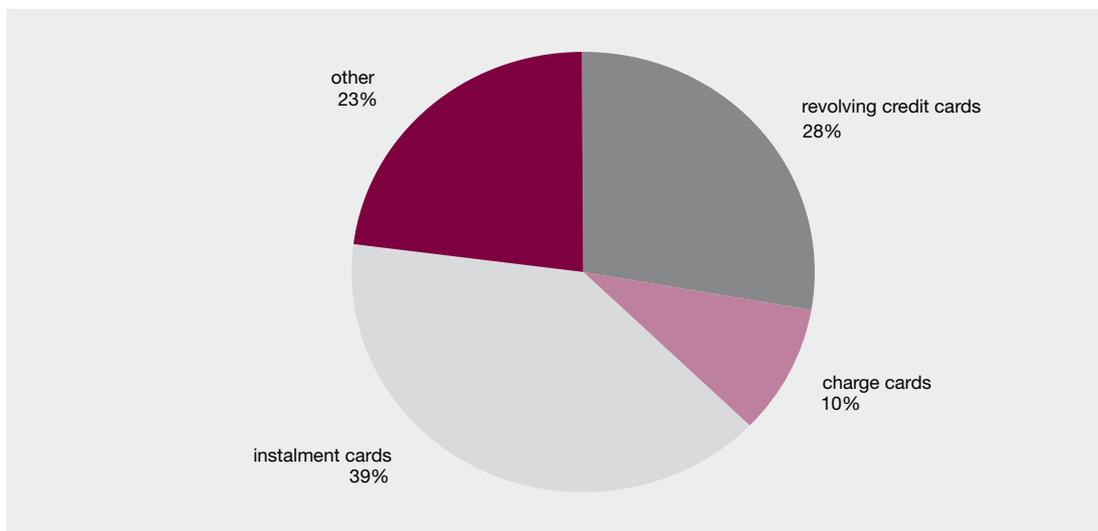


Figure 6. Share of credit cards in Estonia (as at September 2008)

Overseer's assessment of payment and settlement systems

There were no such incidents in the operation of the Estonian payment and settlement systems in the past six months that would have threatened the stability of Estonia's financial sector. The value of transactions processed in the settlement systems increased as a result of the global financial crisis. However, thanks to sufficient buffers the settlement systems experienced no failures that would have entailed the materialisation of the systemic risk in the settlement systems or the financial sector in general.

The functionality and principles of the systemically important settlement systems operating in Estonia – TARGET2-Eesti, the EP RTGS and the ESTA – have been structured so as to minimise the materialisation of potential risks. Nevertheless, some failures occurred in the last six

months. The EP RTGS survived one serious malfunction² resulting from a communications interruption, which suspended the system's operation for 1 hour and 30 minutes (see Figure 7). The error was localised and repaired, and the business continuity procedure was applied to settle one express payment. The availability of the EP RTGS was 100% in the second quarter and 99.78% in the third quarter.

The ESTA also experienced one communications interruption, which involved all system participants and lasted for 1 hour and 15 minutes. The availability of the ESTA was 99.83% in the second quarter and 100% in the third quarter.

The cross-border payment system TARGET2 also encountered some malfunctions, but these did not influence TARGET2-Eesti. The availability of TARGET2-Eesti remained at 100% throughout the period under analysis. The malfunctions of the settlement systems did not affect financial stability.

² According to the risk management procedures, a failure is considered serious if the incident involves several system participants or if it entails the application of business continuity or a decrease in the operability of settlement systems.

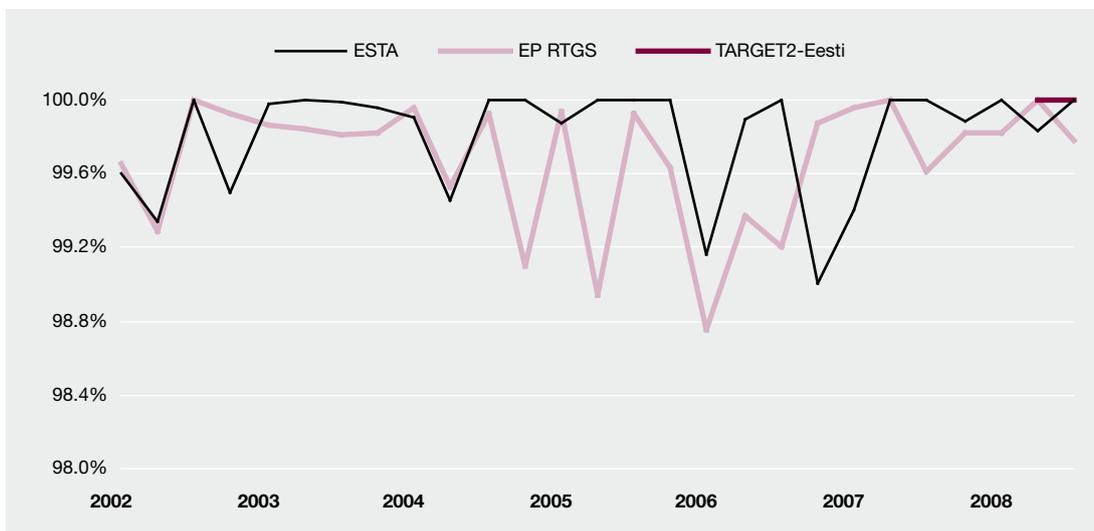


Figure 7. Availability of interbank payment and settlement systems

IMPACT OF FINANCIAL CRISIS ON FINANCIAL SECTOR'S BEHAVIOUR WITHIN THE SETTLEMENT SYSTEM OF EESTI PANK

The influence of the financial crisis on the interbank payment and settlement systems could be perceived from mid-September to mid-October. Namely, the number of interbank settlements soared during that period. This included a nearly 8 billion-kroon cash flow between the major credit institutions operating in Estonia. The credit institutions covered their position changes by making purchase and sale transactions of the Estonian kroon against the euro with the central bank. In general, credit institutions have encountered no liquidity problems. One small bank only survived a malfunction in the ordinary payment system at the beginning of the settlement day owing to an insufficient settlement buffer.

At the beginning of October, the **cash**

demand for the Estonian kroon slightly exceeded the customary volume, surging by 7% within the two first weeks, but subsiding by the end of the month. This may primarily be attributed to the preventive measures of banks to hold more cash than usual.

Credit institutions have not faced problems with meeting the **reserve requirement** – all banks complied with the requirement at the end of both September and October. Owing to a deviation in the euro area interest rates from their reasoned levels because of the financial crisis³, in mid-October some credit institutions fulfilled the reserve requirement only as kroon deposits held with Eesti Pank, temporarily eliminating their high-quality securities held for meeting the reserve requirement base.

³ Due to tensions in the international money and capital markets, it became more profitable for some banks to deposit their entire required reserve in Eesti Pank, rather than investing it in other widespread debt instruments, such as government bonds. Capital investment in other instruments is generally more profitable, but due to the crisis, depositing capital in central banks became safer and more profitable.