TRANSFORMATION OF THE ACTIVITIES OF THE NATIONAL BANK OF HUNGARY

1995 - 2000

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1995 - 2000

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PREFACE

This publication gives an overview of the past six years of the National Bank of Hungary (NBH). It aims to describe the comprehensive changes that have occurred during the current president's term of office.

Six years ago, in March 1995, the Hungarian economy was afflicted by a severe lack of outward and inward balance, and confidence in the forint had fallen significantly in spite of the structural, market, institutional, legal and ownership reforms made by the first two freely elected governments. Economic restructuring was still in progress, however. The economic programme introduced to halt the unfavourable developments and necessarily based on painful austerity measures and the coming to fruition of former reforms set the Hungarian economy on a course of sustainable growth from as early as the second half of 1996, which accounted for the exceptionally high performance as of late 1997. Having been stimulated by stabilisation, the rate of inflation gradually decreased, falling to around ten per cent by late 1998. The confidence of analysts, investors and international institutions was also regained. In early January 1996, after nearly seven decades, the country again had a freely convertible means of payment.

Being not just an institution of economic and financial policy, but also a key pillar of democracy built upon a balance of counterpoints, the National Bank of Hungary played its part in the evolution of economic recovery. Yet only a National Bank of Hungary that had itself undergone renewal and caught up with the central banks in the developed world under the given circumstances could support such a spectacular restraint of inflation, and external and internal stabilisation.

Naturally, the process of creating a modern central bank is made up of many components. For example, the organisation underwent transformation, while staff numbers were cut by a half, and operating costs by more than 40% in real terms. Practically all activities unrelated to central banking were separated from the NBH, including those related to commercial banking. The central bank played a key role in the creation of the Treasury and the Government Debt Management Agency, as well as in the successful conduct of debt conversion. The fiscal and monetary functions became clearly distinct. The central bank's forint and currency market organisations were standardised, and its risk management and analysis system took on a modern and strictly controlled form. Up-to-date instruments and analytical systems were developed for monetary policy. Because of its responsibility for financial stability, the Bank is increasingly examining the whole of the financial system with particular regard to any risks. The settlement and internal information systems have been enhanced to state-ofthe-art standards. Thus the NBH has managed to make up for several decades of lost ground. The Bank has became transparent, since its internal and external monitoring systems have undergone radical renewal. New publications, which have been widely accessible on the National Bank's home page via the internet for some time now, provide both specialists and the general public with insight into the National Bank's economic, research and statistical activities, the development of which has been highly praised by independent experts. Even though the decision had been made much earlier, the replacement of coins and banknotes took place partly during this period, and emissions policy has been reviewed. One result of these changes is that the NBH has made essential preparations for Hungary's accession to the EU.

Such developments are described in the present publication, which categorises them according to various criteria. The first chapter summarises the key events of these six years. The second chapter deals with the legal, organisational and operating conditions. The third reviews the central bank's basic tasks, describing in detail the Economics and Research Workshop, the execution of monetary policy, the role related to the financial mediation system, bankers' activities, the statistical service, the information technology system, accounting, human resources and monitoring, as well as the processes of creating and maintaining infrastructure and banking security. The fourth chapter outlines the fate and situation of foreign and domestic interests.

The NBH presents this publication to the reader in order to document an era and to serve the purpose of informing Parliament and the wider public, though it is hoped that it will also present all key factors marking a new era for the central bank from the late 1990s to all economic historians or experts interested in the so-called economic transition.

Finally, I would like to extend my gratitude to all those who have contributed to the National Bank of Hungary's transformation into a modern central bank, especially to my colleagues who, over the past six years, have contributed work and devotion which has been first-rate even by international standards. Also deserving acknowledgement are the members of the Central Bank Council and the Supervisory Board, the auditor, Parliament and its relevant committees, governmental partners, professional associations, the players of the Hungarian financial system, and journalists who have faithfully reported on the milestones in the development of the NBH.

Dr. György SURÁNYI

CHAPTER I

EVOLUTION OF THE MODERN CENTRAL BANK

1995 - 2000

1. From Cleaning up to Catching Up

The past six years in the life of the National Bank of Hungary can be characterised as a time of transformation, cleaning up, catching up and settling down.

It was a time of transformation because the process rooted in the creation of a two-tier banking system followed by the passing of the Central Bank Act gained new impetus in the second half of the 1990s, whereby the NBH renewed itself in terms of both its domestic and international tasks, and also regarding its operating conditions as a result of market economy reforms.

It was a time of cleaning up because it freed itself of its burdens inherited from the single-tier banking system, and undertaken by necessity until the commercial banks had strengthened, the management of internal and external state debts, and domestic and foreign trade bank-related interests becoming obsolete in its new role. The Bank closed its representative offices (except the one in Tokyo) and consolidated its county network into four regional directorates, becoming a central bank in a classical sense.

It was a time of catching up because the NBH was able to make up for its already unmanageable theoretical and technological backlog, while it was able to reduce its operating costs by more than 40% at real value. The markets now interpret its decisions as they would in the case of central banks in western Europe or North America. Furthermore, a new settlement system is in place, which fulfils transfers immediately and monitors them in way that is also clear to the clientele.

The period from 1995 to 2000 was a time of settling down because the identification of new objectives, the creation of a modern organisation and the associated considerable downsizing (from 2,700 to 1,300 persons) had to be followed by level-headed and circumspect creative work.

Adjectives should be used with caution when evaluating transitions, since only the future will tell how useful this work has actually been. It is fact, though, that the NBH has now evolved beyond the state it was in five or ten years ago. It stands the test of comparison with the central banks of the developed economies, and it has become a *European* institution.

These six years marked a period of lost confidence, stabilisation accompanied by sacrifices, slowing inflation, and accelerating growth for the Hungarian economy.

A period of lost confidence, since the figures for the spring of 1995 unmistakably indicated an imbalance. One year earlier consumer prices had begun to rise at an accelerated rate, inflation expectations had been incorporated in business calculations, retail savings were converted to foreign currency, treasury notes could only be issued for three to six months maturity, \$1 billion in capital left the country and by 1994 the payments deficit had reached \$4 billion. The pressure on a budget constrained due to a falling GDP was not alleviated, nor was re-balancing supported by stringent monetary policy. The forint had appreciated at a rate unjustifiably incoherent with the economic

output, while interest rates dropped below the inflation rate. International credit rating institutes put the Hungarian economy in increasingly lower categories, so it was harder and more expensive for the country to obtain foreign capital because of this loss of confidence.

It was a time of painful, but eventually successful, stabilisation because these processes had to be halted by means of a package with austerity measures which also impacted on living standards. It was also a time of slowing inflation and accelerating growth because the Hungarian economy gradually assumed a course of growth over the past six years, which—in generous foresight—could continue to progress rapidly without any imminent risk of imbalance. The economy grew by 22-23% during the period under review, at a rate in excess of 4-4.5% per annum from 1997, to be specific. Inflation, accelerating from early 1994 to temporarily reach as much as 30% by the beginning of the stabilisation, dropped to below 10%. The country's net foreign debt, denominated in foreign currency, dropped from \$21 billion to \$6 billion. The current payments deficit fell from more than 9% of GDP to around 4%. The major international credit rating institutes reclassified the country from the 'speculative' category into the 'investor' class, more specifically into the elite group, i.e. Class A.

The past six years (indeed the last decade) can be said to be a period elapsed in the spirit of law-making. The words of the law mirror the changes. In December 1991 the Act on Central Bank declared the independence of this central financial institution, in other words it specified that the government may not instruct the central bank, which is to report directly to Parliament. The Act allowed for the development and execution of an independent financial policy, and regulated the central budget's financing by the central bank. It also defined how the central bank's officials should be appointed. Nevertheless, it should also be emphasised that the first freely elected government committed to the Euro-Atlantic alliance treated the NBH as an independent central bank even before the Act was passed.

The Act on Central Bank considers the protection of the internal and external purchasing power of the national currency (the forint) as an essential task of the NBH. Monetary policy is its means. The NBH influences the supply of money to the economy as well as the market yields and bank interest rates serving as the basis of decisions about savings or loan applications by controlling the quantity and price (the prime rate) of the money it issues, i.e. central bank money. The NBH achieves this essentially by varying the interest rate on the loans extended to and on the deposits collected from banks (interest policy), by regulating the compulsory central bank reserves of the financial institutions, and by influencing the exchange rate of the forint with respect to foreign currencies.

2. Suspension of Activities Unrelated to the Central Bank

Following and at the same time spurring the development of the financial system, the Central Bank Act has been amended more or less every year, essentially in order to allow the NBH to focus increasingly on classical central banking tasks, and so that the financing of the central budget could be gradually diverted from the central bank to the money market, thereby allowing the accounting relations between the two institutions to become more transparent. Parliament comprehensively amended the Act on Central Bank on two occasions, in 1994 and 1996, by gradually updating its

financing relationship with the budget, cutting off activities not related to central banking from the NBH, and specifying new requirements in respect of both executives and employees. Planned additional amendments will include the provisions of the European Union. However, the Act is essentially already in line with current practices. (For example, the Bank has not financed the budget for years now, and this possibility was even explicitly prohibited. "The protection of the purchasing power of the national currency" was replaced by the wording "the priority of price stability".)

Thus, the NBH was given the role of stabilising the economy, as designated by the Central Bank Act six years earlier. Employing its means of interest and exchange rate policy, it had to participate in the designation of macroeconomic framework, in the founding of a sustainable, balanced, yet rapid growth, in regaining international confidence, in the enhancement of international financial institutions, and in the preparations for OECD membership and accession to the EU. However, only a central bank that had been renewed in all aspects and aspired to meet the dual challenge presented by market economic transition and EU accession could appropriately support a successful monetary policy, a moderation of inflation, a foreseeable exchange rate mechanism, and financial stabilisation both externally and internally.

In line with the provisions and spirit of the Act, the NBH had to eliminate all its activities unrelated to central banking, so that it could update its organisation and devote its attention to implementing its key tasks intended to curb inflation, which included applying a monetary policy to stabilise the financial intermediary system, money and exchange market transactions serving interest and exchange rate policy, and tasks related to debt management and to the management of international reserves.

Thus, having assessed the internal and external challenges, the management of the NBH subjected its reorganisation and development to the requirements of price stabilisation and financial stability as of early 1995. The responsibilities of areas related to central banking had to be reconsidered. The activities of divisions in charge of theoretically formulating and executing the strategic objectives of interest and exchange rate policy in practice, analysing and regulating the operation of the banking system, executing money market transactions, managing reserves, and cultivating international relations had to be harmonised. The NBH was able to assume a new role in the financial division of labour, because the interbank giro system, the Treasury and the Debt Management Centre were born, and banking supervision was expanded and upgraded. Thanks to the fulfilment of international obligations related to liberalisation, the central bank gave up its foreign exchange controlling tasks in the area of current payment transactions, so restrictions that can and should be eliminated within a foreseeable time now only exist in the field of capital transactions and in money market and securities investments.

3. Renewal of the Instruments and Analytical System of Monetary Policy

As of 1995, in parallel with economic stabilisation, the central bank could focus on the gradual yet sustainable (i.e. continuous) cutback of inflation as its fundamental task. In harmony with the government, the NBH introduced its narrow-band, crawling peg exchange rate scheme in March 1995. By announcing changes in the depreciation rate in advance, the Bank on the one hand created conditions for regaining its credibility, and on the other it made assessing the impact of economic decisions predictable. The requirement for predictability could only be asserted in a relatively narrow exchange margin, yet this ± 2.25 % rate was still able to foster the development of the foreign exchange market, and made short-term speculative capital inflow expensive. As a result, the new system fostered foreseeable exchange-rate trends and the curbing of inflation, while in the meantime economic development accelerated to achieve outward and inward balance, the profitability of exports improved, export growth surpassed that of GDP, the country no longer faced the risk of becoming trapped by debt, and the capital markets were also able to expand.

The freedom of movement afforded by interest rate policy, however, is relatively limited within an exchange rate system involving a crawling peg. The freedom of movement of interest rates was determined by how the exchange rate varied within the margin, and by decisions intended to schedule the reduction of the depreciation rate or determine the rate of reduction. The central bank attempted to take advantage of this limited movement all along, so it tried to maintain an interest rate which successfully confirmed anti-inflation policy, alongside an exchange market intervention of an acceptable rate.

During the reorganisation of the central bank in May 1995, it was an important criterion that monetary policy decision-making be based on comprehensive economic and research activities, which analysed and forecast developments in economic trends, exposed economic policy correlations, and encompassed the empirical examination of the theoretical issues and effects of monetary policy. Increasingly reliant on empirical modelling, macroeconomic forecasting played a leading role in enhancing credibility and the anticipatory nature of monetary policy. Subjects relating to monetary policy and the choice and operation of the exchange rate mechanism (primarily international experience in managing crawling peg systems and feasible alternatives for smooth withdrawal) were at the focus of research, while the examination of balanced macroeconomic development and external, global economic conditions also became part of the research programme.

In line with the central bank's main area of responsibility, a number of studies dealt with the subject matter of inflation and deflation, in order that continuous and sustainable inflation moderation be implemented with the least possible growthrelated losses alongside a balanced course of growth. The theoretical and empirical research aimed at forming a framework for monetary analysis, estimating and analysing the yield curve, and exposing the transmission mechanisms of monetary policy, was intended to enhance the credibility of the Bank and the efficiency of communication with the market.

In addition to the aforementioned economic analyses and forecasts, the work of the decision-making bodies such as the Central Bank Council and the Monetary Committee has also backed by materials (drafted on a daily, weekly or quarterly basis and relying on wide-ranging data) which illuminate money and capital market developments, trends in the banking system's liquidity, capital flow and the factors influencing it, shifts in the yield curve, and the essentials of monetary policy. The quarterly monetary programme describes the cash flow and income processes and financing capability of the three main domestic income sectors (company, household and central government) and those abroad, as well as providing a prognosis about key financial aggregates, the central bank's balance sheet, and the banking system's consolidated balance sheet.

Naturally, such analyses have contributed to the development of the repertory of means at the disposal of monetary policy over the last six years. After 1995, they had to be urgently rationalised and standardised. The central bank had to adapt to changing market conditions. After regaining the confidence of international players, capital influx into the country took on magnitudes never experienced before, and the neutralisation of this surplus liquidity (sterilised intervention) soon compelled the central bank to use deposit-like means instead of credit in monetary policy, so it also had to transform its arsenal.

The current instruments evolved gradually over time. Along with the development of the money market the central bank gradually abandoned long-term maturities; as a means of sterilisation it initially used 12-month then 3-month NBH bonds, and it reduced the duration of its prime rate from one month to two weeks. A few other changes, which refined the repertory, were also made, such as increasing the compulsory reserve deposit system's mean period from two weeks to one month, and the development of a symmetrical interest 'corridor' around the prime rate for 24-hour maturity.

For reasons of efficiency and competition under equal terms the central bank announced the gradual reduction of the compulsory reserve ratio. This was able to contribute to the approximation of deposit rates and interest received. The compulsory reserve ratio had moderated from 17% in 1995 to around 6% by early 2001.

In conjunction with the country's international commitments, the domestic money and capital markets quickly developed in terms of size and variation as a result of the gradual lifting of capital restrictions, and the futures markets boomed. The most spectacular development was demonstrated by the government securities market, which had become transparent – series grew in size, the secondary market's liquidity increased continuously and the yield curve now reaches maturities as long as ten years as a result of issuing government securities of increasingly longer duration. The Bank's interest policy had to consider more extensively the speculative foreign exchange deals that took advantage of the relatively free capital movement. Monetary policy was able to adapt successfully to these new requirements.

4. Support of Diverging Monetary and Fiscal Policies

Effective macroeconomic control is unimaginable without the clear and transparent separation of monetary and fiscal policies. The creation of the Hungarian State Treasury and the Government Debt Management Agency in early 1996 can be considered as milestones in this process.

Based on authorisation by the law, the central budget swapped a significant part of its forint debt towards the NBH into foreign exchange debt in early 1997. Thus the non-interest-bearing state debt of an unlimited term formerly accumulating at the central bank was completely eliminated. Thereafter, the budget was able to sense the burden of the Hungarian public sector debt directly, and not via the profits or losses of the NBH, which reflects the combined effect of several factors. A unified treasury account was created by isolating monetary policy from fiscal policy, and accounts kept by the NBH for budgetary bodies and state funds had been discontinued. The Treasury and the Debt Management Agency were responsible for issuing government securities as of their foundation. The state's foreign borrowing programmes and bond issuance were

also transferred to the Treasury and the Debt Management Agency. After the establishment of the Treasury's regional network, the NBH consolidated its eighteen county directorates into four regional ones, rationalised its operations and achieved savings on costs.

Research and the central bank's analyses served as the basis for reforming state debt management in accordance with the standards of a developed market. Extensive research aimed at creating budget indices facilitating macroeconomic and timeline analysis and examining factors impacting on indebtedness served the harmonisation of monetary and fiscal policy thereafter.

The NBH also contributed technical assistance by establishing and running the Treasury's operational infrastructure for an extended time. Along with the function of "issuing and trading government securities" it handed over in a functional state the information technology systems that supported the tasks and the procedural rules. It participated in setting up a Treasury branch network, and rolled out a new cashier and cash operations system as a result of the aforementioned reorganisation of its own network.

5. Creation of a Standard Reserve Management and Banker Organisation

A new, standard banking organisation was created in the central bank as a result of dividing fiscal and monetary policies. Resolving former demarcations, the Bank management connected the organisational units that carried out market operations in forints and in foreign currencies. The newly formed organisation primarily serves the implementation of monetary policy. As defined by ERP, it intervenes in the interbank foreign exchange market in order to protect the forint's exchange rate, and carries out operations within the forint market to assert the central bank's interest policy. The same organisational unit also manages international reserves. Like all central banks in general, the NBH maintains business relations with banks and other financial service providers, and when it accepts deposits or extends credit or borrows, converts foreign currencies to forints and vice versa, it strives to influence interest and exchange rates in order to fulfil its basic tasks of decreasing inflation in a sustainable way and preserving the purchasing power of the national currency.

It was in the early 1990s that central bank made its first strategic decision to entrust the management of foreign exchange reserves to internal portfolio managers trained in accordance with international requirements. The initial years were devoted to establishing the basic conditions. While in late 1991, there was only one portfolio manager for the \$700 million securities portfolio, by 1995 five experts were managing a portfolio which had grown to an average \$7.9 billion. Such a degree of growth demanded that the activity be performed by a standard, well-regulated and highly trained team of specialists, in line with the professional requirements of contemporary portfolio management. In addition to the technical and personnel resources, decisionmaking also became regulated and transparent. Reserve management policy is approved by the Board of Directors once a year, while the Resources Committee is responsible for its practical implementation and regularly reports to the management about the proceeds achieved on the reserves and about changes in the market situation. The NBH is subject to numerous financial risk factors as a result of operating the exchange-rate system and its foreign exchange reserve management activities. In order to analyse and manage financial risks and to assess the results of resource management, independent organisations, directly subordinated to senior management, have been created everywhere in the international environment. Previously, the NBH had no such independent organisation. The organisational changes started in 1995 and the ensuing clearing up of the central bank's roles allowed, after twelve months of preparation, the establishment in 1998 of such an organisational unit, in line with the international standards. The tasks of this new, independent department were expanded in the summer of 2000 by the addition of credit risk management, thus the analysis and management within the NBH. It carries out its activities on the basis of a separate risk management policy approved by the Board of Directors.

In accordance with the regrouping of tasks, as of 1999 the central bank only acts as an agent in the state's international loan applications. It forms opinions on the debt management strategy and on financing plans, participates in preparing international loan applications and conducting the transactions, participates in the preparation of legal documents, and also executes the international covering transactions relating to debt management on behalf of the state. Stemming from its past role, the central bank also acts as an agent in collecting the state's international receivables. Additionally, the central bank's banker area provides foreign exchange-related services to treasury subjects falling within the scope of the national budget.

6. Responsibility for the Stability of the Financial Intermediary System

Monetary policy is primarily asserted through the banks, therefore, the central bank like its modern counterparts abroad—must safeguard the stability and smooth but controlled functioning of the financial intermediary system, and also play the role of lender of last resort whenever necessary. The NBH expedites this task in collaboration with the authorities controlling or supervising the financial intermediary system. Within the now resolved division of labour established between the central bank and the supervisory authority, the NBH monitors the balanced operation of the whole of the financial mediation system, while the authority verifies the prudential nature and risks of the individual banks (financial mediators). Along with meeting the requirement for checking, monitoring and analysing the activities of the individual credit institutions at the required level, the central bank is increasingly reviewing and analysing the whole of the financial mediation system, with particular regard to factors representing risks to the system and threatening fiscal stability.

Besides the development of the banking system and the monetary repertory and environment, the role of the NBH has changed regarding the financing of banks and ensuring their short-term liquidity. Following the establishment of the two-tier banking system, the NBH achieved refinancing by dividing specific credit lines among banks in an essentially normative manner, then progressively cut back this channel, so active repo (financing with government security coverage) and foreign exchange swap transactions became the principal means of ensuring short-term liquidity from 1993 onwards. In the altered environment that followed the introduction of the new exchange rate regime, the central bank adjusted the available repo margin to the banks' balance-sheet totals, while making the higher yield, credit line supplementing repo freely accessible. This repertory already corresponds to the one generally used in international practice.

In the early and mid-1990s—in conjunction with the deterioration of the real economic situation—the problems noticeable in the operation of the banks and the bankrupt or near bankrupt situations redirected attention to the importance of rapid and accurate information access. Being responsible for the stability of the financial mediation system, the central bank aimed to possess the best possible data base on the individual banks. To this end, it set up a reporting system in the second half of 1995, the activities of which were served by the establishment in 1996 of standardised analysis criteria and index systems which assisted the evaluation of the banks' activities. The bank rating system, which evaluates bank performance using various indices and subjective elements, likewise helps to assess the situation of various banks. Today, the refinancing practice the central bank pursues in respect of the individual banks is dependent on rating.

The Bank is continuously monitoring the activities of the individual credit institutions on the basis of the established data base and on-site inspections, and, in addition to measures taken within its own jurisdiction, it has always notified the government body concerned whenever it has found serious problems in the operation of a particular bank or deemed that intervention was necessary. Even though the NBH warned the government several times between 1996 and 1998 that massive capital loss was imminent in the case of Postabank, in view of the government's commitment to keep this bank alive and capitalised, it had to intervene as the lender of last resort in 1997 in order to alleviate the liquidity crisis caused by massive deposit withdrawals. Learning partly from the problems arising in the course of the Postabank onslaught and from the experience gained at that time, the NBH set up standard regulations within its scope of operations regarding moves that would be required if such events were to occur again.

As the central bank was able to divert its attention from inspecting individual banks to analysis of the financial mediation system as a whole, it expanded its comprehensive analytical and evaluative activity to investment service providers, insurance companies, retirement funds and investment fund managers. First published in September 2000, the "Report on Fiscal Stability" includes coverage of non-bank financial mediators. At the same time, the analyses made on the banks are increasingly "consolidated" in terms of concept, i.e. they take into account the situation and risks of the individual banks by surveying the positions of the nonbanking financial mediators in their group.

Due to its responsibility for financial stability, the NBH continues to play a key role in the preparation of legislation on the financial mediation system, which falls essentially within the scope of the Ministry of Finance.

7. Development of the Cash Flow System

Alongside maintaining the integrity of the interbank giro system, which began operating in early 1995, the central bank has endeavoured to enhance the efficiency of the interbank payment system, such that even bank clients could notice the advantages thus gained. Hence it designed the standardised, paper-based cash flow vouchers and a standard account number system, which served as a basis for the introduction of new payment schemes (group transfer and collection order) under the strategic cash flow plan approved in 1996. Taking advantage of cash flow services became simpler and clearer for bank clients, and the new payment alternatives proved a good response for meeting the demands of mass payments involving small sums. In order that the account-keeping service (typically paper-based in 1995) offered to the banks by the central bank could also meet the appropriate requirements, and that the conduct of an increasing and high-value remittance traffic is not limited by liquidity or technical hurdles, the NBH opted for the introduction of a real-time settlement system in 1996.

The preparation and implementation of the Real Time Gross Settlement System (VIBER) took a relatively long time. However, this work performed over nearly three years stands the test even internationally, since it is world-class both in terms of managing financial risks and technically. Furthermore, it can be linked to the European Union's settlement system (TARGET). In addition to serving the security of interbank payment traffic and providing first-rate support for the effective liquidity management of the banks, VIBER facilitates same-day transfers even among the banks' clients, the immediate settlement of debts resulting from securities transactions, and the overview of all bank operations influencing the positions.

The past five years have been a period of change for the Hungarian bank card market. As opposed to interbank settlement, no standard system could be established in the area of card settlement until the mid-1990s, though the market still developed continuously. The card authorisation and processing systems set up by the banks processed and forwarded some 4.5 million bank card transactions by 2000. The growth in the number of cards, however, resulted not only in cost savings for the population but also acutely raised the question of consumer protection. In order to preserve and enhance confidence in cash flow services, the central bank prepared a draft government decree in 1999, which ensured the protection of card holders within reasonable limits.

The NBH developed a finalised plan for 1995 regarding the replacement of bank notes and coins produced and issued at essentially unchanged technical standards for nearly 50 years, and even began to release coins for the new series. In addition to designing the new bank note and coin series, decisions also had to be made about updating the minting capacities of the NBH. As early as 1992 the central bank submitted a proposal to the government concerning the required investment as well as the expected costs of alternative versions. At that time, the government decided to implement bank note paper production and printing domestically—primarily for national security considerations—even though the financial calculations pointed to the importation of bank notes instead. So both Magyar Pénzvero (Hungarian Mint) and Diósgyori Papírgyár és Pénzjegynyomda (Diósgyor Paper and Bank Note Plant) had to be modernised. The bank notes that had been in circulation up to 1997 had none of the security elements used in international practice because of the outdated, several decades-old technology used. After the mint reconstruction, the new bank note series was produced using modern raw materials and advanced printing techniques, so it provides appropriate protection from quickly developing counterfeiting techniques. The release of the new series was started in 1997, with three new denominations initially appearing in circulation – the Ft 10,000, Ft 2,000 and Ft 200 bills. The new denomination structure is better suited to the demands of a cash flow that has significantly appreciated in value. The ratio of the highest and lowest denominations against the daily average wage was in line with the rate typical to most countries. Only the six (seven from 1 February 2001) new bank notes of the series and the likewise seven denominations of coins may be used for cash payments as of October 1999.

In 1995, the president of the central bank deemed that the reconstruction of the Mint should be reviewed once again. A decision was made in May 1995 to reconstruct the Mint at its existing site in order to reduce costs by approximately Ft 2 billion. Actual reconstruction began in January 1996. The installation of the equipment for printing bank notes was completed in early 1997 and production began in the spring of that year.

The central bank implemented conditions for modern bank note printing through a project worth nearly Ft 9 billion, thus managing to preserve the tradition of domestic minting. It is true, though, that production costs are relatively high by international comparison.

As a result of the replacement of bank notes and coins and the changes taking place in cash flow, the cash management of the NBH had also undergone major changes throughout the past five years. Business-like cash processing, as a supplementary financial service, takes place within the bounds of law as of 1997. A cash handling and conversion fee was introduced in the autumn of 1998, which was a step taken primarily to defray the expenses of cash flow. In 1998, the NBH tightened the conditions of payments to and from accounts. In the wake of the successful changes, the central bank began to develop bulk cash flow. In this sense, like several central banks in the world, it intends to effect changes which reduce the costs of cash management at the level of both the central bank and the national economy. Thus, in harmony with the objectives of the medium-term emissions strategy approved in 1999, it is preparing the placement of part of the central bank's coin reserves outside the central bank.

8. Upgrade of the Information System

The NBH has made up for several decades of arrears over the reviewed six years by upgrading its information system. This development required the cooperation of several areas within the bank, ranging from cash flow organisation, through the banker unit, to the computer department.

A program called MNB 2000 encompassed the reform of banking IT activities from 1995 to 2000. This, incidentally, was greatly needed, as the bank's accounting system ran on an outdated, fully depreciated "Honeywell 66" mainframe in 1995, employing a

nearly 20-year-old technology. It was increasingly difficult and risky to keep it in operation and had to be replaced by a brand new system.

In addition to the aforementioned VIBER, the bank introduced a new IT system to implement general ledger accounting, finance, human resources and executive accounting functions (SAP R/3). Four European central banks, including the European Central Bank, as well as hundreds of financial institutions use this system. In parallel, it updated the system of accounts and adjusted the accounting policy and methodology in accordance with the constantly changing Hungarian and international requirements.

A new system is also in charge of keeping client accounts and performing the related settlement functions. Such a system operates in several Hungarian and more than one hundred foreign banks, as well as at the Bank of England. In parallel with its introduction, the central bank harmonised detailed bookkeeping with the new accounting order, simplified the administrative procedures, eliminated in-bank clearing settlement, and integrated the keeping of forint, currency and salary accounts into a single system. It adapted itself to the new group transfer and collection system.

The NBH introduced a new agent system, which is used by several leading international financial institutions and the central bank of Sweden. It thus ensured the digital input of information from various data suppliers and their simultaneous, edited display on the agents' workstations, the establishment of the momentary market value of the payables and receivables and the profit/loss for the given period, as well as the immediate and actual display of limit utilisation.

The central bank stabilised the operation of the system of payments to and from abroad, and connected it to a new client account-keeping system. It established an online connection with the Budapest Stock Exchange and with the domestic (KELER) and foreign (Euroclear) clearing houses of securities transactions. In terms of settlement, it shifted to the euro, and the use of the standard and convertible forint. It defines all exchange rates in a standard way, using new software. The results are published daily, along with historical (archive) data.

The bank has developed several data processing systems in order to support monetary policy and carry out central banking tasks related to financial institutions. As a result, the NBH has been able to supply statistics (e.g. the balance of payments or the coverage statements of the banks) more quickly and accurately.

The employees of the NBH communicate among themselves and with the outside world via electronic mail, and are able to utilise internet services. The email system had become an everyday means of internal communication by the end of the period surveyed and has contributed greatly to enhancing the efficiency of information exchange and teamwork. Thus new technical and systems integration infrastructure has been established in the Bank.

9. New Communication Practice for Illuminating the Decision-making Process and Describing Economic, Research and Statistical Work

Like its counterparts in the developed market economies, the National Bank of Hungary has to make its strategy and objectives understood by the outside world. It had to regain and preserve its credibility, and fulfil requirements regarding statistical data and other expectations serving financial transparency, first by approaching international standards, then reaching or even exceeding these obligations.

Since the fundamental task of the central bank lies in the protection of the national currency's purchasing power and reducing inflation at a sustainable rate, practically all attention from the outside focuses on this very activity. Interest is satisfied by a wealth of publications, presentations, statements and announcements. The number of publications has doubled over the past six years.

The NBH publishes its Annual Report following the annual general meeting held in spring. It sends its report to Parliament, which is discussed by the representatives during a plenary session. The relevant Parliamentary committees regularly hear reports from the heads of the central bank. The Bank publishes its monetary policy guidelines every year in late autumn. These discusses the anticipated key developments of the year to follow. There is a Quarterly Report on Inflation, which analyses the correlation between macroeconomic and monetary processes. The study entitled Report on Financial Stability has raised major international response, since only a few central banks among those of the developed economies publish an analysis that evaluates the hazards possibly threatening the financial system, assesses their magnitude and describes the means required for maintaining stability. The central bank's experts also publish the results of their research in the NBH Working Papers (in Hungarian and English) and in Occasional Papers as well. Such publications now appear frequently as references in the Hungarian and foreign literature. A plain-language leaflet introducing the National Bank of Hungary in relation to the euro, monetary policy and inflation also assists applied training and has enriched the list of publications.

In keeping with the altered communication requirements of the age, the NBH set up its internet home page in the spring of 1998. This means of communication quickly became the most important channel of disseminating information, as every piece of essential data can be found in it. Published in Hungarian and English, the diary of statistical releases is published six months in advance, indicating the exact date and at the exact hour and minute of the releases. Thus, the heads of the central bank can focus their subsequent remarks, press releases, interviews and off-the-record conversations with specialist journalists on strategic questions.

This development was facilitated among other things by the fact that the Bank's statistical activities have become uniform in terms of organisation, data collection and processing, all of which have become much faster and more reliable. The manner and content of publishing has also undergone transformation. Former ad hoc announcements were supplanted by seven press releases¹ which quickly followed the

¹ Evolution of Hungary's Balance of Payments — with preliminary and final figures; Net Financial Savings of Households; Enterprise, Household Sector and Interbank Forint Interest Rates; Balance Sheet of the Central Bank; Aggregate Balance Sheet of the Banking Sector and the Monetary Aggregates; Distribution of Securities Holdings by Sector.

processing of the data, and a Monthly Report with a longer follow-up time. The date of the press releases, gradually approximating the reference period, is now in line with the practices of the developed countries. As a result of recent developments, the lengthy timelines of the central bank's statistics have been likewise posted on the NBH home page.

Employees of the bank participate in the Money Market Consultation Forum, first convened in 1999, which provides an arena for the interchange of views between the NBH and the major banks. As a result of raising its standards of research, the central bank has been able to participate in international scientific circles embracing the economic results of counterpart institutions and academic analyses alike. A number of associates of the NBH have been invited to speak at professional conferences, both at home and abroad.

10. Preparations for EU Membership

In the initial years of transition and prior to it, the most important international tasks of the NBH were to ensure the economy's external resource requirements and to generate appropriate reserves. The central bank applied for the majority of loans up to the early 1990s. However, the international activities of the NBH have seen a significant shift over the past six years. Financing was increasingly superseded by promotion of the country's international integration. The NBH took upon itself a consultative role relying upon its experience gained from cooperation, as it is now the state that applies for the loans since the establishment of the Treasury and the execution of debt exchange. Every area of the NBH involved in this process turned international, in other words the former delineation between domestic and foreign matters was eliminated. Every professional unit collects and analyses international experience and organises its contacts in order to execute its tasks.

The agreement signed with the International Monetary Fund in March 1996 to support the stabilisation programme introduced in 1995 and the collaboration with international financial institutions gradually improved the country's appraisal by the capital market. Following the successful fulfilment of the last IMF agreement, the country repaid the loans granted by the IMF in the spirit of debt management. As of 1999, the IMF uses the forint and lends it onward to other member states under its programmes. In international recognition of restructuring, in early 1996 Hungary joined the Organisation for Economic Cooperation and Development (OECD) integrating the developed industrial countries. Improving domestic and external conditions facilitated the continuous improvement of the composition of the debt portfolio on the one hand, and the transformation of the debt management organisation on the other.

The NBH played an important role in the process leading to OECD membership. Namely, most of the accession requirements involved areas that also fell into the jurisdiction of the NBH (exchange regulations, operation of the financial system and macroeconomic stabilisation). The new Act on Foreign Exchange and the additional currency deregulation having taken place since its entry into force are partly related to OECD membership. At the same time, obtaining membership was a sign to the international capital markets that the Hungarian economy's features correspond to those of the most developed countries. This enhances investor confidence in respect of the Hungarian economy, and has contributed to reducing the costs of debt restructuring and increasing the influx of foreign capital. Ever since the country joined the OECD, experts of the NBH have been involved in the work of OECD bodies important from the perspective of the National Bank of Hungary. They have participated in the drafting of OECD materials examining Hungary's economic policy, financial system and currency regulations, and have taken an active part in the discussion of studies investigating similar sectors of other member states.

Accession negotiations began with the European Union in 1998. The NBH has been playing a key role in some chapters from the outset (Economic and Monetary Union, capital movement and financial services). On the one hand it has contributed to formulating the Hungarian position, on the other hand it directly represents the country in the negotiating groups.

With regard to the above chapters, the NBH and the regulatory and institutional environment of the overall domestic financial system are undergoing change as result of the fulfilment of the accession requirements. In the case of laws, along with other elements this calls for harmonisation of the Act on Central Bank, Act on Foreign Exchange and other financial laws. In the period to come, the NBH must prepare for the introduction of the euro in Hungary. The country will not accede to the monetary union upon gaining EU membership, though the NBH will be part of the European System of Central Banks (ESCB) and the forint a part of the exchange-rate mechanism (ERM-II) immediately following accession. In developing Hungarian economic policy close cooperation will be required with the relevant EU institutions, including the European Central Bank (ECB) based in Frankfurt. In recent years the NBH has established comprehensive institutional and working relations with the ECB and the national central banks of ESCB (more specifically the euro system).