

Eesti Pank  
Bank of Estonia

# Eesti Pank Annual Report 2008

2009

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# CONTENTS

<b>CONTENTS</b> .....	3
<b>MAIN FEATURES AND FUNCTIONS OF EESTI PANK</b> .....	9
<b>MAIN FEATURES AND FUNCTIONS OF EESTI PANK</b> .....	9
Foreword by Governor of Eesti Pank.....	12
<b>ACCOUNTABILITY</b> .....	16
Legal framework for accountability and compulsory publications of the central bank .....	16
Accountability vis-à-vis the Riigikogu .....	16
Regular reporting on economic policy views and publication of economic data .....	17
<b>STRATEGIC OBJECTIVES FOR PERFORMING THE MAIN FUNCTIONS OF EESTI PANK</b> .....	20
I Monetary policy.....	20
II. Financial stability.....	20
III Meeting cash demand .....	20
IV. Joining the euro area .....	20
V. Organisation and cooperation.....	21
<b>90 AASTAT EESTI PANKA</b> .....	24
Algu 90 aastat tagasi.....	24
Iseseisva Eesti riigi esimesed maksevahendid, esimene oma raha.....	24
Ettevalmistused rahareformiks – raamistiku uuendamine .....	25
Majanduskriis .....	25
Sõja- ja okupatsiooniperiood .....	26
Eesti Panga taasasutamine, krooni uus tulek .....	27
Nelja mehe ettepanekust edasi... ..	27
Supervisory Board and Executive Board of Eesti Pank in 1919–2009 .....	28
Uue Eesti krooni kattevara .....	30
1992. aasta rahareform .....	31
Eesti rahasüsteemi põhialused ja areng taasiseseisvuse ajal.....	31
Eesti Panga käsutuses olevad rahapoliitika instrumendid .....	32
<b>KRONOLOOGIA: RAHAPOLIITILISE RAAMISTIKU ARENG TAASISEISVUSPERIOODIL</b> .....	34
<b>KRONOLOOGIA: PANGANDUSE ÕIGUSRAAMISTIK JA REGULATSIOON</b> .....	44
<b>MONETARY POLICY</b> .....	56
ECONOMIC ANALYSIS, FORECAST AND RESEARCH AS THE BASIS FOR MONETARY AND FINANCIAL POLICY-MAKING .....	57
Monitoring.....	57
Economic reviews .....	57
Economic forecast .....	57
Economic research.....	58
<b>RESERVE MANAGEMENT</b> .....	59
Structure of foreign exchange reserves .....	59
Investment process.....	59
Results and determinants of investment in 2008 .....	60
Changes in the benchmark portfolio in 2008.....	60
Asset management services provided to the public sector .....	61

<b>ENSURING FINANCIAL STABILITY</b> .....	62
Financial sector analysis and financial stability assessment .....	62
Measures adopted to ensure financial stability .....	63
Amendments to EU legislation on banking and payment intermediation .....	64
Improvement of securities market .....	65
infrastructures .....	65
Payment and settlement systems oversight .....	65
<b>DEVELOPMENTS IN STATISTICS</b> .....	67
One of the key responsibilities of Eesti Pank is to compile Estonia's balance of payments statistics and monetary and financial statistics. ....	67
Banking and other financial statistics .....	67
Balance of payments statistics .....	68
General economic statistics.....	69
<b>PAYMENT AND SETTLEMENT SYSTEMS, AND CURRENCY IN CIRCULATION</b> .....	70
Development of the payment and settlement environment .....	70
<b>MEETING THE CASH DEMAND</b> .....	73
Banknotes and coins in circulation and their structure.....	73
Expert analysis and handling of cash .....	74
Preparation of new banknotes and coins .....	75
<b>ORGANISATION AND COOPERATION</b> .....	76
<b>INTERNATIONAL COOPERATION</b> .....	76
Cooperation with European Union institutions.....	77
Role of Eesti Pank after the adoption of the euro .....	80
Cooperation with the International Monetary Fund .....	81
Cooperation with the Bank for International Settlements .....	84
Cooperation with rating agencies.....	84
<b>INTERNAL COOPERATION</b> .....	84
<b>PUBLIC RELATIONS AND COMMUNICATION</b> .....	86
Principles of informing the public .....	86
Media relations and public appearances .....	86
Celebration of the 90th anniversary of the Republic of Estonia .....	87
Birth of the Republic of Estonia and busts of government members.....	88
Eesti Pank Museum .....	88
<b>GOVERNANCE, ORGANISATION AND HUMAN RESOURCES POLICY</b> .....	90
Governing and decision-making bodies of Eesti Pank .....	90
DEVELOPMENT OF THE MANAGEMENT SYSTEM AND WORK ORGANI- SATION OF EESTI PANK IN 2008 .....	92
Organisational values and value-based management .....	92
Eesti Pank's human resources policy .....	95

<b>ANNUAL ACCOUNTS OF EESTI PANK FOR THE FINANCIAL YEAR ENDED</b> .....	100
<b>31 DECEMBER 2008</b> .....	100
ITEM 17 – PROVISIONS .....	115
ITEM 20 – NET INTEREST INCOME.....	116
<b>GLOBAL ECONOMY IN 2008</b> .....	126
UNITED STATES AND JAPAN .....	127
EURO AREA.....	128
NON-FINANCIAL SECTOR .....	129
Monetary policy environment .....	129
Domestic and external demand .....	129
<b>ESTONIA'S ECONOMY IN 2008</b> .....	129
Inflation .....	131
General government.....	133
SOVEREIGN RATING.....	134
FINANCIAL SECTOR .....	136
Banking sector .....	137
Securities market .....	140
Other financial intermediaries.....	142
KEY POINTS OF EESTI PANK'S ECONOMIC FORECASTS IN 2008.....	145
<b>DECREES OF THE GOVERNOR OF EESTI PANK IN 2008</b> .....	148
<b>DECISIONS ADOPTED BY THE SUPERVISORY BOARD OF EESTI PANK IN 2008</b> .....	149
<b>PUBLICATIONS OF EESTI PANK IN 2008</b> .....	150

G. Belli



Parliament Building



Traditional boat of Estonia



Estonia

## **Günther-Friedrich Reindorff**

1889-1974



The illustrations used on the insets of this report depict motifs from 1-kroon coins designed by Günther Reindorff. This is the first time that the general public has the opportunity to see these graphic works, stored in the archives so far.

Günther Reindorff is one of the most outstanding, well-known and loved Estonian graphic artists of the 20th century. Reindorff became famous in particular for his nature motifs, skilfully capturing different colour shades and mood. His Italian pencil drawings are highly valued, for instance the “Sibelius’ ‘Finlandia’”, which is one of his best works.

Günther Reindorff’s illustrations in the “Eesti rahva ennemuistsed jutud” by Friedrich Reinhold Kreutzwald (a collection of fairytales based on oral heritage, first published in the 19th century) are inseparable from the tales themselves.

As a graphic artist of the applied arts, Reindorff is valued for his designs of the Estonian kroon banknotes issued in 1928–1940.



—Ciklismudel. 1928/1940. 1940-1940

1928-1940





### **Main features and functions of Eesti Pank**

Eesti Pank is the central bank of the Republic of Estonia and a constitutional institution analysing and administering the Estonian monetary system, i.e. the monetary policy of Estonia. The aim of monetary policy is to ensure a low and stable price rise and the best conditions for economic growth. The central bank is also responsible for the security and stability of the financial system. It has the sole right to issue Estonian currency and bears responsibility for currency circulation along with maintaining the stability of the national currency.

**The mission of Eesti Pank is to guarantee price stability in Estonia.** The main tasks of Eesti Pank in carrying out its mission are as follows:

- Participating in the national economic policy through the implementation of an independent monetary policy, consultancy to the government, and international cooperation;
- Ensuring financial stability in Estonia by creating policies for the financial sector and operating well-functioning settlement systems;
- Arranging the circulation of cash in Estonia;
- Making preparations to become one of the policy-makers among other national central banks of the euro area who design the coordinated economic policy and single monetary policy in Europe.

G. Reinhardt



*Presidenti loss.*

11



Foreword  
by Governor  
of Eesti Pank

## **FOREWORD BY GOVERNOR OF EESTI PANK**

Year 2008 was the year of global financial crisis, which intensified in the second half of the year and drove the economic downturn also in Estonia. The economic environment has changed considerably compared to previous years and calls for changes in the behaviour of all economic agents.

The economic downturn has made inflationary pressures nearly non-existent. On the one hand, this has been caused by the decline of global commodity prices; on the other hand, the price fall is affected by domestic factors. Strong economic growth has been accompanied by the current account deficit stemming from large investment needs. At this point, both the households and businesses spend considerably less owing to their uncertainty about the future. Budget constraints will also be tighter because of the decrease in incomes, and the cautious behaviour of banks and investors restrains borrowing. All this has resulted in the current account deficit turning into a surplus.

Similar to many other countries, Estonia's export revenues have decreased significantly owing to the strong decline in external demand. The Estonian economy also has to cope with the decreasing confidence of foreign investors, which means a considerably smaller foreign capital inflow compared to the previous levels. The adoption of the euro would help restore confidence as soon as Estonia joins the euro area.

The objective of adopting the euro needs to be borne in mind when planning any economic policy measures. A postponement of the euro objective would make the return to a sustainable convergence path more challenging in the current global financial crisis situation.

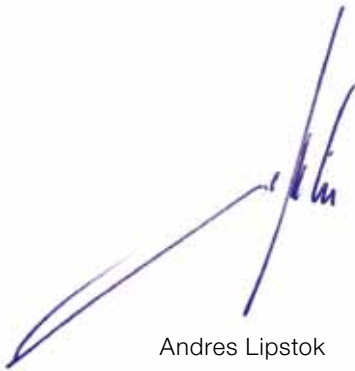
In order to adopt the euro, additional fiscal consolidation efforts are needed. However, budget balancing measures are crucial not only for meeting the Maastricht criterion. It is also important to bring public finances in line with the changed economic environment and to ensure long-term fiscal policy sustainability. The national budget strategy is expected to answer the question when Estonia will regain balance between consolidated budget revenue and expenditure and start restoring its fiscal reserves. One of the lessons to be learnt from the current recession is the great significance of extensive liquid public-sector reserves in safeguarding Estonia's economic security and cushioning the impact of unanticipated changes in the economic environment. This is why the measures planned for 2009 and 2010 should be viewed as an integral package.

For a small open economy like Estonia it is essential for future growth that the external conditions start to improve. According to the present expectations, the situation might start to improve only in 2010, but it is not yet clear how broad-based and how long the current recession will be for our main trading partners.

In addition, it is necessary that the post-shock restructuring be completed in large part and the imbalances recede. The economy has moved into a period of restructuring, which might be relatively painful. The ability of the product and labour market to adjust to the rapidly changing economic situation will pose a major challenge for the Estonian economy.

However, banks operating in Estonia have sufficient funds to support restructuring in both the business sector and the entire economy. This allows to face the future with cautious optimism. Economic decisions should be based on favourable medium- and long-term economic outlooks, since Estonia's income convergence towards the level of more advanced EU countries will continue also in the future. This is supported by sustainable fiscal policy and Estonia's accession to the euro area as soon as possible.

The central bank on its part will do everything necessary to ensure a stable monetary system and financial environment also in the coming years.

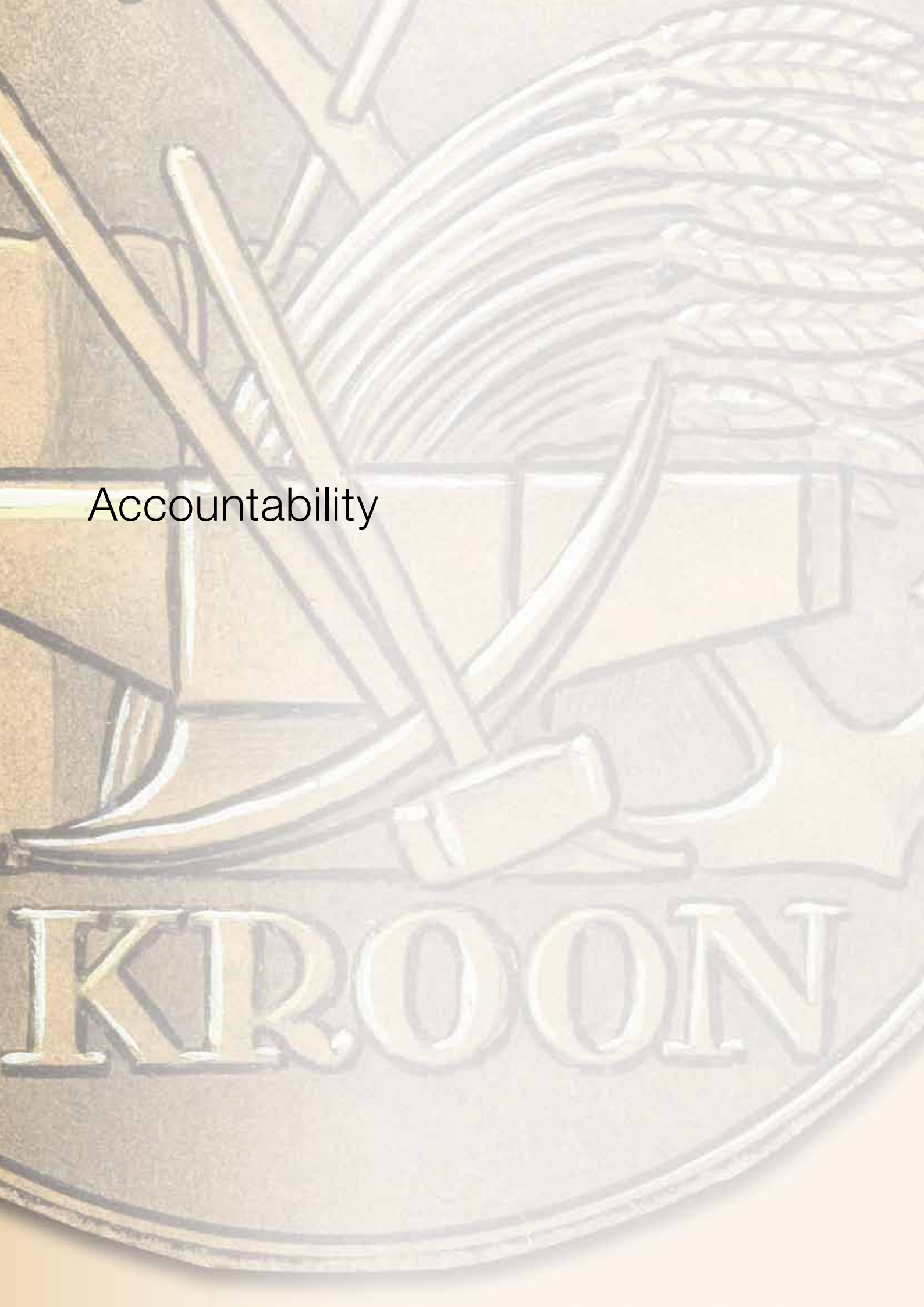


Andres Lipstok  
Governor



*Kaubandus, tööstus, põllumajandus.*

*G. Reinдорff*



Accountability

KROON

# ACCOUNTABILITY

Central bank's independence is an inseparable part of any monetary system that gives priority to ensuring price stability. At the same time, principles of modern democracies expect any independent institution performing public functions to be accountable for its actions. For Eesti Pank, the autonomous central bank of the Republic of Estonia, accountability entails explaining its economic policy views and decisions to the citizens of Estonia and their democratically elected representatives in a clear and profound manner. Accountability and autonomy of the central bank are two counterbalancing principles.

## **Legal framework for accountability and compulsory publications of the central bank**

The scope of accountability of the central bank has been defined in various Estonian laws. Pursuant to the Law on the Security for the Estonian Kroon, the central bank is to publish at least once a month data on the volume of gold and foreign exchange reserves and the amount of Estonian kroons in circulation. These data are published in the form of **tables describing the balance sheet of Eesti Pank and foreign exchange reserves backing the kroon**. Pursuant to the Official Statistics Act and the Eesti Pank Act, the central bank is entitled as well as obliged to collect and publish **monetary, financial and balance of payments statistics** in its field of responsibility, according to rules laid down for this purpose. The statistical data are published on the bank's website. The Eesti Pank Act also requires publication of a bulletin at least once every three months in addition to the Annual Report of Eesti Pank. The **quarterly bulletins focus on monetary or financial policy** issues

in turns. The **Annual Report** includes the annual accounts for the year. The Supervisory Board of Eesti Pank approves the Annual Report and submits it, together with the auditor's report, to the Riigikogu. Along with the Annual Report of the central bank the Riigikogu receives the Annual Report of the Financial Supervision Authority after the report has been approved by its Supervisory Board. Governor of Eesti Pank also makes a presentation in the Riigikogu on the Annual Report of the central bank.

## **Accountability vis-à-vis the Riigikogu**

Governor of Eesti Pank makes a presentation on the Annual Report every year. In addition, the bank and the Riigikogu cooperate in the form of meetings and bank representatives give explanations and comments in response to the issues raised by members of the Riigikogu.

The top executives and specialists of Eesti Pank meet regularly with the Finance Committee of the Riigikogu in order to explain the central bank's estimates on economic processes and discuss topical economic issues.

Upon request of parliamentary factions the top executives of Eesti Pank introduce the central bank's economic policy standpoints and activities. In 2008, economic adjustment and inflation processes were of most interest.

Eesti Pank was also requested to deliver its opinion on a draft act. In addition, Eesti Pank replied to an interpellation of members of the Riigikogu concerning the drafting of state budget and developments of interest rates on household loans.





## **Regular reporting on economic policy views and publication of economic data**

The central bank's reliability for the public and the transparency of its activities are the preconditions for the smooth operation of the monetary system. Eesti Pank must provide both the general public and the experts with regular, profound and high-quality information on the economy. The central bank considers it important to offer easy and low-cost access to data (for example, regular publications of Eesti Pank are free of charge to subscribers and public libraries), and also to provide quality and timely information (for instance, there are very strict requirements for the system of publishing statistical data<sup>1</sup>). In addition to providing information on the website and in various publications<sup>2</sup>, it is possible to request information directly from the bank. Information can be requested by mail, e-mail or phone. In 2008, Eesti Pank received 3,751 inquiries, 73 of which were registered as requests for information.

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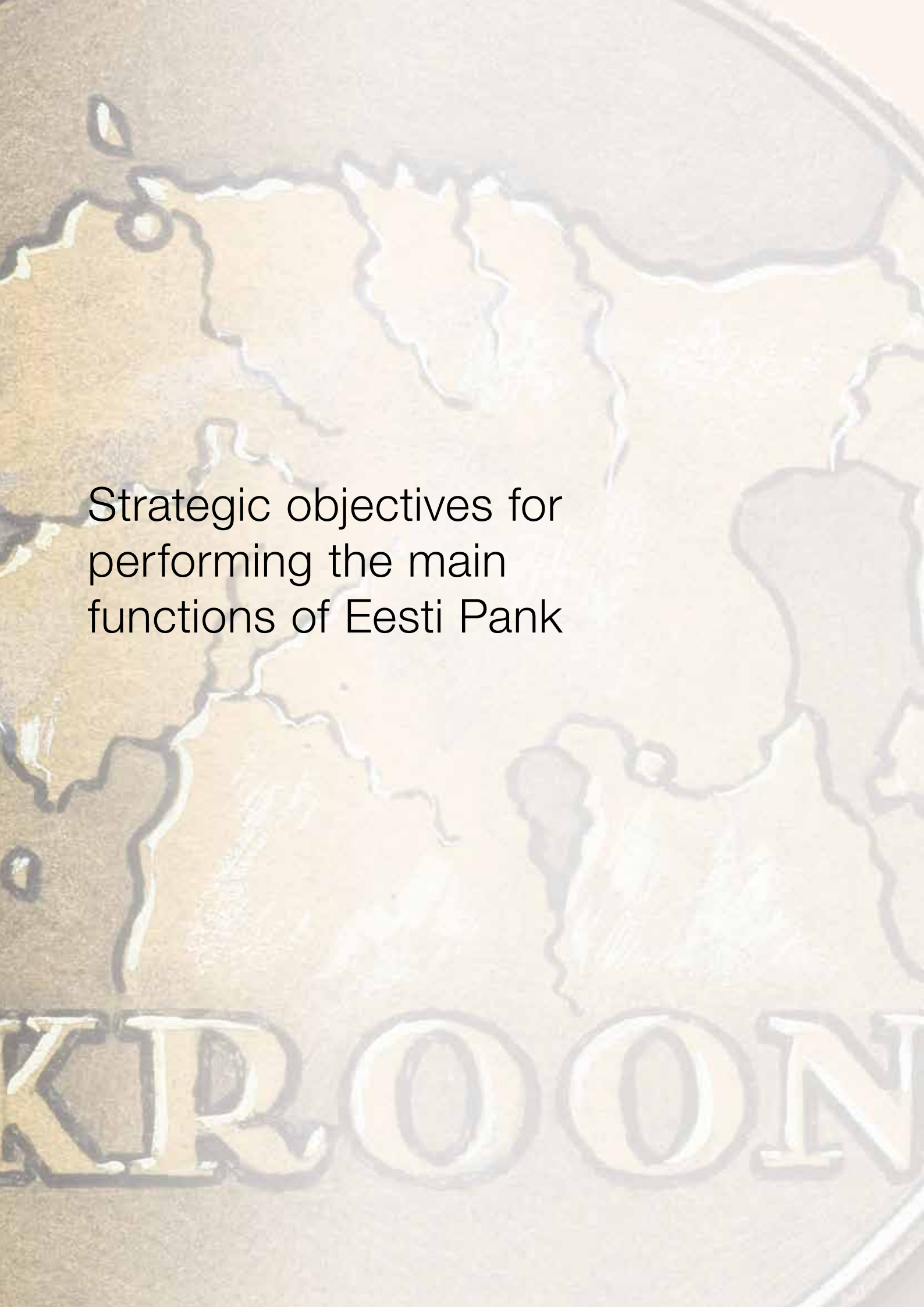
<sup>1</sup> The data are to be published not only on a fixed date but also at a certain time of the day, and they have to meet internationally accepted quality criteria.

<sup>2</sup> The full list of publications of Eesti Pank in 2008 is available in the Annex to the Annual Report on page ....

G. Reinдорff



»» Eestimaa ««



Strategic objectives for  
performing the main  
functions of Eesti Pank

EURO

# STRATEGIC OBJECTIVES FOR PERFORMING THE MAIN FUNCTIONS OF EESTI PANK

Eesti Pank follows these strategic objectives in order to carry out its main tasks.

## I Monetary policy

1. Maintaining the currency board arrangement until Estonia joins the euro area.
2. Monitoring Estonia's economy with the key focus on the risks related to inflation inertia and the uncertainty surrounding the external environment. Meanwhile, cooperation with the government on economic policy is aimed at finding ways to prevent setbacks arising from the abovementioned risks.
3. Integrating Estonia's monetary policy environment and market operations with those of the Economic and Monetary Union, taking into account the specifics of Estonia.
4. Developing economic forecasting methods that aim to achieve content-related and procedural uniformity with the economic forecasting arrangement of the European System of Central Banks.
5. Ensuring the consistency and quality of the compilation of financial sector and balance of payment statistics in compliance with European Union standards, as well as better and diverse use of these statistics.

## II. Financial stability

6. Ensuring financial stability by assessing the credit and liquidity risk of the financial sector and bringing the risk scenarios of the economic forecast more in line with the financial stability stress tests. Consultations are carried out with market participants as well as domestic and international cooperation partners to obtain high-quality and reliable estimates.
7. Safeguarding financial stability by developing the financial sector's safety net with special focus on the sector's infrastructure. Strengthening national crisis management capacity in cooperation with the Ministry of Finance and the Financial Supervision Authority and cross-

border crisis management capacity in cooperation with Scandinavian and other Baltic central banks.

8. Acting as the overseer of settlement systems and publishing respective assessments regularly.
9. Contributing to better integration of European financial markets, including in the field of securities settlement, by participating in the work of European Union institutions. Participating in the development of the securities settlement system TARGET2-Securities.

## III Meeting cash demand

10. Promoting the usage of modern payment means in order to reduce the share of cash in currency circulation.
- Increasing the performance of cash handling, thus avoiding growth in costs of cash handling in the medium term.
12. Celebrating key events in Estonia by issuing numismatic-bonistic products.

## IV. Joining the euro area

13. Reaching the stage in preparation for the launch of the euro where it can be completed within 12 months before the day the euro is launched. Estimating twice a year Estonia's readiness for the launch of the euro.
14. Amending the management of foreign exchange reserves with the goal of ensuring the optimum investment of assets when Estonia becomes a full member of the Economic and Monetary Union.
15. Ensuring the technological readiness of cash management for the changeover to the euro.
16. Ensuring readiness for competent participation in the decision-making and cooperation mechanisms of the single European monetary policy.
17. Informing public, private, and third sector organisations and the general public of the developments in the implementation of

the single European monetary policy and its effects on Estonia's economy, and of central bank's responsibilities upon Estonia's accession to the euro area.

## **V. Organisation and cooperation**

18. Providing central bank services cost-effectively at the national level and as a member of the European System of Central Banks (ESCB).
19. Promoting research-related scientific cooperation by strengthening collaboration with the other EU central banks through cooperative projects; continuing the visiting researchers' programme, and promoting joint research work in Estonia, including via the Estonian Economic Association.
20. Developing the professional skills and knowledge of the staff through in-service training programmes and personal development plans.
21. Developing the management system of the central bank by anchoring the bank's organisational values, preparing a comprehensive description of the organisation, specifying the bank's products and services, and determining their cost on the basis of ESCB's methods.
22. Conducting regular self-assessments of the bank's internal audit and risk management processes.
23. Enhancing the business continuity of the bank's critical processes.
24. Establishing an interactive visitor centre by using the resources of the museum and library of Eesti Pank, which will be introducing the role and tasks of Eesti Pank as a member of the ESCB as well as the history of the Estonian economy and currency.
25. Improving the physical and IT working environment and the teleworking opportunities.



*Põllumajandus ja tööstus*

*G. Reinдорff*



90 aastat Eesti Panka

KROON

# 90 YEARS OF EESTI PANK

## 90 years ago: the beginning

In 1929, on the tenth anniversary of Eesti Pank, looking back at the emergence of an independent Estonia, Juhan Kukk, the former Governor of the Central Bank, said,

*The foundation of every independent and sovereign state is its economic independence. /-/ In 1919, the country's financial expenses amounted to 713,952,000 marks. /-/ To cover these expenses, the State Treasury had at its disposal: a) state taxes and incomes from public undertakings in the sum of 150,700,000 marks; b) a domestic loan amounting to 9,500,000 marks; and c) a foreign loan of 322,000,000 marks, making 482,200,000 marks in total. The missing share, 583,892,000 marks, was covered by cash. /-/*

*Private banks actually had no capital: some had left it in Russian banks, while others had lost it in various ways in the turmoil of war and revolution. Nobody dared or wanted to deposit their money in banks because of the ever-looming question of whether and in which sums funds could be withdrawn in case of need. The old Russian rouble was the most highly valued currency among people. /-/ All other currencies were accepted only involuntarily. /-/*

*Initially, only government bonds circulated as Estonian currency, although this did not boost respect towards it. Foreigners mockingly called them "vabamaa" (freeland) and Estonians dubbed them "kuked" (roosters) and "pätsud" (after President Päts).*

Under such circumstances, on 24 February 1919, at a meeting celebrating the first anniversary of the Republic of Estonia, the Provisional Government resolved to establish Eesti Pank, approved the Statutes of the bank and decided to start issuing their own currency. Juhan Kukk proceeds:

*The Provisional Government knew that these tasks could not be executed by the Parliament or Government, but an autonomous institution had to be created where all the country's key economic fields would be represented and where purely political interests could not be enforced on the account of economic interests, which would be detrimental to politics as well as to the economy.<sup>1</sup>*

## The first means of payment in the newly-independent Estonia, the first national currency

During the initial years of the newly-independent Republic of Estonia, multiple securities issued by various institutions were used as means of national payment.

On 4 January 1919, the Provisional Government declared the payment notes of the Clearing House of Tallinn, which had initially been intended for intra-agency use only, as the national means of payment.

On 23 November 1918, the Estonian National Council (Eesti Maapäev) decided to issue 5% short-term Government bonds to acquire cash for the immediate expenses of the state, which obtained the status of legal tender on 16 January 1919. On 9 December 1918, the Provisional Government gave the Ministry of Finance the right to issue national treasury notes. The currency of the Estonian Republic was named the mark after the currency of our Nordic neighbours.

Eesti Pank commenced issuing the Estonian Republic's first "real" money alongside the State Treasury in 1919. The sole right to issue bank notes was given to Eesti Pank only by the new Bank Act passed in 1928. (The sole right was referred to before as well; e.g., the 100-mark bank note issued in 1921 boasts a notation concerning Eesti Pank's sole right to issue currency in the

<sup>1</sup> J. Kukk. Kui Eesti Pangale alus pandi. Eesti Pank 1919–1929, lk 11–13.



bottom left corner.) Pursuant to the Statutes of Eesti Pank, the mark was supposed to be equal to the French gold franc: 0.2903225 grams of pure gold. However, there were no assets backing the kroon neither in gold nor in trustworthy foreign currencies. The gold clause was annulled in 1922. The reliability and stability of Estonia's first very own currency was also undermined by the extensive national defence expenses resulting from the War of Independence.

Eesti Pank commenced operating as the Central Bank of the Government, while simultaneously operating as a commercial loan bank. Commercial assets also served as provisions for the bank notes issued. Due to the dire economic circumstances no other solution was feasible for the time being. The bank notes issued during that first period were basically uncovered paper that did not gain the trust of market participants. According to its official gold content, a dollar equalled 5.2 marks, but the official dollar exchange rate determined by Eesti Pank's exchange rate committee at the beginning of 1919 set it equal to 45 marks, while the free market exchange rate was 120 marks to the dollar.

The situation was not improved by the 15 million gold roubles received from Russia upon the conclusion of the Tartu Peace Treaty. The gold went to the Government and through the State Treasury it was used to cover the Government's operational costs, including communicating with the external world to obtain the necessary converted external funds. At the beginning of 1920, fixing the Estonian mark's exchange rate became the responsibility of the Tallinn Committee of Banks and a year later that of the Tallinn Stock Exchange. In 1924, the dollar's stock exchange rate had already exceeded 400 marks. In addition, the mark's drop rate was also influenced by currency speculation.

### **Preparations for the monetary reform – updating the framework**

On 20 June 1924, the Riigikogu enforced a new currency – the Estonian gold kroon. The gold kroon was subdivided into a hundred Estonian marks and equalled 0.403226 grams of pure gold. All loans in Eesti Pank and private banks were revalued in kroons. Thereafter, loan contracts could be concluded and securities issued in kroons. In reality, the gold kroon never went into circulation and thus ordinary settlements were made with marks using the daily exchange rates determined by the Stock Exchange. This reduced currency speculation and increased trust in the circulating mark.

One of the main goals of the planned monetary reform was to replace the Estonian mark with a real and internationally recognised national currency backed by reserves. The years 1925–1927 were economically favourable for preparing the monetary reform: Estonian exports exceeded imports, state budget revenues surpassed expenditures and money circulation remained stable. The reserves backing the mark still consisted mainly of commercial assets.

The idea that external borrowing was the only solution had already been developed at the beginning of the 1920s. Eesti Pank turned to the government with a respective proposal and a plan was devised to reorganize the bank as a central bank. In 1927, the Republic of Estonia received a foreign loan of 1,350,000 pounds sterling with the support of the League of Nations. 1,000,000 of that was transferred to Eesti Pank in order to base the domestic currency on gold. Meanwhile, the Government and bank's liabilities and claims were also settled. Thus, neither party had any remaining claims or liabilities pertaining to the other party. The Currency Act that took effect on 1 January 1928, and the Statutes of Eesti

Pank that were enforced as a legal act, laid the foundation for the new monetary system. The gold content of the kroon was fixed at 0.403226 grams, similar to that of the gold kroon. Thereon, only gold, liability-free and freely convertible foreign currencies were included in the reserves backing the kroon. The new Statutes of the Central Bank demanded provisions for at least 40% of the circulating bank notes and other continuous liabilities. The operations of Eesti Pank were changed from commercial to central bank principles (in the form that had been internationally established at the time). The fixed capital of Eesti Pank was increased to five million kroons. The measures taken provided suitable conditions for launching a stable currency.

### **Economic crisis**

The first signs of crisis appeared in the global economy soon after the launching of the kroon. The effects of the crisis first appeared in the decrease of goods exports, which had already begun in 1929. At the time, over half of Estonian exports were agricultural products, which were mostly exported to England and secondly, to Germany. Regarding imports, the main trading partner was Germany, followed by the USA and England. With regard to the extent of economic liaisons and the stability of economic partners, the largest share of the reserves backing the kroon was placed in pounds sterling.

In 1931, England abandoned the gold standard. This caused a steep fall in the exchange rate of the pound sterling. In the financial results of Eesti Pank that year, this was reflected as a deficit of 3.9 million kroons, which could have been redeemed by devaluing the kroon. However, this was avoided primarily because it would have been seriously detrimental to the reliability of the relatively recently launched currency. In the meantime, import restrictions and several extraordinary measures were applied. For instance, propaganda for devaluation was banned.

The stability of the kroon could formally be maintained for a while.

However, as production volumes diminished sharply and especially as the foreign trade balance turned negative, the devaluation of the kroon became inevitable. On 23 June 1933, the kroon was devalued by approximately 35%. Initially, the new value was set according to the exchange rate of the Swedish kroon, which was pegged to the pound sterling. However, considering the leading position of England in Estonian exports, on 1 November 1933, the kroon was directly pegged to the pound sterling: 1 pound sterling equalled 18.35 kroons.

In the increasingly complex circumstances of the end of the 1930s, the Estonian kroon remained stable and reliable both internationally and domestically. The kroon's peg to the pound sterling remained unchanged until 1940.

The economic crisis and the measures adopted to cope with it proved to the central bank's management the importance of having reliable reserves backing the kroon for the smooth operation of the monetary system. At the time, the best option was gold. Thereafter, the share of gold in the reserves was deliberately increased from 33% in 1931 to 66% in 1939. It was unforeseeably essential to the later resurrection of the kroon.

### **War and period of occupation**

The violent incorporation of Estonia into the Soviet Union interrupted the operations of Eesti Pank for half a century. It began on 10 October 1940, when the State Bank of the USSR took over Eesti Pank. This was followed by exchanging kroons and converting kroon accounts to roubles.

Already at the beginning of July 1940, immediately after the coup of 21 June, the authorities of

the Soviet Union started making efforts to acquire the Estonian gold and foreign exchange reserves of Eesti Pank that were deposited abroad. The Soviet-friendly government of Johannes Vares that came to power adopted several secret resolutions regarding the gold and foreign exchange reserves, giving orders that were illegal pursuant to the legal framework of the time. Eesti Pank was forced to sell its gold to the State Bank of the USSR and transfer its foreign exchange reserves to Eesti Pank's account in the State Bank of the USSR in Moscow. The bank's justified objections were ignored, but international defence mechanisms stepped in and disrupted the initiated process. Largely thanks to the protest of the USA, the central bank's gold reserves remained untouched with one exception.

Half a century later, after regaining independence, the Estonian central bank got back the gold deposited abroad, which amounted to approximately 11.3 tonnes. This laid the foundation for the reserves backing the new Estonian kroon in 1992. The relatively large share of gold among the reserves helped to keep it through the years of occupation. The accounts in convertible currencies had considerably better liquidity; they were harder to protect. However, preserving the gold was not easy either. The Soviet Union's authorities aggressively continued trying to retrieve Estonia's gold from the BIS (the Bank for International Settlements) until the end of the 1980s.

Instead of trustworthy money, the currencies circulating on Estonian territory were roubles and German marks without real reserves backing them up.

### **Re-establishment of Eesti Pank, resurrection of the kroon**

Eesti Pank was re-established when Estonia was still a part of the Soviet Union. It was done pursuant to the Bank Act of Soviet Estonia adopted in December 1989. The first Governor of

the newly re-founded Eesti Pank, Rein Otsason, was appointed to office on the day of the law's passage.

On 1 January 1990, Eesti Pank started operating again after a pause of fifty years. It began under quite peculiar conditions: in two little rooms at a time when Estonia was not yet independent and while another central bank was also operating in Estonia besides Eesti Pank.

Preparations for future changes in the monetary system started almost immediately after the re-establishment of Eesti Pank, although the initial idea – to have already adopted our own currency by the end of 1990 – could not be realised. Rebuilding Eesti Pank as an organisation also started at the same time, a process that had to be done nearly from nothing.

The first Supervisory Board of Eesti Pank was appointed by the Presidium of the Supreme Council on 22 January 1990, with 5 members. By their office, both the Governor of the bank as well as the Minister of Financial Affairs belonged to the Supervisory Board. The offices of the Chairman of the Supervisory Board and that of the Governor were separated by the Amendment Resolution of the Bank Act on 26 June 1990.

One of the first major organisational tasks was to formulate the Statutes of Eesti Pank. The Supreme Council approved them on 15 March 1990. In addition to the Statutes, the Bank Act was also amended and resolutions regulating the foundation and operation of banks were adopted. The council fulfilled tasks that are nowadays fulfilled by the central bank's management; therefore, the council also discussed Eesti Pank's structure and organisation of work.

In the beginning, the range of tasks of the re-established Eesti Pank was also slightly obscure. By the decision of the Council, state and private enterprises were given credit but later the matu-

## Supervisory Board and Executive Board of Eesti Pank in 1919–2009

Supervisory Board of Eesti Pank before World War II	
1921	E. Aule, J. Sihver, L. Sepp, K. Baars, A. Janson, E. Kuusik, J. Laidoner, M. Luther, A. Teetsov, A. Uibopuu, A. Uesson, K. Wirma
1922	E. Aule, J. Sihver, L. Sepp, K. Baars, A. Janson, E. Kuusik, J. Laidoner, M. Luther, A. Teetsov, A. Uibopuu, A. Uesson, K. Wirma
1923	E. Aule, J. Sihver, L. Sepp, K. Baars, E. Kuusik, J. Laidoner, M. Luther, A. Teetsov, J. Tõnnisson, A. Uibopuu, A. Uesson, K. Wirma
1924	E. Aule, J. Kuk, T. Vares, K. Baars, J. Laidoner, M. Luther, J. Puchk, A. Teetsov, A. Tofer, J. Tõnnisson, K. Wirma
1925	A. Uibopuu, J. Kuk, P. Õpik, A. Jürmann, J. Laidoner, H. Leesment, M. Luther, J. Puhk, O. Strandman, A. Tofer, J. Tõnnisson, K. Virma
1926	A. Uibopuu, J. Jaakson, P. Õpik, J. Kivisild, A. Jürmann, J. Laidoner, H. Leesment, M. Luther, J. Puhk, O. Strandman, A. Tofer, J. Tõnnisson, K. Virma
1927	J. Jaakson, P. Õpik, J. Kivisild, A. Jürmann, J. Laidoner, H. Leesment, M. Luther, J. Puhk, O. Strandman (until September), A. Tofer, J. Tõnnisson, K. Virma
1928	J. Jaakson, J. Hansen, Chr. Kaarna, A. Kask, J. Kivisild, R. Kuris, M. Luther, G. Vestel, K. Virma
1929	J. Jaakson, J. Hansen, Chr. Kaarna, A. Kask, J. Kivisild, M. Luther, J. Puhk, J. Veske, G. Vestel, K. Virma
1930	J. Jaakson, J. Hansen, Chr. Kaarna, A. Kask, J. Kivisild, M. Luther, J. Puhk, J. Veske, G. Vestel, K. Virma
1931	J. Jaakson, J. Hansen, Chr. Kaarna, A. Kask, J. Kivisild, M. Luther, J. Puhk, J. Veske, G. Vestel, K. Virma
1932	J. Jaakson, J. Hansen, Chr. Kaarna, A. Kask, J. Kivisild, M. Köstner, M. Luther, J. Puhk, J. Veske, G. Vestel, K. Virma
1933	J. Jaakson, M. Jänes, J. Hansen, Chr. Kaarna, J. Kivisild, M. Köstner, J. Laidoner, M. Luther, J. Puhk, J. Veske, K. Virma
1934	J. Jaakson, J. Hansen, Chr. Kaarna, M. Köstner, J. Laidoner, M. Luther, J. Puhk, J. Rosenfeldt, J. Sihver, J. Veske, K. Virma
1935	J. Jaakson, J. Rosenfeldt, Chr. Kaarna, J. Hansen, M. Köstner, M. Luther, J. Puhk, J. Sihver, J. Veske, K. Virma
1936	J. Jaakson, E. Arnover, K. Kaarna, M. Köstner, M. Luther, J. Puhk, J. Rosenfeldt, E. Saar, J. Sihver, N. Teliste, J. Veske, K. Virma
1937	J. Jaakson, E. Arnover, A. Eslas, K. Kaarna, A. Kuller, M. Köstner, R. Käsper, M. Luther, J. Rosenfeldt, E. Saar, J. Sihver, N. Teliste, K. Virma
1938	J. Jaakson, E. Arnover, A. Eslas, K. Kaarna, M. Käbin, R. Käsper, M. Köstner, M. Luther, J. Rosenfeldt, J. Sihver, N. Teliste, M. Vinnal
1939	J. Jaakson, K. Kaarna, P. Kurvits, M. Käbin, R. Käsper, M. Köstner, M. Luther, J. Raudava, J. Rumberg (in place of N. Teliste), N. Teliste, A. Tõnnisson (in place of M. Luther), M. Vinnal
1940	J. Jaakson, K. Kaarna, J. Rosenfeldt, P. Kurvits, M. Köstner, M. Käbin, R. Käsper, A. Tõnnisson, M. Vinnal, J. Rumberg
Re-Independent Republic	
<b>22.01.1990–14.11.1990</b>	
	R. Otsason (Governor 28.12.1989–18.09.1991), R. Hagelberg, E. Mändmaa, S. Kallas, V. Porfirjev (substitute: M. Sörg)
<b>15.11.1990–23.06.1993</b>	
	R. Otsason, S. Kallas (Governor as of 23.09.1991), A. Veetõusme (Chairman as of 13.05.1991), R. Hagelberg, R. Jalakas (Adviser as of 26.10.1993), R. Miller, I. Proos, M. Sörg, Ü. Uluots, U. Mereste (Member as of 23.09.1991, Chairman as of 16.12.1992), M. Üürrike (as of 21.10.1992)
1993	U. Mereste (Chairman), R. Hagelberg, R. Jalakas, S. Kallas, I. Proos, M. Sörg, Ü. Uluots, A. Veetõusme, M. Üürrike
<b>23.06.1993–13.10.1998</b>	
1993	U. Mereste (Chairman), A. Erm, R. Hagelberg, A. Hansson, S. Kallas, H. Kranich, K. Kuk, I. Pärtelpoeg, M. Üürrike
1994	U. Mereste (Chairman), A. Erm, R. Hagelberg, A. Hansson, S. Kallas, H. Kranich, K. Kuk, I. Pärtelpoeg, M. Sörg, M. Üürrike
1995	U. Mereste (Chairman), A. Erm, R. Hagelberg, A. Hansson, S. Kallas (kuni 21.03), V. Kraft, H. Kranich, K. Kuk, I. Pärtelpoeg
1996	U. Mereste (Chairman), A. Erm, R. Hagelberg, A. Hansson, V. Kraft, H. Kranich, K. Kuk (substitute: H. Siigur), I. Pärtelpoeg, M. Sörg
1997	U. Mereste (Chairman until 21.12), A. Erm, R. Hagelberg, A. Hansson, V. Kraft, H. Kranich, K. Kuk, I. Pärtelpoeg (Chairman after U. Mereste), M. Sörg
<b>13.10.1998–16.02.2004</b>	
1998	M. Sörg (Chairman as of 18.06), I. Pärtelpoeg, A. Järvesaar, V. Kraft, K. Kuk, M. Meos, H. Meri, M. Pärnoja, J. Sepp, E. Terk
1999	M. Sörg (Chairman), A. Järvesaar, K. Kuk, V. Kraft, M. Meos, H. Meri, J. Sepp, E. Terk, M. Pärnoja (teda asendas K. Jürgenson)
2000	M. Sörg (Chairman), A. Järvesaar, K. Jürgenson, K. Kuk, V. Kraft, M. Meos, H. Meri, J. Sepp, E. Terk
2001	M. Sörg (Chairman), A. Järvesaar, K. Kuk, V. Kraft, M. Meos, H. Meri, M. Pärnoja (al 01.10), J. Sepp, E. Terk
2002	M. Sörg (Chairman), A. Järvesaar, K. Kuk, V. Kraft, M. Meos, H. Meri, M. Pärnoja, J. Sepp, E. Terk

<b>2003</b>	M. Sörg (Chairman), A. Järvesaar, K. Kukk, M. Meos, H. Meri, M. Pärnoja, J. Sepp, E. Terk, V. Kraft
<b>17.02.2004-16.02.2009</b>	
<b>2004</b>	M. Sörg (Chairman), R. Eamets, A. Lipstok, E. Listra, M. Opmann, T. Palts, J. Sepp, L. Tõnisson, V. Kraft
<b>2005</b>	M. Sörg (Chairman), R. Eamets, V. Kraft (kuni 07.06), A. Lipstok (al 07.06), E. Listra, M. Opmann, T. Palts, J. Sepp, L. Tõnisson, H. Õunapuu
<b>2006</b>	M. Sörg (Chairman), R. Eamets, E. Listra, M. Opmann, T. Palts, J. Sepp, L. Tõnisson, H. Õunapuu, A. Lipstok (kuni 08.07)
<b>2007</b>	M. Sörg (Chairman), R. Eamets, E. Listra, M. Opmann, T. Palts, J. Sepp, L. Tõnisson, H. Õunapuu
<b>2008</b>	M. Sörg (Chairman until 13.06), J. Männik (Chairman as of 13.06), R. Eamets, E. Listra, M. Opmann, T. Palts, J. Sepp, L. Tõnisson, H. Õunapuu
<b>18.02.2009</b>	J. Männik (Chairman), K. Kallio, I. Kull, J. Ligi, E. Listra, T. Palts, L. Tõnisson, U. Varblane
<b>Executive Board of Eesti Pank before World War II</b>	
<b>1919</b>	M. Pung, E. Aule, J. Sihver
<b>1920</b>	E. Aule, J. Sihver, G. Vestel
<b>1921</b>	E. Aule, J. Sihver, L. Sepp
<b>1922</b>	E. Aule, J. Sihver, L. Sepp
<b>1923</b>	E. Aule, J. Sihver, L. Sepp
<b>1924</b>	E. Aule, J. Kukk, T. Vares
<b>1925</b>	A. Uibopuu, J. Kukk, P. Öpik, T. Pielbaum (Acting Director)
<b>1926</b>	J. Jaakson, P. Öpik, J. Kivisild, T. Pielbaum (Acting Director)
<b>1927</b>	J. Jaakson, P. Öpik, J. Kivisild, T. Pielbaum (Acting Director) (government's superintendent: N. Köstner, adviser to the central bank: Sir W. Williamson)
<b>1928</b>	J. Jaakson, J. Kivisild, T. Pielbaum (Acting Director), C. Kaarna (government's superintendent: N. Köstner, adviser to the central bank: Sir W. Williamson)
<b>1929</b>	J. Jaakson, C. Kaarna, J. Kivisild, F. Tannebaum (government's superintendent: N. Köstner, adviser to the central bank: Sir W. Williamson)
<b>1930</b>	J. Jaakson, C. Kaarna, J. Kivisild, F. Tannebaum (government's superintendent: N. Köstner)
<b>1931</b>	J. Jaakson, C. Kaarna, J. Kivisild, F. Tannebaum (government's superintendent: N. Köstner)
<b>1932</b>	J. Jaakson, C. Kaarna, J. Kivisild, F. Tannebaum (government's superintendent: N. Köstner)
<b>1933</b>	J. Jaakson, C. Kaarna, J. Kivisild, J. Rosenfeldt
<b>1934</b>	J. Jaakson, C. Kaarna, J. Rosenfeldt
<b>1935</b>	J. Jaakson, C. Kaarna, J. Rosenfeldt
<b>1936</b>	J. Jaakson, K. Kaarna, J. Rosenfeldt
<b>1937</b>	J. Jaakson, K. Kaarna, J. Rosenfeldt
<b>1938</b>	J. Jaakson, K. Kaarna, J. Rosenfeldt
<b>1939</b>	J. Jaakson, K. Kaarna, J. Raudava
<b>1940</b>	J. Jaakson (until 17.07), K. Kaarna, J. Rosenfeldt, from the coup to the abolishment of Eesti Pank on 10.10.1940 J. Vaabel (Governor), H. Pärtelpoeg (Acting Director), H. Raesaar (Deputy Director)
<b>Re-Independent Republic</b>	
<b>21.12.1993</b>	S. Kallas (Chairman), V. Kraft, E. Teimann, A. Järvan, U. Kaju
<b>1994</b>	S. Kallas (Chairman), V. Kraft, E. Teimann, A. Järvan, U. Kaju
<b>1995</b>	S. Kallas (Chairman until 21.03), V. Kraft (Chairman as of 27.04), A. Järvan, U. Kaju, H. Meerits, E. Teimann
<b>1996</b>	V. Kraft (Chairman), H. Meerits, E. Teimann, U. Kaju, P. Nirgi, A. Järvan, A. Penjam
<b>1997</b>	V. Kraft, H. Meerits (until 31.12), P. Lõhmus (as of 05.03), U. Kaju (until 18.02), P. Nirgi, A. Järvan, A. Penjam, V. Laid (as of 19.02), R. Minka (as of 19.02)
<b>1998</b>	V. Kraft, P. Lõhmus, H. Meigas (as of 01.06), P. Nirgi (until 13.05), A. Järvan (until 01.07), A. Penjam, V. Laid, R. Minka
<b>1999</b>	V. Kraft, P. Lõhmus, H. Meigas, V. Laid, A. Trink (as of 04.01), M. Ross (as of 22.06), A. Penjam, R. Minka
<b>2000</b>	V. Kraft, R. Minka, M. Ross, A. Trink
<b>2001</b>	V. Kraft, R. Minka, M. Ross, A. Sutt, A. Trink
<b>2002</b>	V. Kraft, R. Minka, M. Ross, A. Sutt
<b>2003</b>	V. Kraft, R. Minka, M. Ross, A. Sutt
<b>2004</b>	V. Kraft, R. Minka, M. Ross, A. Sutt
<b>2005</b>	A. Lipstok, V. Kraft (until 06.06), R. Minka, M. Ross, A. Sutt
<b>2006</b>	A. Lipstok, R. Minka, M. Ross, A. Sutt
<b>2007</b>	A. Lipstok, R. Minka, M. Ross, A. Sutt
<b>2008</b>	A. Lipstok, R. Minka, M. Ross, A. Sutt
<b>2009</b>	A. Lipstok, R. Minka, M. Ross, A. Sutt

rities of the loans had to be extended due to a deep economic crisis; some of the non-recoverable debts even had to be written off. The first Governor of Eesti Pank believed that a major commercial bank should be joined with the central bank – this would provide an opportunity to be financially stronger and more independent. The council firmly opposed this approach, but the Tallinn department of the Soviet Union’s Vnesheconombank was nevertheless reformed to manage Eesti Pank’s external operations. Later, after the monetary reform, it served as the basis for founding the North Estonian Share Bank.

In November 1989, currency auctions started taking place in the former Soviet Union (Moscow). The first currency auction of Eesti Pank was arranged on 28 June 1990. There were three sellers and buyers. The US dollars offered were bought at the price of 27 roubles. The official dollar exchange rate of the Soviet Union was still 62 kopecks to the dollar – thus, the auction of Eesti Pank showed a 43.5 times difference from the official rate. The first official response of Moscow to the auction’s results was painful. The auctions of Eesti Pank nevertheless turned out to be successful and became an acknowledged place for currency exchange in the entire former Soviet Union, with the number of participants reaching 120–140 people. Eesti Pank arranged currency auctions until August 1991. The experience received from this was later useful for the preparation and implementation of the monetary reform.

### **After the Proposal of Four Men...**

The impetus to re-establish Eesti Pank and launch our own currency had again emerged from the Proposal of Four Men,<sup>2</sup> issued in the newspaper Edasi on 26 September 1987 under the heading “Complete self-sufficiency for the whole of Soviet Estonia”. By developing the thoughts presented

and the concept of a self-sufficient Estonia in numerous discussions, the idea of convertible roubles was also generated, which seems quite utopian in hindsight. More importantly, though, the Estonian leadership in developing the territorial self-sufficiency of the Soviet states and all the other consequences that sprung up from the Proposal of Four Men gave a strong impetus towards restoring independence and preparing for the adoption of our own currency.

In the summer of 1990, the Supreme Council of the Republic of Estonia gave Eesti Pank a task to present a specific concept and programme for carrying out the monetary reform to Parliament by 15 November. On 19 July Eesti Pank formed eight working groups with a total of 46 members to develop the reform concept. No members of the government were included in these working groups. In September, the Government established a committee to arrange the monetary reform.

It was too soon to present the specific principles and programme of the monetary reform – however, several problems that needed to be solved were identified. Both the Government and Eesti Pank concluded that Parliament and the Government were not the most suitable institutions for preparing the detailed plan of the monetary reform. Thus, a proposal to establish a monetary reform committee with extensive powers was added to the Government’s concept, with a recommendation to authorise the committee to decide upon any matters linked with the monetary reform. It was presumed that a small team of experts could make important decisions faster and more effectively. The committee was recommended to include the Prime Minister, the Governor of Eesti Pank and a “neutral arbitrator”. The concept of Eesti Pank also included a similar proposal.

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<sup>2</sup> S. Kallas, T. Made, E. Savisaar, M. Titma.

On 23 January 1991, the concepts and draft acts reached the Parliament's (Supreme Council's) Budget and Economic Affairs Committee. The Committee recommended using both concepts as the basis for the monetary reform and decided to establish a monetary reform committee. On 27 March 1991, the Supreme Council of the Republic of Estonia (Parliament) decided to establish a monetary reform committee with members Edgar Savisaar (later Tiit Vähi and Mart Laar), the Governor of Eesti Pank (Rein Otsason) and an independent scientific member, initially Siim Kallas (later Rudolf Jalakas and Ardo Hansson). The committee was fully authorised to conduct the monetary reform in the Republic of Estonia. Its powers remained valid until 29 June 1995 and it had to report to Parliament.

The building up of our own monetary system started gaining momentum from 20 August 1991, when Estonian independence was restored. Eesti Pank commenced solving all the conceptual, strategic, tactical and technical issues necessary to carry out the monetary reform in the first half of 1992.

### **Reserves backing the new Estonian kroon**

The reserves backing the kroon were created from the pre-war gold of the Republic of Estonia that was returned by the Bank of England and the Bank for International Settlements (BIS), as well as with the foreign funds which the Central Bank of Sweden (Sveriges Riksbank) compensated Estonia for regarding the Estonian gold that had been deposited there before the war.

In October 1991, the Governor of Eesti Pank, Siim Kallas, was authorised by the Chairman of the Supreme Council of the Republic of Estonia, Arnold Rüütel, to represent the Republic of Esto-

nia in negotiations with the BIS and countries where Eesti Pank's gold had been deposited to back the kroon. The powers were legally approved by the Supreme Council of the Republic of Estonia in December of the same year, when the then current Eesti Pank was declared the legal successor of the original Eesti Pank founded in 1919.

The government of Great Britain restored the gold transferred to the Soviet Union in 1967 as a gold account and was also the first to open it in December 1991. Sweden returned the gold given to the Soviet Union in 1940 in equivalent German marks.

Opening the gold accounts was time-consuming and it was no longer sensible to postpone the execution of the monetary reform. Thus, it became necessary to form temporary reserves to back the kroon. At a meeting with the Chairman of the Supreme Council, Arnold Rüütel, a proposal was made to establish the currency reserves of the Republic of Estonia by using the reserve cutting areas of the national forest fund. The Supreme Council approved the formation of the reserves that became known as the "kroon forest" by the decision of 23 January 1992. The reserve was supposed to include reserve cutting areas totalling 150 million US dollars. However, it was not necessary to use these reserves and their importance remained limited to developing a favourable emotional environment. In June 1997, the Riigikogu declared the Supreme Council's decision of 1992, by which a part of the national forest fund had been given to Eesti Pank to form the currency reserve, null and void.

The last gold account – in the New York bank of the US Federal Reserve – was opened on 23 January 1993.

## **Monetary reform in 1992**

On 20 June 1992, Estonia underwent the first and most radical monetary reform among the former countries of the rouble zone. This date meant the actual restoration of Estonia's economic independence. The Estonian kroon was deemed the only legal tender and Eesti Pank the only manager of monetary relations in Estonia. The official exchange rate of the Estonian kroon against the German mark was fixed at 8 EEK = 1 DEM.

Every resident natural person could convert up to 1,500 roubles to kroons within three days at the rate 1 kroon = 10 roubles; i.e., the exchange rate corresponded to the market rate of the German mark and Soviet rouble at the time. The same exchange rate was also used to convert almost all the roubles circulating in Estonia into kroons: deposits, corporate finances, etc. All the laws and other legal acts scheduled for the beginning of the monetary reform took effect. Eesti Pank started publishing the daily exchange rates of the Estonian kroon against major foreign currencies. As of the execution of the monetary reform, Estonia adopted a monetary system based on the strict rules of the currency board, which has continued to operate successfully to this day.

## **Fundamentals of the Estonian monetary system and its development during reindpendence**

Pursuant to Section 111 of the Constitution, Eesti Pank bears responsibility for currency circulation along with maintaining the stability of the national currency. In addition, the central bank's mission has been phrased pursuant to this heavy responsibility: to guarantee price stability in Estonia.

A stable price level offers both companies and individuals a sense of security, thus enabling them to plan their savings, consumption and investment behaviour over a long period. A stable currency is the foundation of a community's successful long-term economic development.

In the Estonian monetary system, price stability is guaranteed by a stable exchange rate. The exchange rate is managed pursuant to the principles of the currency board. The exchange rate of the Estonian kroon is pegged at 1 euro = 15.6466 kroons.<sup>3</sup> The Estonian kroon is freely convertible; i.e., there are no restrictions on the free movement of capital.

The currency board is an automatic system based on stringent rules. In order to maintain the fixed rate of the Estonian kroon, the central bank's liabilities (incl. the monetary base in the economy) must be fully guaranteed by foreign exchange or gold reserves (see Figure 1). The Estonian currency board is not a separate institution but operates as a part of the central bank. Thus, it is not enough for Estonia to have foreign currency reserves only to back the monetary base (as is the case with some different currency boards), but all Eesti Pank's liabilities and given guarantees have to be covered by reserves too.

Eesti Pank operates independently from other state agencies. Under the currency board arrangement, the central bank is prohibited by law to directly or indirectly credit the central government and local governments. Pursuant to the Security of the Estonian Kroon Act, Eesti Pank has no right to devalue the exchange rate of the kroon.

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<sup>3</sup> This is equivalent to the exchange rate of the Estonian kroon to the German mark (1 mark = 8 kroons) established by the monetary reform of 1992.



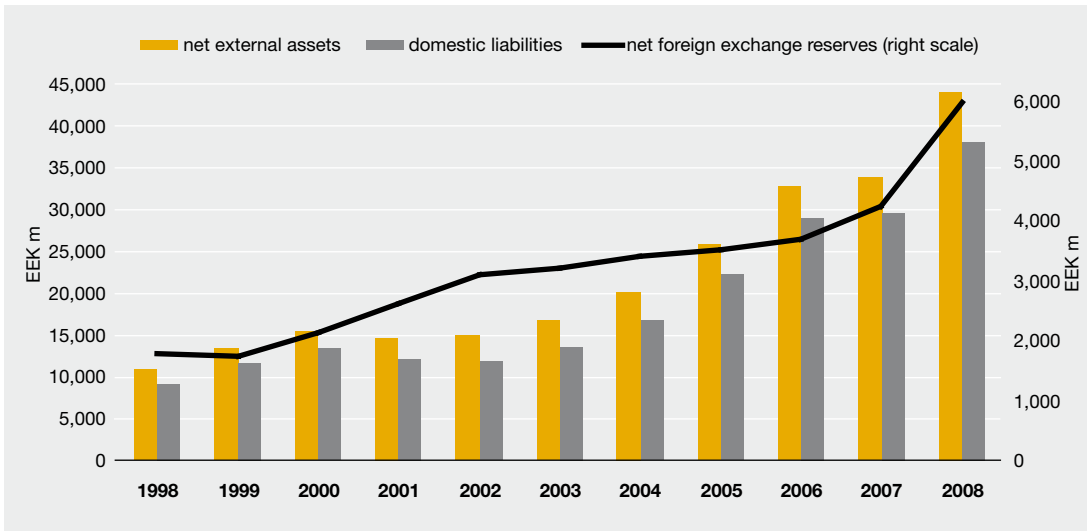


Figure 1. Net external assets, domestic liabilities and net foreign exchange reserves of Eesti Pank

### WHAT IS A CURRENCY BOARD?

Despite the relative diversity of modern currency board systems they usually have three common characteristics:

- a fixed exchange rate against the anchor currency;
- currency board obligations – cash and deposits – are fully covered by interest-bearing and high-quality foreign currency reserves;
- the currency is fully convertible for current as well as capital and financial account transactions.

### Monetary policy instruments available to Eesti Pank

The **standing facility of buying/selling foreign currency (forex window) and the reserve requirement** for banks are Eesti Pank's key monetary policy instruments. The forex window was created to provide sufficient kroon liquidity to banks. The reserve requirement was established to regulate the liquidity reserves of the financial system.

Because of the fixed exchange-rate system,

the Government's fiscal policy plays an essential role in stabilising the Estonian economy. A conservative and balance-oriented budgetary policy is thus vital to ensure the sustainability of the economy. An important precondition for the smooth operation of the currency board is the flexibility of the non-financial sector, especially the labour market. As the exchange rate is fixed, the economy cannot be balanced by exchange rate changes. Therefore, adjustments have to take place in the non-financial sector – in wages and prices.

### **Reserve requirement and excess reserves (deposit facility)**

The reserve requirement for banks was established to regulate the liquidity reserves of the financial system. In a currency board arrangement, a sufficient liquidity reserve is the best means of hedging the liquidity risks of the settlement system and the entire financial system. Compared to other frameworks, the currency board thus gives a much greater weight to the Estonian reserve requirement instrument, which slightly helps to compensate for the lack or limited nature of other instruments.

For these reasons, in Estonia the reserve requirement rate – applied under the currency board conditions – currently 15% – is higher than in other EU Member States. Reserves deposited with Eesti Pank are subject to the deposit interest rates of the European Central Bank (ECB) in order to reduce the negative impact of the high reserve requirement rate on the structure of financial intermediation, the interest margin and service charges, and to adapt the operational framework of monetary policy more to the market. In order to create a larger buffer for daily settlements that would help banks reduce the liquidity risk and stabilise the interest rates on the interbank money market, the fulfilment of the reserve requirement is based on the principle of monthly averaging.

To reduce potential market distortions while maintaining large liquidity buffers, foreign assets can be used to meet the reserve requirement. It makes no essential difference from the liquidity aspect whether the reserve requirement is met by kroon deposits or high-quality and liquid foreign assets. This also decreases market distortions,

since a part of the reserve requirement is met by market instruments. Accepting foreign assets as a means of meeting the reserve requirement also helps to reduce the minimum reserve level of kroons quite easily, while maintaining sufficient liquidity buffers.

### **Eesti Pank's forex window**

In Estonia's monetary system based on the currency board arrangement, the liquidity of banks is mainly managed via a standing facility of buying/selling foreign currency. Credit institutions holding a licence to operate in Estonia may, according to the applicable procedure,<sup>4</sup> enter into unlimited buying and selling transactions with Eesti Pank regarding the Estonian kroon and foreign currencies (currently ten different currencies). In addition, Eesti Pank may enter into buying and selling transactions with credit institutions regarding any other currencies officially quoted by Eesti Pank and the Estonian kroon or two different foreign currencies officially quoted by Eesti Pank. Banks have the facility to sell securities to Eesti Pank for kroons.<sup>5</sup> So far, the banks have not used that option.

To maintain the high liquidity of the Estonian kroon and facilitate the free movement of capital, there is no difference in the buying and selling rates being applied to transactions regarding the Estonian kroon and the euro. Transactions between the Estonian kroon and the anchor currency – the euro – are performed by Eesti Pank and credit institutions at the rate quoted by Eesti Pank (1 euro = 15.6466 kroons). The absence of exchange rate differences eases the creation of foreign currency liquidity buffers (and using the inclusion of foreign assets to meet the reserve requirement), stabilises interest rates on the

<sup>4</sup> Decree No. 5 of 14 March 2002 of the Governor of Eesti Pank, "Procedure for exchange transactions between Eesti Pank and credit institutions operating in Estonia".

<sup>5</sup> Regulation No. 15 of 29 December 2000 of the Governor of Eesti Pank, "Procedure for securities transactions between Eesti Pank and Estonian credit institutions".

Estonian loan market and reduces the role of the domestic interbank market. For foreign banks, the lack of a rate difference simplifies the acquisition of funds from the parent bank. Transactions with any other currencies are made based on the market rates of these currencies and the exchange rate of the Estonian kroon to the euro.

Transactions in the forex window determine the monetary base or money supply in the economy. As money supply changes, an equivalent change occurs in the central bank's foreign exchange reserves. The central bank does not establish monetary policy interest rates or otherwise manage the money supply. Under the currency board arrangement, Eesti Pank can theoretically lend money to credit institutions only from reserves in excess of the assets backing the kroon.

## **CHRONOLOGY: THE DEVELOPMENT OF THE MONETARY POLICY FRAMEWORK DURING THE PERIOD OF REINDEPENDENCE**

### **1992: CREATING A MODERN MONETARY AND BANKING SYSTEM**

The time preceding and following the monetary reform of 1992 was difficult both for the Estonian economy and financial system. The central bank's foreign exchange reserves only amounted to 2.5 billion kroons, of which the liability-free reserve contributed about 590 million kroons. The average monthly wage slightly exceeded 1,000 kroons and the inflation rate shot to 1,077% in 1992. The banking framework needed adjustments and a legal framework for market economy circumstances had to be created.

On 17 June 1992, the Supervisory Board of Eesti Pank decided to set a 15% **reserve requirement** rate for banks on all demand, time, and savings deposits. The requirement was applicable to **banks that no longer used the account plan enforced by the former State Bank of the USSR**. A separate reserve requirement was applied to the Savings Bank (Hoiupank). (With minor changes this system remained operational until the middle of 1994.)

On 18 June 1992, **guidelines for foreign exchange transactions** between Eesti Pank and licensed banks, new foreign exchange import and export regulations, and a number of other documents concerning foreign exchange transactions were approved by the decision of the Supervisory Board of Eesti Pank.

On 20 June 1992, the **monetary reform** was carried out.

By the directive of Eesti Pank, the official exchange rate of the Estonian kroon against the German mark was fixed at 1 EEK = 0.1250 DEM; i.e., 8 EEK = 1 DEM.

On the day of the monetary reform the **Foreign Currency Act**, the **Currency Act**, and the **Security of the Estonian Kroon Act** of the Estonian Republic took effect.

### **1992–1994: GUARANTEEING STABILITY AND DEVELOPING TRUST IN THE MONETARY SYSTEM**

#### **First years after the monetary reform**

In the first years after the monetary reform the key goals were to **create a stable financial environment and develop trust in the financial system**, which had been severely damaged by the excessive inflation and banking crisis at the beginning of the 1990s. Guaranteeing stability was also necessary to ensure that the developing banking system would meet the requirements of the market economy.

## 1993

In January 1993, Eesti Pank launched **a short-term money market project**. This gave the banks an opportunity to offer their short-term liquidity excesses on the market and obtain short-term loans from other banks in case of need. The aim of this project was apparently to also reduce the unfounded hopes of being financed by the central bank that was so commonplace in the banking culture of the preceding decades (see also “Chronology: settlement systems and cash”, pp ...)

To boost trust between banks, Eesti Pank started issuing **28-day discounted certificates of deposits** with a nominal value of 100,000 kroons. They were first sold at biweekly auctions. The certificates gave the banks an opportunity to perform fully guaranteed secondary market transactions and boosted the development of the interbank money market and mutual trust.

## 1994

### **The final abolition of restrictions on foreign currency transactions**

The system of legal acts regulating foreign currency transactions that took effect along with the monetary reform (including restrictions on capital account transactions, foreign currency import and export restrictions, the prohibition of exchanging non-convertible foreign currencies, the registration requirement of foreign loans, etc.) was gradually relaxed and was completely abolished in 1994. In the summer of 1994, Estonia made a commitment not to apply foreign exchange restrictions pursuant to Article VIII of the Statutes of the International Monetary Fund. Estonia was one of the first transitional countries in Eastern and Central Europe that eliminated the restrictions on the free movement of capital.

**In February 1994, the restrictions on the German mark’s open position of commercial banks were abolished.**

**In March 1994, the Riigikogu repealed the Foreign Currency Act**, thus abolishing the last formal restrictions on foreign currency transactions and also allowing private residents to open foreign currency accounts.

### **Measures to boost the efficacy and reliability of the monetary system**

In order to increase trust in the Estonian kroon and minimise speculation concerning the potential devaluation of the kroon, on **4 April 1994, Eesti Pank started selling futures and swaps of the Estonian kroon and German mark with maturities of up to seven years**. These transactions ceased in March 1995, when the need for such instruments disappeared.

Amending the calculation and usage procedures of the reserve requirement in July 1994 gave banks an **opportunity to also include cash in Estonian kroons among their required reserves** in the amount of up to 50% of the total required reserves.

## **1995–1998: THE STABILISATION AND DEVELOPMENT OF THE MONETARY POLICY ENVIRONMENT**

In 1995–1998, the rigidly fixed exchange rate of the Estonian kroon to the German mark spread the stability of international prices to the Estonian economy. Three processes played a crucial role in the development of the monetary policy environment: the continuing inflow of foreign capital, exchange rate changes in major currencies and the impact of the interest rates of the German mark on the interest rate of the Estonian kroon.

### **1995**

With the stabilisation of the monetary policy situation, the need for Eesti Pank's **future and swap transactions** initiated in 1994 waned. Having started to limit the performance of these transactions at the end of 1994, **the execution of new transactions stopped in March 1995.**

### **1996**

#### **Commencing TALIBID/TALIBOR quotations**

On 9 January 1996, the TALIBID/TALIBOR quotation regulations were approved.

#### **Major conceptual changes in the operational framework of monetary policy**

In the middle of 1996, Eesti Pank made several significant changes to the operational framework of monetary policy in order to boost the credibility and transparency of monetary policy, reduce the systemic financial risk stemming from the expansion of the financial sector and strengthen the liquidity system.

On 1 July 1996, the constant reserve requirement of banks was replaced by the **obligation to maintain the balance of a settlement account in Eesti Pank at a required level based on monthly averaging.** Thus, banks got a much greater monetary base buffer for daily settlements. This helped to reduce the liquidity risk and stabilise the interbank money market interest rates. In order to discipline the liquidity management of banks, 20% of the reserve requirement still remained in effect on a daily basis and this could be used only for interest penalties.

**The share of cash used in fulfilling the reserve requirement was reduced to 40% of the reserve requirement.**

On 1 July 1996, Eesti Pank abolished the purchase and selling rate difference in the transactions performed between the Estonian kroon and the German mark. The earlier minor exchange-rate difference mostly hindered short-term interest-rate arbitration due to greater transaction costs. As the backdrop of progressing integration, such transaction cost reductions helped to increase the currency turnover of the banking system – in December 1997, the monthly turnover of currency transactions exceeded that of June 1996 by 14 times.

In order to give banks an additional stimulus to stabilise the monetary base demand, in the second half of 1996 Eesti Pank **started offering banks a standing deposit facility** for the first time. In order to avoid market disturbances and increase the reliability of the currency board, the interest rate paid on the banks' account surplus at the end of the month was less than the Estonian money market interest rate and was linked to the discount rate of the Deutsche Bundesbank.

## **1997**

### **Eesti Pank's measures to strengthen the liquidity system**

In 1997, several hazards accompanying the rapid economic expansion emerged in the macroeconomic environment. The growth rate of the money supply (except cash) was relatively high; in addition, the investments of banks in domestic loans and other equal debt instruments grew quickly. This created a need to adjust the monetary policy framework. Hence, Eesti Pank adopted several measures to strengthen the liquidity system.

Considering the great inflow of foreign capital, as of 1 July 1997, **the sums by which the loans of banks obtained from foreign credit institutions exceeded the sums deposited in them were included in the reserve requirement calculation base.**

In November 1997, a **temporary additional liquidity requirement** of 2% (3% in December) of the reserve requirement calculation base was imposed on banks.

In order to stabilise the banks' intra-month kroon liquidity and reduce potential settlement risks, on 1 November Eesti Pank raised **the daily reserve requirement from 2% to 4% of the calculation base. Additionally, the penalty interest rate applied upon failure to meet the reserve requirement rose to 20%.**

On the other hand, the interest rate paid on the deposits exceeding the minimum reserve requirement was also raised to the discount level of Deutsche Bundesbank (since January 1999, the reference interest rate is the European Central Bank's deposit interest rate).

## **1998**

Until autumn 1997, the interest rate level steadily converged with German interest rates, especially the short-term rates. This trend was disrupted by the instability of global financial markets caused by the Asian crisis. The Asian and Russian crises hindered the capital flows invested in developing markets and in many countries shook the trust of foreign investors. Due to the monetary system being based on the currency board arrangement and the small scale of our money market, the short-term interest rates in Estonia responded swiftly to the changes in foreign capital flows and speculative attacks on the kroon, as the central bank did not interfere directly with the liquidity and interest rate developments in the money market. **At the end of 1997 and in August 1998, the currency board system proved its ability to persevere in an unstable economic environment.**

The rapid economic expansion and hectic growth of money and loan aggregates in 1997 was followed by a slight stabilisation in 1998 and, during the second half of the year, **a significant toughening of the economic environment**. External demand dropped, and so did foreign funding and loan supplies that had become so customary during the past period. The increases in the interest rates stemming from limited loan resources caused an increase in real interest rates along with a faster drop in inflation.

#### **Measures for increasing domestic liquidity buffers**

As an additional measure to increase banks' liquidity buffers and limit loan growth, in August-September 1998, Eesti Pank extended its reserve requirement calculation base by the sum in which banks have granted guarantees to financial institutions and non-resident credit institutions.

Considering the falling demand for cash and a need to increase settlement system buffers, on 19 June Eesti Pank reduced the banks' inclusion of cash in meeting the reserve requirement from 30% to 20%.

From 1 September, the **financial collateral** given to financial institutions and non-resident credit institutions were also fully included in the reserve requirement calculation base.

#### **New TALIBID/TALIBOR quotation principles**

On 1 September 1998, the quotation principles of the interbank money market interest rates were changed. Eesti Pank started calculating TALIBOR and TALIBID based on the quotations of three banks (Hansapank, Eesti Ühispank and Eesti Forekspank) for monthly, three-month and six-month periods. The weekly quotation and the restriction on the loan and deposit interest margin for the same period were abolished. The sum in which quoting banks were obligated to receive deposits or grant loans according to their quotations was increased from 1 million kroons to 10 million. TALIBID/TALIBOR quotations continued to be updated once a week.

#### **1999–2004: PREPARATIONS FOR JOINING THE EUROPEAN UNION**

The economic policy goals of 1999–2004 were a stable macroeconomic environment, steady confidence in the currency board and successful preparations for joining the European Union. The efficiency of the Estonian monetary and banking policy was proved by the fact that despite international crises all the international ratings given to Estonia in 1998 remained unchanged.

During 1994–2004, Estonia developed from an EU candidate country to an accession country and finally became a Member State. One of the entities responsible for the accession negotiations was Eesti Pank. The central bank had a significant role in preparing the issues addressed in chapters regarding the free movement of services and capital, the Economic and Monetary Union, institutions and statistics.



In 2002, the European Central Bank (ECB) sent an invitation to the central banks of candidate countries (incl. Eesti Pank) to participate as observers in the work of the ECB General Council and the committees of the European System of Central Banks as of the signing of the Treaty of Accession to the European Union. The non-voting observer status lasted until the Treaty of Accession took effect.

In December 2002, the European Union sent an official accession invitation to ten candidate countries. The Treaty of Accession was signed in Athens on 16 April 2003 and entered into force on 1 May 2004.

At the referendum on joining the European Union held in Estonia, 66.9% of voters favoured accession to the EU.

## **1999**

### **Changes related to the beginning of the third stage of the Economic and Monetary Union**

Due to the start of the third stage of the Economic and Monetary Union, on 1 January 1999, the currencies of 11 European Union states, including the anchor currency of the Estonian kroon (the German mark), were irreversibly bound to each other and the single European currency, the euro, was adopted.

**On 31 December 1998, Eesti Pank fixed the exchange rate of the Estonian kroon at 1 euro = 15.6466 kroons.** This equals the official exchange rate of the Estonian kroon against the German mark (1 DEM = 8 EEK).

**In 1999, a new procedure for currency exchange transactions between Eesti Pank and credit institutions operating in Estonia took effect.** Eesti Pank started performing purchase and sales transactions with banks operating in Estonia between the euro and Eesti kroon, and the national currencies of the euro area countries (a parallel currency system remained in effect for a while after the adoption of the euro) and the Estonian kroon without a price spread. The list of currencies in which Eesti Pank performed purchase and sales transactions with banks included all the national currencies of the euro area countries.

**On 1 January, Eesti Pank started applying the European Central Bank's deposit interest rate instead of the discount rate of the Deutsche Bundesbank on banks' monthly average balance of settlement accounts in excess of the monthly reserve requirement.**

### **Remuneration for required reserves and the central bank's profit distribution strategy**

Since 1999, the stabilisation of international financial markets and waning tensions in Estonia's real economy and monetary environment enabled it to concentrate more on long-term strategic questions in monetary policy.

As of 1 July 1999, Eesti Pank started **remunerating all the funds deposited by credit institutions in the settlement accounts of the central bank**. Earlier, the central bank paid interest only on deposits exceeding the reserve requirement minimum.

In September 1999, the Supervisory Board of Eesti Pank approved **the central bank's profit distribution strategy** for three years. The strategy's monetary policy was based on the principle of avoiding an excessively rapid decrease of Eesti Pank's own capital and net foreign exchange reserves against key economic indicators before Estonia joined the Economic and Monetary Union. The Supervisory Board relied on the fact that the central bank's profit distribution principles should also support the key monetary policy goals in the future and that the distribution of profit should by no means hinder the guaranteeing of the monetary system's stability.

### **Daily quotations of TALIBID and TALIBOR**

On 8 February 1999, **the TALIBID and TALIBOR quotation regulations were changed**. Eesti Pank started fixing the TALIBOR and TALIBID rates every working day at 11 a.m. The quoting banks also included Merita Bank Plc and Svenska Handelsbanken. The quotations of TALIBOR and TALIBID were now calculated as an arithmetic average of quotations, excluding the highest and lowest quotations. Two quotation periods were also added: nine and twelve months. In addition, the obligation of quoting banks to grant loans or accept deposits within their quotations was abolished.

## **2000**

### **Reforming the monetary policy operational framework**

On 25 April 2000, the Supervisory Board of Eesti Pank approved the **reform strategy of the operational framework of the Estonian monetary policy**, which prescribed a thorough rearrangement of the credit institutions' required reserve system. The most immediate goal of the reform was to guarantee the smooth operation of the pegged exchange rate within the currency board arrangement and reduce market distortions. In the long-term, this was the first step in the gradual harmonisation of the Estonian monetary policy framework with that of the euro area.

The beginning of the first reform stage, aimed at updating the liquidity system, was marked by

Eesti Pank's **decision to cease arranging the auctions of certificates of deposits** as of 20 May 2000. (The certificates had served their initial purpose – to foster the development of the kroon's money market. However, due to the more efficient liquidity management of banks and the increased volume of the money market, this instrument with severe interest rate and volume restrictions was no longer suitable for balancing the seasonal deviations of the money market.)

On 1 July 2000, **the additional liquidity requirement was united with the banks' reserve requirement**. The latter increased from 10% to 13% on account of the abolition of the additional requirement. With this decision, a common legal framework and penalty mechanism was created for all the reserves kept in the central bank. (The remuneration for all reserves since 1 July 1999 had made different types of reserve requirements pointless; meanwhile, the penalty for failure to fulfil the additional liquidity requirement – the application of a triple reserve requirement during the next month – became useless in a stable environment.)

## **2001**

### **Rendering the reserve requirement system more market-based**

As of 1 January 2001, banks were **permitted to fulfil up to 25% of their reserve requirement with high-quality liquid foreign assets**. On 1 July 2001, the inclusion limit of foreign assets rose to 50% of the reserve requirement.

## **2002/2003**

### **Converging the calculation of the Estonian reserve requirement base to the Eurosystem's framework**

In 2002, Eesti Pank prepared the technical changes applied in March 2003 to harmonise the calculation of the reserve requirement base with the Eurosystem's framework (the Supervisory Board of Eesti Pank adopted this decision on 31 October 2002). Besides the **harmonisation of balance sheet items** included in the reserve requirement base, the changes also entailed the application of the principle of due date calculation: liabilities were now **categorised in terms of maturity structure** (maturity over or under two years) and **type**. In similar fashion to the Eurosystem, Estonia also basically adopted two reserve requirement rates: **the general rate** for liabilities with maturities of up to two years and a **special rate** for liabilities with longer maturities and repurchase transactions.

Eesti Pank also emphasised that the preparations for harmonising the monetary policy framework with that of the euro area are continuing, but that they primarily proceed from Estonia and the European Union's economic situations. The goal is to avoid monetary policy steps that contradict the economic environment.

### **New procedures for currency transactions**

In 2002, new procedures for buying and selling foreign currency between Eesti Pank and credit institutions operating in Estonia came into force, based on which US dollars, Australian dollars, euros, Japanese yen, Canadian dollars, Norwegian kroner, Swedish kronas, British pounds sterling, Swiss francs and Danish kroner could be bought and sold for Estonian kroons.

### **2004**

#### **Further changes in the reserve requirement system**

In March 2004, several changes in the reserve requirement system took effect, rendering it more market-based and converging it towards the Eurosystem.

Since 1 March 2004, **high-quality debt securities with floating rates were included among the suitable foreign assets that can be used to** meet the reserve requirement.

Banks **could no longer take their cash into account to fulfil the reserve requirement.** (In the Eurosystem, banks' cash is also not regarded as a part of their required reserves.)

#### **Measures to hedge risks related to the rapid growth in loan volume**

In 2004, Eesti Pank repeatedly drew the attention of the public, financial sector and the Government to the risks accompanying the rapid growth in loan volumes.

Due to the hectic growth of loan volumes and the extensive current account deficit, in 2004 Eesti Pank retained both the specific and general rate of the reserve requirement at 13%, while the general rate in the euro area was 2% and the specific rate 0%.

Together with Eesti Pank, the Government reviewed the national support policy of the housing loan market. As a result of this, the role of KredEx in fostering the availability of housing loans was specified.

**Estonia joined the European Exchange Rate Mechanism (ERM II) on 27 June 2004.**

### **2005–2007: FIRST YEARS AS A MEMBER OF THE EUROPEAN UNION**

### **2005**

In 2005, Estonia's average annual inflation rate reached 4.1%. In the context of converging income levels, the 3.4% rise in consumer prices accompanying the rapid – and, considering the increase in labour productivity, also balanced – economic growth could be regarded as natural. Nevertheless, Eesti Pank frequently drew the attention of the public, financial sector

and the Government to the external and domestic risks threatening the balanced development. By external risks, the central bank mainly meant the developments related to the global rise in oil prices. As regards domestic risks, the central bank emphasised the **need to monitor the proportion of supply and demand across sectors**, both in the labour and services markets. **One of the key issues for the central bank was the ongoing rapid growth of the household debt burden.** In December 2005, Eesti Pank decided to take measures to tighten the legal framework related to housing loans.

## **2006**

### **Measures for managing threats stemming from strong domestic demand**

In 2006, the central bank mainly focused on **managing the threats stemming from strong domestic demand**. Eesti Pank repeatedly drew the public's attention to the hazards related to excessively optimistic consumption and loan behaviour.

Amendments to banking regulations took effect in March 2006 with an aim to reduce the risks related to housing loans (see also "Chronology: the legal framework and regulation of banking", pp..). However, as these changes did not diminish the risks enough, **Eesti Pank decided to raise the reserve requirement of banks from 13% to 15% on 1 September 2006. With this decision, the central bank also sent a clear message about the severity of the overheating threat to the economy.**

## **2007**

In 2007, domestic demand in Estonia started waning rapidly, the growth in loan volumes halted and wage growth began decelerating. Towards the end of the year, the external balance also started improving. Meanwhile, price rise pressures strengthened remarkably during the year and the growth in wages continued to exceed that of productivity. Thus, the points of emphasis significant for monetary policy shifted during the year.

Considering the persistent great economic imbalances and high inflation, the **reserve requirement rate remained unchanged at 15% despite the slowdown in the growth in loan volumes.**

At the beginning of 2007, the **daily minimum requirement of the settlement account** that had so far been included in the reserve requirement calculation was abolished, the penalty interest for the failure to fulfil the reserve requirement was updated and the procedure for the enforcement of the reserve requirement amendments was specified.

## **CHRONOLOGY: THE LEGAL FRAMEWORK AND REGULATION OF BANKING**

### **FROM THE BEGINNING OF REINDEPENDENCE UNTIL THE MONETARY REFORM IN 1992**

Eesti Pank was re-established under the Soviet regime pursuant to the **Bank Act of Soviet Estonia** adopted in December 1989. (The central bank operated pursuant to this Act until June 1993 and the commercial banks until January 1995.) During the period preceding the monetary reform and even later, the banks adhered to the norms and account plan enforced by the State Bank of the USSR.

### **1992–1994: MODERNISING AND ORGANISING THE BANKING SYSTEM**

The transition to new reporting regulations and prudential norms complying with market economy conditions started in the first half of 1993. This process was urgent, because according to the reporting review of seven major commercial banks conducted by the auditing company **Price Waterhouse** in cooperation with the banking supervision personnel within the PHARE aid scheme, the asset risk level of Estonian commercial banks was relatively high. Eesti Pank emphasised that the actual risk level of assets should also be reflected in the reporting of banks.

During the first years following the monetary reform, the underdeveloped legal environment was a major problem for Estonian banking supervision; the lag in preparing legal acts concerning the general arrangement of the economic environment was especially crippling. Until the end of 1994, Estonia lacked a proper modern Accounting Act and a Commercial Code (the Accounting Act took effect on 1 January 1995; the Commercial Code was proclaimed by the President of the Republic of Estonia on 8 March 1995). The minimal norm base to monitor the operation of investment funds was created by the regulations of the Ministry of Finance only towards the end of 1994. The retardation of the general economic regulatory environment compared to banking regulations significantly restricted the legal opportunities of banking supervision authorities to demand adherence to modern risk management. The outdated accounting regulations also hindered the objective assessment of the data presented in the banks' reports.

The culmination and end of this period was the enforcement of the modern Credit Institutions Act in January 1995.

### **1993**

**On 1 January 1993, new reporting procedures were laid down for Estonian banks, replacing the former reporting regulations of the State Bank of the USSR.** The old reporting procedures were based on the principles of socialist planning and did not reflect the actual financial situation of the banks. In practice this meant that banks interpreted the balance

sheet requirements differently, which made the comparison of data difficult.

On 16 February 1993, the **procedure for the establishment, operation and liquidation of savings and loan associations** was adopted by the decision of the Supervisory Board of Eesti Pank.

**On 11 May 1993, new stricter requirements were prescribed for the minimum size of banks' share capital.**<sup>6</sup>

The **Eesti Pank Act** entered into force on 18 June 1993.

As of **1 July 1993, new prudential norms** were prescribed for banks: the solvency rate, liquidity rate and the risk concentration limit of customers and banks. Their elaborators took into account the development level of Estonian banking as well as the norms of the European Union.

To reduce the currency risk a **limit was set on the net foreign exchange position** – the ratio of the difference between the foreign currency assets and liabilities of a bank and the transactions performed on agreed dates (for which money has yet to be transferred) to the bank's equity capital. The limit of the total open net foreign exchange position of the banks was 30%, including up to 10% with some currencies and 250% in the case of the German mark (since February 1994, the position of the German mark has been free).

## 1994

At the beginning of 1994, the **write-off procedure of uncollectible loans** was specified. Loans with a repayment due date exceeding 150 days had to be written off from the loan risk reserve. If this did not suffice, the sums had to be written off as the unrealised loss from revaluations. In essence, this was the first step to obligate banks to reevaluate their assets.

In February, the calculation of the net foreign exchange position was changed. The most important part of the change was **the total abolishment of restrictions on the open position of the German mark**, which emanated logically from the monetary and exchange rate policy of Eesti Pank.

The Supervisory Board of Eesti Pank laid down **due dates for banks to reach the minimum amounts of own funds** through its decision of September 1994: 1 January 1996 – 50 million

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<sup>6</sup> Share capital had to reach 15 million kroons as of 1 April 1995, 25 million as of 1 April 1996, and 35 million as of 1 April 1997. The decision on establishing commercial and cooperative banks adopted during the Soviet regime stated that share capital had to amount to at least 5 million roubles in commercial banks and 1.5 million roubles in cooperative banks. The Supervisory Board of Eesti Pank laid down 5 million roubles as the minimum of the statute funds of commercial banks through its decision of 19 February 1990. In essence, the Soviet norms were retained. In the meantime, hyperinflation had made 5 million roubles a ridiculously small sum for banks, raising the minimum capital rate to 6 million Estonian kroons (through the Supervisory Board's decision of 7 October 1992) and laying down the schedule for further increases in 1993 was certainly justified.

kroons; January 1997 – 60 million kroons; 1 January 1998 – 75 kroons. The aim was to strengthen the banks' capital base and foster intra-system consolidation, which would enable banks to fulfil the role of financial intermediaries more efficiently.

In order to avoid excessive risk concentration and decrease potential conflicts of interests, in September 1994, the **maximum allowed liabilities of a client or related parties were reduced from 50% to 25% of the own funds of credit institutions. Additional norms** were also established for the so-called **internal interest groups**.<sup>7</sup>

The legal base of banking and banking supervision was strengthened by the adoption of the **Credit Institutions Act** in December 1994 and its enforcement in January 1995. The Act was prepared on the basis of the legal acts of European Union Member States banking, but also took the development level of Estonian banking into account.

#### **1995–1998: IMPROVING THE CRISIS RESISTANCE OF THE FINANCIAL SYSTEM AND FURTHER COORDINATION OF BANKING**

The enforcement of the Credit Institutions Act in January 1995 entailed a need to amend the prudential norms and related reporting procedures. The capital adequacy calculation rules were thoroughly changed (market risk was included) and Tier 3 was added to the calculation.<sup>8</sup> All prudential norms were also applied in consolidated calculations. Meanwhile, the risk concentration rules, currency risk calculation and the reporting of off-balance-sheet items were also amended. Liquidity reporting changed significantly and investment reporting was added.

The security of information systems became one of the key goals of supervision, because the rising popularity of ATMs and the introduction of telebanking and Internet banking required increasing attention to guaranteeing high-level data protection. Thus, the obligation to perform information technology audits of and specific requirements for the information systems of credit institutions were imposed.

Procedural requirements were laid down for credit institutions to prevent money laundering.

At the end of this period the legislation applied to Estonian credit institutions was generally similar to that of more developed countries and the comparability of indicators was guaranteed. The next goal was to bring the legal framework of Estonian banking into compliance with the requirements of the European Union.

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<sup>7</sup> Subdivisions of credit institutions, the liabilities of parent companies and other subdivisions of parent companies could not exceed 20% of the own funds of credit institutions; the liabilities of the members of the management board or other employees of credit institutions, shareholders representing a share capital of 5% or more or representing votes, and also the liabilities of companies related to them could not exceed 20% of the own funds of credit institutions. The loan portfolios of banks had to be harmonised with the new requirements by 1 January 1996.

<sup>8</sup> Own funds to cover the market risks of trade portfolios.



## **1995/1996**

At the beginning of 1996, **new guidelines for the calculation of prudential norms and reporting procedures of credit institutions** took effect. The regulations on capital adequacy and risk concentration were thoroughly updated, liquidity reporting changed significantly and investment reporting was introduced.

By the Decree of the Governor of Eesti Pank, in May 1996, the **diligence and procedural requirements of credit institutions upon the application of provisions pertaining to the prevention of money laundering** took effect. (Adding a chapter on the prevention of money laundering in the version of the Credit Institutions Act that entered into force at the beginning of 1995 was the first step in creating the framework for combating money laundering.)

## **1997**

Of the changes that took place in 1997, the most important one was increasing **the capital adequacy minimum from 8% to 10%** on 1 October 1997.

In July 1997, the risk weight applied to Estonian local governments and their secured exposures was increased from 50% to 100%.

In October 1997, the **obligation to perform information technology audits** and the general requirements for the information systems of credit institutions were laid down.

In order to increase the liquidity of credit institutions, at the end of the year an **additional liquidity requirement** was imposed on them (remaining valid until the end of 1999). The additional liquidity requirement supplemented the reserve requirement framework, which was also developed further during that period (see also "Chronology: the development of the monetary policy framework during the period of reindpendence", pp...).

## **1998**

**In April 1998, the Riigikogu passed the Deposit Guarantee Fund Act, which laid the foundation for the deposit guarantee system of Estonia.** This Act entered into force in October 1998. Pursuant to the Act, a fund had to be created to guarantee the payment of deposits in the amount of and according to the procedures prescribed by law in case of a credit institution's insolvency. Upon the enforcement of the Act, the deposits of both natural and legal persons were guaranteed in the amount of 20,000 Estonian kroons per depositor. The final deposit guarantee sum – ECU 20,000 – was to be reached within 15 years. (The Deposit Guarantee Fund operated until the foundation of the Guarantee Fund in 2002.)

**In November 1998, the Riigikogu passed the Money Laundering Prevention Act, by which the respective provisions of the Credit Institutions Act were repealed.** Pursuant

to the Money Laundering Prevention Act, besides credit institutions the obligations to prevent money laundering were also extended to financing institutions, including insurance companies, investment funds and professional participants in the securities market.

The major changes of 1998 regarding the prudential norms were **the inclusion of market risk in calculating the capital adequacy indicator, the adoption of Tier 3 capital and the enforcement of prudential norms on a consolidated basis.**

The **currency risk calculation** previously applied was updated, prescribing 15% of net own funds as the limit on the joint position of the German mark and Estonian kroon, in similar fashion to all other A-zone currencies.<sup>9</sup>

The **reporting of off-balance-sheet items** was updated.

**In 1998, an action plan to have completed preparations for the “Readiness for 2000” by mid-1999 was elaborated.**

The halt in the exceptionally fast growth of the banks' balance sheet totals and the sudden plunge of the stock market at the end of 1997 caused serious problems for banks and led to extensive operational losses by the end of 1998. **An analysis of the events showed that this largely emanated from the drawbacks in the general management and internal control of banks.** The results of the analysis were reflected in the new Credit Institutions Act which was passed and entered into force in 1999.

### **1999–2004: DEVELOPING THE OPERATION ENVIRONMENT OF THE FINANCIAL SYSTEM BEFORE JOINING THE EUROPEAN UNION**

Due to the perspective of acceding to the European Union and the improvement of international banking contacts, the priority of this period was to **harmonise the legal acts of banking and supervisory methods with international standards.**

#### **1999**

On 9 February 1999, the Riigikogu passed the new version of the Credit Institutions Act which entered into force on 1 July. This new version complied with the requirements of the EU directives regulating the operation and supervision of credit institutions and expanded the rights and authorisations of banking supervision in accordance with the internationally acknowledged requirements. Banking supervisors were granted greater rights to obtain information and inspect the banks and other companies of a consolidation group on-site. The impact of the new version on the development of the modern banking environment in Estonia was remarkable and

<sup>9</sup> The currency limit of B-zone countries remained at 5% of net own funds, with the exception of Latvia and Lithuania at 10% of net own funds. Due to the adoption of the single currency of the European Union, the euro, since January 1999 a joint position was formed by the euro and the Estonian kroon (with the limit of 15% of net own funds).

it was followed by the enforcement of several important provisions of implementation:

- Reporting procedures for the liquidators of credit institutions, interim trustees of credit institutions and trustees in bankruptcy (May 1999);
- The new version of the prudential norms of credit institutions (July 1999);
- Procedure for the application for and granting of the licence for credit institutions and branches of foreign credit institutions and the list of documents submitted on applying for the licence (July 1999);
- Procedure for applying for the obtainment of a qualified holding in a bank and requirements for documents submitted upon applying for the licence (October 1999);
- Procedure for presenting data regarding the suitability of the managers of credit institutions and other personnel employed in the positions provided for in the Credit Institutions Act as well as the procedure for the declaration of the economic interests of these persons (October 1999);
- Public reporting procedures of credit institutions (October 1999).

## **2000**

In order to improve the credit risk management of credit institutions and obtain a better overview of the quality of credit institutions' loan portfolios, loan structures, values and the risks therein, **minimum requirements of loan evaluations and the write-off procedures of uncollectible claims** were laid down for credit institutions.

At the beginning of 2000, the **procedure for the general risk reserve calculation** that had entered into force at the beginning of 1998 was repealed. It was concluded that considering the development of the banking sector's legal framework and the improvement of the internal risk management of credit institutions, the need for a restriction determined by an estimated risk reserve had expired.

## **2001/2002**

In order to facilitate the monitoring of the new risks accompanying the development of banking and to adopt the updated EU directives, it became essential to amend the existing procedure for calculating the capital adequacy of credit institutions that had been in effect since 1999. The amendments of the Credit Institutions Act that were necessary to adopt the new framework were passed by the Riigikogu in autumn 2001 and **the new procedure for calculating capital adequacy** entered into force on 1 July 2002. The renewed framework was in complete compliance with the updated EU directives. The most important amendments concerned the opportunity to use **netting with instruments similar in terms of maturities and other features** in order to reduce credit risk exposure. In addition, the previously non-existent risk calculation of **commodities and their derivatives** was added.

In order to improve the security network of the financial sector and increase the confidence of

small depositors and investors in the financial sector, a **Draft Act on the Guarantee Fund Act** was compiled in cooperation with the Ministry of Finance and Eesti Pank in 2001. The Riigikogu passed the Act at the beginning of 2002. The Guarantee Fund was founded in July 2002.

### **2003**

The years 2001–2003 were characterised by a more extensive involvement of foreign funds by banks and increased household borrowing. Thus, Eesti Pank considered it necessary to adopt some measures and inform the public of the potential problems. **The Financial Supervision Authority and Eesti Pank reminded banks of the risks accompanying the rapid growth in loan volumes. They emphasised the need to inform clients of the risks accompanying borrowing** and to draw the clients' attention to the potential rise in loan servicing costs in the future.

Eesti Pank made a proposal to the Government to **review the existing state-offered instruments fostering household borrowing.**

In 2003, the consolidated estimation of the currency and market risks in the banks' capital adequacy framework was amended. **The possibility of netting positions reflecting market and currency risks between subsidiaries was abolished.**

### **2004–2007: INTEGRATION WITH THE BANKING FRAMEWORK OF THE EUROPEAN UNION**

On the one hand, this period was characterised by Estonia's accession to the European Union and the resulting developmental leap; on the other hand, it was characterised by the beginning of an economic cooling and the first signs of insecurity in global financial markets. International cooperation in financial supervision became increasingly important.

A great conceptual change in the normative environment of banking was the adoption of the framework of prudential norms based on Basel II (the updated, more risk-sensitive procedure for calculating capital adequacy).

### **2004**

In 2004, the changes in the legal acts of banking were primarily related to Estonia's accession to the European Union. The amendments to the Credit Institutions Act were related to the harmonisation of the directive on the winding-up and reorganisation of credit institutions; the procedures for applying for activity licenses and relations between the market participants and the Financial Supervision Authority were also specified. One of the key changes was the adoption of the **single EU activity licence principle** – in the case of a credit institution's branch operating in another Member State, the requirement for the application of an activity licence

was replaced by a notification requirement.

Estonia's accession to the European Union also entailed changes in banks' prudential norms. Upon calculating credit and currency risk, **all new EU Member States were included among the countries bearing a lower risk; i.e., the A-zone countries.** The earlier 50% risk weighting laid down for local governments and investment companies was reduced to 20% in accordance with the EU directive.

## **2005**

In October 2005, the Riigikogu passed the **Electronic Money Institutions Act.**

The most important amendment to banking regulations in 2005 was the increase **of the risk weighting applied to housing loans** from 50% to 100% upon calculating capital adequacy.

## **2006**

In 2006, the transposition of the **new EU directive on the capital adequacy calculation to the Estonian legal framework** was completed. This meant extensive amendments to the existing Credit Institutions Act and the elaboration of a new decree on prudential norms. The decree of Eesti Pank established detailed rules for the calculation of capital adequacy pursuant to the new capital adequacy calculation framework. The key difference compared to the EU directive is that **in Estonia the general capital adequacy requirement for both credit and market risks has remained at 10%.**

## **2007**

The procedure for the implementation and calculation of the prudential norms based on Basel II that had entered into force on 1 January the same year was amended at the end of 2007. Although the growth in loan volumes was falling rapidly and the ratio of the loan burden to the disposable incomes of households was stabilising, the risks related to the rapid growth in loan burdens still remained high. Thus, **in the procedure for implementing the prudential norms based on Basel II, Eesti Pank decided to apply a risk weighting of 60% on household loans** for the year **2008.**

## **CHRONOLOGY: SETTLEMENT SYSTEMS AND CASH**

In the 1990s, prior to the monetary reform, interbank **settlements were performed in the Clearing Division of Eesti Pank** via the omnibus accounts open to banks and their branches. The payment documents were submitted to Eesti Pank on paper. Thereafter, the data was recorded on a punched card or tape and entered into a computer. The account statements were delivered to banks on the next day. The settlements of more distant branches could take days. Eesti Pank automatically granted settlement loans at the interest rate of 0.1% per day – thus, banks did not have to pay attention to their settlement account balance. It was also useful for banks, because the credit they had given to companies carried a higher interest rate.

**Along with the preparations of the monetary reform new settlement procedures** were also compiled and preparations were also made for the commencement of electronic settlements. During the period 1 April – October 1992, the banks that used computers gradually joined the common computer network. Compared to earlier times, the transfer of money from a payer's bank account without his/her order was restricted. The rule that settlements could only be performed within the limitations of the credit balance of the bank's omnibus account was laid down. In order to accelerate the execution of settlements another requirement was adopted, according to which domestic settlements had to be completed within 48 hours. While before, the branches of banks had been regarded as separate banks with independent omnibus accounts, from 1 October 1992 parent banks and their branches were treated as one and settlements were thus performed within the same credit balance. This gave parent banks an opportunity to constantly monitor the activity of branches and regulate the cash flows between them.

In October 1992, **Eesti Pank's net settlement system EPNAS** was launched. All payment information was forwarded by modem and payment orders were accepted until 2 p.m. Thereafter, the settlement system started calculating the banks' reciprocal net receivables and payables based on the payment orders. The first interim summary of the netting was issued to banks an hour later. From 3 p.m. to 5 p.m. banks performed money market operations, after which the final netting took place. The Clearing Division constantly watched that the banks' settlement account balances would not drop below the reserve requirement level. (EPNAS operated until the adoption of new settlement systems in January 2002.)

In October 1993, **the first ATMs of the Baltic States** started operating in Tallinn.

On 6 December 1993, Eesti Pank commenced performing international settlements via the interbank messaging network **SWIFT**. As of the end of the year, 675 SWIFT messages had been forwarded. Meanwhile, five Estonian commercial banks had joined SWIFT.

In 1993, **foreign banks started receiving information concerning the bank notes of the Republic of Estonia.**

According to the decision of the Supervisory Board of Eesti Pank, the coining and issuing of **five-cent coins** was terminated in 1996, but they were to remain in circulation for an unspecified term.

In 1998, for the first time since the monetary reform, the central bank did not have to release additional cash into circulation; in fact, the amount of circulating cash even decreased.

In 1998, Eesti Pank stopped releasing the **one-kroon coins** issued in 1992, 1993 and 1995 into circulation. A new one-kroon coin was issued (from a new alloy and with different dimensions compared to before) and the issue of **one-kroon bank notes** to credit institutions was terminated.

In 1999, Eesti Pank issued a gold collector coin to celebrate the 80th anniversary of Eesti Pank and the adoption of the euro, the single European currency. The **extraordinary nominal value of this coin – 15.65 kroons** – reflects the exchange rate of the euro against the Estonian kroon (1 euro = 15.6466 kroons).

In January 2002, Eesti Pank launched a new interbank settlement system that met international requirements. Contrary to before, the new system was composed of two subsystems: the Designated Time Net Settlement System (**DNS**) meant for settling retail payments and the Real-Time Gross Settlement System (**RTGS**) for express transfers.

In 2002, the Cash and Security Department of Eesti Pank was granted the **international quality certificate ISO 9001:2000** for managing, handling, and safeguarding cash reserves.

In 2004, a **new cash calculation system** was adopted by Eesti Pank, which enables it to monitor and issue data concerning two currencies simultaneously and can thus be used upon the adoption of the euro.

In January 2004, Estonia was the 28th European country to apply the **international account number standard IBAN**. This helped to accelerate international payments.

In October 2005, Eesti Pank updated the Designated Time Net Settlement System (DNS) by launching the Settlement System of Ordinary Payments (**ESTA**). In the new system the settlements are faster, the working hours of the system are longer and the entire system is more effective.

In 2005, Eesti Pank and the Police Board entered into a cooperation agreement to prevent the circulation of counterfeit cash and to ensure the security of euro cash distribution. **Since December 2005, the expert analyses of banknotes suspected of being counterfeit are performed by the police.**

In November 2006, along with the Estonian Central Register of Securities and three commercial

banks, Eesti Pank joined **TARGET**, the settlement system of euro-area central banks. Due to this, the working day of the Settlement System of Ordinary Payments (ESTA) was extended by one hour.

Since 30 April 2007, the cash leg of claims and liabilities resulting from securities transactions can be settled with the help of the Real-Time Delivery Versus Payment (**RT DVP**) service.

Since 14 June 2007, most commercial banks started **offering the interbank direct debit service**.

To celebrate the 15th anniversary of the re-launching of the Estonian kroon and the monetary reform, **a triangular gold coin with a nominal value of one-hundred kroons was released into circulation** in 2007.


**On 19 May 2008, Eesti Pank acceded** to the new TARGET system; i.e., **TARGET2**. TARGET2 is a settlement system operating on a single shared platform that offers uniform services through a central IT-platform. **Besides Eesti Pank, seven Estonian commercial banks also joined TARGET2** (incl. major banks). Thus, most Estonian bank clients have an alternative for settling express payments in euros.





G. Reindorf





Eesti Panga olulisemad  
tegevused ja saavutused  
2008. aastal

## MONETARY POLICY

The goal of Eesti Pank is to ensure price stability through the fixed exchange rate of the Estonian kroon. Estonia has been using the fixed exchange rate and the currency board system successfully for 16 years.

The strengths of the system have revealed themselves in the current phase of economic downturn. The currency board arrangement has successfully coped with the adjustment need of the internal and external balance in the changed economic environment. Inflation, wage growth, the current account deficit and credit demand have all decreased rapidly. At this point, large exchange rate volatility would have jeopardised non-financial sector competitiveness as well as financial stability.

Eesti Pank ensures the smooth operation of the monetary system through monetary policy instruments and active participation in economic policy discussions. The central bank's main monetary policy instrument is the **standing facility of buying and selling foreign currency** (forex window) available for credit institutions. The forex window enables banks to increase their Estonian kroon reserves by selling to the central bank a desired amount of foreign currency, and vice versa – to buy foreign currency for Estonian kroons. The **reserve requirement** is another important monetary policy instrument of Eesti Pank, obliging banks to keep a part of their assets as buffers in Eesti Pank or in high-quality external assets.

In 2008, the central bank left the banks' reserve requirement unchanged at comparatively high 15%. The underlying reason was the turmoil in global capital markets. In the light of the current global financial crisis, the Estonian banking system has maintained a high level of liquidity and capitalisation, meaning that financial intermediaries continue funding credit-worthy projects. Owing to the credit crunch, local financial institutions do not depend on parent banks' funds that much any more, and are thus less vulnerable to the changes in the external environment.

The Estonian kroon money market remained thin in 2008. The transactions mainly reflected non-residents' decisions to cover the open foreign exchange position in the kroon. The changes in the Estonian money market interest rate (Talibor) did not affect the cost of capital for the domestic non-financial sector.

On 26 February 2009 Eesti Pank entered into a precautionary arrangement with the Swedish central bank to ensure financial stability under the currency board system and to promote confidence in the financial markets. The contract amount is 10 billion Swedish kronor in exchange for Estonian kroons. The precautionary arrangement with the Swedish central bank is an additional measure to support the current high liquidity and capital buffers of the branches and subsidiaries of Swedish banks operating in Estonia.

## **ECONOMIC ANALYSIS, FORECAST AND RESEARCH AS THE BASIS FOR MONETARY AND FINANCIAL POLICY-MAKING**

### **Monitoring**

Making monetary policy decisions requires an effective system for monitoring and forecasting economic developments, supported by target research on long-term processes in the Estonian economy. This system involves all departments that are responsible for shaping the central bank's monetary policy decisions.

Economic development monitoring mainly covers Estonia and the European Union member states, but also other major countries that play an important role in global economic developments. Understanding the external environment is very important for a small open economy, and thus developments in Estonia are always analysed in the context of trends in foreign economies. The monitoring process of the Estonian economy may be divided into two categories: monitoring developments in the non-financial sector and in the financial sector. The outputs of this process are monthly reviews for internal use in the bank, which serve as a basis for press releases and statements.

### **Economic reviews**

Eesti Pank publishes economic statements six times a year. Twice a year the central bank publishes a longer **economic overview** that includes also an economic forecast (see also "Key points of the economic forecasts of Eesti Pank in 2008", p ...). Once every six months the central bank analyses financial stability. The results of the analysis are published in the **Financial Stability Review**. Estonia's economic developments in light of the forthcoming adoption of the euro is analysed in the **Report on the Adoption of the Euro** published twice a year.

The flexibility of the labour market plays an

important role in the fixed exchange rate regime. Smooth income convergence towards more prosperous countries requires flexible wage formation based on productivity growth. Labour market issues have been the topic of targeted research projects already for several years. These serve as the basis for the Labour Market Review published twice a year.

### **Economic forecast**

Eesti Pank issues economic forecasts twice a year: a spring forecast in May and an autumn forecast in November (see "Key points of the economic forecasts of Eesti Pank in 2008", p ...). To this end, current year's economic developments and projections for the following two years are analysed. The forecast baseline scenario is usually accompanied by two risk scenarios. For further information on the key points of Eesti Pank's economic forecasts see the bank's web site.

Rapid changes in the economic structure require regular improvement and revision of the macroeconomic model for the Estonian macroeconomic forecast. This task has been divided between the Research Department and the Economics Department of Eesti Pank. The Research Department is responsible for developing the quarterly econometric model of the Estonian economy that serves as a basis for compiling semi-annual economic forecasts in the Economics Department. In 2008, the development of the model for the macroeconomic forecast focused on improving the description of the credit transmission channel. The second agenda of development activities was related to the development of a general equilibrium model that would enable to analyse the impact of the ECB's monetary policy decisions on the Estonian economy. Representatives of Eesti Pank participated in the modellers' working group of the ESCB member states. The working group meetings focused on exchange of experience in model development and harmonisation of relevant principles.

## **Economic research**

Eesti Pank's economic research projects are based on the **strategic research plan**, which determines the general framework for the studies conducted in the bank. The priorities for 2007–2009 included activities related to the development of the macro model of the Estonian economy and the monetary policy simulation model; research on monetary policy and financial sector, as well as analysis of the sustainability of the Estonian monetary system. In 2008, thirteen research projects on these issues were carried out.

The projects focused on stress testing the banking sector; inflation in the Central and Eastern European countries; the effects of the opening of the Estonian labour market; the ability of Estonian companies to adjust to economic shocks; the flexibility of price and wage formation in Estonian companies, etc. In 2008, also the development of the monetary policy simulation model started off and the base model for the macroeconomic forecast of the Estonian economy was improved.

Most of the research projects are conducted in the Research Department, but occasionally also other departments carry out single projects. For instance, migration trends were analysed in 2008 in the Economics Department.

In addition to publication in the Eesti Pank Working Papers Series, the central bank's economic researches gain recognition on the international arena. In 2008, research papers and articles were published in internationally recognised academic journals and introduced at international conferences.

The **cooperation in research continued at international and domestic level** in 2008. Central bank's economists attended the Working Group of Econometric Modelling and the Wage

Dynamics Network, composed of members of the European System of Central Banks. In cooperation with the Faculty of Economics and Business Administration of the University of Tartu, Eesti Pank started preparations for a high-level conference "European Association of Labour Economists Annual Meeting 2009" to be held in Tallinn in autumn 2009.

Along with introducing Eesti Pank's own research projects, several well-known **foreign experts** were invited to Estonia last year to present their research results. For example, Zsolt Darvas from the Corvinus University of Budapest presented a research on the euro area enlargement and euro adoption strategies; Prof. David Mayes from the University of Auckland held a seminar on the background and lessons of the global financial crisis; colleagues from other national central banks (Finland, the Netherlands, the Czech Republic) introduced their current research projects, etc. The annual series of lectures dedicated to the internationally renowned Estonian economist Prof. Ragnar Nurkse continued in 2008 with a lecture by Erkki Liikanen, Governor of the Bank of Finland.

On 1–2 February 2008, the International Monetary Fund (IMF) and Eesti Pank organised a seminar "Convergence in the Baltics" in Brussels to discuss the developments and outlook of the Baltic economies and economic convergence in the European Union. Seminar participants included representatives from the Baltic States, the IMF, the European Commission, the European Central Bank, other EU countries and universities.

On 21 August 2008, Eesti Pank, the Ministry of Economic Affairs and Communications and the US Global Interdependence Center (GIC) organised an international conference "Emerging Energy Markets" in Tallinn, which addressed energy policy issues in the Nordic and Baltic countries.

The keynote speeches were held by Juhan Parts, Minister of Economic Affairs and Communications, who talked about energy policy challenges in the Nordic-Baltic region, and Jean-Claude Schwartz from the European Commission, who analysed changes in the European energy policy. The panels were chaired by Einari Kisel, Deputy Secretary General of Energy at the Estonian Ministry of Economic Affairs and Communications; David R. Kotok, Member of the Board of Directors of GIC, and Andres Sutt, Deputy Governor of Eesti Pank. Panel participants included market agents, economists and experts from the IMF, the United States, EU countries and the Nordic Investment Bank.

In 2008, Eesti Pank conducted twelve **open seminars**. Nine of them had guest lecturers from abroad and three presented the bank's own research projects.

The **visiting researcher programme** of Eesti Pank has contributed to fruitful research contacts for years now. In 2008, five foreign experts took part in the economic research projects of Eesti Pank.

In 2008, Eesti Pank granted the traditional **research award** of young Estonian economists to Kristjan-Olari Leping, doctoral candidate at the University of Tartu, for his research "Heterogeneity of human capital and its valuation in the labour market".

## RESERVE MANAGEMENT

The foreign exchange reserves of Eesti Pank are backing the Estonian kroon and are used to ensure the stability of the kroon. According to the currency board principles, foreign exchange reserves must fully cover all the liabilities of Eesti Pank, including the banknotes and coins issued, and the accounts of commercial banks with Eesti Pank. The central bank proceeds from strict risk

constraints in investing the reserves, taking into account the primary objectives, namely the preservation and liquidity of assets. Return comes third on the list of objectives.

### Structure of foreign exchange reserves

The structure of foreign exchange reserves did not change considerably in 2008. The reserves are still divided into two: the liquidity buffer and the investment portfolio. A marginal part of the reserves is held in gold.

The liquidity buffer accounts for approximately 10% of total reserves and the central bank can use it at any time for Eesti kroon and foreign currency transactions with domestic credit institutions.

Assets of the other major component of the foreign exchange reserves – the investment portfolio – are invested in international financial markets. The objective of the investments is to achieve the optimum balance of risk and average return above money market interest rates over a global economic cycle. Investment portfolio assets are primarily invested in the liquid bond markets of leading industrial countries, while constantly monitoring and managing the interest rate, credit, currency and liquidity risks of the investments. For further information on risk management see the web site of Eesti Pank.<sup>1</sup>

### Investment process

Eesti Pank manages interest rate risk through the benchmark portfolio. This determines the average risk level the bank is ready to accept, and it is also used for performance measurement purposes in reserve management. The benchmark portfolio does not include currency risk. Limits have been set for the allowed deviation of the actual investment portfolio from the benchmark portfolio.

<sup>1</sup> <http://www.eestipank.info/pub/en/ylidine/pank/haldamine/reserve.html?ok=1>

The decisions regarding changes in the risk level of the benchmark portfolio are made by the Monetary Policy Committee of Eesti Pank. Lowering the risk level of the benchmark portfolio essentially means reducing the average duration of the portfolio: more assets are invested in low-volatility financial instruments providing more stable yields. As a result, the accrued interests offset the potential price fluctuations caused by market volatility. In the case of increasing the risk level, more assets are invested in longer-term instruments; that is, government bonds with the maturity of more than one year.

In addition to earning on a relatively stable benchmark portfolio, or **passive investment**, Eesti Pank is also engaged in **active investment**, taking positions in global financial markets. Such investment decisions are taken based on economic analyses, market relationships and other factors. Markets and securities are chosen on the basis of the concept, expected horizon and efficiency of the investment. The main investment philosophy lies in diversification: the aim is to spread risks and make better use of market opportunities. Strategies utilise primarily fixed income and interest rate markets and exchanges of the world's developed economies. Portfolio managers make investment decisions independent of each other. This is possible because the overall risk limit is divided into portions and the use of each portion is up to its portfolio manager.

Eesti Pank tries to keep up with the times and find its niche in today's relatively efficient markets. Two different approaches are applied in making investment decisions: subjective and model based. The former is mainly based on the qualitative analysis of economic processes, market psychology and the experience of portfolio managers. The latter is based on quantitative market relationships derived from investment models. The best decisions for investment in money, capital and foreign exchange markets are made by combining these two approaches.

External asset managers also have a role in active investment. In 2008, the central bank had four external asset managers. Informed Portfolio Management started cooperation with the central bank in 2007. BlackRock has been investing Eesti Pank's assets since 2006, PIMCO since 2005 and ABN Amro Asset Management since 2003. The external asset management programme is based on overlay mandates and the managers express the majority of strategies through derivative instruments.

In 2008, active investment resulted in 69 basis points of excess return over the benchmark portfolio.

### **Results and determinants of investment in 2008**

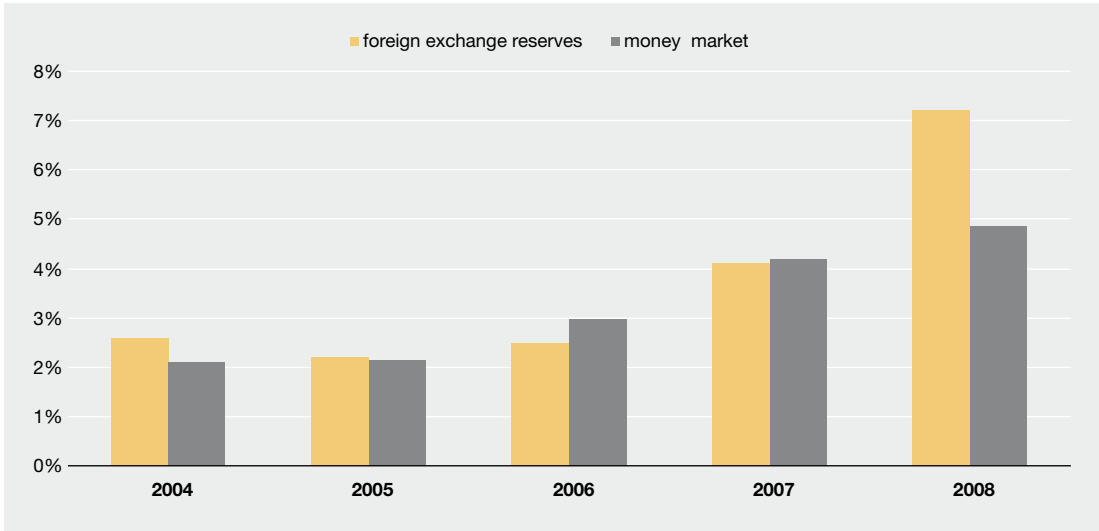
The foreign exchange reserves of Eesti Pank totalled 44.18 billion kroons as at the end of 2008. Annual growth in reserves was approximately 26%. The excess reserve accounted for nearly 14% (6 billion kroons) of total reserves.

Return on investment was significantly higher than expected. It was affected by the deepening of the global financial and liquidity crisis in the second half of 2008, which brought about a rapid decline in the interest rates on government bonds both in Europe and the United States. The decline continued until the end of the year, regardless of the key interest rate cuts and other measures taken by major central banks. Consequently, the 7.21% return on foreign exchange reserves was considerably higher than the return on the money market (see Figure 1).

### **Changes in the benchmark portfolio in 2008**

As of April 2008, the investment horizon of the benchmark portfolio is one year. In July, the Monetary Policy Committee of Eesti Pank decided to extend the duration of the benchmark portfolio





**Figure 1. Return on foreign exchange reserves compared to return on money market**

**Table 1. Structure of the benchmark portfolio**

	3 months	1 to 3 y	3 to 5 y	5 to 7 y	7 to 10 y	10+ y
Euro area	62.78%	16.56%	8.33%	5.71%	4.26%	2.37%
USA	67.02%	16.02%	7.71%	5.23%	4.02%	

owing to the rise in interest rates at the beginning of 2008. However, interest rates went down in autumn, which is why the duration was shortened in November. Table 1 shows the structure of the benchmark portfolio endorsed by the Monetary Policy Committee on 19 November 2008.

**Asset management services provided to the public sector**

Eesti Pank has been cooperating with various public sector institutions for years already. In

2006, the central bank started to provide risk management service to the Estonian Unemployment Insurance Fund. The service includes daily monitoring of the investment activities of asset managers, drawing the reports required and, if necessary, advising the Fund in investment related matters.

Eesti Pank continued to provide the full package of asset management services to the Guarantee Fund, whose investment portfolios totalled 2.2 billion kroons at the end of 2008.

## ENSURING FINANCIAL STABILITY

**Eesti Pank's key responsibility is ensuring price stability. The smooth operation of the financial system is a necessary precondition for central banks to be able to achieve their targets.**

In order to ensure the smooth operation of the financial system, Eesti Pank assesses the related risks and takes measures to minimise the potential materialisation of such risks.

To assess the risks to the financial system, the primary responsibility is to guarantee the availability of sufficient **high-quality data**. Eesti Pank cooperates with domestic and international institutions to collect, exchange and publish financial sector statistics. The **results of the analysis** of financial sector operation and related risks are published twice a year in the Financial Stability Review. The review also includes regular assessments of the operability of and risks to the payment and settlement systems; that is, the infrastructure necessary for financial intermediation.

The collection and analysis of data is a continuous process. The need to **implement measures** to improve the operability or efficiency of the financial sector may emerge very rapidly. Therefore, Eesti Pank is regularly monitoring and analysing the situation of the financial sector. In order to increase the transparency of the financial sector and provide market participants with the necessary data, Eesti Pank publishes statistics on the operation of banks and leasing companies on a monthly basis. As of 2008, the data are published with comments. In addition, the credit institutions operating in Estonia are required to publish their own consolidated quarterly financial statements.

As the Estonian financial sector and economy are globally integrated, it is essential to maintain close **domestic and cross-border cooperation** with the institutions that influence the sector's operational environment.

In order to further enhance cooperation, Eesti Pank, the Financial Supervision Authority and the Ministry of Finance revised their cooperation arrangement, which has been laid down in the Memorandum of Understanding (MoU) renewed in 2007. A committee of their representatives has been established for exchange of information and coordination of operations. In addition to providing a framework for daily operations, the MoU concluded in 2006 laid down the tasks and foundations for their joint operation in case of an emergency, i.e. a systemic financial crisis. Still, it should be borne in mind that although the operability of the financial intermediation system is a broader goal and in the interest of the society, the main responsibility for the sustainability of a bank lies with the owners and management of the bank.

In addition to domestic operations, as a member of the European System of Central Banks Eesti Pank also cooperates with the national central banks of other EU countries in order to ensure financial stability. Information exchange with the Nordic and Baltic States is especially frequent owing to close regional integration. Since 2006, Eesti Pank belongs to the cooperation network of Nordic and Baltic central banks, where information on the functioning of the financial systems and their operation environment is exchanged regularly. The areas of responsibility and operation of the Nordic and Baltic central banks regarding crisis management have been specified in the regional MoU.

### **Financial sector analysis and financial stability assessment**

The uncertainty in financial markets that started off in the US mortgage market at the end of summer 2007 evolved into a global crisis in autumn 2008, when several US and European financial institutions encountered difficulties and needed to make large-scale write-downs on trading and credit portfolios. The confidence crisis caused a

significant rise in the cost of lending, to which central banks have responded with significant cuts in key interest rates.

In Estonia, growth started to slow in the middle of 2008, when the global financial crisis had not fully unfolded yet. Investment demand has decreased, whereas banks' risk assessments and thus also risk margins have increased. As a result, growth in banks' credit portfolios has slowed considerably.

Quite expectedly, the number of bad loans has started to grow. Growth in loans overdue is alleviated by earlier provisions and available capital buffers. The latter have resulted, among other factors, from the stricter requirements to the share of own funds implemented by Eesti Pank already in previous years.

The 15% reserve requirement imposed by Eesti Pank on credit institutions serves for hedging liquidity risk. The liquidity of major banks operating in Estonia largely relies on the ability and will of their parent banks to provide funds when needed. The general cost of funds depends on fund providers' assessments of the risk level of the whole group. In the rapidly changing economic environment it cannot be ruled out that the risks, which may have been so far incorrectly assessed, will materialise, bringing along changes in the cost of funds for the whole group. Therefore it is vital that credit institutions maintain sufficient liquidity and capital buffers to cope with the difficult market conditions.

### **Measures adopted to ensure financial stability**

The operation of participants in cross-border financial groups is often integrated and the risk management of groups has become more centralised. Thus, **cross-border coordination** between the banking and monetary regulators and supervisory authorities in a group's operat-

ing region is extremely important, especially in difficult market conditions.

In order to improve cross-border cooperation between institutions responsible for safeguarding financial stability, in June 2008, pursuant to the action plan of the EU Council of Economic and Finance Ministers (ECOFIN) on ensuring financial stability in the EU, an amended version of the cooperation agreement on ensuring cross-border financial stability was concluded between bank supervision authorities, central banks and ministries of finance. Estonia also acceded to the agreement.

To alleviate the consequences of the risk aversion that hit global financial markets in autumn 2008, several governments and central banks adopted extraordinary measures to support liquidity and customer confidence. As banking systems are closely integrated, the cross-border impact of the actions of governments and central banks has gained more importance. Therefore, it is very important that the adopted measures be harmonised across countries. As a response to increased risk aversion, Member States (including Estonia) agreed at the October ECOFIN to harmonise the minimum level of deposit guarantees (see below).

Among others, also Nordic and Baltic governments and central banks have taken alleviating measures. High-quality data is of key importance to ensure that appropriate measures are adopted. When the situation worsened in autumn 2008, Swedish and Estonian central banks exchanged information on a daily basis. Eesti Pank submitted relevant data, analyses and assessments also to other Estonian institutions, organisations and market participants.

In addition to cross-border cooperation, Eesti Pank participated in the development of national measures aimed at ensuring financial stability. In order to improve the ability of the Estonian

government to prevent and, if necessary, manage financial crises, the State Budget Act, the Foundation of and Participation in Legal Persons in Private Law by the State Act, as well as the Riigikogu Rules of Procedure Act and the Riigikogu Internal Rules Act were amended.

Based on the assessment of the developments, Eesti Pank decided to retain the 15% reserve requirement and 10% capital adequacy requirement to the credit institutions operating in Estonia. The central bank also continued to improve the crisis management framework.

#### **Amendments to EU legislation on banking and payment intermediation**

Although the prime responsibility for the operation of a company lies with its owners and management, the uncertainty on financial markets and the decreasing confidence in financial intermediaries call for **improving the requirements to the operation of and supervision over financial institutions.**

Supervision over different fields of activities and the globally integrated financial sector is currently decentralised. To solve the resulting problems, in autumn 2008 the European Commission established a working group which is due to present its first proposals in 2009.

Although the analysis of the lessons learnt in the current financial crisis has not ended yet, several processes were initiated in 2008 to ensure improved performance of financial systems. For instance, additional requirements are to be imposed on credit rating agencies and they are to be subjected to supervision. To this end, a working group was established to develop a draft act concerning requirements to the rating agencies and supervision over their compliance with the requirements. Work in that field continues in 2009. In addition, the framework of capital adequacy calculation and the rules of financial

accounting are to be amended in order to reduce their pro-cyclicality. In 2008, further amendments were made to the EU directive on capital requirements in the matters of supervision over international credit institutions and cross-border exchange of information between competent authorities; also some rules on capital adequacy calculation were amended. Some requirements regarding the calculation of risk weighted items were amended, the requirements for own funds were revised and additional restrictions were imposed on the concentration of credit risk.

Besides the need to improve the pre-warning and supervision systems, the need to speed up the harmonisation of **deposit insurance systems** across EU Member States came up again along with the increasing uncertainty on financial markets. In autumn 2008, the Member States agreed that the maximum amount of insured deposits would be raised to 100% of 50,000 euros (782,330 kroons) per depositor. Work in that field is to be continued in 2009.

The globalisation of financial groups has increased expectations to the central coordination of supervision and regulation at the group level or even at the EU level. Latest developments clearly indicate that successful prevention and solution of crises requires better cross-border cooperation. However, it is important that the country responsible for the functioning of the financial system and that may be expected to provide financial contribution to the improvement of the system, would receive sufficient information regarding the operation of and risks to the financial sector. Furthermore, the country should also be entitled to adopt measures that might be necessary for ensuring financial stability.

In the field of settlement systems, the directives on e-money, financial collaterals and settlement finality and the regulation on euro payments were revised in 2008.

## **Improvement of securities market infrastructures**

The global financial crisis showed the importance of financial sector infrastructures – **payment and securities settlement systems**. Therefore, greater efforts were made to improve them. In May 2008 Eesti Pank and credit institutions operating in Estonia connected to the trans-European settlement system TARGET2, which operates on a single shared platform and was launched in November 2007. As regards securities market infrastructures, the implementation of the Code of Conduct for clearing and settlement agreed upon by market participants continued. An agreement was also reached regarding the recommendations of the European System of Central Banks (ESCB) and the Committee of European Securities Regulators (CESR). The TARGET2-Securities (T2S) project, initiated by the European Central Bank, moved to the next stage.

The most important public sector initiative for Eesti Pank and the Estonian Central Register of Securities was the **T2S project**, the single shared platform for the settlement of securities. After the project's feasibility study, identification of user requirements and receiving feedback from market participants, the Governing Council of the European Central Bank decided to start the development of the T2S settlement platform. With the launch of the T2S the Eurosystem will be providing a single infrastructure for securities settlements to securities depositories, using the central bank's money if the transaction is conducted in euros. The T2S services will be extended to other currencies in case there is sufficient market demand, the central bank issuing the other currency requests it and the Governing Council of the ECB approves it. The platform will be operational in 2013. With the support of Eesti Pank and the market participants operating in

Estonia, at the end of 2008 the Estonian Central Register of Securities gave a conditional commitment to join the T2S platform. Since the second half of 2008, Eesti Pank and the Estonian Central Register of Securities have been participating in the T2S Advisory Group; at the beginning of 2009, the T2S Estonian National User Group (EENUG) was established. The aim of the EENUG is to represent the country's interests for the T2S project team operating at the European Central Bank and between the T2S Advisory Group and the market participants operating in Estonia.

## **Payment and settlement systems oversight**

**In 2008, regardless of the financial crisis, there were no such incidents in the operation of the Estonian payment and settlement systems that would have jeopardised the stability of the financial sector or the smooth functioning of payment systems.**

The value of transactions processed in the payment and settlement systems increased as a result of the global financial crisis. However, thanks to sufficient buffers the payment and settlement systems experienced no failures that would have triggered a systemic risk in the systems or the financial sector in general.

The **implications of crisis** on interbank payment and settlement systems could be perceived from mid-September to mid-October. Namely, then the number of interbank transactions increased robustly, credit institutions used the central bank's forex window, and the demand for cash rose. **Credit institutions had no problems with meeting the reserve requirement.** Owing to a deviation in the euro area interest rates from their customary levels because of the financial crisis<sup>1</sup>, in mid-October some credit institutions fulfilled the reserve requirement only as

<sup>1</sup> 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.

kroon deposits in Eesti Pank, temporarily eliminating their high-quality securities held for meeting the reserve requirement base.

By now, all major Estonian credit institutions have joined the new payment and settlement system TARGET2-Eesti launched on 19 May 2008. This means that Estonian bank customers now have an alternative to settle express payments in euro. In **overseeing TARGET2-Eesti**, Eesti Pank proceeds from the guide on the implementation of the Eurosystem's TARGET2 oversight function and Eesti Pank's framework on settlement systems oversight. The assessment of TARGET2 and its subsystems is based on the "Core principles for systemically important payment systems" by the Bank for International Settlements (BIS) and „Business continuity oversight expectations for systemically important payment systems" implemented by the Eurosystem.

The responsibility for the oversight of the entire TARGET2 lies with the European System of Central Banks, including the Eurosystem and the central banks outside the Eurosystem that are connected to TARGET2. The leading overseer of the single platform of TARGET2 is the European Central Bank. Owing to the legal and operational decentralisation of the subsystems of TARGET2, the responsibility for overseeing TARGET2-Eesti lies with Eesti Pank.

The oversight of TARGET2 supports its secure and effective operation; the primary purpose of oversight is to minimise systemic risks. To this end, national central banks assess the compliance of TARGET2 and its subsystems with internationally recognised standards, make recommendations and implement measures to achieve compliance.

**According to the overseer of Eesti Pank, the system of TARGET2-Eesti complies with the principles recognised internationally and by the Eurosystem.** The probability of the occur-

rence of systemic risks is reduced by acknowledging and preventing other potential risks in the settlement system. The legal framework, functional and technical solutions and procedures of TARGET2-Eesti are secure and appropriate. In addition to the legislation of the Republic of Estonia, the legal relationships of TARGET2-Eesti are regulated by the rules of TARGET2-Eesti and the accession agreements concluded between the settlement system participants (between Eesti Pank and the members of the settlement system).

In accordance with the strategic goal of Eesti Pank to foster the integration of European financial markets, the **central bank evaluated one development concept for the securities market infrastructure**. In cooperation with other Baltic stock exchanges, the Tallinn Stock Exchange and the Estonian Central Register of Securities analysed the introduction of the euro as a trade and settlement currency in the entire Baltic market. In addition to Estonian kroons, the securities traded on the Tallinn Stock Exchange have been denominated also in euros since the beginning of 2002, when the trading system of the Helsinki Stock Exchange HEX was introduced by the Tallinn Stock Exchange. Given that the TARGET2 provides the necessary infrastructure for euro settlements, Eesti Pank supports the idea to allow stock exchange members settle their transactions in euros and, in the case of over-the-counter transactions, in Estonian kroons or euros as required by the transaction parties. For introducing the euro as a currency for securities settlements, Eesti Pank recommends to proceed from the same principles as applied for the listing of securities in euros. In other words, financial claims and liabilities resulting from securities transactions will be settled using the official exchange rate of the Estonian kroon and the euro throughout the transaction process from the seller to the final investor.

## DEVELOPMENTS IN STATISTICS

### **One of the key responsibilities of Eesti Pank is to compile Estonia's balance of payments statistics and monetary and financial statistics.**

Eesti Pank has applied an up-to-date, flexible and internationally compatible system for collecting, processing and publishing statistical data. This system serves as an input for monetary policy analysis and assessment of risks related to Estonia's financial and external sectors. The comprehensive and regularly updated web site of the central bank contains over 400 tables of data and is available to everyone.

As regards statistics, Eesti Pank proceeds from both the national and international interests. The related responsibilities are fulfilled according to the generally accepted best practices in official statistics, while adhering to the principles of efficiency and optimum use of resources.

Eesti Pank participated in the **working group for drafting the new Official Statistics Act and the government committee for simplification of the reporting framework** in order to bring the system of official statistics in Estonia in line with the abovementioned requirements. Both working groups were established in 2008 to update the system and legal basis of official statistics and facilitate the reuse of available data for statistical purposes. This would help minimise the administrative burden arising from the submission of data and lower the costs related to statistics.

Eesti Pank also participated in several working groups and committees of the European Commission and the European Central Bank and attended seminars on the **revision of international statistical standards**. In 2014, all European countries will implement the new standards for balance of payments and GDP statistics.

### **Banking and other financial statistics**

At the beginning of 2008, several decrees of the

Governor of Eesti Pank entered into force, imposing additional reporting requirements for credit institutions. Amendments were mainly inspired by the need to bring reporting in line with the international financial reporting standards. Since this is integrated reporting (data are collected for both compiling statistics and exercising supervision) the amendments considered the needs of all interested parties, including the requirements arising from the statistics regulations of the European Central Bank.

Credit institutions made arrangements related to the amendments in reporting mostly in the second half of 2007; Eesti Pank performed the majority of related activities in the first quarter of 2008. Amendments comprised almost all statistical outputs, including the submission of statistics to the European Central Bank, the International Monetary Fund, etc. Therefore, changes were made to the forms of outputs as well as to the data compilation query systems.

Several statistical tables and also the release calendar published on the web site of Eesti Pank were improved based on user feedback. Namely, the majority of statistical tables are now published within 2–3 days, which enables statistics users to get a better overview of banking sector developments.

Compared to 2007, there were considerably fewer amendments to reporting regulations in 2008. Amendments to the reporting requirements for the Guarantee Fund should be mentioned here, which was related to the raising the maximum amount of insured deposits from 20,000 to 50,000 euros. Another example is the establishment of a requirement for savings and loan associations to report to Eesti Pank. In the case of the latter, the previous form of cooperation – cooperation agreements – was replaced by a decree of the Governor of Eesti Pank. As of 2009, savings and loan associations are required to submit monthly balance sheets and quarterly income statements to the central bank. Aggregate data are available on the web site of Eesti Pank.

In the second half of the year, preparations were made for establishing an **automated system for the compilation of quarterly financial accounts**. Since this is a very specific system, Eesti Pank analysed national best practices and decided to cooperate with the Finnish central bank in that respect. After several consultations it appeared that the functionality of the software developed by the Finnish central bank would also meet the needs of Eesti Pank. It was agreed by the end of the year that the Finnish central bank would give the necessary module of the software in question to Eesti Pank for free, while not assuming any obligations in connection with that. The software received from the Finnish central bank is just a component of a bigger system. Therefore, Eesti Pank has to develop the missing components itself, proceeding from database structures and other factors. The first tests of this large-scale project are planned at the end of 2009.

In 2008, Eesti Pank continued regular meetings with credit institutions, savings and loan associations, Statistics Estonia and the Financial Supervision Authority. Cooperation with market participants was focused on exchange of information to guarantee that reports were up to date and met the needs and possibilities of all parties. The primary objective of cooperation with Statistics Estonia and the Financial Supervision Authority was to increase the consistency and quality of statistical outputs and minimise the reporting burden on reporting subjects.

### **Balance of payments statistics**

In 2008, the web-based reporting portal was developed further, cooperation with reporting agents was improved to increase the quality of preliminary data and statistical outputs, and amendments were made to the balance of payments methodology.

As at the end of 2008, 1,182 enterprises (34% of the reporting agents) had subscribed to the web-based system for the collection of balance of payments statistics. During the year, 192 more report-

ing agents subscribed. 37 enterprises stopped using the portal, which was mainly due to liquidation or merger.

A preliminary analysis showed that the culture of statistics (timely submission of reports, response rate) of enterprises who had subscribed to the portal was higher than the average of the sample.

During the year, the maintenance of the portal was carried out, the authentication options were improved and future developments mapped.

Eesti Pank also continued **close cooperation with other state agencies that collect and manage statistics**. The common electronic accounting system for the public sector introduced in Estonia enables Eesti Pank to obtain preliminary data on the general government. In 2008, in cooperation with Statistics Estonia, the entries of the above-mentioned accounting system were linked to balance of payments and investment position items. Consequently, Eesti Pank will be able to receive statements from Statistics Estonia that meet the needs of the Balance of Payments and Economic Statistics Department. Based on the statement public accounting system, cash-based approach for calculating foreign aid was replaced by accrual accounting. This considerably improved the quality of general government transfers and assets and liabilities.

For the compilation of the travel services account, a new source of data was introduced – the quarterly border crossings report of Statistics Estonia. In cooperation with Positium OÜ, a company of the University of Tartu, Eesti Pank started to test a mobile positioning method that enables to identify the number of non-residents in Estonia.

In 2008, Eesti Pank started to bring the accounting methods of financial intermediation services indirectly measured (FISIM) into compliance with the new version of the IMF's Balance of Payments Manual. In the current version, FISIM is included under investment income, whereas the revised methodology places it under financial services.



The adoption of the new methodology will eliminate the discrepancy between the balance of payments account and the rest of the world account under the national accounts, which has resulted from different approaches to FISIM. The FISIM accounting methods were coordinated with Statistics Estonia and also the first test calculations were made. All source data for calculating external sector FISIM originate from Eesti Pank; therefore, the calculation of FISIM will be fully taken over from Statistics Estonia during 2009.

In 2008, Eesti Pank decided to start publishing the quarterly balance of payments with the timelines of T + 70 days (previously T + 90 days) starting from the first quarter of 2009. The aim is to bring the publication of the balance of payments and that of gross domestic product in line with each other.

In addition, the central bank had to solve problems related to external trade statistics; develop principles for the implementation of penalty payment; improve the model of balance of payments flash estimates; develop assessment models for trade credit and notional units, etc. Eesti Pank regularly assesses the quality of balance of payments statistics. To this end, two quality reports were produced in 2008. The first was an annual report based on Eurostat's initiative and EU regulations, which assessed the quality of the current account and direct investment data. The report confirmed the high quality of Estonia's balance of payments, as later revisions have always remained within acceptable limits.

In the field of **international cooperation**, central bank representatives continued to participate in the ECB's Centralised Securities Database (CSDB) project. Primarily, this involved the quality control and monthly submission of data on exchange-quoted shares and bond issues registered in the Estonian Central Register of Securities to the European Central Bank. Eesti Pank also continued to prepare for the survey of Community

statistics on the structure and activity of foreign affiliates (FATS). Together with colleagues from Latvian and Lithuanian central banks, the survey sample was specified and the scope and timetable of the necessary activities were described. The survey will be conducted in spring/summer 2009 and the results will be submitted to Eurostat in September 2009.

Representatives of Eesti Pank participated in the revision of the regulation on cross-border payments in euro<sup>1</sup> and submitted amendment proposals regarding the content and form of the regulation. Work with the regulation is to continue in 2009.

In the negotiations between Estonia and the Organisation for Economic Cooperation and Development (OECD), the Balance of Payments and Economic Statistics Department of Eesti Pank is responsible for direct investment statistics. In relation to that, a large-scale Survey of Implementation of Methodological Standards for Direct Investment (SIMSDI) was completed and the time series complying with the OECD requirements were submitted. Eesti Pank also participated in the OECD working group on investment statistics where Estonia's direct investment statistics were examined in connection with the accession negotiations. Furthermore, a questionnaire of methodological proposals on the renewal of OECD's Manual on Statistics of International Trade in Services was submitted to the OECD.

### **General economic statistics**

Regular submission of general economic statistics to the European Central Bank and the Bank for International Settlements continued also in 2008. Another line of cooperation with the European Central Bank was price statistics, with a special focus on regulated prices in the structure of the consumer price index. In addition, the issue of telecommunication services was still on the agenda, and also the matter of electricity and gas prices was raised.

<sup>1</sup> Regulation (EC) No 2560/2001 of the European Parliament and of the Council of 19 December 2001 on cross-border payments in euro.

# PAYMENT AND SETTLEMENT SYSTEMS, AND CURRENCY IN CIRCULATION

**Price stability relies on the smooth operation of the financial system, which is based on efficient and well-functioning payment and settlement systems. Management and development of interbank payment and settlement systems is one of the primary tasks of Eesti Pank.**

## **Development of the payment and settlement environment**

Given the close integration of European countries, the keywords regarding the development of the payment and settlement environment are **international cooperation** and **common strategic development patterns**. The objective of harmonisation is to achieve effectiveness at the member state level as well as the EU level. As a member of the European System of Central Banks, Eesti Pank closely cooperates with the European Central Bank and member countries of the Eurosystem.

In 2008, the most important project of the ESCB, including Eesti Pank, was the trans-European settlement system **TARGET2** that operates on a single shared platform. The new system was implemented in several stages. The first member states connected to the system at the time it was launched; that is, in November 2007. Eesti Pank and a number of commercial banks<sup>1</sup> operating in Estonia connected to the TARGET2-Eesti, a sub-system of TARGET2, on 19 May 2008.

The new system is more efficient, both technologically and financially, since it operates on a single shared platform and there is no need for the euro area countries to maintain their own systems for euro transactions. Financial risks have been minimized, as the TARGET2 payments are settled using the central bank's funds

– banks can make transactions only with the funds available on the single shared platform. The TARGET2 is secure and reliable. Besides ensuring the operational reliability of the system, Eesti Pank together with the other national central banks of the Eurosystem will be planning and testing the TARGET2 also in 2009 to **ensure the system's business continuity in the case of a financial or operational crisis**.

As regards the **cross-border retail payment market**, under the leadership of the European Payments Council (EPC) Estonian banks have been preparing to join the **Single Euro Payments Area (SEPA)**. In addition to cross-border cooperation, the commercial banks, Eesti Pank and the Estonian Banking Association collaborate in the Estonian working group of the EPC. The SEPA aims at making euro payments across Europe as easy as domestic payments. Several banks operating in Estonia have concluded an adherence agreement and as of 28 January 2008 are providing the service of trans-European retail payments in compliance with the standards for SEPA credit orders. The year 2009 will witness major changes when the directive on payment services<sup>2</sup> will be transposed into the Estonian legislation and the SEPA Direct Debit Scheme will be made available. The inclusion of the general public in the consultation process for legislative amendments will be yet another major challenge.

As regards domestic developments in 2008, Eesti Pank opened accounts for several new branches of foreign banks. In addition, preparations are under way to connect to the interbank settlement systems. Thus, the systemically important payment systems can expect new members in 2009.

<sup>1</sup> Swedbank, SEB Pank, Nordea Pank, Sampo Pank, Eesti Krediidipank, Marfin Pank and Tallinna Äripank.

<sup>2</sup> Directive 2007/64/EC of the European Parliament and of the Council of 13 November 2007 on payment services in the internal market

### Interbank payment and settlement system

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

Around **98,500 payments** are settled every day via the interbank payment and settlement systems with the total value of **10 billion kroons**.

The Settlement System of Ordinary Payments (ESTA) is among the fastest in Europe. Payments are transferred to accounts in other banks ten times a day. The payment is transferred from the originator's account to the payee's account in 30 to 90 minutes, depending on the time of the origination. The ESTA also enables to settle large-value payments.

The ESTA's customer-friendly functionality enables to settle the majority of interbank domestic payments: **98,000 payments** are settled daily, which accounts for **99.7%** of total interbank payments. An average of **1.8 billion kroons** a day were settled through the ESTA in 2008. Both

the number and value of payments continued to grow in 2008, with annual growth standing at 10% and 21%, respectively (see Figure 1). The average value of a payment increased 10% to 18,500 kroons.

The **Real-Time Gross Settlement System (EP RTGS)** processes express payments – transfers between banks take around five minutes.

The number of payments settled through the EP RTGS decreased 13%, year-on-year. The decrease is due to a change in the structure of the EP RTGS, namely the transfer of cross-border euro payments from the RTGS to the TARGET2. On average, 270 transactions a day were settled in 2008 (see Figure 2). The express payments originated by bank customers account for 62% of total transactions; on average, 164 domestic customer payments were settled a day with an average value of 2.7 million kroons.

The average daily value of express payments reached 5.5 billion kroons. Banks' "compulsory" payments (transactions related to the collateral account of the ESTA) and purchase and sale transactions accounted for the largest share of the value (40% and 30%, respectively). Com-

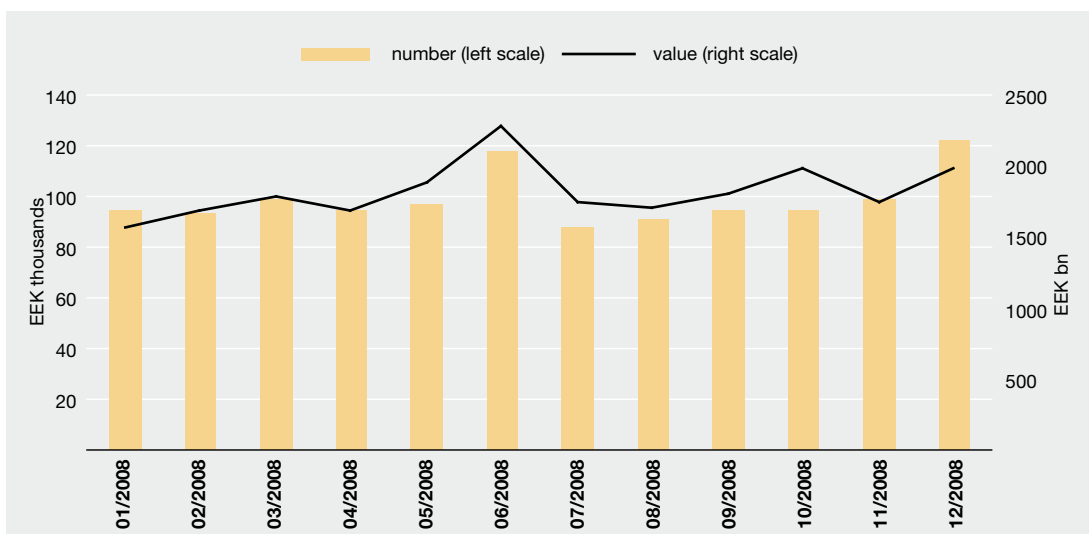
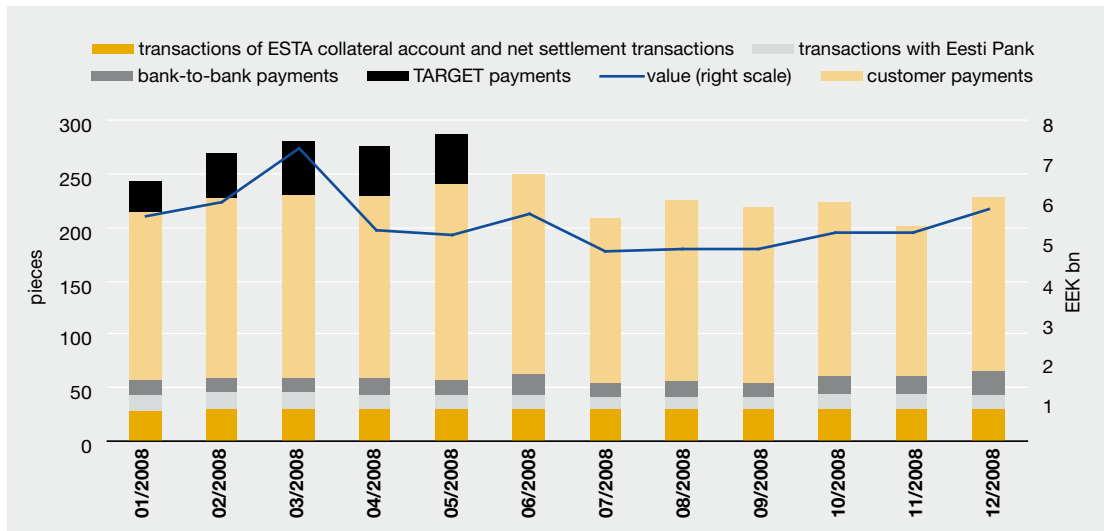


Figure 1. Number of payments processed in ESTA and their daily average value in 2008

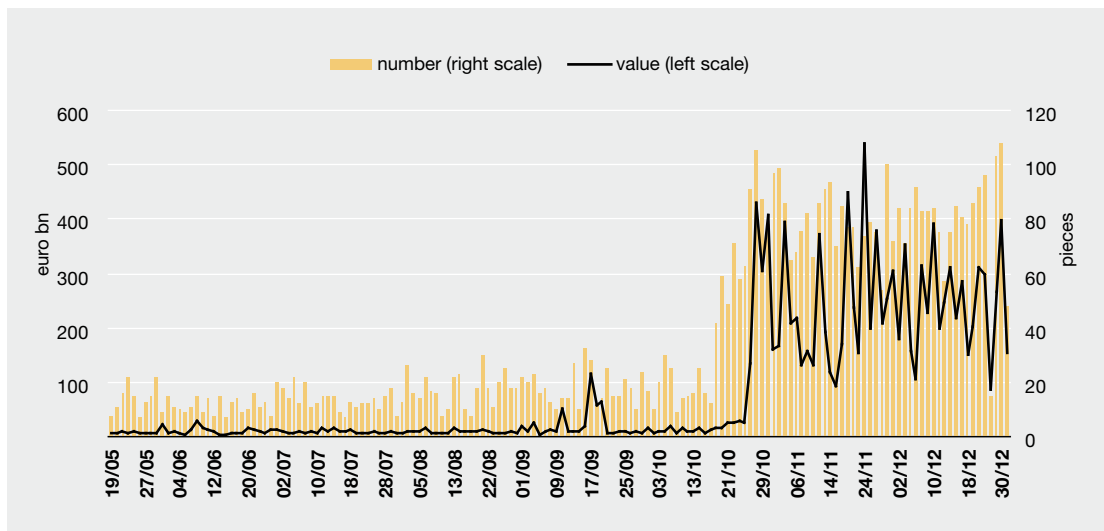


**Figure 2. Number of payments processed in EP RTGS by transaction types and their average daily value in 2008**

pared to 2007, the value of payments settled through the EP RTGS increased 8%.

The number of payments settled via the TARGET2-Eesti was relatively modest in the first year of the system's operation. Customers started to use the TARGET2, the alternative channel for set-

ling euro payments, more actively in November-December 2008. On average, 35 payments are settled a day with the value of 80 million euros (1.3 billion kroons). Estonian bank customers and banks receive an average of 170 payments daily via the TARGET with the value of 80 million euros (1.3 billion kroons).



**Figure 3. Number of payments processed in TARGET2-Eesti and their average daily value in 2008**

## MEETING THE CASH DEMAND

### Banknotes and coins in circulation and their structure

The total amount of currency in circulation as at 31 December 2008 was 11,996.3 million kroons (see Table 1). 1,905.1 million kroons (15.9%) were in the vaults of credit institutions, and savings and loan associations operating in Estonia; 10,091.2 million kroons (84.1%) was in circulation outside credit institutions and savings and loans associations.

In 2008, the amount of currency in circulation increased by 234.2 million kroons (2.0%). The increase is relatively small compared to 2005-2006, when the currency in circulation grew more than 10% year-on-year. The amount of currency in circulation reflects economic develop-

ments. It is especially noteworthy that in December 2008 the currency in circulation increased by only 17.1 million kroons. This is the lowest figure for December since the re-introduction of the Estonian kroon in 1992. Usually, in December the amount of currency in circulation grows (by more than 200 million kroons) for seasonal reasons.

Although the amount of coins in circulation continued growth, the rate of growth was lower than in previous years. As at year-end, there were 454.6 million coins in circulation; that is, approximately 340 coins per inhabitant.

The average calculated value of a banknote in circulation remained close to the 2007 level and stood at 137 kroons at the end of 2008. The average calculate value of a coin in circulation was 34 senti.

**Table 1. Banknotes and coins in circulation as at end-year**

Nominal value	Total amount (EEK m)				Number (m)			
	31.12.2005	31.12.2006	31.12.2007	31.12.2008	31.12.2005	31.12.2006	31.12.2007	31.12.2008
1 kroon	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
2 krooni	29.6	33.5	38.5	39.6	14.8	16.8	19.2	19.8
5 krooni	43.1	47.8	49.5	49.9	8.6	9.6	9.9	10.0
10 krooni	77.5	85.6	94.3	95.0	7.7	8.6	9.4	9.5
25 krooni	207.1	225.4	233.4	232.8	8.3	9.0	9.3	9.3
50 krooni	46.6	49.0	54.4	52.1	0.9	1.0	1.1	1.0
100 krooni	1,122.4	1,180.1	1,193.1	1,165.2	11.2	11.8	11.9	11.7
500 krooni	8,450.3	10,001.2	9,942.5	10,194.6	16.9	20.0	19.9	20.4
<b>Banknotes total</b>	<b>9,981.2</b>	<b>11,627.3</b>	<b>11,610.3</b>	<b>11,833.9</b>	<b>73.1</b>	<b>81.3</b>	<b>85.4</b>	<b>86.3</b>
5 senti	2.1	2.1	2.1	2.0	42.0	41.5	41.2	40.8
10 senti	12.3	13.4	14.6	15.2	123.2	134.4	146.0	152.1
20 senti	19.8	22.3	24.7	26.1	99.2	111.3	123.4	130.6
50 senti	19.1	22.1	25.1	27.2	38.2	44.1	50.2	54.4
1 kroon	52.9	61.0	69.7	74.8	52.9	61.0	69.7	74.8
5 krooni	8.3	8.5	9.0	9.4	1.7	1.7	1.8	1.9
<b>Coins total</b>	<b>114.6</b>	<b>129.4</b>	<b>145.1</b>	<b>154.9</b>	<b>357.1</b>	<b>394.1</b>	<b>432.3</b>	<b>454.6</b>
<b>Collector coins</b>	<b>6.0</b>	<b>6.4</b>	<b>6.7</b>	<b>7.5</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>
<b>Banknotes and coins total</b>	<b>10,101.7</b>	<b>11,763.2</b>	<b>11,762.2</b>	<b>11,996.3</b>				

### Expert analysis and handling of cash

In 2008, the central bank issued 12,897.5 million Estonian kroons of cash to credit institutions and received 12,646.9 million kroons, which is slightly more than in 2007 (see Table 2). The amount of cash issued and received by Eesti Pank has decreased significantly, as the supply of small denominations has shrunk. The amount of coins issued by the central bank has also substantially decreased.

All banknotes returned to Eesti Pank are sorted with fully automatic sorting machines. Banknotes unfit for circulation are destroyed and the rest are returned to circulation. In 2008, 31.2 million banknotes in the total amount of 3,016.3 million kroons were withdrawn from circulation (see Table 3).

Compared to 2007, the number of unfit banknotes has grown considerably. This concerns primarily 25-, 100- and 500-kroon notes, as new banknotes were put into circulation.

In 2008, Eesti Pank performed expert analyses for 12,011 damaged and worn-out banknotes and 2,076 coins submitted by credit institutions. 20 banknotes with counterfeiting elements were discovered.

All in all, 297 counterfeit banknotes were discovered in Estonia in the expertises performed by the Forensic Service Centre in 2008. 500-kroon banknotes accounted for the largest share of counterfeit money (48.1%). Given the number of banknotes in circulation (86.3 million), the number of counterfeits is relatively marginal. No counterfeit coins were found in 2008. Neither were there any failures in circulation.

**Table 2. Movement of currency between Eesti Pank and credit institutions**

Year	Total amount (EEK m)		Number (m)			
	Issued by Eesti Pank	Received by Eesti Pank	Issued by Eesti Pank		Received by Eesti Pank	
			Banknotes	Coins	Banknotes	Coins
2005	10,445.0	9,237.8	105.8	31.7	99.0	0.6
2006	12,399.0	10,732.5	118.6	37.5	110.4	0.7
2007	12,474.8	12,472.6	114.6	38.4	110.5	0.3
2008	12,897.5	12,646.9	102.0	24.7	101.1	2.6

**Table 3. Banknotes unfit for and withdrawn from circulation as at year-end**

Nominal value	Total amount (EEK m)				Number (m)			
	2005	2006	2007	2008	2005	2006	2007	2008
1 kroon	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
2 krooni	0.4	0.7	14.1	11.0	0.2	0.4	7.0	5.5
5 krooni	9.3	6.3	16.5	11.4	1.9	1.3	3.3	2.3
10 krooni	5.3	2.9	61.3	30.8	0.5	0.3	6.1	3.1
25 krooni	13.5	16.3	47.3	154.0	0.5	0.7	1.9	6.2
50 krooni	10.6	12.4	16.0	17.5	0.2	0.2	0.3	0.4
100 krooni	74.7	63.7	284.6	1,017.6	0.7	0.6	2.8	10.2
500 krooni	751.0	537.9	124.8	1,774.0	1.5	1.1	0.2	3.5
<b>Total</b>	<b>864.7</b>	<b>640.2</b>	<b>564.6</b>	<b>3016.3</b>	<b>5.6</b>	<b>4.5</b>	<b>21.8</b>	<b>31.2</b>

### **Preparation of new banknotes and coins**

In 2008, new 25-, 100- and 500-kroon banknotes were put into circulation (year of issue: 2007). The new banknotes were delivered to Eesti Pank by Giesecke & Devrient (Germany).

In addition, the central bank ordered new 2-kroon notes (produced by Giesecke & Devrient) and 10-kroon notes (by De La Rue Ltd in the UK).

New 10- and 20-sent coins were ordered from Staatliche Münze Berlin (Germany) and 50-sent coins from Monnaie de Paris (France).

In February 2008, Eesti Pank issued 10-kroon silver coins, 50-kroon golden coins and 100-kroon platinum coins dedicated to the 90th anniversary of the Republic of Estonia. The coins were minted by Suomen Rahapaja Oy (Finland). The silver coin was designed by Heino Prunsvelt and the reverse depicts the "Wiiralt oak" after a famous engraving by the Estonian artist Eduard Wiiralt. The golden coin was designed by Jaano Ester and the reverse depicts a windmill. The first windmills are known to have existed in Estonia already in the 14th century. The first Estonian platinum coin was designed by Tiit Jürna and its reverse depicts barn swallows, Estonian national birds. The averses of these coins bears Estonia's national coat of arms.

In June 2008, Eesti Pank put into circulation a 1-kroon circulation coin and a 10-kroon collector banknote to celebrate Estonia's 90th anniversary. In terms of specification, the new 1-kroon coin is similar to the previous 1-kroon coin. The difference lies in the reverse designed by Jaan Meristo and depicting the logo of the 90th anniversary of the Republic of Estonia. The coins were minted by Staatliche Münze Berlin.

The design of the collectors' banknote draws on the currently valid ten-kroon note as well as the pre-war ten-kroon note. The averses are a copy of the pre-war note designed by Günther Reindorff. The original printing plates for 10-kroon banknotes, which were found from a hideaway in the vault of Eesti Pank and which date back to 1940, were used. Most probably, the plates had been hidden there after Estonia's occupation in 1940 and were meant to be destroyed. The reverse of the collector banknote is a copy of the current 10-kroon note, designed by Vladimir Taiger and depicting the famous Tamme-Lauri oak. The collector banknotes were printed by De La Rue printing office. The banknote and the coin come in a special presentation folder.

In July 2008, Eesti Pank issued a silver 10-kroon collector coin dedicated to the summer Olympic Games. The averses depicts a fragment of the Olympic stadium in Beijing and the logo of the Estonian Olympic Committee. The reverse bears the grand national coat of arms of the Republic of Estonia. The coin was designed by Tiiu Kirisipuu and minted by Suomen Rahapaja Oy.

# ORGANISATION AND COOPERATION

## INTERNATIONAL COOPERATION

International cooperation is an important part of the central bank activities. The developments taking place in Estonia, a small and open economy, are closely related to Estonia's external environment. The central bank's international communications play an important role in protecting and representing Estonia's economic policy interests and explaining the problems related to the country's economic development to the international public and foreign investors.

Well-coordinated and considered communications are of great importance for the bank. Efficient collaboration relies on the international communication framework of Eesti Pank. This includes regular economic policy reviews (in particular regarding EU Member States and Estonia's neighbouring countries); working meetings to prepare for the meetings of EU committees and working groups, as well as to be well informed of the recent developments; management of the external communication database, and participation in various international meetings and events.

Prior to sessions of high-level bodies, working meetings are held where experts from different departments together with Eesti Pank's representatives attending such sessions discuss rel-

evant information, specify the national positions and make proposals for comments.

Communication with various European institutions and participation in EU meetings constitute the largest share of Eesti Pank's external communication and reinforce cooperation with the central banks of Estonia's neighbouring countries. In 2008, Estonia continued accession negotiations with OECD, which involved also central bank experts.

Nordic and Baltic central banks have held a special place among the communication partners of Eesti Pank for over fifteen years. Similar to previous years, several seminars and meetings of the governors and vice governors of Baltic central banks were organised also in 2008. The traditional high-level joint seminar with Suomen Pankki (Bank of Finland) was held in Estonia this time and focused on economic developments and policies in Finland and Estonia. Other topics of discussion included Nordic and Baltic financial sector policies and cooperation on crisis management. Erkki Liikanen, Governor of Suomen Pankki, also gave a public lecture entitled "Euro's tenth anniversary: time to reflect" at the Tallinn University of Technology. The lecture was part of the memorial lecture series dedicated to the internationally renowned Estonian economist prof. Ragnar Nurkse.

**Table 1. Business trips of Eesti Pank in 2007-2008**

	2008			2007		
	Total	European Commission, ESCB	Other	Total	European Commission, ESCB	Other
Number of trips	735	327	408	794	345	449
Employees sent on business trip	148	80	117	163	87	138
Days spent on business trips	1,932	978	954	2154	1,047	1,107
Expenses (EEK m)	7.8	4.3	3.5	8.4	4.2	4.2
Average expense (EEK thousand)	10.7	13.2	8.6	10.6	12.2	9.4
Average length (days)	2.6	3.0	2.3	2.7	3.0	2.5



**Table 2. Eesti Pank's participation in the work of international organisations and institutions**

<b>Cooperation bodies of the Council of the European Union</b>	Informal Council of Economics and Finance Ministers Economic and Financial Committee
<b>Cooperation bodies of the European Commission</b>	European Banking Committee Committee of European Banking Supervisors Committee on Monetary, Financial and Balance of Payments Statistics Balance of Payments Committee
<b>Cooperation bodies of the European System of Central Banks</b>	General Council of the European Central Bank Accounting and Monetary Income Committee Banking Supervision Committee Banknote Committee External Communications Committee Human Resources Conference Information Technology Committee Internal Auditors Committee International Relations Committee Legal Committee Market Operations Committee Monetary Policy Committee Payment and Settlement Systems Committee Statistics Committee
<b>Bank for International Settlements (BIS)</b>	Board of Governors of the BIS Meetings of BIS central bank governors BIS Monetary Policy Working Party Irving Fisher Committee on Central Bank Statistics Meetings of Coordinators of Technical Assistance, organised by the BIS Heads of Security Committee

**Cooperation with European Union institutions**

Eesti Pank's representatives participate in around seventy committees and working groups set up by the European System of Central Banks (ESCB), the Council of the European Union or the Council of Ministers and the European Commission (see Table 2). In 2008, Eesti Pank executives and experts participated in about 230 meetings in various EU institutions. Collaboration in committees and working groups provides a good opportunity to the Member States for discussing their political and expert views, enabling each participant to substantiate and clarify their standpoints.

**European Central Bank (ECB)**

The European Central Bank (ECB), where euro-area monetary policy decisions are made, is the most significant cooperation partner for Eesti Pank in the EU. Eesti Pank is a full member of the

European System of Central Banks (ESCB).

Until Estonia has not yet adopted the euro, the main fields of cooperation are the economic policy of the EU, the monetary policy of the non-euro area countries, and preparations for the euro area enlargement, including drafting of the so-called Convergence Report – an account of meeting the euro area accession criteria. The Governor of Eesti Pank participates together with the governors of other EU national central banks (NCB) in the meetings of the ECB General Council, which are held four times a year. Day-to-day cooperation takes place in the thirteen committees of the ESCB and their substructures, where common analyses are composed, information exchanged and preparations for the work of the decision-making bodies – the Governing Council and the General Council of the ECB – are made together with representatives of NCBs. The committees cover all the fields of activity of the central bank. In 2008, representatives of Eesti Pank took part in over 200 working meetings.

***A selection of the most relevant topics covered in the ECB meetings in 2008***

**Assessment of the euro readiness of ten non-euro area countries: Convergence Reports.**

The ECB, having consulted with the national central banks of the ESCB, and the European Commission prepared regular Convergence Reports on the non-euro area EU Member States, including Estonia, Latvia, Lithuania, Sweden, Poland, Slovakia (a non-euro area country at the time of preparation of the reports)<sup>1</sup>, the Czech Republic, Hungary, Bulgaria and Romania. The reports analysed compliance of the countries' economies with the requirements for the introduction of the euro (the Maastricht criteria) along with their legal framework. Similar to the previous Convergence Report in December 2006, Estonia met all the criteria for the launch of the euro except the criterion of price stability. Based on the Convergence Reports, the EU Finance Ministers approved of Slovakia's accession to the euro area. With Slovakia joining the euro area, the number of euro area countries now totals 16. Slovakia is the second country to adopt the euro from among those who joined the European Union in 2004. The first one was Slovenia, who introduced the euro in 2007.

**Choosing an appropriate economic policy strategy in the period of nominal convergence**

was among the topics of interest for EU institutions also in 2008. It is important for Estonia to have its economic growth and level of inflation assessed against the background of a financial system having a currency-board-based fixed exchange rate regime and strong cross-border integration (primarily with Northern Europe). In the same way, it is necessary to take these circumstances into account when discussing the funding of Estonia's economy. To this end, central bank experts explained the specifics of Estonia's economic developments at the meetings of

ECB committees and working groups.

**The economic policy framework behind exchange rate stability and the flexibility of the economy and markets (incl. the labour market) within the exchange rate mechanism ERM II.** Once a year, the ECB assesses the functioning of the exchange rate mechanism ERM II and the fulfilment of commitments by the countries that have joined the ERM II. The report prepared by the ECB analyses the economic developments of the ERM II member countries to assess their readiness to join the euro area. Estonia joined the ERM II on 28 June 2004 and has not encountered any difficulties during the time of participation in the system. Estonia's representatives have stressed the need to keep the focus of analysis on issues vital for the functioning of the ERM II. The topics related to the ERM II were also on the agenda of the meetings of the Council of the European Union (see page ...).

Both the European Central Bank and the European Commission celebrated the **tenth anniversary of the Economic and Monetary Union (EMU)**. Among other things, the activities and achievements of the Eurosystem in the past ten years were analysed in depth. The EMU project is considered a great success. The ECB stressed that the euro has brought several economic benefits such as price stability and low interest rates. The ECB considers it important to enhance supervision over the economy, strengthen international cooperation and develop common fiscal and economic strategies. Estonia did not support establishing additional policy instruments for the coordination and closer monitoring of the EMU, but making better use of the existing instruments instead. However, Estonia does support expanding the principles of policy monitoring and cooperation of the euro area countries to the ERM II Member States. At the same time, additional (including indirect) criteria for joining

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<sup>1</sup> Slovakia adopted the euro on 1 January 2009.

the euro area should be avoided when improving the existing mechanisms (or developing new ones).

The **growing uncertainty in the financial markets** was, quite expectedly, one of the key topics discussed in various forums. In the summer of 2008 and also in autumn it seemed that the EU can overcome the global financial crisis relatively easily. However, the bankruptcy of Lehman Brothers, a major US investment bank, in mid-September made the economic outlook much more pessimistic for the whole world, including the EU. In relation to that, the ECB had to take extraordinary measures to provide liquidity to the market by lowering the monetary policy interest rates.

### ***Council of the European Union***

Besides participating in the cooperation bodies of the European System of Central Banks, Eesti Pank's representatives also attend various committees and working groups set up by the Council of the European Union, i.e. the Council of Ministers. For example, in April and September 2008, the Governor of Eesti Pank attended the informal meetings of the Economic and Financial Affairs Council (ECOFIN). Topics of discussion included the European and global economic situation and outlook; issues related to the EU financial stability, such as harmonisation of the supervisory practices of the EU financial sector; development of a crisis exercise; improvement of public finances; revision of the deposit guarantee scheme, and the problems related to the constant rise in energy and commodity prices.

In addition, central bank experts advise the officials of the Ministry of Finance participating in the monthly ECOFIN meetings in matters within the competence of Eesti Pank. In 2008, such matters included ensuring the sustainability of public finances against the background of ageing population; assessment of Member States'

economic policy; establishment of the Single Euro Payments Area; financial markets supervision and cross-border crisis management.

One of the most important substructures of the Council of the European Union, where Eesti Pank's representatives participate, is the Economic and Financial Committee (EFC) and its working groups dealing with issues of international economy and coins. Since the EFC prepares the meetings of the Council of Economic and Financial Ministers (ECOFIN), all important ECOFIN issues were also discussed in the meetings of 2008.

### ***Key topics of discussion in the Council of the European Union in 2008***

#### **Economic situation in the European Union.**

The second half of 2008 witnessed rapid changes when the financial turmoil turned into a global economic crisis. This, in turn, intensified the actions taken at the EU level, including the development of several new action plans, such as the European Economic Recovery Plan.

Eesti Pank's statements focused on economic policy issues concerning Estonia and other ERM II members, including long-term fiscal sustainability, and inflation and structural policies. For Estonia, it was important to receive an adequate and objective assessment from the EU, which was ultimately generally in line with the central bank's expectations.

**Euro area expansion.** Eesti Pank finds that it is in the interests of the entire EU that expansion of the euro area should take place in compliance with the provisions of the Treaty establishing the European Community and according to uniform rules. Otherwise, the credibility of the euro as an international reserve currency would be compromised.

Eesti Pank observed closely the economically meaningful interpretation of the criteria for join-

ing the euro area at different meetings in Estonia as well as in the EU. The central bank considers it important that the concept of ERM II commitments would be objective and that the interpretation of the criteria would not become restrictive. The importance of the equal treatment of the old and new Member States must also be stressed. The criticism at Estonia's economic growth above the potential and low flexibility of the labour market was generally justified.

**Financial supervision and crisis management at EU level.** The tightening of cross-border cooperation in financial supervision and crisis management in 2008 led to recognising the need for a reform of the supervision architecture. Given the specifics of Estonia's financial system, closer cross-border cooperation in financial supervision is of utmost importance for us. Eesti Pank supports the approach that requires clear division of roles between the home and host country's (Estonia's) national institutions as regards supervision over cross-border banks and financial crisis management. Estonia was satisfied with the results in that field of cooperation, as the interests of host countries were sufficiently protected in negotiations on establishing capital requirements to banks.

Representatives of Eesti Pank took part in a high-level working group, which was initially established for preparing a pan-European crisis simulation. In the crisis situation, the working group started to monitor the bottlenecks with regard to the organisational aspects of work at the EU level.

**Common position of the EU on issues related to the IMF.** Eesti Pank participated in discussions on topics like IMF quotas, representation in the IMF and strengthening economic policy monitoring in the Member States also in 2008. In the light of deteriorating global economic and financial situation, special attention was paid to issues related to strengthening the surveillance

and reforming the lending framework of the IMF. Eesti Pank was also involved in the spring and autumn meetings of the IMF's International Monetary and Financial Committee (IMFC), where common positions of the EU are developed.

**Statistics.** Eesti Pank has supported the development and application of good practice in the field of statistics for years now. A lot of attention was paid to the quality of statistics and its harmonisation in all EU countries also in 2008. The central bank facilitated the efficient use of resources for collecting, processing and publishing statistics by identifying the respective priorities (see also "Developments in statistics" on p. ...).

#### ***European Commission***

Representatives of Eesti Pank participate in the Banking Advisory Committee, Banking Supervisory Committee, Balance of Payments Committee, and Committee on Monetary, Financial and Balance of Payments Statistics set up by the European Commission. These committees address issues related to communications, statistics, economic forecasts, payment and settlement systems, banking, banknotes and coins, and counterfeit money.

Regular meetings with European Commission experts take place both in Estonia and Brussels to discuss Estonia's economic outlook and specify the data needed by the Commission to produce economic forecasts for EU Member States.

#### **Role of Eesti Pank after the adoption of the euro**

Until accession to the euro area, Eesti Pank is in charge of implementing Estonia's monetary policy, arranging currency circulation, ensuring financial stability, and guaranteeing the operation of reliable and well-functioning payment and settlement systems. The goal is to maintain the

stability of the economy and the Estonian kroon, which form the foundation of a strong state.

When Estonia adopts the euro, the tasks of Eesti Pank will be largely the same, but the international significance of the institution will increase, as Estonia starts to participate in the euro area financial policy making hand in hand with other national central banks and the ECB. Eesti Pank is currently responsible for ensuring the reliability of the Estonian kroon; after joining the euro area, the central bank will be engaged in ensuring the reliability of the euro. As transition to the euro means that one currency is replaced by another one, the issuer of the euro in Estonia will be Eesti Pank as agreed with the European Central Bank.

Eesti Pank will continue to perform all the tasks of a central bank in the Eurosystem. The objective of the euro area national central banks is to ensure price stability and to this end they implement the single monetary policy in the euro area. The central bank will be participating in the monetary policy decision-making, for instance fixing of interest rates.

Eesti Pank is already analysing the economic indicators of Estonia as well as the rest of the world. Euro area membership and participation in the euro area monetary policy decision-making means that the central bank will have to deepen and expand international economic analysis even further. As a member of the euro area, Eesti Pank will participate in the joint management of reserves and development of settlement systems.

As a member of the Eurosystem, the Estonian central bank is responsible for communication with other central banks and international organisations (e.g. the IMF, rating agencies).

Eesti Pank will be ensuring the smooth operation of payment and settlement systems also in the future so as to guarantee fast and efficient inter-

bank transfers, contribute to the sustainability of the financial system, and compile Estonia's balance of payments.

### **Cooperation with the International Monetary Fund**

The International Monetary Fund is a very important forum of international cooperation involving most of the countries in the world (185 to be more specific). The main objectives of the IMF are to ensure the stability of the international monetary and financial system, support stable and sustainable economic growth, and through this, prevent financial and balance of payments crises, and facilitate international trade. Eesti Pank is responsible for representing the interests of Estonia in the IMF.

The Governor of Eesti Pank is a member of the highest decision-making body of the IMF, the Board of Governors, which makes him the Governor of Estonia, and the Secretary General of the Ministry of Finance is the alternate member of the Board of Governors, or the Deputy Governor of Estonia. Both members attend the IMF Annual Meeting every year. The International Monetary and Financial Committee (IMFC), the advisory board to the Board of Governors, meets twice a year (in April and September).

Day-to-day cooperation with the IMF is conducted, first and foremost, through the Nordic-Baltic Constituency representing inter alia Estonia. The Constituency includes eight countries (Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway and Sweden) that elect a common representative to the Executive Board of the IMF. As of January 2007, the position of the Director of the Constituency has been held by a Swedish representative Jens Henriksson. To participate in the daily decision-making process of the IMF, the Constituency coordinates the positions of the eight countries on issues discussed in the Executive Board.

The strategic issues and related problems within the sphere of interests of the Nordic and Baltic countries are discussed twice a year in the Nordic-Baltic Monetary and Financial Committee (NBMFC). Each constituent country is represented in the Committee by a representative of the government and of the central bank. The experts daily involved in coordinating the work of the Constituency, i.e. the coordinators, meet once a year.

In June 2007, the IMF adopted new principles of surveillance (the 2007 Surveillance Decision). Above all, this changed the daily tasks performed by the Fund to achieve its main objective regarding the economic policy monitoring of its member countries; that is, to facilitate ensuring external stability. In principle, the IMF is now obliged to clearly assess in the final report of every Article IV consultation, whether and how much a country's real exchange rate is overestimated or underestimated as far as long-term balance is concerned, and whether a country's external position (current and capital accounts) is in line with economic development. In short, the IMF assesses whether the country's exchange rate policy is in compliance with the objective of maintaining stable economic development and external balance.

In 2008, the representatives of the IMF paid two visits to Estonia within the framework of bilateral surveillance. Regular economic policy consultations were conducted under Article IV of the IMF Articles of Agreement on 7–19 May and 9–15 December. The resulting report and a special report on the Estonian economy were published on the web sites of the IMF and Eesti Pank. The next visit of the IMF to Estonia will take place in May 2009.

#### ***Selected topics from the International Monetary Fund forums in 2008***

The near-term priorities of the IMF include monitoring of relations between the financial and non-

financial sectors, risk assessments, identification of financial sector vulnerabilities and assessment of the exchange rate equilibrium, with a particular focus on enhancing transparency and openness.

In tackling the current financial crisis, the IMF addresses the following issues with utmost attention.

#### **Reforming the international financial system.**

Great efforts are needed to overcome the ongoing financial crisis and avoid similar crises in the future. The IMF has a leading role here given its mandate to foster economic growth and financial stability. The Fund's primary focus is on surveillance, supervision and regulation of the international financial system as well as drawing conclusions from the crisis. Providing policy advice and financing to members is of importance too.

As regards strengthening the financial system, Eesti Pank considers it important to contribute to developing common positions of the EU. To this end, market-based solutions should be preferred, while avoiding over-regulation and state intervention.

#### **Development of early warning systems.**

One of the IMF's objectives is to strengthen collaboration with the Financial Stability Forum (FSF). Global risks and financial sector vulnerabilities can be better identified through relying on mutual expertise and membership in the IMF. Closer cooperation between the IMF and FSF is, first and foremost, necessary for clear and profound assessment of the risks to global financial stability. This would contribute to a more systematic integration of risk assessment and bilateral surveillance.

**Strengthening of surveillance.** Given the ongoing financial crisis, there is an increasing need for better assessment of risks and provision of policy advice. The IMF stresses the need

for integrating multilateral and bilateral surveillance and in-depth monitoring of threats to financial stability to better identify spill-over risks and relations between the financial and non-financial sectors. Among other things, this requires increasing competence.

Eesti Pank considers it crucial to develop global risk assessments at regional and group level, instead of the country-based approach. In addition, crisis management should be better coordinated.

**The IMF needs to hold sufficient resources and loan instruments** to provide immediate financial aid to its members that have been hit by the crisis. Thus, opportunities to increase the Fund's loan instruments should be investigated. In the light of changed economic and financial conditions, the current lending policy and facilities need to be revised. The ultimate goal is to make the IMF's lending framework easier, faster and more flexible.

In order to alleviate the effects of the current financial crisis, the IMF developed a new Flexible Credit Line to provide short-term liquidity to countries with strong economies yet facing liquidity problems owing to the crisis. The Extended Fund Facility is used to help countries address balance of payments difficulties. In addition, there are facilities to provide lending to low-income countries. As at the beginning of 2009, several countries had approached the IMF for financing, including Belarus, Hungary, Iceland, Latvia, Pakistan, Serbia and Ukraine.

Estonia and the Nordic-Baltic Constituency support providing fast, transparent and flexible access to the IMF's lending facilities for the member countries affected by the crisis. Therefore, revision of the policy of access to the Fund's credit facilities in line with the changed economic and financial situation is highly welcome. Eesti Pank is of the opinion that countries are increas-

ingly more facing crises that rather stem from the capital account, and not the current account. Thus, the potential need for financial aid is substantially bigger, which means that the Fund should be able to offer extensive access to its lending facilities.

**Reforming the system and principles of management.** The main objective is to enhance the Fund's legitimacy through increasing the voting power of poor and less advanced member states of the IMF. The effectiveness and decisions of the IMF affect also other actions of the Fund necessary for fulfilling its mandate, such as strengthening surveillance; revision of the lending framework to alleviate the effects of the crisis; development of the early-warning systems to name a few.

As a member of the Nordic-Baltic Constituency, Estonia has always supported making the management system of the IMF more effective, while also ensuring appropriate representation of the European Union, including Estonia, in the governing bodies of the IMF.

The revision of the IMF's operating principles has reached the final stage. At the Annual Meeting 2006 in Singapore the member countries decided to **reform the system of quotas and voting power.** The objective was to simplify the formula used for calculating quotas, increase quotas for under-represented countries and also the role of basic votes, which calls for changing the IMF's Articles of Agreement and approval by the parliaments of member states, including Estonia. The discussions on changing the operating principles continued in 2007-2008 and resulted in approval of the reform of quotas and voting power as well as the IMF's new income model by the Board of Governors in spring 2008. Currently, ratification is under way in the member countries. After the reform, Estonia's quota and voting power in the IMF will increase 31% and 46%, respectively. Based on the current formula, the quota for Esto-

nia is 65.2 million SDRs (about 1.1 billion kroons), i.e. 0.03% of total quotas. Estonia has 902 votes (0.04% of total votes).

In 2008, Estonia and many other members contributed to the **cancellation of Liberia's debt to the IMF** (543 million SDRs), since the Fund lacked sufficient resources and proposed to the member countries to give aid bilaterally. All in all, 102 member states could donate. Estonia's contributed 173,924 SDRs (2,872,894 kroons), which was allocated against the Republic of Estonia's claims on the IMF.<sup>2</sup>

#### **Cooperation with the Bank for International Settlements**

The Bank for International Settlements (BIS) is one of the oldest cooperation forums of central banks. Eesti Pank is one of the founders of the BIS in the 1930s and Governor of Eesti Pank attends regular meetings of heads of central banks.

The meeting agendas mostly contain topical monetary policy issues (including the role of cen-

tral banks), the economic and financial situation in different regions, as well as financial sector management and supervision.

#### **Cooperation with rating agencies**

Since 1997, Estonia has been assessed by three major international rating agencies: Moody's Investors Service, Standard & Poor's and Fitch Ratings. Eesti Pank coordinates relations between Estonia and the rating agencies. This includes rating agencies' visits once a year and day-to-day communication with the analysts (for more details, see "Sovereign rating" p. ...).

#### **INTERNAL COOPERATION**

Experts and executives of Eesti Pank participate in different cooperation bodies in Estonia (see Table 3).

On Eesti Pank's initiative, quarterly four-partite meetings are held for officials of the central bank, the Ministry of Finance, the Ministry of Economic Affairs and Communications, the Prime Minister's Office, and the Economic Adviser to the Presi-

**Table 3. Eesti Pank's participation in internal cooperation**

- European Union Coordination Council
- Lisbon Working Group
- National Changeover Committee and its sub-working groups
- Working Party of Foreign Relations Councillors
- Estonian working group of the European Payments Council (EPC)
- Working Group on Financial Services Legislation
- Coordination Committee for Combating Money Laundering and Terrorism
- Development Cooperation and Development Assistance Working Group
- Accession negotiations committee of the Organisation for Economic Cooperation and Development (OECD)
- Working group for the development of national positions for representing Estonia in the European Commission, the European Court of Justice and the Court of First Instance
- Working group for the future enlargement of the European Union

<sup>2</sup> Order of the Government of the Republic No 189 on participation in the cancellation of Liberia's debt as initiated by the IMF.



dent of the Republic. The topics of discussion include Estonia's economic situation and forecast, the fiscal strategy, the situation in the Estonian labour market, international cooperation, etc. Joint committee meetings of Eesti Pank, the Ministry of Finance and the Financial Supervision Authority on financial sector policy issues should also be mentioned here.

Eesti Pank participates in the committee of experts chaired by the Ministry of Finance, which deals with preparations for the changeover to the euro in Estonia. In 2008, representatives of the central bank and other state institutions and the private sector continued with preparations in the field of communication on the changeover.

Governor of Eesti Pank also belongs to the political working group chaired by Prime Minister and responsible for monitoring compliance with the Maastricht criteria and coordination of Estonia's accession to the euro area.

The presidency of the European Union changes in every six months, which entails revising Estonia's national policy priorities and short-term objectives for the new presidency period. The Government's long-term objectives are established in a three-year framework programme to achieve Estonia's general objectives in the European Union.

Participation in the EU decision-making process is coordinated by the European Union Coordination Council, which was set up in 2005 and includes representatives of all ministries and the central bank. The Council coordinates the transposition of European Union legislation, discussion of EU-related positions submitted to the Government, and exchange of information between state agencies on EU-related matters.

#### ***Cooperation with the Office of the President***

A member of the Executive Board of Eesti Pank,

Märten Ross, is a member of President's Academic Advisory Board. The Board analyses different fields of life and makes recommendations for the balanced development of the country.

#### ***Cooperation with the Ministry of Finance***

Eesti Pank and the Ministry of Finance collaborate on a daily basis in legislative drafting, international communication and several other fields.

A joint seminar was held also in 2008, with the focus on economic developments and cooperation on financial supervision.

#### ***Cooperation with the Financial Supervision Authority***

Cooperation with the Financial Supervision Authority operating by Eesti Pank has been centred on monitoring financial system developments, discussions on financial sector regulation and, to a large extent, also on international cooperation.

In 2007, Eesti Pank, the Ministry of Finance and the Financial Supervision Authority signed the Memorandum of Understanding (MoU) on financial crisis management. At the end of 2008, the actions laid down in the MoU started off, including regular joint meetings between the three institutions.

#### ***Cooperation with the Estonian Banking Association and Estonian banks***

In 2008, there were several high-level meetings with members of the Estonian Banking Association; that is, representatives of commercial banks operating in Estonia. These meetings form a basis for cooperation and information exchange with the private sector. Experts of commercial banks often meet with representatives of Eesti Pank in order to specify the technical issues regarding the development of the Estonian banking infrastructure.

## **PUBLIC RELATIONS AND COMMUNICATION**

Eesti Pank operates in the framework of the currency board system with a fixed exchange rate. The objective of central bank communication is to support with its messages the stability of Estonia's monetary system, economy and financial system. The strategic objectives of the bank and the organisation's understanding of the central bank's role form the basis for communication.

The communication policy of Eesti Pank proceeds from the following objectives:

- To ensure public understanding of and sufficient support to the monetary policy pursued by the central bank;
- To maintain and value the reputation of Eesti Pank as a competent, independent, and credible institution that plays a significant role in guiding Estonia's economic policy and economic development, whose activities are transparent and monitored, and that is willing to communicate with all social groups;
- To ensure the best possible access for economic agents to background information necessary for making economic decisions.

The key objective of central bank communication is to help shape reasonable market expectations.

### **Principles of informing the public**

Transparency and reliability are vital in the central bank's activities. The general public but also more specific target groups, both domestic and foreign, must be able to receive regular, sufficient and high-quality information on economic policy from Eesti Pank.

Eesti Pank has undertaken the commitment to publish information more extensively and frequently than laid down by its accountability as

provided by law (see also „Accountability” on p. ...). The central bank publishes overviews of Estonia's economy six times a year. On two occasions, the overview contains an economic forecast and on two occasions a review on financial stability. In 2008, a new series of topical overviews called Flash Reports was launched to keep the public informed about crucial developments in the economy. In addition, the central bank publishes regular reports on preparations for the adoption of the euro and on labour market developments (see also “Publications of Eesti Pank in 2008” on p. ...).

The central bank considers it important to provide as up-to-date information as possible in the most convenient and the least expensive way. For example, Eesti Pank's regular publications are free of charge for subscribers and among others all the county libraries receive them. Besides the publications and information published on the web site it is possible to send direct inquiries to Eesti Pank. Information can be requested by mail, e-mail or phone. In 2008, Eesti Pank received altogether 3,751 inquiries: 2,407 by phone, 1,189 by e-mail, mail or fax, and 57 through the “Ask a question” interface on the bank's web site. 73 of the written inquiries were registered as requests for information.

### **Media relations and public appearances**

Approximately 5,150 writings, news texts, radio and TV news reflecting the activities of Eesti Pank and its economic policy standpoints were published or released in the Estonian media in 2008. Compared to other financial institutions in Estonia, Eesti Pank gained the biggest media coverage. In 2008, the central bank held 10 press conferences, issued 157 press releases and statements, and around 50 articles and interviews on the economic policy. In addition, bank's representatives made over 30 public presentations.

As regards banking related articles in general, the banking sector appears to have been, more than ever, in the limelight in the last four months of 2008. Looking back at the past ten years, banking (and economy) have never received as much attention as at the end of 2008.

The February and June media coverage on central bank activities was mostly related to the events dedicated to the 90th anniversary of the Republic of Estonia. The attention received in autumn, however, was not related to any specific media event. The top stories in terms of media coverage included the economic statements of Eesti Pank (799 articles), references to Eesti Pank in relation to the state budget problems (499 articles) and articles on the economic downturn (359). The first seven in the top ten topics concerning Eesti Pank are related to the difficult economic situation. In most cases, the central bank expertise was in focus.

### **Celebration of the 90th anniversary of the Republic of Estonia**

The Republic of Estonia celebrated its 90th anniversary in 2008. In relation to that, June was the month of Eesti Pank, as the monetary reform was once carried out in June 1992. The central bank organised various exciting events for different target groups.

At the beginning of June, the bank issued a new special one-kroon coin to celebrate Estonia's anniversary. The volume of coins issued totalled 20 million. The coins were presented at a fashion, art and music party called PangaÕõ (the Night of the Bank) on the roof of the Viru Centre in Tallinn.

In the second half of June, the central bank presented the special commemorative collectors' banknote dedicated to the anniversary. The design of the collectors' banknote draws on the currently valid ten-kroon note as well as the pre-war ten-kroon note. The avers is an exact copy of the

pre-war note designed by Günther Reindorff. The reverse features the current ten-kroon banknote designed by Vladimir Taiger (see also "Preparation of new banknotes and coins" on p. ...).

In June, an exhibition on monetary reforms in Estonia was opened at the Eesti Pank Museum. The Museum also organised special events featuring the characters depicted on Estonian banknotes. In addition, in summer a travelling exhibition called "The Estonian Money from the Mark to the Euro" could be visited at different places in Estonia (see also "Eesti Pank Museum" on p. ...).

In honour of the month of Eesti Pank, a new episode of the popular Estonian cartoon film called "Lotte from Inventors' Village" was completed, telling a story of the bank in that village. In addition, the central bank published a colourful and children's money book with illustrations and children's fun money, which explains the emergence and essence of money, banking and central banks.

The art gallery of Eesti Pank was open for visitors during June, featuring an exhibition called "Tükid" ("Pieces") by Estonian artist Sirje Runge. Guided tours in the buildings of Eesti Pank were held every Wednesday, Thursday and Friday. All in all, 250 people visited the bank in June.

The traditional Open Door Day of Eesti Pank took place on 6 September 2008. The day started with the joint public press conference of Governor of Eesti Pank and Chairman of the Board of the Financial Supervision Authority (FSA), who gave an overview of the most topical economic and financial sector developments and replied to the questions of the audience. Visitors could also get acquainted with the process of cash production, and the FSA staff gave tips how to manage one's money to the best of one's ability. Excursions were held all over the bank and children were entertained by the beloved cartoon character Lotte. More than a thousand people visited the Open Door Day of Eesti Pank.

### **Birth of the Republic of Estonia and busts of government members**

The hundred-year-old building of Eesti Pank has a unique national historical background: several crucial events took place here, laying the foundation for the birth and independence of the Republic of Estonia.

On 24 February 1918, the three-member Salvation Committee – Konstantin Päts, Jüri Vilms and Konstantin Konik – met in the original residence of Eesti Pank (the current Independence Hall of Eesti Pank). The Committee read out the Manifesto of Independence and established the first government of the Republic of Estonia called the Provisional Government of Estonia. The first Cabinet included Prime Minister Konstantin Päts and members Jüri Vilms, Jaan Poska, Juhan Kukk, Ferdinand Petersen, Andres Larka, Jaan Raamot and Peeter Pöld.

In 2008, the central bank commissioned bronze busts of four of the ministers (K. Päts, J. Vilms, J. Poska and J. Kukk), which were completed in February. The busts were presented on 14 February at a ceremony held in the Independence Hall with Toomas Hendrik Ilves, President of the Republic of Estonia, and Ene Ergma, President of the Riigikogu, attending as guests of honour.

The busts of the rest of the Cabinet – F. Petersen, A. Larka, J. Raamot and P. Pöllu – were added on 24 February 2009. All the busts were designed by sculptors Isabel Aaso-Zahradnikova and Ales Zahradnikov.

### **Eesti Pank Museum**

In 2008, the Museum had altogether 12,833 visitors, including 5,182 exhibition visitors and 7,651 coin purchasers. The amount of coins sold increased by nearly three times compared to 2007, totalling 21 million kroons.

In 2008, three exhibitions were held:

- “Heraldics today: A Selection of the Heraldic Symbols of Estonian Local Governments, State Agencies and Citizens in 1988–2008” (in February);
- “Own State, Own Money: Monetary Reforms in the Republic of Estonia (in June);
- “Coins with holes” (from November to February 2009).

There was also a travelling exhibition called “The Estonian Money from the Mark to the Euro”, at 15 different locations in the country as well as in Riga and Strasbourg.

#### ***Travelling exhibition in Riga***

The Latvian National History Museum in Riga held an exhibition „Igaunijas nauda – no markas līdz eiro” from 9 June to 17 August 2008. This was complemented by the Estonian travelling exhibition “The Estonian Money from the Mark to the Euro”, offering a representative display of specimens from the very first Estonian marks to the current Estonian kroons. The Estonian exposition was a follow-up to the Latvian exhibition “Money in Latvia: History and the Present Day”, which was open in the Eesti Pank Museum from 15 November 2007 to 9 February 2008.

#### ***“The Estonian Money from the Mark to the Euro” visiting the Council of Europe in Strasbourg***

The travelling exhibition “The Estonian Money from the Mark to the Euro”, which had won the first prize at the festival of Estonian museums in 2006, was displayed in Strasbourg for the 50th time. The exhibition was shown in the building of the Council of Europe on 8–19 December 2008 to celebrate the 90th anniversary of the Republic of Estonia. In a way, it was also related to defending Estonia’s report at the sitting of Monneyval, the Council’s Committee of Experts on the Evaluation of Anti-Money Laundering Measures, which took place at the same time. The author of

the idea to hold the exhibition there was Andres Palumaa from the Financial Supervision Authority and Head of the Estonian delegation in the Moneyval committee. The exhibition was coordinated in Strasbourg by the Permanent Representation of Estonia to the Council of Europe, especially Ambassador Sulev Kannike.

The display featured all collector coins issued by Eesti Pank from 1992 to 2008. The exhibition was officially opened on 10 December 2008. In addition to representatives from the Member States and officials of the Council also local Estonians residing in Strasbourg were invited to the opening.

## **GOVERNANCE, ORGANISATION AND HUMAN RESOURCES POLICY**

### **Governing and decision-making bodies of Eesti Pank**

#### ***Supervisory Board of Eesti Pank***

Pursuant to the Eesti Pank Act, the Supervisory Board of Eesti Pank is the highest body of Eesti Pank, exercising supervision over all activities of the central bank. The Supervisory Board has exclusive competence in the following areas:

- Making a proposal to the President of the Republic for appointment of the Governor of Eesti Pank;
  - Appointment to office and release of the Deputy Governors of Eesti Pank, the heads of the independent divisions and representative offices and Head of the Internal Audit Department of Eesti Pank; appointment and removal of members to the Supervisory Board of the Financial Supervision Authority<sup>1</sup> on the proposal of the Governor of Eesti Pank;
  - Approval of the Statute of Eesti Pank, the statutes of its independent divisions and representations and the Statute of the Internal Audit Department;
  - Supervision over the execution of the Eesti Pank budget;
  - Appointment of the internal auditors of Eesti Pank and approval of the internal audit work schedule;
  - Appointment of the independent auditors of Eesti Pank;
  - Approval of Eesti Pank's Annual Report on the proposal of the Governor;
- Making decisions regarding the denomination and design of new banknotes and coins;
  - Making decisions regarding the establishment, reorganisation and liquidation of the independent divisions of Eesti Pank on the proposal of the Governor;
  - Reviewing and approving written proposals and other documents submitted to the Riigikogu in the name of Eesti Pank.

The Governor of Eesti Pank reports regularly to the Supervisory Board on the situation in Estonia's economy, monetary policy and financial sector, and the implementation of the central bank's budget.

The Riigikogu appointed the Supervisory Board operating in 2008<sup>2</sup> to office on 17 February 2004. The Board comprised Professor Mart Sõrg (Chairman of the Board, appointed to office on 12 June 2003), Faculty of Economics of the University of Tartu; Professor Raul Eamets, Faculty of Economics of the University of Tartu; Professor Enn Listra, Faculty of Economics of the Tallinn University of Technology; Mart Opmann, economist; Tõnis Palts, public figure and economist; Professor Jüri Sepp, Faculty of Economics of the University of Tartu; Liina Tõnisson, public figure and economist, and Harri Õunapuu, Member of the Riigikogu. Until 12 June 2008, the Chairman of the Supervisory Board was Mart Sõrg. As of 13 June 2008, the Board has been chaired by Jaan Männik, public figure and economist.

#### ***Governor of Eesti Pank***

Andres Lipstok commenced his duties as Governor of Eesti Pank on 7 June 2005.

<sup>1</sup> The Supervisory Board of the Financial Supervision Authority comprises six members: two of them – the Minister of Finance and the Governor of Eesti Pank – are members by virtue of office while four are appointed. The Board is chaired by the Minister of Finance. Half of the members are appointed and removed by the Government of Estonia on the proposal of the Minister of Finance and half by the Supervisory Board of Eesti Pank on the proposal of the Governor of Eesti Pank.

<sup>2</sup> On 18 February 2009 a new composition of the Board was appointed to office.

### **Executive Board of Eesti Pank**

Pursuant to the Eesti Pank Act, the Executive Board of Eesti Pank is responsible for planning and organising the tasks of the central bank. The Governor of Eesti Pank is, by virtue of office, the Chairman of the Executive Board.

In 2008, the Executive Board comprised Governor Andres Lipstok and Deputy Governors Rein Minka, Märten Ross and Andres Sutt.

**Governor Andres Lipstok** is in charge of the **overall governance** of Eesti Pank. His exclusive competence involves organising the designing of monetary and banking policies and the overall governance of the tasks of Eesti Pank; supervision of the enforcement of the decisions passed by the Supervisory Board and implementation of measures necessary for that purpose; approval of Eesti Pank's budget, and supervision of the execution of the tasks of the European System of Central Banks.

The Governor reports to the Riigikogu and responds to interpellations concerning Eesti Pank's activities submitted. The Governor regularly reports on his activities to the Supervisory Board of Eesti Pank.

The Governor controls the work of Deputy Governors and is responsible for supervising the bank's management mechanisms.

**Deputy Governor Rein Minka** is responsible for coordinating the tasks related to currency circulation; safety of the working environment; reliable, cost-efficient and integrated development of the settlement system of Eesti Pank; development of the information technology working environment and legal environment, as well as human resources management.

**Deputy Governor Märten Ross** is responsible for the preparation and implementation of monetary policy decisions; management of the financial assets of Eesti Pank; coordination of collection, compilation, and disclosure of national statistics, and for the coordination of economic research and activities related to in-service economic training.

**Deputy Governor Andres Sutt** is responsible for international and public relations of Eesti Pank; development and implementation of financial sector policies; coordination of collection, handling and disclosure of financial sector information; supervision of payment and settlement systems, financial accounting and reporting, internal administrative services, and operational working environment at Eesti Pank.

### **Monetary Policy Committee**

A standing Monetary Policy Committee has been established to develop positions on monetary, economic and financial policies and coordinate the activities of Eesti Pank.

In 2008, the Committee included members of the Executive Board – Governor Andres Lipstok and Deputy Governors Rein Minka, Märten Ross and Andres Sutt – and Janno Luurmees, Head of the Financial Markets Department, Ülo Kaasik, Head of the Economics Department, Tanel Ross, Head of the International and Public Relations Department, Rait Roosve, Head of the Cash and Security Department, and Jaak Tõrs, Head of the Financial Stability Department (as of 17 April 2008).

### **Cooperation with the Financial Supervision Authority**

The **Financial Supervision Authority** (FSA)<sup>3</sup> operates as an agency of Eesti Pank. It exercises

<sup>3</sup> See § 4 of the Financial Supervision Authority Act.

national supervision over banks, insurance companies, financial intermediaries, investment funds and management companies licensed<sup>4</sup> and operating in Estonia as well as the securities market.

The FSA is governed by the Management Board chaired by Raul Malmstein. The activities of the FSA are planned by the Supervisory Board chaired by the Minister of Finance by virtue of office (by Ivari Padar in 2008). Members of the Supervisory Board include Governor of Eesti Pank Andres Lipstok and Deputy Governor Andres Sutt.

## **DEVELOPMENT OF THE MANAGEMENT SYSTEM AND WORK ORGANISATION OF EESTI PANK IN 2008**

### **Organisational values and value-based management**

The Executive Board of Eesti Pank has defined the following values of Eesti Pank.

#### **Competence**

- We keep ourselves informed on our long-term goals and follow them in our activities
- The messages we communicate are clear and understandable
- Our employees have the best qualification and a broad basis of knowledge
- We value self-learning and individual development and we learn from the best
- The sharing of employee skills and knowledge is well organised
- We are committed to fulfilling our main goals and we are prudent in our activities

#### **Cooperation orientation**

- We are flexible and innovative
- We engage the necessary expertise and make contributions where relevant

- We act in good will and trust each other
- We work as a team

#### **Reliability**

- We are loyal to our organisation and committed to our work
- Our words match with our deeds
- We are candid and self-critical
- We are consistent

#### **Consideration**

- • We keep each other informed in regard with our work and give feedback
- • We give recognition to good employees
- • We have consideration for others and we are helpful and obliging

These values are part of the bank's management system. They are used in the daily and case-by-case analysis of work as well as in the more general analysis in annual development interviews. In order to keep the values better in mind, in-house seminars on the values were held at the end of 2008.

### ***Revision of the competency model for managers and evaluation of managers***

In 2008, the Executive Board together with the Human Resources Department and external consultants revised the competency model for managers established in 2004. The revised model consists of five major competencies (instead of the earlier seven): leadership and management; analytical skills and strategic thinking; self-organisation and taking responsibility; cooperation and establishment of relations, and influencing. In addition, behavioural descriptions were developed for every competency. The management's compliance with the competency model will be evaluated in the development interviews of 2009.

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<sup>4</sup> Supervision over branches of banks, insurance companies and investment funds operating in Estonia is exercised by the supervision authority of the country of origin of the branch.



Besides revising the competency model, the management of Eesti Pank was evaluated based on the concept of the so-called 360 degree feedback<sup>5</sup>. Evaluation from both the supervisors and subordinates provided valuable feedback to the heads of department and ground for self-development. The Executive Board could monitor the management's developments at the individual as well as group level.

### **Development interviews**

The traditional development interviews were conducted also in 2008. The Human Resources Department compiled a summary of the interviews with the focus on the staff's proposals concerning the organisation. The summary was presented at a seminar for all employees and also at the traditional spring seminar where members of the Executive Board and the management could debate on the proposals. The conclusions of the working groups were then discussed at the bank's autumn seminar.

### **Process management**

The tasks of the process management development committee in 2008 included revision of in-house processes; determination of the rights and obligations of process owners and participants, and listing the bank's products and services along with their quality indicators and objectives. The committee also started to make preparations for the adjustment and introduction of the cost sharing methods that have been applied as a basis of comparison in the European System of Central Banks. In addition, the committee discussed the self-assessment model, which serves as the basis for the European Quality Award, to be adopted soon by the central bank.

During the audit of Eesti Pank, Bureau Veritas Eesti OÜ renewed the ISO 9001:2000 Qual-

ity Certificate issued to the Cash and Security Department in 2002. The certificate serves as a proof that cash handling and security processes in Eesti Pank are compliant with the requirements set forth in the standard.

### **Management accounting**

Financial and management accounting was developed further in 2008. Among other things, the accounting information system was enhanced by improving the interface to the payment and settlement system TARGET2-Eesti and replacing outdated loan software. In order to bring the bank's process-based budget drafting in line with that of the euro area central banks, the management accounting experts of Finnish, Swedish and Latvian central banks were consulted. Last but not least, the first descriptions of the relations between the processes of Eesti Pank and the European System of Central Banks were completed in 2008.

### **Risk management**

Eesti Pank has launched a risk management process that covers all bank's functions and is aimed at reducing the adverse impact of accidental events on accomplishing the bank's objectives. Risk management addresses operating risks, such as human resources risks, information system risks, financial risks, strategy and management risks, and reputation risks. Ensuring business continuity is another field of risk management.

Eesti Pank revises and assesses the risks regularly. Twice a year, all structural units submit a report on the materialisation of risks. Some units register smaller incidents also routinely. Based on the reports, no major risks materialised in 2008, which means that the risk measures taken so far have been effective.

<sup>5</sup> Method of evaluation of the executive's competence by himself, his subordinates, peers and supervisors.

In 2008, the focus of risk management measures was on planning the business continuity of the bank's main processes. The Executive Board has defined processes that are of critical importance for fulfilling the principal tasks of the central bank: settlement of interbank payments, operations of the currency board, management of foreign exchange reserves, coordination of currency circulation and public relations. Additionally, the bank has analysed and defined the incidents, which might cause substantial harm to the bank and for which business continuity plans have been drawn. These plans are based on common principles.

In 2008, the European Central bank started to introduce common principles for risk management and business continuity. The necessary framework instruments and action plan were approved at the end of the year. Eesti Pank participated in the coordination of these principles, and realised that the efforts in the field of risk management have been in line with the common vision and goals of the European central banks.

In 2008, Eesti Pank commissioned an external assessment of the level of risk management in the bank to determine future developments in that field. The audit by AS PricewaterhouseCoopers Advisors concluded that the organisational culture of Eesti Pank supports the implementation of risk management principles and procedures in the bank. The audit also noted that the central bank has established a suitable organisational culture and communication process, which helps ensure efficient risk management. The report of auditors included 12 recommendations for the further improvement of the bank's risk management system. For instance, the bank should identify the risks to achieving the strategic objectives of the bank and its structural units, as well as integrate risk management with strategic planning and budgeting. Most of

the recommendations are planned to be implemented in 2009.

### ***e-Eesti Pank 2008***

The main task related to the development strategy for document and information management (e-Eesti Pank) in 2008 was to start preparations for the transition to electronic records management in 2009. In other words, internal records will be only digital, external records will generally be digital, and the entire records management will be based on e-applications. Digital documents and related information will be stored in a digital repository. E-applications will speed up the administration process and make it more transparent. Failures and errors will be easily detected and corrected.

To prepare for the transition to electronic records management, universal e-applications were developed for the coordination and approval of electronic records and the implementation of and supervision over the tasks set out in the records. In addition, the structure of the digital repository was specified and the application for digital correspondence was developed.

In relation to that, more individual trainings as well as trainings for e-application users were organised in 2008. Future users could also participate in defining the tasks of new applications, testing them and will eventually decide on the introduction of these applications.

The transition to electronic records management will entail the joint management of information and business processes. The different aspects of the transition were also introduced to a wider audience at the autumn seminar of the bank, given that the transition is not just a technical or organisational task, as it will also bring about changes in the organisational culture.

## **Eesti Pank's human resources policy**

The aim of Eesti Pank's human resources policy is to ensure the recruitment of employees needed for accomplishing the main objectives of the bank, to develop and train as well as motivate and provide fair remuneration to the staff.

### **Employees**

Internal competition is preferred in recruitment in order to motivate the staff by providing career opportunities within the bank. External competition is used in case internal competition has failed or in case an employee with different experience is needed. A competency model is used for recruiting executives or other highly responsible positions, as it provides the best opportunity to evaluate candidates' knowledge, skills, and personal characteristics.

Staff remuneration derives from the need to recruit and retain highly competent staff and motivate them to work effectively and contribute to the good reputation of the bank. The average compensation should be competitive in the labour market where the bank competes for employees; that is, the financial sector labour market in Tallinn.

The Supervisory Board of Eesti Pank determines the remuneration of top executives taking into consideration top executives' wages in state and private enterprises with turnovers larger than 500 million kroons. The size of the remuneration paid to top executives is affected by changes in the wage market data in the financial sector of Harju County. The remuneration of the Governor of Eesti Pank should not be smaller than the average wages of top executives in comparable enterprises and agencies.

In 2008, the total remuneration (basic wages and additional remuneration) paid to the members of

the Supervisory Board amounted to 2,268,000 kroons and that of the Executive Board to 6,049,689 kroons.

Non-executive positions have been assessed on the basis of the Hay method. Depending on the assessment results, all positions have been divided into wage groups listed in the classification of central bank positions.

Eesti Pank has implemented a wage scale comprising all wage grades.

The employees (members of the Executive Board excluded) receive remuneration on the basis of their wage grade, comparable by groups of similar work within as well as outside the bank.

The average monthly wages (including additional remuneration and holiday pay) in Eesti Pank amounted to 29,835 kroons in 2008. This includes the top executives as well as the support staff, but the majority of the central bank employees (nearly 85%) are specialists. The intermediate-level specialists employed in Eesti Pank must have a Master's degree, at least three years of professional experience and proficiency in written and oral English. They are also expected to attend some EU or European Central Bank working group. The monthly wages of a specialist complying with these requirements was approximately 23,000 kroons.

Eesti Pank had 245.2 positions as at the end of 2008. However, the number of actual employees was lower – there were 231 employees in 2008 on average. The reasons for suspending contracts of employment were maternity leave or employment at the European Central Bank or other international organisations.

The average age of the staff in 2008 was 42 years. 39% of the employees were men and 61% were women.

### ***Development and training***

For 2008, Eesti Pank had planned 4.4% of the wage budget on training. By the end of the year, nearly 4.6 million kroons had been spent on training courses, which accounts for 3.75% of the staff's payroll. All in all 226 employees (95% of total staff) attended trainings. On average, an employee received six days of training with the total cost of 19,500 kroons.

Traditionally, the most common fields of training were economic theory and policy, management/communication and language studies. Many of the trainings in core fields take place abroad. Group trainings mostly include in-house training courses and open seminars.

43 employees were engaged in academic studies in 2008: 75% of them were acquiring a Master's or Doctor's degree.

Two employees participated in trainee programs at the European Central Bank.

### ***Hobbies and traditions of the staff***

Eesti Pank's Sports Club had 232 members as at the end of 2008. Swimming, basketball, fitness, tennis, aerobics, volleyball, track and field, and yoga were the most popular fields of sport. In addition, winter and summer sports days were held. The staff also practices bowling, Nordic walking, kayaking, sailing and skiing.

Competitions between public officials were held in basketball and football. In-house competitions were held in bowling and chess. In addition, there were football and basketball competitions with the Financial Supervision Authority. As regards the sport events of European central banks, representatives of Eesti Pank took part in the Eurofest organised by the European Central Bank, a bowling competition in France and a chess tournament in Austria.

The chamber choir of the employees of Eesti Pank and the Financial Supervision Authority first gathered on 15 May 1998. The choir has 29 members and is conducted by Peeter Perens. Its activities are coordinated by the board that is elected every year.

To celebrate the 90th anniversary of the Republic of Estonia, the choir gave a spring concert dedicated to famous writers or musicians who celebrated or would have celebrated a jubilee in 2008. The choir's own tenth anniversary was celebrated with a concert at the House of the Brotherhood of Blackheads in Tallinn.



G. Reindorf



The background of the page is a light-colored, embossed coat of arms of the Republic of Estonia. It features a shield with two lions, a crown on top, and a banner with the text "RIIGIVABARIK" (State Chancellery). The shield is surrounded by oak leaves and acorns.

Annual accounts of  
Eesti Pank  
for the financial year ended  
31 December 2008

**APPROVAL OF THE ANNUAL ACCOUNTS FOR THE FINANCIAL YEAR  
ENDED 31 DECEMBER 2008 BY THE EXECUTIVE BOARD OF EESTI PANK**

The Executive Board acknowledges its responsibility for the Annual Accounts of Eesti Pank for the financial year ended 31 December 2008.

The Annual Accounts have been prepared in accordance with the Eesti Pank Act and the internal accounting policies and procedures of Eesti Pank. The Annual Accounts give a true and fair view of the assets and liabilities, equity capital and economic performance of Eesti Pank.

In order to prepare the Annual Accounts in conformity with the requirements outlined in the previous section, the Executive Board is expected to provide estimates which affect the assets and liabilities of Eesti Pank as at the accounting date and income and expenses during the accounting period. These estimates are based on the information available about Eesti Pank, its intentions and risks as at the date of preparation of the Annual Accounts. The final outcome of the economic transactions reflected in the Annual Accounts may differ from the estimates of the Executive Board.

On 23 March 2009, all members belonging to the Executive Board of Eesti Pank on that day signed the Annual Accounts.



Andres Lipstok  
Governor of Eesti Pank,  
Chairman of the Executive Board



Rein Minka  
Deputy Governor,  
Member of the Executive Board



Märten Ross  
Deputy Governor,  
Member of the Executive Board



Andres Sutt  
Deputy Governor,  
Member of the Executive Board



**BALANCE SHEET AS AT 31 DECEMBER 2008 AND 2007 (EEK THOUSAND)**

	<b>Kirje</b>	<b>31/12/2008</b>	<b>31/12/2007</b>
<b>ASSETS</b>			
Gold and gold receivables	<b>1</b>	79,553	73,544
Claims on non-residents denominated in foreign currency		43,610,202	35,625,190
Receivables from the IMF	<b>2</b>	1,126,856	1,107,004
Balances with banks, security investments and external loans	<b>3</b>	42,483,346	34,518,186
Intra-Eurosystem claims	<b>4</b>	10,745	10,745
Other assets		1,900,031	827,219
Tangible fixed assets	<b>5</b>	276,676	286,535
Other financial assets	<b>6</b>	3,441	3,441
Off-balance-sheet instruments revaluation differences	<b>7</b>	481,847	99,462
Accruals and prepaid expenses	<b>8</b>	280,148	322,224
Sundry	<b>9</b>	857,919	115,557
<b>Total assets</b>		<b>45,600,531</b>	<b>36,536,698</b>
<b>LIABILITIES</b>			
Currency in circulation	<b>10</b>	11,996,322	11,762,182
Liabilities to residents related to the monetary policy	<b>11</b>	25,691,517	17,521,307
Liabilities to other residents denominated in kroon	<b>12</b>	102,017	100,366
Liabilities to residents denominated in foreign currency	<b>13</b>	179,828	1,387
Liabilities to non-residents denominated in foreign currency	<b>14</b>	0	1,129,347
Liabilities to the IMF	<b>2</b>	1,118,218	1,095,648
Other liabilities		205,186	320,458
Off-balance-sheet instruments revaluation differences	<b>7</b>	57,366	55,517
Accruals and income collected in advance	<b>15</b>	112,275	158,687
Sundry	<b>16</b>	35,545	106,254
Provisions	<b>17</b>	6,955	0
Revaluation accounts	<b>18</b>	740,987	172,216
Capital and reserves	<b>19</b>	4,312,407	3,948,268
Capital		600,000	600,000
Reserves		3,712,407	3,348,268
Profit for the year		1,247,094	485,519
<b>Total liabilities</b>		<b>45,600,531</b>	<b>36,536,698</b>

The notes on pages ...-... form an integral part of the Annual Accounts.

**PROFIT AND LOSS ACCOUNT FOR 2008 AND 2007 (EEK THOUSAND)**

	<b>Kirje</b>	<b>2008</b>	<b>2007</b>
Interest income		2,353,608	1,895,334
Interest expense		-1,353,434	-1,045,049
<b>Net interest income</b>	<b>20</b>	<b>1,000,174</b>	<b>850,285</b>
Realised gains/losses arising from financial operations		587,408	-18,632
Write-downs		-46,073	-93,218
<b>Net result of financial operations, write-downs and risk provisions</b>	<b>21</b>	<b>541,335</b>	<b>-111,850</b>
<b>Net result of fees and commissions</b>	<b>22</b>	<b>12,854</b>	<b>10,294</b>
<b>Dividend income</b>	<b>23</b>	<b>1,152</b>	<b>1,009</b>
<b>Other operating income</b>	<b>24</b>	<b>51,085</b>	<b>19,348</b>
<b>Operating expenses</b>	<b>25</b>	<b>-359,506</b>	<b>-283,567</b>
Personnel expenses		-125,996	-108,732
Banknote and coin production costs		-103,218	-51,827
General administration expenses		-94,665	-89,132
Depreciation of fixed assets		-35,627	-33,876
<b>Profit for the year</b>	<b>26</b>	<b>1,247,094</b>	<b>485,519</b>

The notes on pages ...-... form an integral part of the Annual Accounts.

## STATEMENT OF CHANGES IN EQUITY (EEK THOUSAND)

	Fixed capital	Reserve capital	Special reserve	Profit	Total
<b>Balance as at the end of 2006</b>	<b>100,000</b>	<b>500,000</b>	<b>3,201,770</b>	<b>195,330</b>	<b>3,997,100</b>
Distribution of the 2006 profit	0	0	146,498	-146,498	0
Allocations to the state budget	0	0	0	-48,832	-48,832
Profit of 2007	0	0	0	485,519	485,519
<b>Balance as at the end of 2007</b>	<b>100,000</b>	<b>500,000</b>	<b>3,348,268</b>	<b>485,519</b>	<b>4,433,787</b>
Distribution of the 2007 profit	0	0	364,139	-364,139	0
Allocations to the state budget	0	0	0	-121,380	-121,380
Profit of 2008	0	0	0	1,247,094	1,247,094
<b>Balance as at the end of 2008</b>	<b>100,000</b>	<b>500,000</b>	<b>3,712,407</b>	<b>1,247,094</b>	<b>5,559,501</b>

The notes on pages ...-... form an integral part of the Annual Accounts.

# NOTES ON THE ANNUAL ACCOUNTS OF EESTI PANK

## ACCOUNTING POLICIES USED IN THE ANNUAL ACCOUNTS

### General principles

The Annual Accounts have been prepared in accordance with the Eesti Pank Act and the internal accounting policies and procedures of Eesti Pank. The internal accounting policies of Eesti Pank have been drawn from the European Central Bank's (ECB) guidelines for accounting financial instruments. The accounting of other assets and liabilities is based on the accounting principles generally accepted in Estonia.

The structure of the Balance Sheet proceeds from the structure specified in Annex IV to the ECB Guideline ECB/2006/16. The ECB Balance Sheet items are grouped by residency (euro area, non-euro area) and currency (euro, other currency). The assets and liabilities related to the monetary policy are recorded on separate rows.

The structure of the Profit and Loss Account is based on the structure outlined in Annex IX to the ECB Guideline ECB/2006/16.

Until Estonia joins the euro area, Eesti Pank is recording all claims in foreign currency (except interests) under "Claims on non-residents denominated in foreign currency" and all liabilities in foreign currency under "Liabilities to non-residents denominated in foreign currency" (except interests and liabilities in the Special Drawing Rights (SDR) of the International Monetary Fund). Accrued interests are recorded under other assets and liabilities.

The Annual Accounts have been prepared on the historical cost basis, except in cases explained in the following accounting principles.

Pursuant to Subsection 30(7) of the Eesti Pank Act, Eesti Pank does not pay income tax or any other taxes related to its economic activities to the state budget or local budgets, except taxes related to individuals. Pursuant to Section 21 of the Value Added Tax Act enforced on 1 May 2004, Eesti Pank is registered as a VAT taxable person with limited liability as of 14 May 2004 and calculates the value added tax from the supply of intra-Community acquisition or imports of goods and services.

Preparing the Annual Accounts requires the Executive Board to provide estimates regarding the aspects affecting the assets and liabilities of Eesti Pank and income and expenses during the accounting period as at the balance sheet date. These estimates are based on the information available about Eesti Pank and its intentions and risks as at the date of preparation of the Annual Accounts.

The Executive Board of Eesti Pank is of the opinion that the publication of the Bank's Cash Flow Statement does not provide significant relevant information to the readers of the Annual Accounts of Eesti Pank, given its role as the central bank.

The Annual Accounts have been prepared in thousands of Estonian kroons (EEK thousand) unless indicated otherwise.

## Financial assets and liabilities

Assets and liabilities are recorded on the Balance Sheet when it is probable that Eesti Pank will derive future expected benefits or losses from the asset or liability; most of the risks and rights related to assets and liabilities have been taken over; the cost of the asset or liability and the resulting gains or losses can be measured reliably.

Financial asset is any asset that is cash, or a contractual right to receive cash or any other financial assets from another entity, or a contractual right to exchange financial assets with another entity under conditions that are potentially favourable. Financial liability is any liability that is a legal obligation to deliver cash or any other financial assets to another entity or to exchange financial assets with another entity under conditions that are potentially unfavourable.

The transactions of financial instruments (except securities) denominated in foreign currency are recorded in off-balance-sheet accounts on the trade date. On the settlement date, off-balance-sheet entries are reversed and transactions are recorded on the Balance Sheet. The purchase and sale of foreign currency affect the net foreign-exchange position on the trade date; the sales proceeds are also calculated on the trade date. The interest accrued on financial instruments denominated in foreign currency and the premiums or discounts are calculated and recorded on a daily basis. These receivables also affect the foreign currency position on a daily basis.

Subsequent measurement of financial assets and liabilities is based on the market value, the acquisition cost or amortised cost depending on the type of a respective asset or liability. Market value is the amount for which an asset could be exchanged, or a liability settled between knowledgeable, willing parties in an arm's length transaction. Financial instruments recorded at market value are revalued on every balance sheet date.

Contingent liabilities are recognised as off-balance-sheet items.

## Recording of transactions in foreign currency

Transactions in foreign currency are recorded on the basis of the official daily fixings of Eesti Pank as quoted by Eesti Pank on the trade date. Assets and liabilities denominated in foreign currencies are translated into Estonian kroons at the official daily fixings effective on the balance sheet date.

The official daily fixings applied on 31 December 2007 and 2008 were as follows:

	2008	2007
USD	11.1052	10.6382
SDR	17.1521	16.8059
EUR	15.6466	15.6466

## Income recognition

Income and expenses are recorded in the Profit and Loss Account in the period in which they are earned or incurred or basis, regardless of when cash was received or paid.

Unrealised gains are not recognised as income but are transferred directly to a revaluation account.

Unrealised losses are recorded in the Profit and Loss Account under “Write-downs” if they exceed previous revaluation gains recorded in the corresponding revaluation account. Unrealised losses in any one currency or security or in gold are not netted against unrealised gains in other currencies or securities or gold.

In the event of an unrealised loss on any item at the year-end, the average cost of that item is reduced to the year-end exchange rate or market price.

Premiums or discounts arising on purchased securities are recorded as part of interest income and are amortised over the remaining life of the securities on a straight-line basis.

### **Gold**

Gold reserves are valued at the market value prevailing at the year-end, equal to Eesti Pank’s daily fixing of the Estonian kroon and gold.

Claims on non-residents denominated in foreign currency

Claims on non-residents denominated in foreign currency are divided into two: “Receivables from the IMF” and “Balances with banks, security investments and external loans”.

Foreign debt instruments and other quoted securities denominated in convertible foreign currencies are recorded at their year-end market value. Debt instruments are revalued on the last banking day of the year by reference to the market prices on the last banking day.

Repurchase transactions (sale/repurchase transactions) are recorded as collateralised loans taken at their fair value, i.e. securities are recorded as assets on the Balance Sheet and the repurchase sum as a liability. Interest payable is recorded on accrual basis on the Balance Sheet under “Accruals and prepaid expenses”.

Reverse repurchase transactions (purchase/resale transactions) are recorded as collateralised loans granted. Interest receivable is recorded on accrual basis on the Balance Sheet under “Accruals and income collected in advance”. Securities used as collateral for reverse repurchase transactions are not recorded on the Balance Sheet of Eesti Pank.

### **Derivative instruments**

Derivative instruments are used to manage foreign exchange risks and interest rate risks and they include foreign exchange forwards, swaps, futures and options. The purchase and sale transactions of derivative instruments are recorded in off-balance-sheet accounts on the trade date. On the settlement date, transactions are recorded on the Balance Sheet. The prices of derivative instruments are revalued at the end of the year by reference to the market prices on the last banking day or the yield curve in case of interest swaps. Eesti Pank does not apply hedge accounting to derivative instruments.

### **Investment in shares**

Investment in shares is recorded at market value if it can be reliably assessed. The assessment of the market value of shares is not reliable if they are not actively traded and there are no alternative

methods to assess their value in a reliable way. In this case shares are recorded at their acquisition cost. Gains and losses on the sale of shares are recorded in the Profit and Loss Account after all conditions of sale are fulfilled. Dividend income is recorded as income for the period.

### **Fixed assets**

Fixed assets are assets with useful life over a year and acquisition cost in excess of 50,000 kroons. Fixed assets are initially recorded at cost, which includes purchase price and other expenditure directly related to bringing the assets to the location and condition necessary for their intended use. Land, buildings, utility systems of buildings, IT hardware, software, and other assets with long-term useful lives are recorded as fixed assets on the Balance Sheet. Prepayments for fixed assets are also recorded as fixed assets.

Land and objects of art and culture are not depreciable assets. Other fixed assets are depreciated on a straight-line basis over the estimated useful lives of the assets at the following rates:

	<b>2008</b>
Buildings	3%
Utility systems of buildings	20%
Hardware	33%
Software	20-50%
Other fixed assets	20%

The need to differentiate between software depreciation rates arose due to the introduction of application software with high acquisition cost and different useful life.

Subsequent expenditure incurred for items of fixed asset are recognised as fixed assets when it is probable that Eesti Pank will derive future expected benefits from the asset and the cost of the asset can be measured reliably. Other maintenance and repair costs are expensed at the time they are incurred.

### **Write-downs of loans and other claims**

Allowance is made for uncollectible loans and other claims. Expenses of the accounting period arising from the allowance are recorded in the Profit and Loss Account of the reporting period. At the same time, respective assets on the Balance Sheet are reduced.

A general allowance is set up for losses of the loan portfolio to cover potential but unidentified losses in the loan portfolio. The general allowance is applied only to low-risk loans. It reflects the estimates of the Executive Board of Eesti Pank on the volume of potential losses, based on the risk group of the loans and previous experience.

Loans and other claims are recorded on the Balance Sheet until they are received or written off. Loans and other claims are written off only after all measures prescribed by law to recover them have been exhausted, or if such recovery is economically not feasible. Loans previously written off but collected during the accounting period are recorded as a reduction of expenses under the same cost account.

**Asset impairment**

An assessment is carried out at each balance sheet date to identify possible signs of an impairment of financial assets recorded at cost or amortised cost, or tangible fixed assets recorded at cost.

The impairment of significant financial assets is assessed for each object separately. The impairment of financial assets that are not individually significant and that are not expected to be impaired is assessed for all assets together. Write-downs of financial assets are recorded as an expense of the accounting period in the Profit and Loss Account.

The recoverable amount of an asset is identified during testing the value of tangible fixed assets recorded at cost. If it is not possible to identify the value of a single asset (object) through testing, the value is tested across the smallest possible group of assets. The recoverable amount is determined as the higher of an asset's fair value less costs to sell and its value in use. The value in use is the present value of cash flows expected from the use and sales of assets after use. The discount factor used to calculate the net present value is the expected profitability of investments with similar risk level. If the recoverable amount of an asset is smaller than its carrying amount, the asset is written down. The write-down is recorded in the Profit and Loss Account as an expense of the accounting period on an accrual basis.

**Currency in circulation**

Currency in circulation comprises banknotes and coins issued by Eesti Pank at their nominal value and recorded on the Balance Sheet as a liability to the holder of currency. Currency in the cash desk of Eesti Pank is deducted from this liability.

**Claims on and liabilities to the Financial Supervision Authority**

The Balance Sheet of Eesti Pank contains a claim on the Financial Supervision Authority in relation to services provided by Eesti Pank and acquisition of current assets, and a liability to the Financial Supervision Authority in relation to its settlement account held with Eesti Pank.

**Reclassification**

A number of items were reclassified in 2008 for presentational reasons and the comparable balances as at 31 December 2007 have been adjusted accordingly. These reclassifications are described in the Notes on the Balance Sheet.



## ITEM 1 – GOLD

Changes in the value of Eesti Pank's gold reserves are as follows:

	Amount (ounces)	Market price per ounce (kroons)	Market value (EEK thousand)
<b>Balance at the end of 2007</b>	<b>8250.171</b>	<b>8914.24</b>	
Revaluation	-	-	6,009
<b>Balance at the end of 2008</b>	<b>8250.171</b>	<b>9642.60</b>	<b>79,553</b>

The market price for an ounce is equal to Eesti Pank's daily fixing of the Estonian kroon and gold.

## ITEM 2 – RELATIONS WITH THE INTERNATIONAL MONETARY FUND (IMF)

This asset includes the SDR account in the IMF, participation in the IMF and other receivables. The value of SDR is determined on the basis of a basket of currencies. It is the weighted average of the exchange rates of the four main currencies (the euro, the Japanese yen, the pound sterling and the US dollar).

*EEK thousand*

	31/12/2008	31/12/2007
Participation in the IMF	1,118,317	1,095,744
SDR account in the IMF	1,054	1,003
Other receivables from the IMF	7,485	10,257
<b>Total receivables from the IMF</b>	<b>1,126,856</b>	<b>1,107,004</b>

### SDR account in the IMF

An SDR account is generated for every IMF Member State and it is used for conducting loan transactions and several other related operations between a Member State and the IMF. The following table reflects the dynamics in the account the Republic of Estonia holds with the IMF.

*EEK thousand*

SDR account in the IMF	31/12/2008	31/12/2007
Balance at the beginning of the year	1,003	1,023
Interest and other income	30	78
Exchange rate differences	21	-98
<b>Balance at the end of the year</b>	<b>1,054</b>	<b>1,003</b>

### Participation in the IMF

Eesti Pank acts as a fiscal agent between the Republic of Estonia and the IMF and as a depository of IMF's kroon deposits and debt instruments. A quota has been established for each IMF member determining its participation (subscription) and voting power in the IMF. Participation in the IMF is recorded under assets on the Balance Sheet and equals to the country's quota. At the end of 2008 the quota of the Republic of Estonia in the IMF was 65,200,000 SDRs.

The Republic of Estonia has paid its subscription in government debt instruments deposited with Eesti Pank, which are recorded under the item "IMF kroon accounts". These debt instruments do not bear interest.

EEK thousand

<b>Participation in the IMF (assets)</b>	<b>31/12/2008</b>	<b>31/12/2007</b>
Balance at the beginning of the year	1,095,745	1,164,779
Exchange rate differences	22,572	-69,034
<b>Balance at the end of the year</b>	<b>1,118,317</b>	<b>1,095,745</b>
<b>IMF kroon accounts (liabilities)</b>		
Balance at the beginning of the year	1,095,648	1,164,676
Exchange rate differences	22,570	-69,028
<b>Balance at the end of the year</b>	<b>1,118,218</b>	<b>1,095,648</b>

### Other receivables from the IMF

Since March 1997 this item has reflected the amounts that the IMF has reserved to strengthen its financial situation. The source of these amounts is the percentage added to the interest rate on the Stand-by Arrangement (SBA) and the Systemic Transformation Facility (STF), which is currently about 0.1%.

In 2008 Estonia contributed 173,924 SDRs to the cancellation of Liberia's debt to the IMF. According to an agreement of Eesti Pank and the Ministry of Finance, the contribution was allocated against the Republic of Estonia's claims on the IMF.

EEK thousand

<b>Other receivables from the IMF</b>	<b>31/12/2008</b>	<b>31/12/2007</b>
Balance at the beginning of the year	10,257	10,903
Exchange rate differences	-2,772	-646
<b>Balance at the end of the year</b>	<b>7,485</b>	<b>10,257</b>
Eesti Pank, SBA loan-related receivable	5,649	5,649
Government, STF loan-related receivable	1,685	4,608
Exchange rate differences	151	0
<b>Total</b>	<b>7,485</b>	<b>10,257</b>

### ITEM 3 – BALANCES WITH BANKS, SECURITY INVESTMENT, EXTERNAL LOANS

EEK thousand

	Balance at the end of 2007	Structure of residual maturity				
		up to 3 months	3–12 months	1–3 years	3–5 years	over 5 years
	<b>34 518 185</b>	<b>19 056 012</b>	<b>3 593 812</b>	<b>7 022 814</b>	<b>2 013 869</b>	<b>2 831 678</b>
Cash and current accounts	459 717	459 717	0	0	0	0
Time deposits	634 367	634 367	0	0	0	0
Securities	31 111 168	15 648 995	3 593 812	7 022 814	2 013 869	2 831 678
Reverse repurchase agreements	2 312 933	2 312 933	0	0	0	0
	Balance at the end of 2008	Structure of residual maturity				
		up to 3 months	3–12 months	1–3 years	3–5 years	over 5 years
	<b>42 483 346</b>	<b>18 770 815</b>	<b>10 580 620</b>	<b>6 025 691</b>	<b>2 994 279</b>	<b>4 111 941</b>
Cash and current accounts	632 850	632 850	0	0	0	0
Time deposits	2 567 965	2 567 965	0	0	0	0
Securities	37 686 577	13 974 046	10 580 620	6 025 691	2 994 279	4 111 941
Reverse repurchase agreements	1 595 954	1 595 954	0	0	0	0

In 2008, Eesti Pank's foreign exchange reserves were mainly placed in the markets of low-risk government bonds of leading industrial countries of the euro area and the United States with an average maturity of about 1.5 years.

The guidelines for managing Eesti Pank's foreign exchange reserves allow only transactions with highly rated international banks and financial institutions and limit any credit risk the bank can take in managing its foreign assets. The issuer risk is allowed for the following minimum credit ratings assigned by international rating agencies (S&P, Moody's):

- A-1 or P-1 for bonds with the maturity of up to one year;
- AA- or Aa3 for bonds with the maturity of over one year.

The amortisation of discounts and premiums on securities denominated in foreign currency was previously included under Item 8 "Accruals and prepaid expenses" and Item 15 "Accruals and income collected in advance". Eesti Pank has decided, for presentational reasons, to reclassify these items under the heading "Balances with banks and security investments, external loans and other external assets". The comparable balances as at 31 December 2007 have been adjusted accordingly.

#### **ITEM 4 – INTRA-EUROSISTEM CLAIMS**

The item reflects participation of Eesti Pank in the European Central Bank (ECB). Pursuant to Article 28 of the Statute of the European System of Central Banks (ESCB), the national central banks of the ESCB are the sole subscribers of the capital of the ECB. Subscriptions depend on the capital key weighting established in compliance with Article 29.3 of the ESCB Statute and adjusted every five years. In accordance with Article 49(3) of the Statute of the ESCB, which was added to the Statute by the Treaty of Accession, the ECB's subscribed capital is automatically increased when a new Member State joins the EU and its NCB joins the ESCB. This increase requires the calculation of the existing subscribed capital with the ratio between the share of new NCBs and the share of NCBs that are already members of the ESCB according to the extended basis of capital subscription.

As the Republic of Estonia does not participate in the euro area, the transitional provisions of Article 48 of the Statute apply. Eesti Pank was required to pay up a minimal contribution of 7% of its subscribed capital to the ECB upon entry to the ESCB. Eesti Pank is obliged to pay the remaining 93% upon Estonia's accession to the Economic and Monetary Union.

## ITEM 5 – TANGIBLE FIXED ASSETS

EEK thousand

Acquisition cost	Buildings	Hardware	Furniture and fixtures	Software	Total
Balance at the end of 2006	285,366	48,709	73,820	58,271	466,166
Acquisitions	24,077	8,689	1,359	2,448	36,573
Disposals	0	-3,536	-1,817	-4,692	-10,045
Balance at the end of 2007	309,443	53,862	73,362	56,027	492,694
Acquisitions	9,411	5,535	2,735	6,491	24,172
Disposals	0	8,829	1,619	1,722	12,170
<b>Balance at the end of 2008</b>	<b>318,854</b>	<b>50,568</b>	<b>74,478</b>	<b>60,796</b>	<b>504,696</b>
<b>Accumulated depreciation</b>					
Balance at the end of 2006	49,270	42,705	46,223	45,268	183,466
Depreciation charge	16,053	4,715	7,802	5,307	33,877
Disposals	0	-3,536	-1,811	-3,532	-8,879
Balance at the end of 2007	65,323	43,884	52,214	47,043	208,464
Depreciation charge	17,361	5,545	7,659	5,062	35,627
Disposals	0	8,829	1,612	1,733	12,174
<b>Balance at the end of 2008</b>	<b>82,684</b>	<b>40,600</b>	<b>58,261</b>	<b>50,382</b>	<b>231,917</b>
<b>Carrying amount</b>					
Balance at the end of 2006	236,096	6,004	27,596	13,003	282,699
Balance at the end of 2007	244,120	9,978	21,148	8,984	284,230
<b>Balance at the end of 2008</b>	<b>236,170</b>	<b>9,968</b>	<b>16,217</b>	<b>10,414</b>	<b>272,769</b>
<b>Prepayments for fixed assets</b>					
Balance at the end of 2006	12,097	98	0	0	12,195
Balance at the end of 2007	1,172	0	59	1,074	2,305
<b>Balance at the end of 2008</b>	<b>3,892</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>3,907</b>
<b>Total fixed assets</b>					
Balance at the end of 2006	248,193	6,102	27,596	13,003	294,895
Balance at the end of 2007	245,292	9,978	21,207	10,058	286,535
<b>Balance at the end of 2008</b>	<b>240,062</b>	<b>9,968</b>	<b>16,232</b>	<b>10,414</b>	<b>276,676</b>

The cost of fixed assets acquired in 2008 amounted to 24.2 million kroons (136.6 million kroons in 2007). The majority of the procurement of buildings composed costs related to the repair and construction of the Eesti Pank's building at Estonia pst 13.

Hardware procurement included computers, servers, printers and data communication equipment. The majority of purchases of fittings included business machines, security devices and furniture. Software purchases included primarily system software and additional user licences for existing software.

## ITEM 6 – OTHER FINANCIAL ASSETS – INVESTMENT IN SHARES AND UNITS

Shares held by Eesti Pank:

	Balance at the end of 2008		Balance at the end of 2007	
	Holding (%)	EEK thousand	Holding (%)	EEK thousand
<b>Bank for International Settlements (BIS)</b>				
214 shares (200 voting shares)	N/A	3,397	N/A	3,397
<b>Tallinna Börs (Tallinn Stock Exchange)</b>				
29 shares with nominal value à 4,000 kroons	1.1	44	1.1	44
<b>Total</b>		<b>3,441</b>		<b>3,441</b>

N/A – not available

## ITEM 7 – OFF-BALANCE-SHEET INSTRUMENTS REVALUATION DIFFERENCES

This item reflects the unrealised results arising from the revaluation of derivative instruments that were outstanding as at 31 December 2007.

Derivative instruments are revalued by reference to the market prices on the last banking day of the month, if available, and the yield curve in case of interest swaps. This item also includes the unrealised exchange rate difference of derivative instruments denominated in a foreign currency. The difference is calculated using the average exchange rate and the daily fixing of Eesti Pank.

## ITEM 8 – ACCRUALS AND PREPAID EXPENSES

	<i>EEK thousand</i>	
	2008	2007
Interest income	258,403	278,165
Securities	226,641	244,966
Derivative instruments	31,302	29,459
Reverse repurchase transactions	0	2,775
Time deposits	302	811
Loans	158	154
Prepaid expenses	13,318	32,083
Claims on the Financial Supervision Authority	5,696	10,418
Other claims	2,731	1,558
<b>Total</b>	<b>280,148</b>	<b>322,224</b>

## ITEM 9 – SUNDRY

This item mainly includes positive balances related to swap and forward transactions in foreign currency that were outstanding as at 31 December 2008; loans issued to employees of Eesti Pank in the total amount of 51 million kroons and (45 million in 2007), and euro cash in the total amount of 751 million kroons.

These balances arise from the conversion of such transactions into their Estonian kroon equivalents at the respective currency's average cost on the balance sheet date, compared with the kroon values at which the transactions were initially recorded.

Housing loans secured by real estate have been granted to employees of Eesti Pank for a maximum of 30 years and consumption loans for up to 2 years. The Supervisory Board of Eesti Pank establishes the interest rate on consumption loans for every fiscal year. The interest rate on consumption loans is comparable to the interest rate charged by Estonian credit institutions under similar conditions. The interest rate on housing loans is the standing deposit facility interest payable to credit institutions plus the risk margin but not more than the minimum loan interest rate established by the minister of finance. The deposit facility rate equals ECB deposit interest rate, which remained within 2.0–3.25% in 2008. In addition, study loans have been granted for a maximum of 10 years and with a 5% interest rate. Additional information on write-downs of loans is provided under Item 21.

#### **ITEM 10 – CURRENCY IN CIRCULATION**

	<i>EEK thousand</i>	
	<b>2008</b>	<b>2007</b>
Banknotes	11,833,949	11,610,325
Coins	162,373	151,857
<b>Total</b>	<b>11,996,322</b>	<b>11,762,182</b>

#### **ITEM 11 – LIABILITIES TO RESIDENTS RELATED TO THE MONETARY POLICY**

This item includes the settlement accounts of credit institutions with Eesti Pank. The deposits of credit institutions increased by 8.17 billion kroons in 2008. Eesti Pank has imposed the deposit interest rate of the European Central Bank effective on the last banking day of the accounting month as the interest rate on credit institutions' deposits held with the central bank. In 2008, the deposit interest rate of the ECB decreased from 3.25% to 2.0%. The interest rate is calculated on the basis of the monthly average balance of the settlement account (see Item 15).

#### **ITEM 12 – LIABILITIES TO OTHER RESIDENTS DENOMINATED IN KROON**

This item reflects the funds in the account of the Financial Supervision Authority held with Eesti Pank, which subjects of financial supervision pay as supervision fees. Interests on the funds in the Financial Supervision Authority's account are calculated quarterly on the basis of the average balance of the settlement account. The interest rate is equal to the yield of the foreign exchange reserves.

In addition, this item reflects the settlement accounts of the Tallinn Stock Exchange and the Estonian Central Register of Securities.

#### **ITEM 13 – LIABILITIES TO RESIDENTS DENOMINATED IN FOREIGN CURRENCY**

In November 2006, Eesti Pank joined the Trans-European Automated Real-Time Gross Settlement Express Transfer system TARGET. Item 13 reflects the euro settlement accounts of Estonian credit institutions that have joined the TARGET.

#### **ITEM 14 – LIABILITIES TO NON-RESIDENTS DENOMINATED IN FOREIGN CURRENCY**

This item includes repurchase agreements.

## ITEM 15 – ACCRUALS AND INCOME COLLECTED IN ADVANCE

EEK thousand

	2008	2007
Interest expense	55,867	91,044
on deposits with credit institutions	44,555	55,518
on derivative instruments	11,312	32,694
on repurchase agreements	0	2,832
Tax liabilities	11,161	10,969
Other liabilities	45,247	56,674
<b>Total</b>	<b>112,275</b>	<b>158,687</b>

## ITEM 16 – SUNDRY

This item consists mainly of negative balances related to swap and forward transactions in foreign currency that were outstanding as at 31 December 2008. These balances arise from the conversion of such transactions into their Estonian kroon equivalents at the respective currency's average cost on the balance sheet date, compared with the kroon values at which the transactions were initially recorded.

Negative balances related to outstanding swap and forward transactions were previously recorded under "Revaluation accounts". Eesti Pank has decided, for presentational reasons, to reclassify this item under the heading "Sundry". The comparable balances as at 31 December 2007 have been adjusted accordingly.

This item also includes accounts for the Republic of Estonia's claim on the IMF, which is recorded on the Balance Sheet of Eesti Pank as the bank's liability to the Government of the Republic of Estonia. The claim is related to the participation of the Republic of Estonia in strengthening the financial situation of the IMF through premium calculated on the Systemic Transformation Facility (STF).

## ITEM 17 – PROVISIONS

This item consists of performance bonuses to employees of the Financial Markets Department for the results of the financial year. The amount of bonuses is approved by the Deputy Governor in charge of the Financial Markets Department after the audited Eesti Pank Annual Report has been approved by the Supervisory Board of Eesti Pank.

## ITEM 18 – REVALUATION ACCOUNTS

EEK thousand

	2008	2007
Foreign currencies	648,663	101,649
Derivative instruments	50,528	50,125
Securities	41,796	20,442
<b>Total</b>	<b>740,987</b>	<b>172,216</b>

These accounts represent revaluation reserves arising from unrealised gains on assets and liabilities.

The unrealised losses at the end of the year are recognised in the Profit and Loss Account as expenses under "Write-downs".

## ITEM 19 – CAPITAL AND RESERVES

Changes in capital and reserves in 2008:

*EEK thousand*

	Balance at the end of 2008	Distribution of 2007 profit	Balance at the end of 2007
Fixed capital	100,000	0	100,000
Reserve capital	500,000	0	500,000
Special reserve	3,712,407	364,139	3,348,268
<b>Total</b>	<b>4,312,407</b>	<b>364,139</b>	<b>3,948,268</b>

According to Section 30 of the Eesti Pank Act, at least 25% of the annual profit must be allocated for increasing both statutory and reserve capital. After these allocations, part of the profit can be allocated for establishing and supplementing foundation capital and funds for specific purposes, based on the decision of the Supervisory Board of Eesti Pank. The remaining profit is transferred to the state budget.

## Notes on the Profit and Loss Account

### ITEM 20 – NET INTEREST INCOME

*EEK thousand*

	2008	2007
<b>Net interest income</b>	<b>1,000,174</b>	<b>850,285</b>
<b>Interest income</b>	<b>2,353,608</b>	<b>1,895,334</b>
Securities	1,503,419	1,224,263
Derivative instruments	558,155	266,496
Reverse repurchase agreements	231,134	349,975
Time deposits	47,990	41,869
Settlement accounts	10,666	11,432
Loans to personnel	2,243	1,290
Other	1	10
<b>Interest expense</b>	<b>-1,353,434</b>	<b>-1,045,049</b>
Credit institutions' deposit interests	-734,374	-546,002
Derivative instruments	-478,134	-290,619
Securities	-94,480	-46,004
Repurchase agreements	-39,893	-158,638
Settlement accounts	-1,764	-757
Other	-4,789	-3,029

The higher interest income in 2008 arose from the deepening of global financial crisis in the second half of the year, which brought about a rapid decline in the interest rates on government bonds in the United States as well as in the euro area. The lengthening of the portfolio's duration also contributed to the higher level of interest income. Moreover, the volume of invested assets grew 30% year-on-year.



## ITEM 21 – NET RESULT OF FINANCIAL OPERATIONS, WRITE-DOWNS AND PROVISIONS

EEK thousand

	2008	2007
<b>Net result of financial operations</b>	<b>541,335</b>	<b>-111,850</b>
<b>Realised gains/losses arising from financial operations</b>	<b>587,408</b>	<b>-18,632</b>
Securities	466,177	12,984
Income/expense of exchange rate differences	87,430	-14,583
Derivative instruments	48,162	-15,678
Financial asset management costs	-14,361	-1,355
Other	0	0
<b>Write-downs</b>	<b>-46,073</b>	<b>-93,218</b>
Derivative instruments	-42,692	-43,355
Exchange rate write-downs	-3,189	-2,719
Securities	-124	-47,764
Net change of loan portfolio write-downs	-68	620

The realised gains on securities were also slightly higher owing to ordinary transactions and dropping interest rates as well as the higher-than-average sales of securities with longer maturities.

## ITEM 22 – NET RESULT OF TRANSACTION AND COMMISSION FEES

EEK thousand

	2008	2007
<b>Transaction and commission fees</b>	<b>12,854</b>	<b>10,294</b>
Settlement service costs	14,024	12,022
Commissions on futures and options	-1,723	-1,763
Fines, arrears and other	553	35

The majority of this item accounts for income from servicing credit institutions' settlement accounts.

## ITEM 23 – DIVIDEND INCOME

This item reflects dividends from the shares of the Bank for International Settlements and the Tallinn Stock Exchange.

## ITEM 24 – OPERATING INCOME

EEK thousand

	2008	2007
<b>Operating income</b>	<b>51,085</b>	<b>19,348</b>
Income from the sale of collector coins and numismatic-bonistic products	38,904	8,147
Expenses compensated by financial supervision	9,598	7,597
Income on asset management	1,677	1,308
Rental income	692	963
Income from the sale of assets	87	176
Other income	127	1,157

The majority of other operating income in 2008 (38.9 million kroons) comprised income from the sale of numismatic-bonistic products, in particular collector coins.

Income from services provided to the Financial Supervision Authority totalled 9.6 million kroons. Pursuant to the cooperation protocol between the Financial Supervision Authority and Eesti Pank, the Financial Supervision Authority reimbursed, in monthly payments, 100% of the cost of the support services provided by Eesti Pank in 2008. Eesti Pank provides the Financial Supervision Authority with information technology, accounting, real estate, and administration services. The Financial Supervision Authority covers also the depreciation costs of fixed assets used.

Income on asset management includes the service fee paid by the Guarantee Fund and the Unemployment Insurance Fund to Eesti Pank for investing their assets.

Income from the rent of the training centres of Eesti Pank is recorded under "Rental income". Income from the sale of assets reflects income from the sale of fixed assets and inventories unnecessary for Eesti Pank.

## ITEM 25 - OPERATING EXPENSES

*EEK thousand*

	2008	2007
<b>Staff costs</b>	<b>-125,996</b>	<b>-108,732</b>
Wages	-92,657	-79,776
Social tax	-31,080	-26,778
Compensation and benefits	-1,988	-1,948
Unemployment insurance	-271	-230

Staff costs include mainly wage costs, including taxes, but also performance bonuses to employees of the Financial Markets Department for the results of the financial year. In addition, this item reflects the increase in the liability related to the calculated holiday pay that arises from the unused holidays of employees.

Compensation and benefits include pension benefits and fringe benefits tax calculated on the preferential interest rate on housing loans and the preferential price for the rent of the training centre.

The production costs of banknotes and coins included the cost of manufacturing banknotes and coins for 65.1 million kroons and the production costs of numismatic products for 35.5 million kroons.

*EEK thousand*

	2008	2007
<b>General administrative expenses</b>	<b>-94,665</b>	<b>-89,132</b>
Information technology maintenance costs	-19,306	-19,503
Real estate renovation and administration expenses	-16,575	-17,434
Financial asset management costs	-17,295	-14,992
Public relations and publications	-9,547	-8,056
Business travel expenses	-8,262	-8,842
Training expenses	-4,638	-3,975
Office costs	-4,189	-3,502
Communications and transportation costs	-1,326	-1,340
Legal and arbitration costs	-485	-519
Other expenses	-13,042	-10,969

General administrative expenses grew year-on-year, mostly owing to increased financial asset management costs and public relations and publications costs.

The costs of financial asset management and settlements comprise the cost of market information, fees and costs of cross-border payments, and management costs of foreign reserves.

The procurements of public relations, publications and market information include the costs of public events, publications, information agencies, the public web and online databases, public relations research polls, information campaigns, advertising and the Museum of Eesti Pank.

Business trip expenses primarily arise from the representation of Eesti Pank and cooperation with international organisations and financial institutions. There were altogether 735 business trips in 2008 (794 in 2007).

Other expenses consisted mostly of costs of security, the foreign representative and economic research.

## ITEM 26 – PROFIT DISTRIBUTION

The Profit Distribution Strategy of Eesti Pank is based on the principle of avoiding too rapid decrease of Eesti Pank's own capital and net foreign exchange reserves against key economic indicators before joining the Economic and Monetary Union.

Having evaluated the Profit Distribution Strategy in April 2008, the Supervisory Board of Eesti Pank decided to continue with the above-mentioned strategy and transfer 121.4 million kroons from the profit of 2007 to the state budget and 364.1 million kroons to the special reserve fund.

## ITEM 27 – DERIVATIVE INSTRUMENTS

Derivative instruments are used for risk hedging in the management of foreign exchange reserves.

Futures purchase transactions with a contract value of 8.269 billion kroons and futures sale transactions with a contract value of 230 million kroons were outstanding as at 31 December 2008. The contract value of outstanding interest rate swaps totalled 1.542 billion kroons. Foreign exchange swap and forward transaction claims of 5.539 billion and liabilities of 5.087 billion kroons remained outstanding as at 31 December 2008. The contract value of outstanding options sale transactions totalled 50 million kroons.

## ITEM 28 – CONTINGENT LIABILITIES

*EEK thousand*

	Balance at the end of 2008	Balance at the end of 2007
<b>Contingent liabilities</b>	<b>150,840</b>	<b>223,477</b>
Uncalled share capital (75%) of BIS	8,086	7,745
Uncalled share (93%) of ECB participation	142,754	142,754
Contractual obligations to produce banknotes and coins	0	72,978

**Bank for International Settlements (BIS)**

Eesti Pank has a contingent liability to the Bank for International Settlements since 1930. This liability is the uncalled part of the share capital (75%) of the BIS denominated in Swiss gold francs, totalling 8.1 million kroons on the balance sheet date (see Item 6).

**European Central Bank**

In 2004, the Republic of Estonia joined the European Union and consequently Eesti Pank became a member of the ESCB. As Estonia does not participate in the euro area, the transitional provisions of Article 48 of the Statute apply. Eesti Pank was required to pay up a minimal contribution of 7% of its subscribed capital to the ECB upon entry to the ESCB. Eesti Pank is obliged to pay the remaining 93% in the amount of 9.1 million euros (143 million kroons) upon Estonia's accession to the Economic and Monetary Union.

**Printing of banknotes and minting of coins**

Eesti Pank had no contractual liabilities for printing banknotes or minting coins as at the end of 2008.

## INDEPENDENT AUDITOR'S REPORT

(Translation of the Estonian original)\*

To the Supervisory Board of Eesti Pank

We have audited the accompanying financial statements of Eesti Pank which comprise the balance sheet as of 31 December 2008 and the report on revenues and expenses and statement of changes in equity for the reporting year then ended and a summary of significant accounting policies and other explanatory notes.

### Management Board's Responsibility for the Financial Statements

Management Board is responsible for the preparation and fair presentation of these financial statements in accordance with Eesti Pank Act and the accounting principles stated in the "Accounting Policies used in the Annual Accounts" of the accompanying financial statements. This responsibility includes: designing, implementing and maintaining internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

### Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

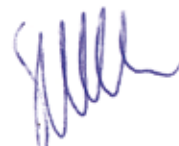
We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

**Opinion**

In our opinion, the accompanying financial statements give a true and fair view of the financial position of Eesti Pank as of 31 December 2008, and of its financial performance for the reporting year then ended in accordance with Eesti Pank Act and the accounting principles stated in the "Accounting Policies used in the Annual Accounts" of the accompanying financial statements.



Tiit Raimla  
AS PricewaterhouseCoopers



Stan Nahkor  
Authorised Auditor

23 March 2009

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*\* This version of our report is a translation from the original, which was prepared in Estonian. All possible care has been taken to ensure that the translation is an accurate representation of the original. However, in all matters of interpretation of information, views or opinions, the original language version of our report takes precedence over this translation.*



G. Reinдорff







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## GLOBAL ECONOMY IN 2008

2008 was a difficult year for the global economy because of the sharp downturn in growth and the deteriorating outlook. By the end of the year, advanced economies had reached the deepest decline since World War II. The economic slowdown in the United States played a central role here. The fourth-quarter results were particularly negative. Decreasing demand in advanced countries had a negative effect also on emerging economies where growth had been largely export-oriented for many years. Global economic slowdown was accompanied by a credit and liquidity crisis, which caused difficulties for several major banks. According to the IMF, global growth decreased from 5.2% to 3.4% in 2008. Global GDP is expected to decline 1–1.5% in 2009; the GDP of advanced economies will decrease up to 3.5% (see Table 1).

Regional growth indicators varied considerably in 2008. In advanced countries growth reached only 1%, whereas developing countries posted 6.3% growth. Developing Asian countries were in the lead with 7.8%, with China's growth being even 9%. In Central and Eastern Europe growth went down from 5.4% to 3.2%. US economic growth shrank to an estimated 1.1% (2% in 2007). Euro area growth indicators were similar to US figures (1%) in 2008; Japan saw a slight decline (-0.3%). Compared to the forecast made at the beginning of the year, actual growth was 0.9 percentage points lower in the US, 0.8 percentage points lower in the euro area and 1.8 percentage points lower in Japan.<sup>1</sup> The situation of the labour market deteriorated because the change in the economic cycle brought about an increase

in unemployment in all G3 countries.

The change in the inflation rate was strongly influenced by the price of oil that rose to a historical high at the beginning of July, exceeding USD 145 per barrel. This caused a consumer price increase in advanced countries: from 2.1% to 3.5%. However, the deepening economic crisis together with a sudden drop in the prices of oil and other commodities caused a rapid decrease in inflation in the second half of the year.

The deteriorating economic outlook reflected also on global financial markets. The robust decline on stock markets that had started in 2007 continued, and the main stock indices of the G3 countries decreased a further 40–50% over the year. As mentioned above, also commodity prices started to fall in the second half-year. Only the price of gold stayed between 700–1000 dollars per ounce last year; this was supported by heightened uncertainty. The leading central banks drastically cut the interest rates for monetary policy purposes. This affected the interest rates on government bonds and led to a robust decline in short-term as well as long-term interest rates. The extensive difficulties in the financial sector increased the crisis of trust between banks, which peaked in October. The US and euro area governments tried to support financial stability by implementing large-scale support measures. Although the actual effect of these measures will appear only in the future, they already provided some confidence in the financial markets.

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<sup>1</sup> Consensus Forecasts, January 2008.

**Table 1. Global economic forecast (%)**

	2008	2009	2010
<b>World</b>	3.2	-1.0... -1.5	1.5...2.5
Advanced economies	0.8	-3.5... -3.0	0.0...0.5
USA	1.1	-2.6	0.2
<b>Euro area</b>	0.9	-3.2	0.1
Japan	-0.7	-5.8	-0.2
Emerging economies	6.1	1.5...2.5	3.5...4.5

Source: IMF, "World Economic Outlook", March 2009

### UNITED STATES AND JAPAN

In 2008, growth in the US slowed significantly, economic problems aggravated and the annual GDP growth rate had reached -0.8% by the fourth quarter. The decline in real estate prices and housing sales, which had initiated the economic crisis, continued. The consistent weakening of the economy and growing unemployment had an adverse impact on private consumption, which constitutes almost two thirds of the US GDP. Consumer confidence deteriorated rapidly; the annual growth of retail trade reached as low as -10% in December.

The decline in demand reflected also in lower industrial production, which stood at -7.8% in December in terms of annual growth. Weak demand hit the car industry hard and forced leading car manufacturers to decrease production and rely on government support in evading bankruptcy. The economic crisis caused a significant rise in the unemployment rate: in 12 months it rose from 4.9% to 7.2% in the United States.

The US external balance was affected by a drop in goods turnover (both the import and export volumes shrank). Consequently, also the trade balance deficit decreased significantly in the last months of 2008. The current account deficit stayed around 5% of GDP in the first three quarters.

As mentioned above, inflation fluctuated consid-

erably, mainly owing to oil price volatility. While still at 5.5% in July, by December inflation had dropped to 0.1%. Excluding energy and commodity prices, inflation decreased to 1.7% by December. If economic difficulties persist or aggravate further, the slowdown in inflation may develop into a longer price decline, i.e. deflation.

The deteriorating economic situation forced the central bank and the government to implement extensive measures to stabilise the financial sector and the economy. The central bank continued drastic cuts on the key interest rate during the whole year, lowering it from 4.25% to 0–0.25%. The bank also expressed readiness to support the economy by keeping the balance sheet total at a high level through including a large amount of risk assets in its balance sheet. The government adopted measures aimed at supporting the financial sector and boosting the economy. Naturally, this required and will require lots of funds, which could lead to a budget deficit of 7–10% of GDP in the United States according to some forecasts.

In Japan, GDP growth slowed even more: from 2.2% to -4.6% over four quarters. The reason lies mainly in the strong dependence of the Japanese economy on external demand. The decline in exports reflected particularly in a decrease in industrial production: the annual growth rate dropped to -21% in December. The export decline was facilitated by low external demand as well as the strengthening of the yen, resulting

from high risk aversion among investors.

Domestic demand in Japan has been relatively weak for some years; in December retail trade growth went down to -2.2%. Unemployment rose from 3.8% to 4.4% in 12 months. This does not seem very high, but we must take into account that the Japanese labour market is not very flexible. Similar to other G3 countries, the inflation rate rose also in Japan at the beginning of the year, but dropped to 0.4% by the end of the year. Similar to the United States, the Japanese central bank had to lower the key interest rate: from 0.5% to 0.1% over the year. Japan's public debt is one of the highest among advanced countries, reaching 170% of GDP in 2007. Thus, Japan has very limited resources for boosting growth.

## **EURO AREA**

Growth in the euro area slowed to an estimated 1% in 2008, whereas in the fourth quarter the annual GDP growth rate declined to -1.2%. Similar to the United States and Japan, the activity of the industrial sector as well as the services sector decreased significantly; industrial output growth shrank to -11% by the end of the year. In the second half of 2008, the economic downturn, financial sector crisis and worsening outlook brought about an abrupt decrease in consumer confidence also in the euro area. It diminished to the lowest level since 1985. Unemployment rose from 7.2% at the beginning of the year to 8% in December.

The euro area inflation dynamics was similar to that of the United States and Japan: the price pressures stemming from the rise in oil price

increased annual consumer price growth to 4% in June-July. By December, however, the sudden drop of the oil price had lowered the inflation rate to 1.6%. The core inflation of the euro area remained relatively stable though and was 1.8% at the end of the year.

The euro area monetary policy in 2008 reflected the changing estimates of the European Central Bank regarding the situation and outlook of the economy. The key interest rate was 4% at the beginning of the year. In July, the ECB decided to raise it to 4.25% owing to increased inflation, although the economic slowdown had already clearly manifested itself. As inflation decelerated and economy slowed, the central bank started to cut the key interest rate in October and lowered it to 2% by the end of the year. The economic discrepancies in the euro area countries became more pronounced as growth slowed further. Consequently, the difference between the interest rates on long-term government bonds posted the fastest growth since the adoption of the euro. This, in turn, revealed fiscal problems in Greece, Spain, Ireland and some other countries, which could lead to a bigger budget deficit in these countries than the 3% set out in the Stability and Growth Pact. Although several countries adopted state support programs to facilitate growth, there is no single fiscal policy in the euro area. Therefore, more efforts should be made in that field.

The economic outlook for the euro area in 2009 is even weaker than the 2008 figures. The International Monetary Fund expects a 3.2% contraction in 2009.<sup>2</sup>

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<sup>2</sup> IMF "World Economic Outlook Update", March 2009.

# ESTONIA'S ECONOMY IN 2008

## NON-FINANCIAL SECTOR

### Monetary policy environment

In 2008 the monetary policy environment became more and more restrictive for the Estonian economy. Upward price pressures were still high in the first half of the year and the European Central Bank (ECB) reacted by raising the monetary policy interest rates at the beginning of July. The US dollar depreciated further against the euro, which was offset by the depreciation of the currencies of some Estonia's trading partners. All in all, the monetary policy environment of the first half of 2008 could be considered almost stable.

The monetary policy environment tightened substantially only in the second half of 2008 because of the deepening global financial crisis. Although the ECB lowered the monetary policy interest rates four times, the Euribor climbed until the last months of the year. At the same time, bank loan interest rates increased, including in Estonia. At the end of 2008 and at the beginning of 2009, loan interests in Estonia started to decline again (see Figure 1).

In the second half-year the depreciation of the Russian rouble and the Swedish krona against the euro accelerated, but this was largely offset by the appreciation of the US dollar. Consequently, the real nominal exchange rate of the Estonian kroon appreciated 1.6% from 2007.

In general, the monetary policy environment was more restrictive in 2008 and in the last months of the year, the global financial crisis started to affect also Estonia's non-financial sector.

### Domestic and external demand

In 2008, Estonia's economic growth was shaped by the continuing adjustment of domestic demand as well as the global economic crisis.

The slowdown in robust growth that had started already in the summer of 2007 continued at the beginning of 2008 and reached a 1.1% decline in GDP in the second quarter. In the second half of the year, the slowdown picked up pace and reached 9.4% in the fourth quarter. According to preliminary estimates, the annual average contraction stood at 3.5%.

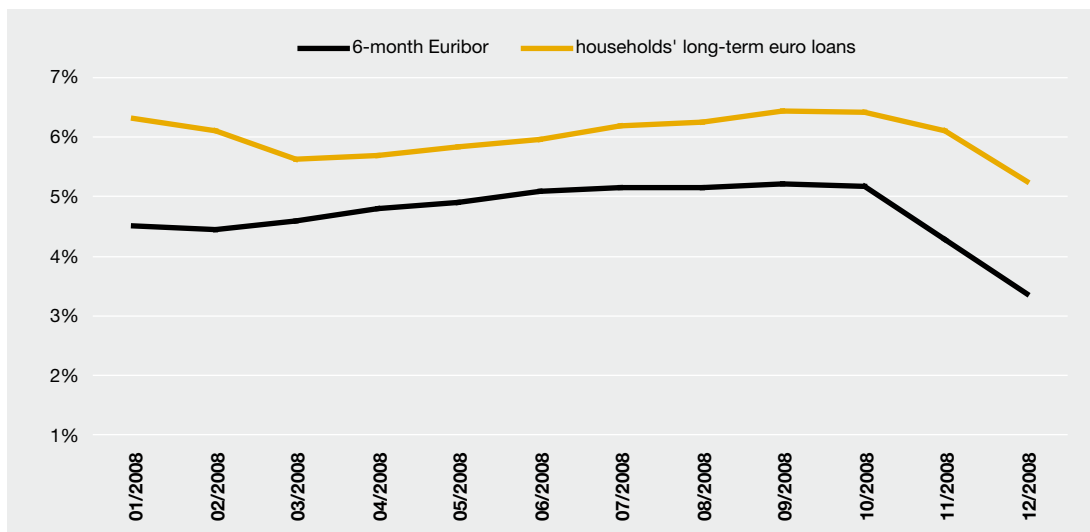


Figure 1. Changes in interest rates on long-term loans issued in Estonia and euro area money market interest rates

Until autumn, only domestic demand weakened. The building of stocks slowed by nearly two times, fixed investment diminished almost 5% and private consumption expenditure decreased 2.5% compared to the previous year.

In November and December when domestic demand slowed at a more moderate rate, a sudden decrease hit Estonia's main export markets and the European economy in general. Goods exports shrank significantly and only services exports remained close to previous levels. For the past two years, services exports have exceeded goods exports in terms of growth. In this context it is important to take into account that the trade flows that could be regarded as re-exports are still large and their volatility strongly affects foreign trade indicators, which complicates the evaluation of the export sector's contribution to growth.

GDP decreased in most fields of activity, and only a few private sector industries maintained growth also in the last months of the year (see Table 1). This was the first time since 1995 that the cost of GDP was smaller than in the previous

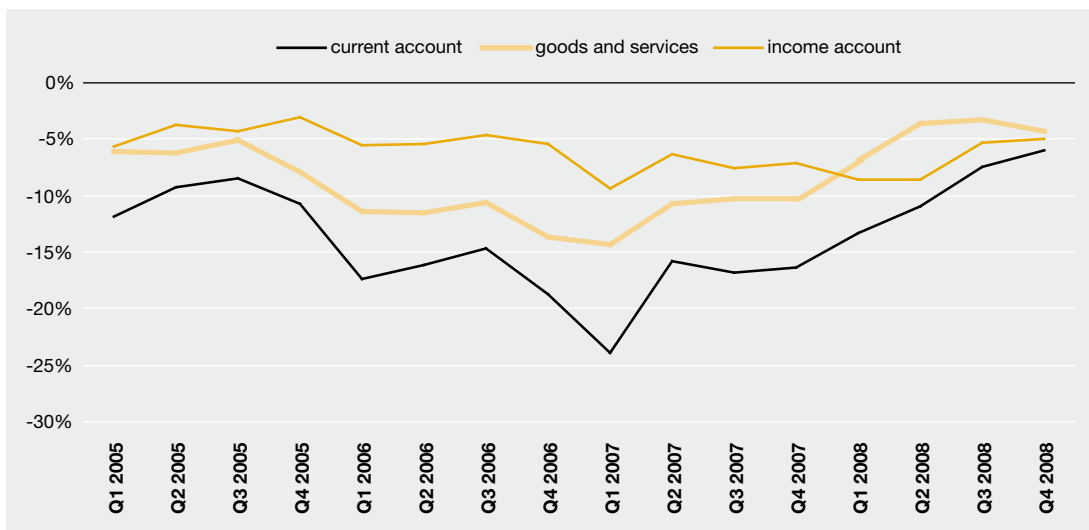
year also at current prices.

The external balance started to improve in the second half of 2007 along with the weakening domestic demand. In 2008, the improvement process picked up speed and the average annual goods and services deficit decreased to 4.5% of GDP. This was supported mainly by a decrease in goods imports, while the goods and services export growth still remained relatively rapid. The terms of trade did not facilitate the improvement of the trade balance. The annual average price rise of import goods was 1.5 percentage points higher than that of export goods. In the second half-year, the improvement of the external balance was supported also by a decline in investment income outflow. The current account deficit decreased to about 6% of GDP in the fourth quarter. In annual terms, the current account to GDP ratio remained almost twice as low as in 2007 and stood at 9.5% (see Figure 2).

Approximately 40% of the net inflow of foreign capital consisted of foreign direct investment. The rest was by various debt-generating cash flows, and by the end of 2008, Estonia's external

**Table 1. Real GDP growth by fields of activity in 2007–2008 (%)**

	2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008
Agriculture and hunting	-12	21.1	7.8	4	2.8
Forestry	-10.5	-12.6	1.9	36.4	7.5
Fishing	8.2	2.4	22.1	3.8	-10.3
Mining and quarrying	11.9	12.2	-4.1	-11.7	-18.8
Manufacturing	9	2.8	-1.2	-1	-16.4
Energy, gas and water supply	-3.3	-5.3	-9.7	-9.5	-7.2
Construction	10	5.3	1.2	-9.2	-17.1
Wholesale and retail trade	6.3	-5.6	-6.2	-8.5	-11.6
Hotels and restaurants	6	3.7	2.3	-7.7	-14.9
Transport, storage and communications	6.5	-5.3	-4.6	-3.8	-9.3
Financial intermediation	18.4	6.5	-1	-8.2	-10.8
Real estate, renting and business activities	2.5	-1.1	0.7	-0.2	-1.5
Public administration and defence; social insurance	2.9	7	8.6	6.7	4.6
Education	1.4	1.4	1.7	1.4	1
Health and social care	4.7	0.1	-0.2	5.1	-3
Other community, social and personal services	5.8	7.1	3.9	-0.5	-4.5
<b>Total GDP</b>	<b>5.6</b>	<b>0.4</b>	<b>-0.7</b>	<b>-3.2</b>	<b>-8.1</b>
Net taxes on products	11.4	-1.3	-3.8	-5.6	-19.8
GDP at market prices	6.3	0.2	-1.1	-3.5	-9.7



**Figure 2. Current account balance and main accounts of the balance of payments (% of GDP)**

debt had grown to 117% of GDP. Various transfers from the EU budget increased by around one third over the year.

### Inflation

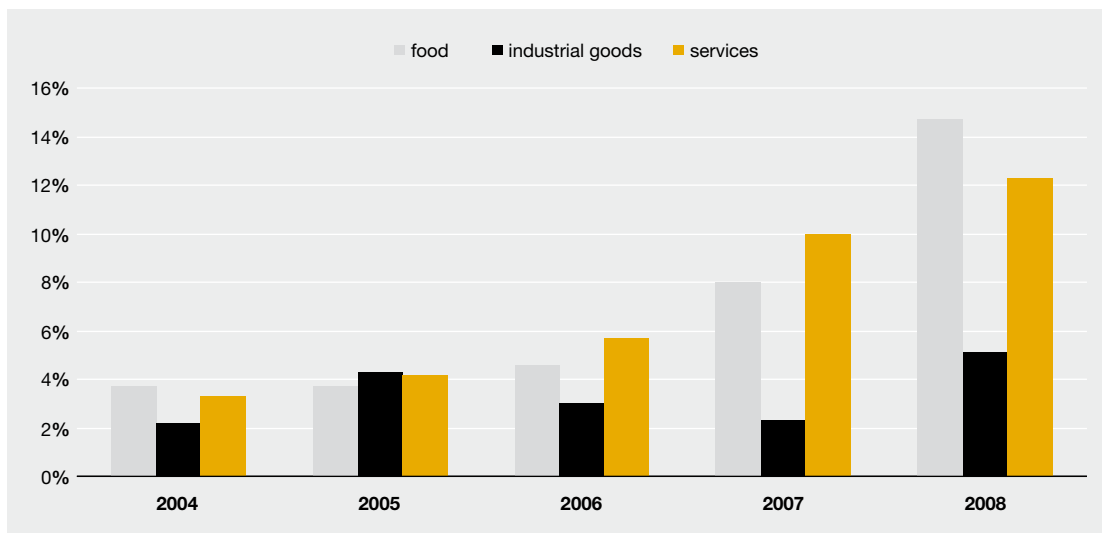
Similar to the last couple of years, consumer prices grew faster than expected also in 2008. This resulted primarily from the pass-through of external price shocks to Estonia, i.e. the continuous rapid rise in the prices of energy carriers and food products.

In the light of the weakening domestic demand, also the acceleration of core inflation ended in the last months of 2007. Unfortunately, a hike in food prices on the world market started off then and continued also in 2008. The excise duties imposed on electricity and the increase in motor fuel, alcohol and tobacco excise duties raised the cost of the consumer basket to 11% in the first months of 2008. As global fuel and food prices kept rising, the inflation rate was much higher in the following months than expected. The robust price rise of import goods affected the consumer price index also in the second half-year, which is

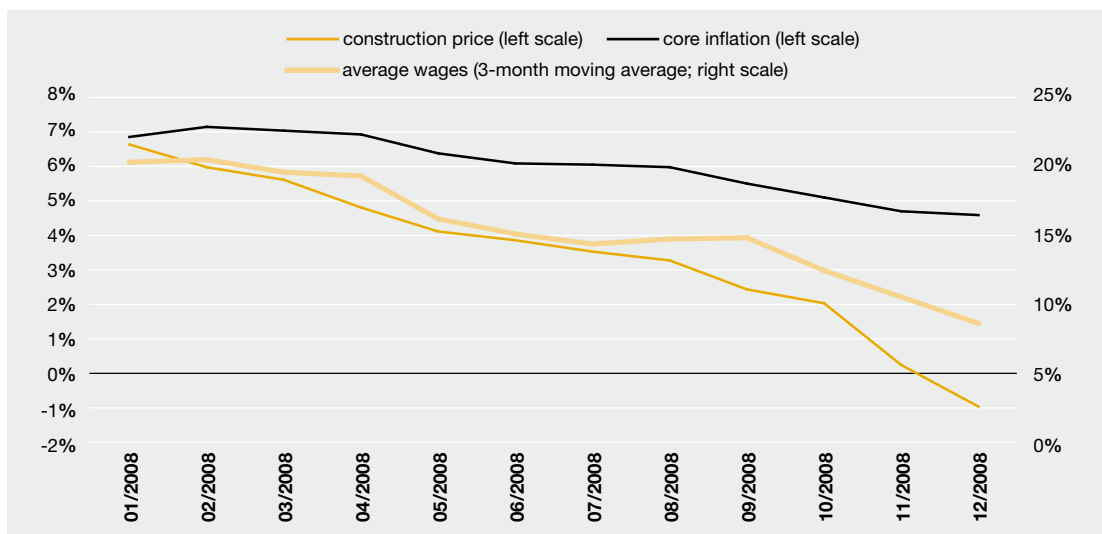
why the annual average inflation indicators were higher than in 2007, leaving the wrong impression of the consumer price increase gaining further momentum (see Figure 3).

In Estonia's case it should be taken into account that the price rise of natural gas purchased from Russia passed through to the prices of distant heating only at the end of the year; that is, when the prices of energy carriers in the world market had dropped considerably.

Although annual average inflation increased, the second half of 2007 saw an adjustment in the prices of goods and construction services oriented to the domestic market. Both, the indices of core inflation and construction prices had fallen to 6–7% by the first months of 2008 (see Figure 4). The rise in service prices slowed, being supported by the continuous weakening of wage pressures. As regards wages and labour market indicators it should be taken into account that major changes in the labour market started to occur in December and January, which is why they are not yet fully reflected in the year-on-year comparison of fourth-quarter data.



**Figure 3. Changes in prices of services, food and industrial products (y-o-y)**



**Figure 4. Changes in core inflation, construction price and average wages (y-o-y)**

The annual average inflation indicators do not reflect the rapid slowdown in inflation at the end of 2008 either. The cost of the consumer basket declined in the last months of 2008, compared to previous months. This trend continued also at the beginning of 2009 (see Figure 5).

In 2008, the real exchange rate of the Estonian kroon appreciated by nearly 4.7% on average. About two thirds of the appreciation can be attributed to stronger consumer price growth compared to that of Estonia's trade partners (see Figure 6).



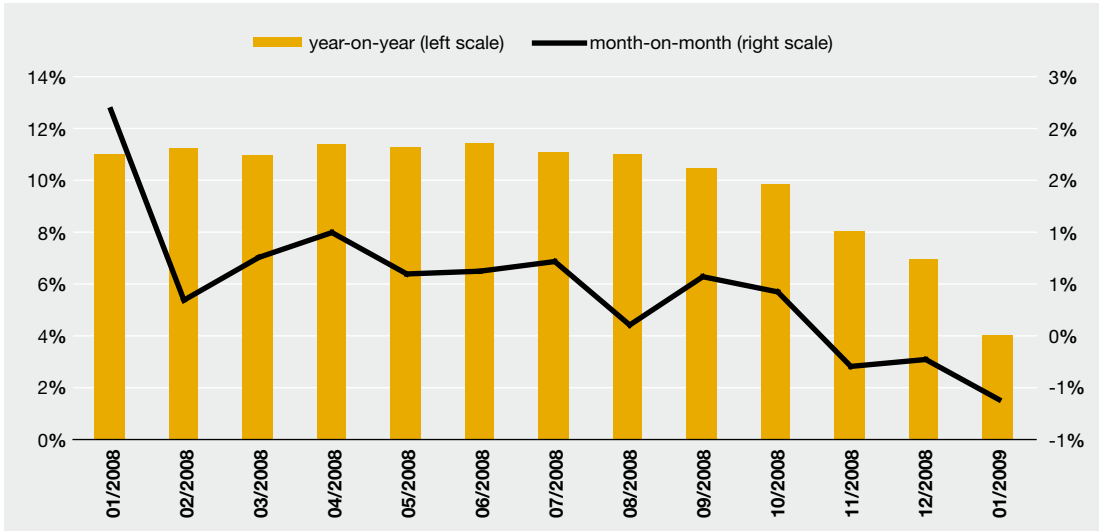


Figure 5. Consumer price changes

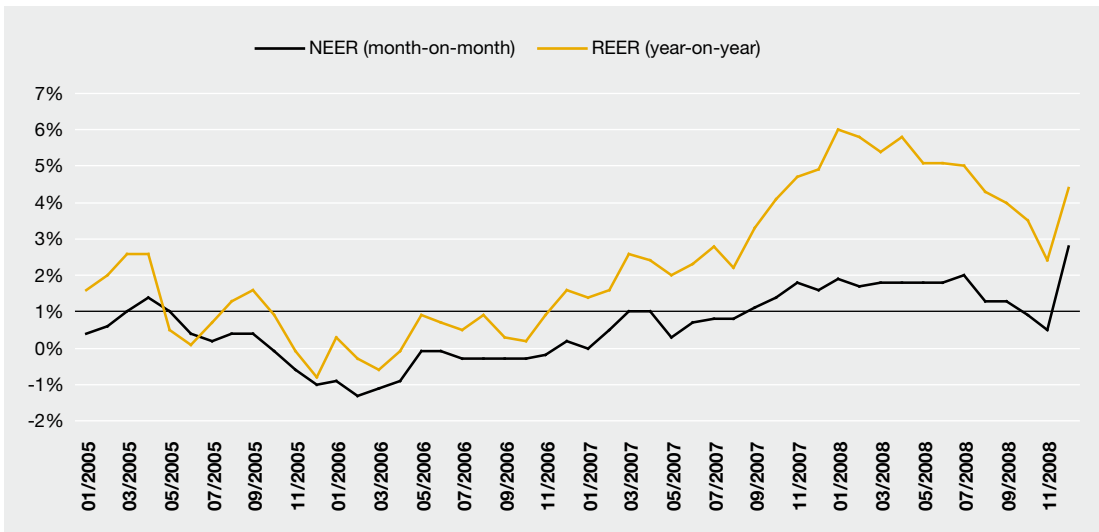


Figure 6. Changes in the real and nominal effective exchange rate of the Estonian kroon

**General government**

The state budget for 2008 was based on an assumption of relatively rapid growth. Therefore, the aim was to both increase expenditure and achieve a moderate budget surplus. However, economic contraction was faster than expected and the general government expenditure exceeded the revenue for the first time in six years.

As concerns the tax policy, the government continued efforts to reduce labour taxes and raise consumption taxes. At the beginning of the year, both the personal and corporate income tax rates were lowered to 21%. As the non-taxable income threshold was also raised at the same time, the actual personal income tax rate decreased by more than 1 percentage point. Yet, the general tax burden to GDP ratio remained

more or less unchanged owing to the rise in consumption taxes. Tobacco and motor fuel excise duties were increased to the EU minimum level, an excise duty was imposed on electricity, and also the tax rates on alcohol were increased.

Already at the beginning of 2008 it became evident that the planned increase in expenditure was too fast given the slowing growth and revenue collection. In order to balance the revenue and expenditure, in July the government drafted a supplementary budget to curb the expenditure. The following economic decline was still stronger than expected and the budget cuts did not result in a consolidated budget balance. At the end of the year, the growth outlook deteriorated even more and ministries and other authorities made every effort to avoid the usual carry-over of certain expenditure to the next fiscal year. All in all, fiscal loosening turned out to be much more extensive than anticipated. According to preliminary estimates, the general government budget deficit constituted 2.8% of GDP in 2008.

Although most of the consolidated budget deficit was covered from reserves, the debt burden of local governments and the central government grew in 2008. In the latter case, the debt increased as a result of extensive construction activities carried out by a state-owned real estate public limited company. This public limited company operates in private law and finances its development with bank loans. Nevertheless, in comparison with other countries, Estonian general government debt is almost non-existent, constituting 4.3% of GDP at the end of 2008.

## **SOVEREIGN RATING**

Sovereign rating, more specifically the credit rating of a country, is an assessment by international (private) rating agencies of a country's capability and willingness to repay its long-term foreign liabilities by due date. Indirectly, sovereign rating reflects the reliability of a country's

economy and economic policy. Sovereign rating largely determines the interest rate on foreign borrowing.

In 2008, Moody's lowered Estonia's **sovereign rating** outlook from stable to negative. Standard & Poor's affirmed the negative outlook of the credit rating. Fitch lowered the rating by one notch from A to A- (A minus), and affirmed the negative outlook. Standard & Poor's and Moody's set the rating of long-term foreign currency liabilities at A and A1, respectively. Moody's rating on the likelihood of the repayment of Estonia's loans has remained unchanged since autumn 2002 and that of Standard & Poor's since 2004.

In connection with revising Estonia's sovereign rating, in 2008 Fitch lowered Estonia's AA-level **sovereign risk rating** – the sovereign risk establishes a ceiling for the rating of companies operating in the country. Moody's and Standard & Poor's did not change Estonia's sovereign risk rating and affirmed them at Aa1 and AA, respectively.

## ***Sovereign ratings and their key determinants in 2008***

In recent years, all the rating agencies have noted that Estonia's main strengths lie in the low general government debt and the reliability of our banking system. Estonia's conservative fiscal policy, which is very important for a currency board based monetary system, has always earned the confidence of rating agencies. The country's sovereign rating has been supported also by the perspective of joining the euro area.

The rating agencies that visited Estonia in 2008 stressed the importance of general government budget surpluses of previous years, the accumulation of reserves in good times and the low debt level. Equally important are the flexible and competitive economic system, strong (high-quality and foreign-owned) banking sector, open mar-

ket economy and the fact that the large current account deficit stems from the capital inflow from parent banks, not low competitiveness. Moreover, the robust economic growth of recent years has Estonia's income convergence towards the European average.

According to the rating agencies, the main weaknesses in 2008 included great external imbalances; a decrease in direct investment and an increase in debt; the extensive and growing liabilities (mostly foreign liabilities) of the private sector; rapid inflation; tightening of the labour market and its impact on competitiveness; and weak external liquidity position. Estonian economy is affected by the global economic and financial crisis, as slow growth in the euro area has an unfavourable impact on Estonia's exports. The rating agencies also pointed out that euro area membership would considerably reduce the balance of payments risks and possible external shocks for Estonia.

Rating agencies' assessments also reflect the negative sentiment prevailing on global markets and the impact of the present liquidity crisis on Estonia's economy, which jeopardises our state budget in the coming years. The liquidity crisis deepens the recession and makes economic adjustment more difficult than expected.

Rating agencies' reports on Estonia are available on the web site of Eesti Pank.<sup>3</sup>

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<sup>3</sup> <http://www.eestipank.info/pub/en/majandus/majandus/rating/reiting1.html>

## FINANCIAL SECTOR

The global financial crisis that started in 2008 has also affected the structure of Estonia's financial sector. Global economic developments have

most significantly affected the volume of investment funds and stock market capitalisation, which have decreased substantially over the last year (see Figures 7–9).

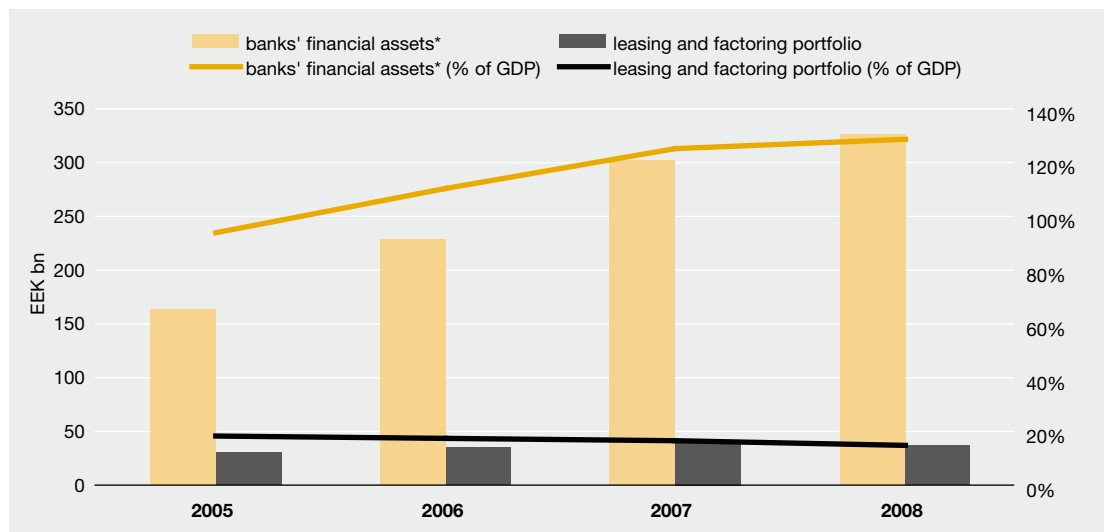


Figure 7. Banks' financial assets and leasing and factoring portfolio

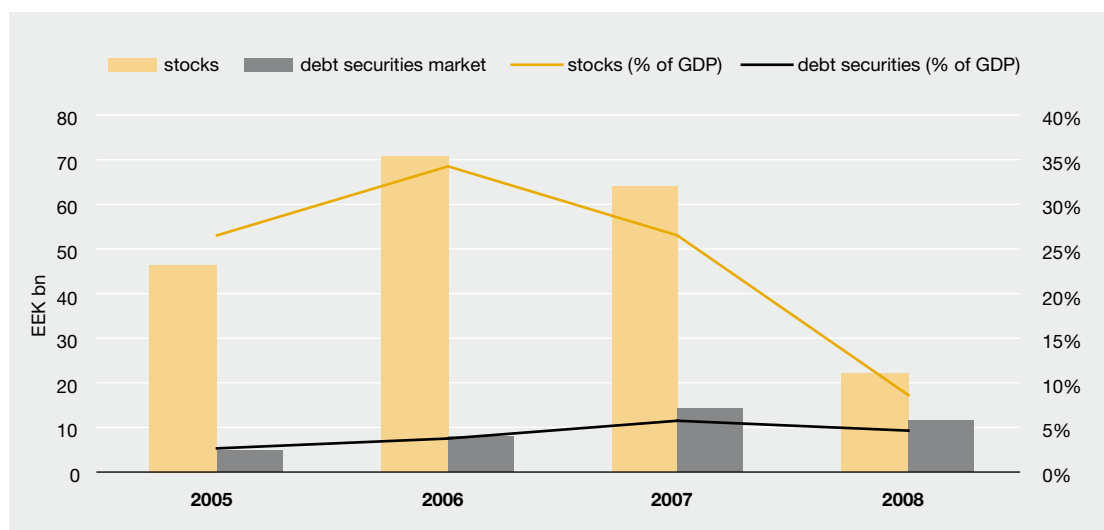
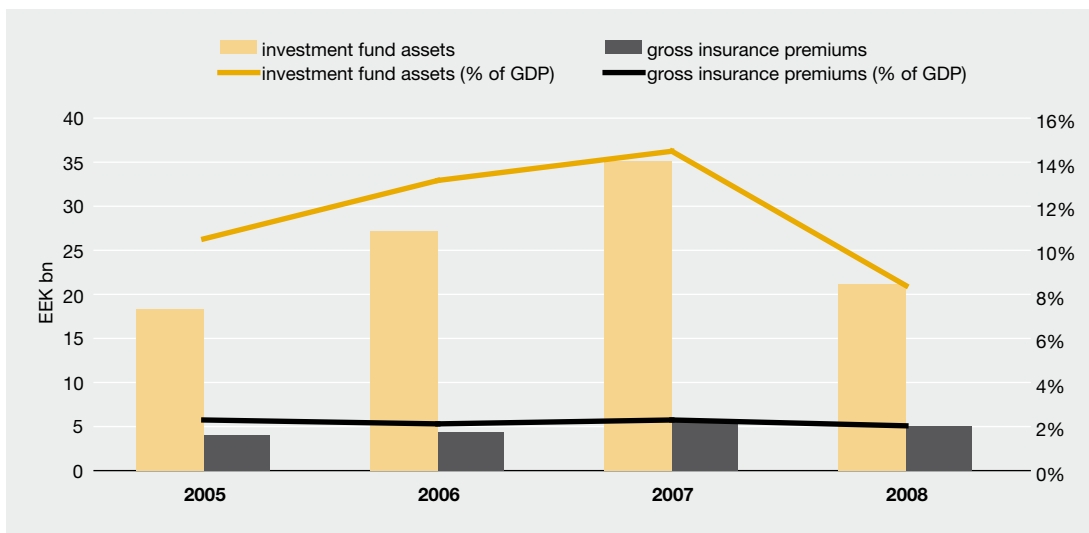


Figure 8. Stock market and debt securities market



**Figure 9. Investment fund assets and gross insurance premiums**

## Banking sector

### *Institutional developments*

Six companies licensed as credit institutions, ten branches of foreign credit institutions and over 200 cross-border banking service providers were operating on the Estonian market at the end of 2008. As of 1 June 2008, the former Sampo Pank is operating as the Estonian branch of Danske Bank. Consequently, the branches of foreign credit institutions now hold more than 25% of the Estonian credit market.

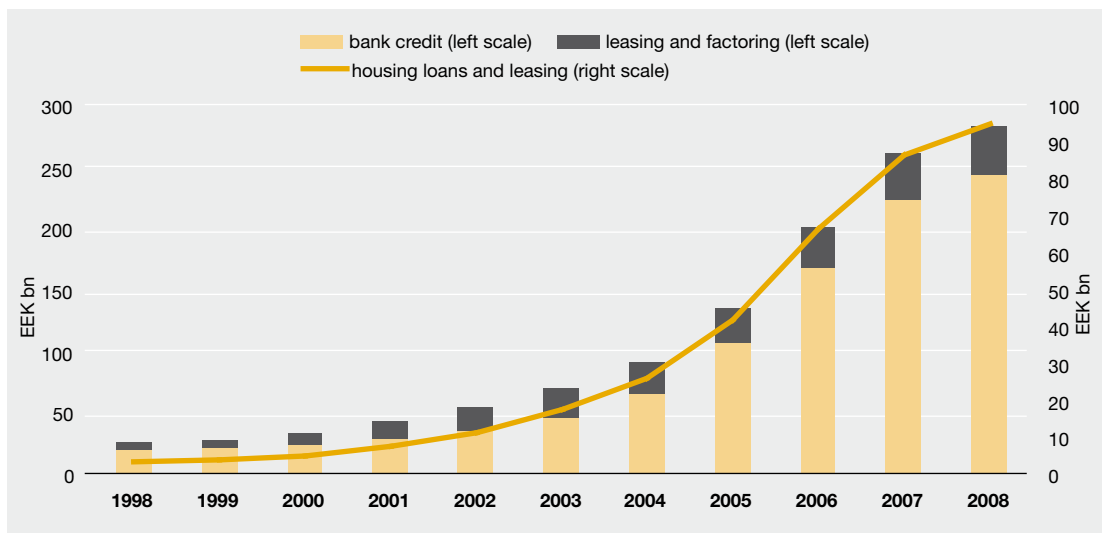
Although growth in banks' financing portfolio slowed considerably in 2008, the market shares of banks operating in Estonia have not changed much. The four major market participants still hold 95% of Estonia's credit market.

### *Assets and liabilities of banks*

Compared to previous years, the increase in banks' assets was modest in 2008: only 6.5% (33% in 2007). At the end of the year, banks' total assets reached 342 billion kroons. The total

value of the financing portfolios of banks and leasing companies exceeded 282 billion kroons at the end of 2008, having increased by 22 billion kroons over the year. This is about three times less compared to loans and leases granted in 2007. In December, the repayments of loans exceeded the volume of new loans issued, which resulted in a decrease in banks' loan and leasing portfolio. The decrease was mainly driven by a drop in credit demand that accompanied the adjustment of the economy and the more conservative credit policies of banks. Credit demand has not increased even after the considerable decline of key interest rates in the second half of 2008. The loan and leasing portfolio is expected to decrease at least until 2010.

The stock of household housing loans and leasing increased 10%, which constitutes only a third of the previous year's figure. The aggregate portfolio of housing loans was 95 billion kroons at the end of 2008. Annual growth in consumer loans was modest as well, falling back from 43% in 2007 to 13% in 2008. The volume of both the car leases and housing loans started to diminish in December 2008 (see Figure 10).



**Figure 10. Public and non-financial sector financing**

The portfolio of corporate bank loans and leasing increased by 10 billion kroons (7%) in 2008 and totalled 158 billion kroons at the end of the year. Portfolio growth decelerated across all sectors, referring to the fact that investment needs have declined everywhere. Besides demand-driven factors, credit growth has slowed also because of banks' more conservative lending policies that have significantly changed the definition of a project worth financing.

The difficult market situation has reduced the loyalty of customers to credit institutions. The switching of banks was probably influenced by customers' risk estimates for the whole group (incl. the parent bank), but also by the different deposit guarantee rates of banks that results from belonging to different deposit insurance schemes<sup>4</sup>, and the offered risk premium (interest rate).

Household deposits grew by 5.5 billion kroons over the year. At the same time, corporate deposits diminished by almost 2 billion kroons.

All in all, household deposits totalled 54 billion and corporate deposits 52 billion kroons in 2008. The rise in interest rates over the year increased the proportion of time and savings deposits to 60% and 41%, respectively, of total household and corporate deposits by the end of the year. Although credit growth slowed in 2008, deposits did not suffice to satisfy the demand for credit. Institutional foreign borrowing<sup>5</sup> increased by 21 billion kroons in 2008, and thus external funds accounted for 48% of banks' total resources.

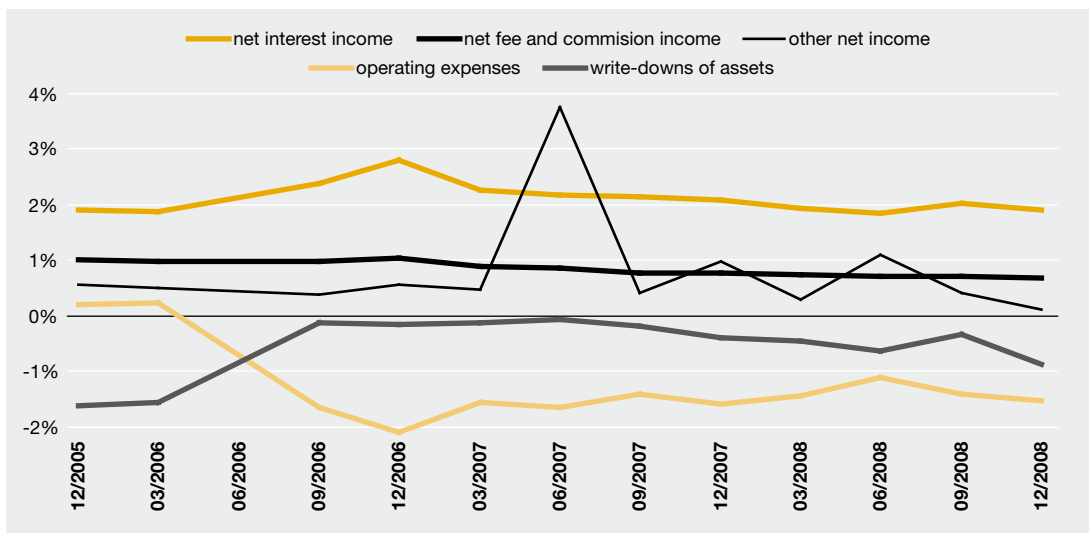
### **Profitability**

Over the last year, the profitability of banks has been curbed by loan write-downs, unfavourable developments in financial markets and slowing credit growth (see also Figure 11). On the other hand, cut-down on expenses, sale of assets, one-off incomes from the reduction of the reserves accumulated earlier, and the decrease of contributions to the Guarantee Fund have all contributed to profitability<sup>6</sup>. The net profit of banks

<sup>4</sup> Since the banking groups operating in Estonia belong to different deposit guarantee schemes in different countries, the upper limits of guaranteed deposits vary.

<sup>5</sup> Deposits and loans, issued securities and subordinated liabilities from other banks.

<sup>6</sup> While the credit institutions under the Estonian deposit guarantee scheme were so far required to pay annual contributions in the amount of 0.5% of the stock of guaranteed deposits, starting from the third quarter of 2008 the rate is 0.0032%.



**Figure 11. Income and expense items (% of total asstes)**

in 2008 was 4 billion kroons, which is about half less than in 2007.

Loan write-downs grew by 1.9 billion kroons in 2008. Provisions constituted 1.5% of the banks' loan portfolio at the end of 2008. Although write-downs may increase, given the general economic outlook and banks' positions, the high rate of provisions already made in relation to overdue loans gives reason to believe that the established buffers will reduce the impact of possible future loan losses. Banks have had to bear losses also on financial assets and liabilities held for trading owing to adverse capital market developments. The slowdown in credit growth has brought about a decrease in fee and commission income. The average return on assets was 1.2% in 2008 (2.4% in 2007). The high return on equity of the banking sector fell to 13.6% by the end of 2008.

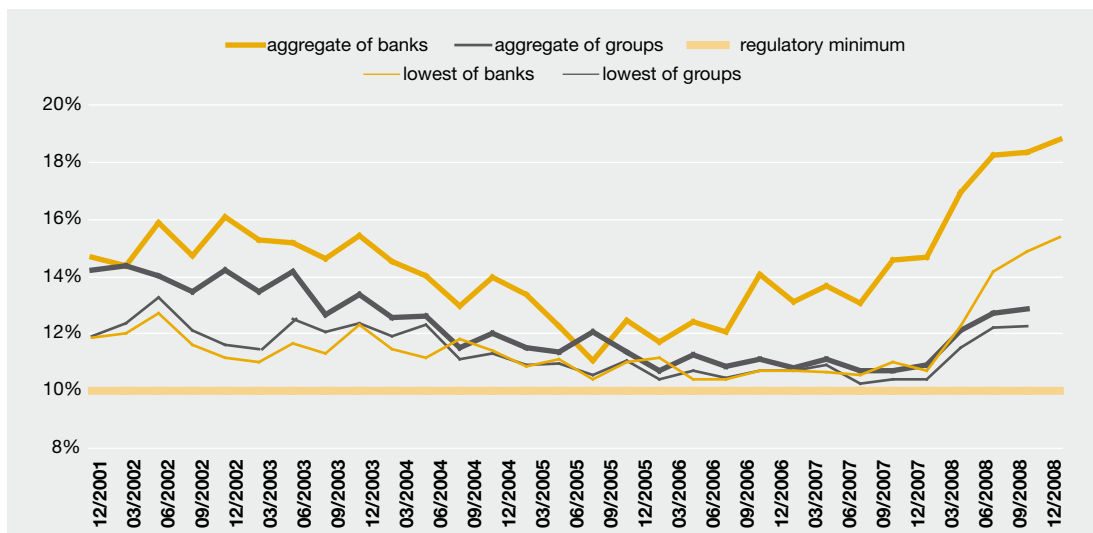
#### **Capital adequacy and risks**

On 1 January 2008, the more risk-sensitive capital adequacy framework (Basel II) became mandatory for all credit institutions operating in Estonia. The quantitative impact studies conducted beforehand showed that capital requirements

might decrease considerably. Although Estonia has established a 60% risk weighting on housing loans instead of the customary 35%, the capital requirements decreased about 9% as a result of the new procedure. The more risk-sensitive calculating methods and the slowdown in credit growth reduced banks' risk assets approximately 16% in 2008. As the own funds necessary for covering the risks have remained at the same level, the aggregate capital adequacy ratio rose to 18.8% by the end of the year (see Figure 12).

#### **Loan servicing capability and risks**

The deterioration of the economic environment in 2008 quite expectedly brought about more problems with loan repayments. By the end of 2008, the share of loans overdue for more than 60 days in the loan portfolio had increased from 0.7% to 2.9%, year-on-year. Commercial real estate and construction sectors had the most overdue loans both in proportion and amount. The volume of overdue loans in the construction sector grew from 1.2% to 5% and that of the commercial real estate sector from 0.5% to 5.3%, year-on-year. In total, the overdue loans of the business sector formed 3.3% of the credit portfolio.



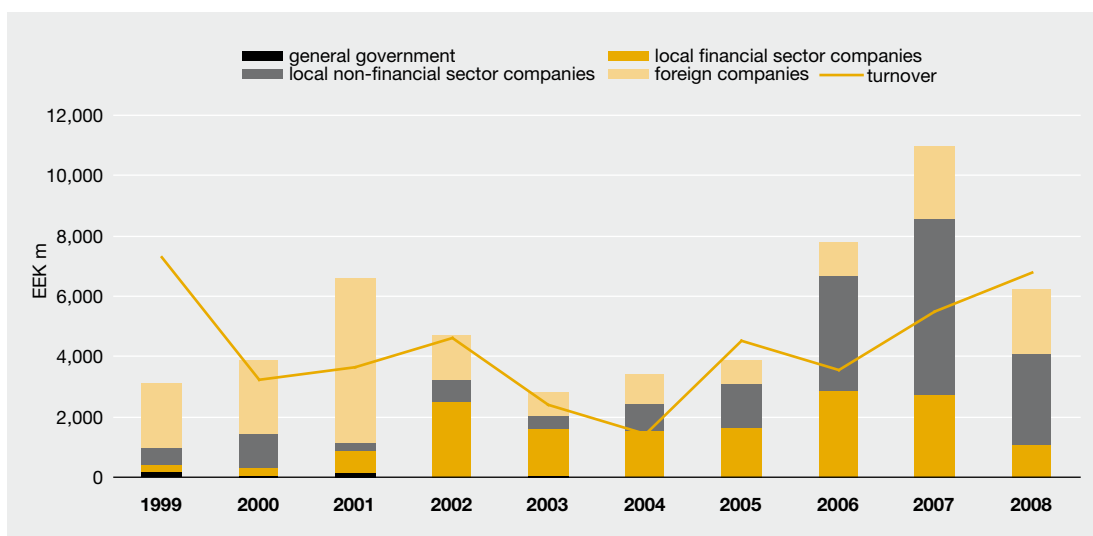
**Figure 12. Capital adequacy of banks and banking groups**

Household overdue loans also increased in 2008. Traditionally, consumer credit include the most loans overdue for more than 60 days with their share growing from 3.2% to 5.8%, year-on-year. The quality of housing loans, on the other hand, is better compared to other loan segments: loans overdue for more than 60 days accounted for 1.9% of the housing loan portfolio at the end of 2008.

**Securities market**

**Bond market**

The primary bond market was more subdued in 2008 compared to the previous year. The total volume of bonds issued during the year formed only 58% of that of 2007 (see Figure 13). Bond issues decreased in all fields of activity; non-



**Figure 13. Amount of debt securities by issuers and secondary market turnover**



financial sector companies and non-residents made the biggest contribution to the primary market turnover.

Although the share of kroon issues dropped to only 1% by the end of the year, they still comprised 34% of total bond issues in 2008. Total bond market capitalisation fell approximately 22% to 11.6billion kroons over the year.

Figure 13. Amount of debt securities by issuers and secondary market turnover

The secondary bond market, however, was very active. The average daily turnover grew by 6million kroons compared to the previous year and reached 28million kroons.

The structure of bond investors has remained unchanged over the past years. Resident investors account for about 67% of total bond capitalisation.

### Stock market

The most important strategic event in the Estonian stock market in 2008 was the merger of

the Baltic and Nordic stock exchange group OMX AB, the majority shareholder of the Tallinn Stock Exchange, with NASDAQ Stock Market, Inc., a company operating mainly in the US stock exchange. The outcome of the merger is NASDAQ OMX Group – currently the world’s largest exchange company.

The decline on the Tallinn Stock Exchange that had started already in the summer of 2007 continued in 2008 (see Figure 14 and Table 3). The Tallinn Stock Exchange index OMXT reached its lowest level (260 points) in mid-December. The index was this low five years ago. Year-on-year, the index went down 53%, and 72% compared to the record high of 2007. The average daily turnover of the stock market was 39million kroons in 2008 (94million in 2007) owing to the uncertainty on financial markets and the price drop on the stock exchange.

The primary list of the Tallinn Stock Exchange included 18 companies at the end of 2008. In September, Saku Õlletehas left the stock exchange. In addition, Merko Ehitus was split into AS Järvevana and AS Merko Ehitus.

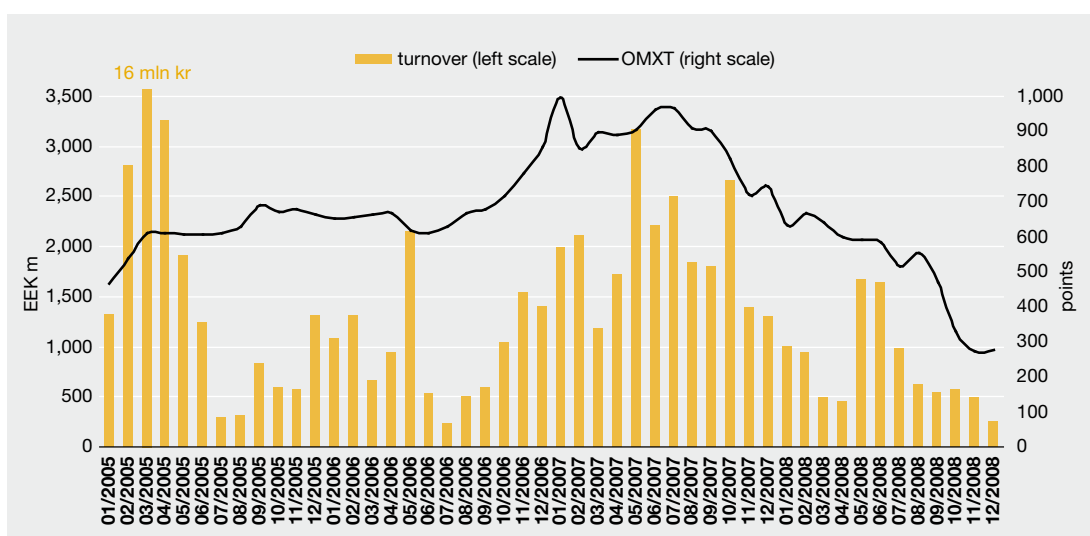


Figure 14. Monthly turnovers of the Tallinn Stock Exchange and index OMXT as at end of month

**Table 3. Aggregate indicators of the securities market (EEK bn)**

	2003	2004	2005	2006	2007	2008
<b>Securities market capitalisation*</b>	<b>53.5</b>	<b>80.0</b>	<b>60.1</b>	<b>89.7</b>	<b>90.3</b>	<b>38.5</b>
<b>Instruments</b>						
shares listed on stock exchange	47.3	71.9	46.9	71.0	64.0	21.9
debt securities	2.9	3.1	4.8	8.5	15.0	11.7
shares and units of investment funds	2.6	4.5	8.4	10.2	11.1	4.8
subscription rights	0.7	0.5	0.0	0.0	0.0	0.0
<b>Securities market turnover*</b>	<b>14.9</b>	<b>13.9</b>	<b>68.4</b>	<b>37.4</b>	<b>74.0</b>	<b>37.2</b>
Capitalisation of Tallinn Stock Exchange	47.3	72.4	46.9	72.3	64.8	21.9
non-resident investors	81%	83%	58%	49%	55%	52%
Turnover of Tallinn Stock Exchange	7.6	10.3	30.3	12.0	24.0	9.7
Securities market capitalisation* / GDP	42%	58%	46%	43%	37%	15%
Securities market turnover / capitalisation	28%	17%	90%	59%	76%	59%
Stock exchange turnover / capitalisation	16%	14%	47%	24%	33%	23%

\* Securities market capitalisation and market turnover do not include delisted shares.

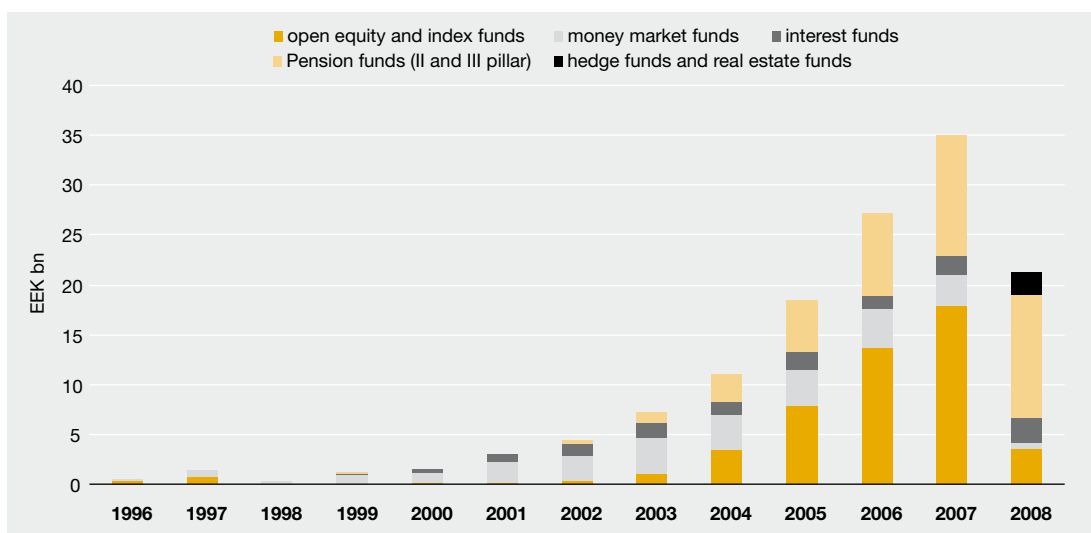
## Other financial intermediaries

### Investment and pension funds

Investment fund assets lost about a third of their value in 2008 and stood at 21.3 billion kroons at the end of the year (see Figure 15). The assets of equity and interest funds decreased the most: by 14.5 and 1.4 billion kroons, respectively. The primary reason for the decrease was the case

of SEB Liquidity Fund, which made a 13% write-down on its units. The assets of mandatory pension funds increased by 419 million kroons over the year, constituting only up to 20% of the growth rates of the three previous years.

Nine new pension funds (four second pillar funds and five third pillar funds), three equity funds, one interest fund, four real estate funds and three risk capital funds entered the market in 2008.



**Figure 15. Total volume of investment funds as at year-end**

## Insurance

Households' cautious investment decisions and the growing uncertainty about the future has largely affected the development of the **life insurance market**. The volume of insurance premiums, which had been growing for seven years in a row, decreased 33% in 2008. Life insurance companies collected 1.3 billion kroons in premiums, with unit-linked life insurance and capital insurance accounting for most of it (83%). The recent profitability of the life insurance sector was replaced by a 297million kroon loss (unaudited) in 2008.

Meanwhile, the profitability of the non-life insurance market increased 27% (539million kroons) from 2007, even though the annual growth of insurance premiums was much more modest compared to 2007 because of low domestic consumption. Premiums collected by Estonian non-life insurance companies grew only 3% in 2008, totalling 3.8 billion kroons at the end of the year. Including the branches of foreign insurance companies, gross insurance premiums totalled 4.2 billion kroons.

## Payment instruments

The use of different payment instruments has increased every year, both in terms of the number and the turnover of transactions (13% and 15%, respectively, in 2008). The most popular payment instrument is still card payments that constitute 57% of all transactions. Even though card payments comprise the majority of transactions, their share in the total turnover of payments is marginal (1%).

Internet and telebank credit orders are also widely used. The use of direct debits and standing orders has grown too. In the case of standing orders, both the transactions and the turnover increased more than 100% year-on-year. Yet the share of direct debits and standing orders in total non-cash payments is still very low. Paper-based credit orders have been losing popularity over the years and also the share of cash payments has decreased (see Figure 16).

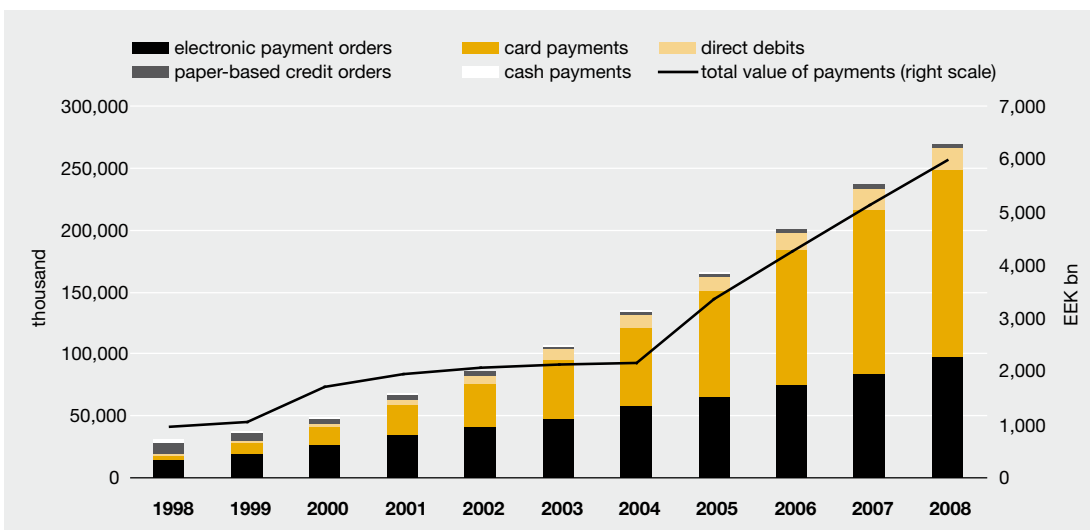


Figure 16. Number and turnover of payments by payment instruments

The number of payment cards in use grew slower (4.5%) in 2008, compared to previous years. At the end of the year, there were 1.84million payment cards in use in Estonia, 70% of which are used actively. Passive cards mainly include credit cards, which are used less often. Their proportion did not change from 2007, forming 24% of all payment cards issued. By the end of 2008, one debit card had been issued per resident. Over the year, both the number of points of sale (POS) accepting payment cards and that of automatic teller machines (ATM) grew, standing currently at 16,194 and 1,018, respectively. About 86% of the ATMs provide for cross-usage between banks. The number of ATMs grows mainly owing to the increase in cash dispensing machines. The number of self-service payment terminals and POS accepting mobile payments has decreased notably over the year, standing currently at 76 and 345, respectively.

## KEY POINTS OF EESTI PANK'S ECONOMIC FORECASTS IN 2008

Eesti Pank publishes economic forecasts twice a year – the spring forecast in May and the autumn forecast in November. To this end, the baseline and risk scenarios are prepared, covering the current year's economic developments and projections for the following two years.

From 2005 to 2007, Estonia's economic growth was driven by strong demand based on active lending, with resources mostly servicing domestic demand. In the spring forecast of 2008 we presumed that growth would slow mostly on account of domestic demand. The decrease in real estate investment was to be expected, but there was also a rapid correction in private consumption. In the first six months, external demand was still quite favourable for exports. In these conditions Estonia's economy would have grown about 2% in 2008, but the forecast risk scenario also included the risk of economic decline.

By the time of the autumn forecast, the situation of the global economy had deteriorated abruptly and external demand did not support exports that much any longer. According to preliminary data, Estonia's GDP decreased 9.4% in the fourth quarter of 2008 and 3.5% in annual terms. For 2009, market participants expect an even more pronounced contraction of the global economy.<sup>7</sup> According to the flash estimate of Eesti Pank published in February, Estonia's GDP would decrease even more than expected in the autumn forecast of 2009; that is, up to 9%.<sup>8</sup> Long-term forecasts are surrounded by a large degree of uncertainty, considering the unfavourable developments of both the domestic and external factors.

The beginning of a new growth cycle depends on when the global economic crisis ends and confidence in the financial sector is restored. The economic policy stimuli of countries should start to

have an effect in 2010 at the latest. In addition to the recovery of export demand, also credit availability is necessary for productivity-based growth in Estonia. Moreover, part of the workforce currently serving domestic demand must be relocated to export-oriented sectors. Otherwise, Estonia might be facing a long period of slow growth.

Estonia's price level rose 10.4% in 2008, which is in line with the forecasts prepared in 2007. The double-digit inflation rate largely arose from an increase in global energy and food prices. In the second half of 2008, price pressures abated in domestic as well as global economy. The decline in energy and commodity prices will fully pass through to consumer prices during 2009. In addition, the impact of administrative inflation factors is expected to decrease. If the price of oil stays at 30–40 dollars per barrel, the average price increase will be very low in 2009. The deflation risk cannot be excluded either. Estonia may be able to meet the Maastricht inflation criterion already in the fourth quarter of 2009 or at the beginning of 2010.

In 2008, there was a large degree of uncertainty surrounding both the Estonian and global economy, and not only in the medium term, but also in respect of near-future developments. Global financial and commodity markets are extremely volatile, which will have a strong impact also on the developments of the non-financial sector in the coming years. Because of this uncertainty, the central bank growth expectations have become much more pessimistic. The crisis of confidence in the financial system might have a great impact on the movement of savings between regions and in the global economy as a whole. It is important for Estonia's development that there would be enough savings (capital) in order to make investments. At the same time, it is vital that both Estonia and its neighbouring regions would maintain the ability to raise foreign capital.

<sup>7</sup> According to IMF, global growth figures for 2009 will be the lowest since the end of World War II. IMF, „World Economic Outlook Update”, 28/2/2009.

<sup>8</sup> Eesti Pank, “Estimates of Estonia's economy in light of deepening global financial crisis”, 5/2/2009.

*G. Reinдорff*





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## DECREES OF THE GOVERNOR OF EESTI PANK IN 2008

### **No 1, 4 February 2008**

Issue of collector coins

### **No 2, 3 April 2008**

Amendments to Eesti Pank Governor's Decree No 20 of 13 December 2002 "Approval of the rules on fixing daily exchange rates of the Estonian kroon"

### **No 3, 9 May 2008**

Amendments to Eesti Pank Governor's Decree No 9 of 7 November 2006 "Approval of documentation of the Real-Time Gross Settlement System of Eesti Pank"

### **No 4, 9 May 2008**

Approval of TARGET2-Eesti rules

### **No 5, 9 May 2008**

Eesti Pank's procedure for foreign currency purchase and sales transactions

### **No 6, 27 May 2008**

Issue of 1-kroon coins dedicated to the 90th anniversary of the Republic of Estonia

### **No 7, 2 June 2008**

Issue of 10-kroon collector banknotes

### **No 8, 8 July 2008**

Issue of collector coin

### **No 9, 5 November 2008**

Amendments to Eesti Pank Governor's Decree No 11 of 1 October 2007 "Establishment of the report on deposits guaranteed by the Guarantee Fund and the report on quarterly contributions paid to the Guarantee Fund"

### **No 10, 7 November 2008**

Establishment of requirements to the contents and form of savings and loan associations' balance sheet statement and income statement

### **No 11, 19 December 2008**

Amendments to Eesti Pank Governor's Decree No 20 of 13 December 2002 "Approval of the rules on fixing daily exchange rates of the Estonian kroon"



# DECISIONS ADOPTED BY THE SUPERVISORY BOARD OF EESTI PANK IN 2008

## **No 1-1, 29 January 2008**

Approval of the procedure for the payment of compensation to the members of the Supervisory Board of Eesti Pank

## **No 2-1, 19 February 2008**

Approval of the basis for the payment of remuneration to the Executive Board of Eesti Pank

## **No 2-2, 19 February 2008**

Approval of the design of the 10- kroon collector banknote

## **No 2-3, 19 February 2008**

Design of the reverse of the 1-kroon coin

## **No 5-1, 29 April 2008**

Profit distribution strategy of Eesti Pank

## **No 5-2, 29 April 2008**

2007 Annual Report of Eesti Pank

## **No 5-3, 29 April 2008**

Design and minting of a collector coin

## **No 6-1, 20 May 2008**

Remuneration of the Executive Board of Eesti Pank

## **No 8-1, 23 September 2008**

Amendment of the statutes of the special merit pension of Eesti Pank

## **No 8-2, 23 September 2008**

Establishment of the special merit pension

## **No 8-3, 23 September 2008**

Approval of the procedure for the payment of compensation to the members of the Supervisory Board of Eesti Pank

## **No 10-1, 25 November 2008**

Approval of the terms and conditions for granting study loans of Eesti Pank

## **No 11-1, 16 December 2008**

Establishment of the interest rate on consumer loans issued to employees of Eesti Pank

## **No 11-2, 16 December 2008**

Strategic Plan of Eesti Pank

## **No 11-3, 16 December 2008**

Approval of the work schedule for 2009 of the Internal Audit Department of Eesti Pank

## **No 11-4, 16 December 2008**

Approval of the new statutes and repeal of the old statutes of the Internal Audit Department of Eesti Pank

## **No 11-5, 16 December 2008**

Design and minting of a collector coin

## **PUBLICATIONS OF EESTI PANK IN 2008**

The **web site** of Eesti Pank is located at [www.bankofestonia.info](http://www.bankofestonia.info). The web site contains information on Eesti Pank and its activities, as well as on the Estonian monetary system, economy and financial environment. Other topics available on the site include banking legislation; information on Estonian banknotes and coins (including guidelines for collectors); information on the European Union and the euro; publications and press releases of Eesti Pank; a glossary, etc. There is also a comprehensive statistics database and the daily fixings of currencies. In addition, there is a virtual library (in Estonian only), which links to other libraries in the field of economy.

### **Economic policy statement of Eesti Pank**

Eesti Pank publishes economic policy statements six times a year. The statements provide prompt and concise opinions of the central bank on the most relevant issues concerning economic and banking policies. The statements are available on the bank's web site, published as press releases and usually also presented at a press conference.

### **Annual Report**

The Annual Report includes the analysis of the monetary and economic policy environment during a calendar year; a survey of changes taking place in the financial and non-financial sectors and the central bank; an overview of bank's international cooperation; the annual accounts, etc.

### **Estonian Economy and Monetary Policy**

The Estonian Economy and Monetary Policy (Monetary Developments & Policy Survey until the beginning of 2008) is published twice a year and includes in-depth analyses of latest economic developments and the central bank's economic forecast for the coming years. Issues published in 2008:

- Estonian Economy and Monetary Policy (1/2008)
- Estonian Economy and Monetary Policy (2/2008)

### **Financial Stability Review**

The Financial Stability Review is a periodical that covers various aspects of financial stability. Issues published in 2008:

- Financial Stability Review (1/2008)
- Financial Stability Review (2/2008)

### **Balance of payments**

The balance of payments gives an overview of Estonia's foreign trade activities, including the country's international investment position and external debt. It contains a lot of statistical data.

Issues published in 2008:

- Estonian Preliminary Balance of Payments for the Year 2007
- Estonian Preliminary Balance of Payments for the First Quarter of 2008
- Estonian Preliminary Balance of Payments for the Second Quarter of 2008
- Estonian Preliminary Balance of Payments for the Third Quarter of 2008
- Estonian Balance of Payments Yearbook 2007

### **Flash report**

The Flash Reports of Eesti Pank focus on the most topical economic issues and are published on an ad hoc basis. Reports published in 2008:

- Current account deficit in Estonia: how will it adjust in turbulent times? (31/10/2008)
- Estonia's banking sector: what is on the agenda? (31/10/2009)

### **Report on the Adoption of the Euro**

With the "Report on the Adoption of the Euro" we wish to share with the public the information at the disposal of Eesti Pank about Estonia's readiness to change over to the single currency of the European Union – the euro – and also introduce the points of view of Eesti Pank. Issues published in 2008:

- Report on the Adoption of the Euro (January 2008)
- Report on the Adoption of the Euro (June 2008)

### **Kroon & Economy**

The quarterly includes surveys and analyses of general interest on topical economic issues, comments, translated articles, statistics, etc.

Issues published in 2008:

#### **Kroon & Economy (1/2008)**

- General development of Estonia's balance of payments in 1992–2006 (R. Kirt)
- Estonia's foreign trade during thirteen years (U. Saks)
- The back-office of calculating travel service indicators (A. Kerge)
- Holiday travel preferences of Estonian residents (survey by TNS Emor)
- Who is affecting Estonia's business climate? (P. Anton)
- Centralised Securities Database of the European System of Central Banks (T. Nõmme)
- Relations between the balance of payments, investment position and external debt (A. Lauba)
- Assessing the quality of the balance of payments (J. Kroon)
- Easier techniques of balance of payments analysis (J. Kroon)

#### **Kroon & Economy (2/2008)**

- Labour migration developments and lessons learned (M. Kuldjärv, T-S. Vertmann)
- The first year of the euro: a review of Slovenia's economic performance (V. Bole)
- Estonian residents' opinion of the economic situation, labour market and consumption (survey by TNS Emor)

### **Labour Market Review**

The Labour Market Review discusses the most important trends in the Estonian labour market, labour supply and demand, institutional developments of the labour market, and other related issues.

Issues published in 2008:

- Labour Market Review (March 2008)
- Labour Market Review (October 2008)

### **Working Papers**

The Working Papers are summaries of the economic studies conducted at Eesti Pank. The target group includes, above all, economists and economic experts. In 2008, the following Working Papers were published:

- Working Papers 1/2008: J. Meriküll. The Impact of Innovation on Employment: Firm- and Industry-Level Evidence from Estonia
- Working Papers 2/2008: Ch. Schulz. Forecasting Economic Activity for Estonia: The Application of Dynamic Principal Components Analysis
- Working Papers 3/2008: K. Staehr. Estimates of Employment and Welfare Effects of Personal Labour Income Taxation in a Flat-Tax Country: The Case of Estonia
- Working Papers 4/2008: K. Staehr. The Maastricht Inflation Criterion and the New EU Members from Central and Eastern Europe
- Working Papers 5/2008: L. Uusküla. Liquidity and Productivity Shocks: A Look at Sectoral Firm Creation
- Working Papers 6/2008: J. Meriküll, K. Staehr. Unreported Employment and Tax Evasion in Mid-Transition: Comparing Developments and Causes in the Baltic States
- Working Papers 7/2008: L. Uusküla. Limited Participation or Sticky Prices? New Evidence from Firm Entry and Failures

### **Other publications**

- Oma riik, oma raha: rahareformid Eesti Vabariigis. Eesti Pank, 2008
- Eesti kunstnikud Saksamaal / Estonian artists in Germany. Eesti Pank, 2008. Tammerraamat 2008
- Mis on raha? Kuidas tekkisid pangad? Mis on keskpank? [children's book on money, banking and the central bank's role]. Eesti Pank, 2008
- Teejuht hindade ja inflatsiooni maailma. Abiks õpetajale [teacher's guide on prices and inflation]. Eesti Pank, 2008
- Väike teejuht hindade ja inflatsiooni maailma. Õppematerjal gümnaasiumile [study material on prices on inflation for upper secondary school]. Eesti Pank, 2008
- Väike teejuht hindade ja inflatsiooni maailma. Õppematerjal põhikoolile [study material on prices on inflation for basic school]. Eesti Pank, 2008
- Raimund Hagelberg. Elust ja endast. Eesti Kirjandusmuuseum, 2008
- Eesti Pank [brochure of Eesti Pank]. Eesti Pank, 2008

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