EUROPEAN CENTRAL BANK

Financial Sectors in EU Accession Countries

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Editor:
Christian Thimann

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Address	Kaiserstrasse 29 60311 Frankfurt am Main Germany
Postal address	Postfach 16 03 19 60066 Frankfurt am Main Germany
Telephone	+49 69 1344 0
Internet	http://www.ecb.int
Fax	+49 69 1344 6000
Telex	411 144 ecb d

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Foreword

The importance of financial sector developments in EU accession countries

Tommaso Padoa-Schioppa

Member of the Executive Board of the European Central Bank

The advent of the euro has had, and continues to have, a major impact on the European financial sector, with the main direction of impact being one of further integration. Further integration of the financial sector throughout the euro area is of significant interest to the ECB, as it will strengthen the effectiveness of monetary policy transmission and contribute to greater efficiency and competitiveness of the euro area's real economy. It is also of interest to accession countries, as it has to guide their own integration process with the euro area.

Important steps towards further integration in the euro area's financial sector are already visible, and the process is gaining increasing momentum. In the banking sector, integration can be considered as achieved in the market for unsecured interbank loans and deposits, and it is also far advanced in the repo market, despite a few remaining differences in the cross-border settlement of collateralised transactions. In banking activities vis-à-vis the corporate sector, the areas of syndicated loans, corporate bond underwriting and equity issues have also witnessed greater integration, which is reflected, inter alia, in narrowing price differentials for such services within the euro area. Greater integration has also characterised capital markets, including equity, government bond and corporate bond markets. The general trend towards greater financial integration has been bolstered by the increasing harmonisation of the regulatory framework and the increasing integration of the underlying financial infrastructure.

For accession countries, the changes ongoing in the euro area's financial sectors indicate that these countries need to catch up with a moving target. Financial sectors in accession countries will not only grow – in breadth, depth and efficiency – but they will also become further integrated with the euro area. Much of this further integration will be market-driven, but it will be – and for some aspects needs to be – supported by actions of the authorities. The adoption of the EU's legal framework, a greater integration of the financial infrastructure with that in the euro area and a strong cross-border collaboration of supervisors will be important policy elements in this process.

Financial sectors in accession countries display a number of distinct features. Most of these features – especially those related to size and efficiency – put them still behind financial sectors in the euro area. Mostly as a result of the legacy from the past, financial sectors in accession countries are still relatively small and not yet fully developed in terms of market segments or instruments. This is particularly true for capital markets, which only play a marginal role in many accession countries' financial sectors, but it is also true for most indicators of banking activities.

However, there is one feature for which the financial environment in accession countries can be considered *ahead* of that in the euro area, namely the local availability of services provided by cross-border operators, mainly due to the wide extent of cross-border ownership.

In accession countries as a whole, foreign ownership already stands above 65% and will rise further once the final privatisation rounds that are ongoing in some countries have been completed. In a few countries the banking sector is even entirely in foreign hands. In the euro area countries, in contrast, foreign ownership is highly limited. Only about 20% of the banks' capital in euro area countries is in foreign ownership, and only in four countries is this ratio at least 30%. In the euro area a number of factors have contributed to limiting strategic cross-border ownership, including a low degree of market integration in the past, differences in banking culture across countries and a desire (often shared by authorities and banks alike) to keep "national champions" in domestic hands. These factors are about to weaken – at highly different speeds – so that over the longer term one can well imagine cross-border ownership levels rising across the area. Many of the experiences the current EU accession countries are going through will then become relevant for the current euro area members.

Structural developments in the financial sector are mostly gradual, which means that large changes can only be observed over a long time period. Therefore, although they will undergo continuous changes over the coming years, it is likely that financial sectors both in the euro area and in accession countries may not look fundamentally different from today when the first of the current EU accession countries will adopt the euro. As a result, the financial sector in an enlarged euro area will look quite different from that of today, and three main features can already be identified: first, the overall size and stage of the development of the financial sector relative to the size of the underlying economy will be somewhat lower than today; second, the structure and functioning of the financial sector will be slightly more heterogeneous across the euro area; and, third, the degree of cross-border ownership will be larger than in the euro area today. The first two features fall into the domain of monetary policy transmission, even though their importance for the euro area-wide monetary policy will be highly limited given the low economic weight of the accession countries in an enlarged euro area for the foreseeable future. The third feature, however, may have relevant implications for supervisors and authorities in the field of payment systems and financial market infrastructure upon euro area enlargement. In particular, it will make cross-border co-operation of supervisors more important and may also lead to an even greater integration of financial infrastructures.

All these considerations demonstrate how vital – and interesting – an analysis of accession countries' financial sectors is, and how relevant it already is at this stage not only for the authorities of accession countries but also for the ECB. The information and assessments provided in this book are therefore highly valuable, as they provide insights into the structure and functioning of financial sectors in accession countries, which will remain a fascinating area for policy-makers in many years to come.

Summary

Financial sectors in EU accession countries: Issues for the workshop and summary of the discussion

Christian Thimann

European Central Bank

1. Introduction

Financial sectors in EU accession countries are entering a new era. Over a decade of transition in central and eastern Europe, the banking sectors have been restructured, recapitalised and privatised, and capital markets have been established. This decade has been characterised by many rounds of public interventions and banking crises, and it has also coincided with periods of macroeconomic instability and economic downturns, with frequent negative spillovers between financial crises and economic crises. This era has clearly been completed in all countries. A new era of financial and economic development is now under way, with broadly stable banking sectors that are almost exclusively in private ownership, expanding money markets and thin but established securities markets. In the real economies, the new era has begun with entrenched macroeconomic stability and positive economic growth rates since 2000 in all accession countries.[1] Hence, financial sectors in accession countries are moving from an era of transition, instability and restructuring into an era of stability, strengthening and development.

EU accession and euro area entry will be important milestones in this new era, and the anticipation of these milestones has already begun to shape the financial sectors in all countries. This shaping is reflected in many respects, for example, the adoption of EU-compatible financial legislation and regulation, the high share of EU ownership in the banking sectors, a strong financial integration with the EU and the gradual harmonisation of the central banks' monetary policy and operational frameworks with that of the Eurosystem. All these developments have already brought key features in the structure and functioning of the accession countries' financial sectors closer to those prevailing in the EU and euro area.

Despite the remarkable progress made in recent years and the ongoing adjustments to euro area standards, it is likely that the financial sectors of accession countries will undergo further significant changes in the future. One way to gauge the potential for further changes is to compare the current situation with the average of financial sector indicators in the euro area, motivated by the fact that the integration process can be expected eventually to make the accession countries broadly comparable to current euro area member countries. In this comparison, the following picture would emerge: financial sectors of accession countries are relatively small, even when taking the countries' lower income levels into account; as percentage of GDP, bank deposits, bank loans and bank holdings of securities as well as

[1] The accession countries referred to in this volume comprise the 12 countries that are currently negotiating accession to the European Union: Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia.

capitalisation of bond and stock markets are far below the euro area average. Financial sectors are dominated even more strongly by the banking sector than those of euro area countries; banking sectors are, by and large, well-capitalised and characterised by strong foreign involvement. The number of financial instruments is lower than in the euro area, spreads in intermediation and capital markets are higher (pointing to lower efficiency, lower liquidity or other structural factors) and some capital market segments – such as liquid secondary long-term bond markets – practically do not exist, except in a few countries. Finally, a considerable share of the corporate sector receives financing from abroad. Looking ahead, this picture would broadly imply a significant further development of the financial sector, in particular with regard to financial deepening, rising financial intermediation and improvements in financial sector efficiency.

There are, however, several reasons to believe that the current average of euro area members may not be a relevant benchmark for all or even most aspects of financial development. For one thing, the financial sectors of euro area countries themselves are undergoing profound changes. In particular, capital markets have grown in importance in the provision of financial services in the past few years, as stock market capitalisation has risen and corporate bonds have become increasingly important in the external financing of larger corporations.[2] In line with global developments, new financial instruments have been introduced and new technologies have left their mark on both the structure (e.g. new firms in internet banking and brokerage services) and the functioning of the euro area's financial sector. More importantly, profound changes are under way *among* countries, essentially reflecting *increasing integration* of financial sectors across euro area members. These changes are the result of the Single Market and have received further impetus from the creation of Monetary Union. Signs of direction are already visible: the banking sectors are increasingly integrated, especially for wholesale banking (still less so for retail banking), stock markets have merged or plan to merge, and the markets for government and corporate bonds have gradually become more integrated as well. For many aspects of financing – especially wholesale banking and securities markets – national boundaries are increasingly irrelevant, and a growing harmonisation or integration of financial infrastructures is underpinning this trend from a technological point of view. Yet another reason why euro area members' average may not be an entirely relevant benchmark for accession countries is that euro area financial sectors themselves are highly heterogeneous and often influenced by historic factors – such as high government deficits in the past that have led to large debt markets – that are not applicable to accession countries.

Overall, these considerations show that for accession countries some euro area indicators, such as degrees of and efficiency in financial intermediation, are relevant for their financial development, while other indicators are not necessarily meaningful benchmarks because the euro area is highly heterogeneous and its financial markets are still subject to profound changes. Finally, it should be borne in mind that the accession process itself implies an integration with the euro area through the adoption of compatible standards, rather than through mere copying of any existing national financial systems. Hence, several euro area indicators may be illustrative, but cannot necessarily serve as guideposts for financial developments in accession countries.

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[2] Given the high volatility in stock market valuations in recent years, however, the evidence is not yet clear-cut and will have to be assessed in a longer-term perspective. See also the article "Characteristics of corporate finance in the euro area", ECB *Monthly Bulletin,* February 2001 on this issue.

2. Issues for the workshop

Financial sector developments in accession countries are, for several reasons, of considerable interest to the central banks concerned, as well as to the ECB and the Eurosystem: there may be an important link between financial development and economic development, the banking sector is the counterpart for the operation of central banks and often under its supervision, financial stability is – directly or indirectly – a key concern for central banks, and financial sector developments have an important bearing on the transmission of monetary policy. For these reasons, the ECB organised on 24-25 October 2001 a workshop for representatives of accession countries' central banks and the national central banks of the euro area to deepen the common understanding of financial sector structure and functioning in accession countries.

The workshop focused on the following set of questions: what are the main characteristics of financial sectors in accession countries? What are the respective roles of the banking sector and of financial markets? How relevant are banks, stock markets and bond markets to provide financing to the economy, and how efficient is intermediation? What are the main transmission mechanisms for monetary policy and what are the main challenges arising from EU integration and euro adoption for these countries? The discussion of these issues is briefly summarised in the following section.

3. Summary of the discussion

The workshop started with a general discussion on the *financial sector and real convergence* in accession countries. A number of participants, from both accession countries and the euro area, agreed with the plausibility of a positive correlation between financial sector development and growth, but considered the experience of accession countries to be too short to assess whether the relationship was a strong one and whether causality also flows from financial development to economic development. As for the general policy measures most conducive to financial sector development, most participants felt that at this stage continued progress in transition, liberalisation and macroeconomic stabilisation would be key.

On the question of a choice or trade-off between a *"European" banking-based financial system and an "Anglo-Saxon" market-based system*, participants considered that this distinction should not be overemphasised as a relevant choice for accession countries. Priority at this stage was rather to establish a sound, stable and efficient banking sector. Participants also remarked that the development of capital markets would possibly follow the strengthening of the banking sector, similar to the experience of a number of current EU Member States. However, some participants cautioned that capital markets could possibly not develop in accession countries unless the authorities took some decisive steps, owing to the close integration of the economies with the euro area, which was already providing significant financing and thereby in some cases hindering the development of domestic capital markets.

Foreign involvement was indeed highlighted as an important feature in many segments of the financial sector. This referred to ownership, particularly in banking, but also to borrowing from abroad of domestic corporates and of listings abroad. This had already implied rather close integration of the financial markets with the EU. Furthermore, it was stressed that foreign direct investment is a key component of external financing of the domestic economies.

Banking sector

The ownership of the banking sector was stressed as being different from that in most other countries, given that *foreign investors* control more than two-thirds of the banking sectors in accession countries, and their ownership share may increase to three-quarters of banking capital and assets, once the still ongoing privatisation processes are completed.

The dominant degree of *foreign ownership* was seen as having several important advantages but also some drawbacks. As *advantages,* foreign investors bring capital and know-how and foster the implementation of best practices of the domestic banking system. Foreign ownership has also been conducive to strengthening competition, even if in some countries foreign banks simply mimicked the behaviour of domestic banks. Participants stressed that foreign ownership has indeed been crucial in the successful restructuring process and the upgrading of banking sector functioning to international standards. Foreign ownership may have also been one of the important factors that recently helped shelter accession countries' banking and financial sectors from spill-overs from the crises in other emerging markets.

However, foreign ownership was not entirely without *drawbacks*. For example, in many of the foreign-owned banks, trading and other key activities were shifted to the headquarters, so that the subsidiaries in the accession countries lost some of their important functions. Moreover, the stability of the system would now depend largely on the stability of the home institutions as well as the home regulators. It was also pointed out that the presence of foreign-owned banks would in itself not guarantee stability in the banking system, as evidenced by the fact that a relatively high level of non-performing loans had persisted even in foreign-owned banks. Finally, foreign ownership should also not be seen as necessarily perpetual as disinvestment – for example, as a result of a domestic crisis or a change in the commercial strategy of the owner – always remains a possibility, and indeed disinvestment in accession countries by a strategic foreign owner had already occurred.

With regard to *functioning,* it was noted that the banking sector was generally considered profitable and well-capitalised, and that operating costs would rise at a slower pace than inflation. As for the *lending behaviour*, participants agreed that the overall level of lending was still rather low, but that this credit channel constraint was alleviated somewhat by significant borrowing from abroad. The most problematic aspect of the lending behaviour was seen in the lending to small and medium-sized enterprises; especially if these enterprises lack a credit track record or collateral, banks in the process of restructuring may be particularly cautious. As for changes in lending activities, banks had been seen as lowering lending to the agriculture and food-processing sector, while increasing lending to the retail area, especially to households, both for mortgages and for consumer lending. The latter was viewed as a result of a rising risk appetite and a stronger focus on achieving positive returns. Such a rise in lending to households was, however, not regarded as raising risk management problems or lowering capitalisation levels, given that levels of exposure remained low.

Looking ahead, *EU accession* was indeed seen as an important structural change for the banking sector. In particular, it could accelerate a trend towards transforming subsidiaries of foreign banks into branches, in order to reduce costs and avoid constraints on exposure limits (by allowing the parent bank to lend, rather than the subsidiary for which exposure limits would be reached earlier). This trend was seen as relevant for a number of accession countries and as entailing challenges for the development of the banking system as well as for domestic regulators and supervisors.

Money and foreign exchange markets

A large number of participants confirmed that the *exchange rate channel* was at present still more powerful in monetary transmission than the interest rate channel, against the background of high openness of the economies and significant public attention paid to exchange rate movements. The relatively stronger transmission through the exchange rate channel was mirrored in the better functioning of the foreign exchange market compared with the money market, again owing to a high degree of foreign financial intermediation and foreign direct investment. The *interest rate channel* was regarded as suffering also from distortions in the financial system, including ongoing bank restructuring. Structural weaknesses in the real economy were also mentioned, including weak corporate governance in some sectors, remaining privatisation and the existence of soft budget constraints in some public enterprises.

As for the further development of the *money market*, workshop participants stressed that the overnight deposit market was functioning relatively well and smoothly, but that the repo market was still underdeveloped. This was seen as a consequence of weak legislation for collateral as well as weaknesses in transfer mechanisms for securities and settlement systems. Also, general regulation would need to be strengthened and taxation issues may have to be solved to foster the repo market.

Bond and stock markets

Workshop participants generally considered it desirable to develop a *capital market* in addition to the banking sector. Although the banking sector could, in principle, cover the financing requirements of the entire economy, it would make the economy entirely dependent upon the banking sector, and a credit crunch in this sector would immediately translate into a financial crunch for the economy as a whole.

Capital markets had indeed been set up in most countries, but were experiencing a particularly difficult situation. In *stock markets*, initial expectations had not been fulfilled and, moreover, market developments were not following the strong growth some economies had experienced in recent years. Indeed, delistings were observed in many markets, often in favour of listings abroad, and most stock markets were dominated by only a few big firms, allowing little room for investor diversification and the financing of medium-sized enterprises.

The *debt market* was also experiencing difficulties, as the low level of government debt, although welcome from a public finance viewpoint, implied a low level of available securities. This had also brought about a trade-off between offering a wide range of maturities along the yield curve and ensuring liquidity in various maturity segments. As a result, only in about half of the accession countries was a ten-year government bond market available. Government debt management was seen as key, and governments were indeed seen as actively pursuing strategies to develop this market. The corporate debt market is small and of little significance in most economies.

With regard to *challenges to the further development of the capital market*, participants stressed difficulties on both the demand and the supply sides. On the demand side, investors from abroad were seen as key, but their dominance also implied that domestic markets were strongly exposed to global market sentiment. Indeed, large market fluctuations abroad had been felt immediately in domestic markets, often irrespective of the domestic situation. As for domestic investors, the pension systems were regarded as still underdeveloped and not yet

geared towards stock market or long-term bond market investment. In fact, both institutional and individual investors were seen as highly conservative, having also been negatively affected by the detrimental experience with stock market investments in the first half of the 1990s. However, in the latter respect, improvements were in sight, as partially funded pension schemes were planned in several countries.

On the supply side, the banks' behaviour was viewed as not always conducive to developing capital markets, as banks would rather crowd out the corporate debt market, and as good firms preferred to be listed abroad rather than using the narrow domestic markets.

Looking forward, participants raised a number of issues regarding the further development of capital markets. First, the infrastructure would need to be improved, including the settlement procedures and other operational prerequisites for efficient financial market functioning. Second, regulatory steps would be required and entry barriers to stock markets may need to be lowered. Third, legal impediments would have to be removed and the legal framework strengthened, in particular for collateral and shareholder protection (especially for minority shareholders' rights). Efforts to improve corporate governance and transparency were also seen as key to foster capital markets.

Overall, however, participants stressed a possible *conflict between stability and liquidity* and were concerned that measures to raise liquidity should not put the hard-gained stability at risk. Some participants raised the issue that regional integration could help the development of small markets but questions arose as to whether "dwarfs standing on each other's shoulders would be able to become a giant".

Participants agreed that survival was an open issue for a number of stock markets, whereas the outlook for bond markets was seen as much more positive. In this respect, questions of government debt management, the need to issue in larger amounts and to continue to attract foreign investors would be crucial, especially since accession countries would largely attract capital through carry trade and attractive yields. To benefit from this, settlement procedures would have to be improved and futures markets would need to be developed. A number of euro area participants stressed that accession countries could learn from their own experience, especially of smaller euro area countries, but should take into account both successful and unsuccessful attempts to develop capital markets.

Financial markets with a view to EU integration

EU integration was indeed seen as having important implications for financial markets. As for market developments, integration was held to accelerate concentration, raising competition and pressure for efficiency, raising the extension of services and strengthening the competition for deposits.

Integration was also seen as advancing liberalisation, especially through the implemention of free movement of capital and services, thereby fostering better regulation and providing a momentum especially for retail and insurance banking. The centralisation of activities in head offices outside accession countries was also seen as a distinct feature of integration. This would make closer co-operation between national and foreign supervisors important. The Basel II Capital Accord would provide another challenge for banks. As for offshore banking sectors, which exist in two of the accession countries, the strategy in one country was to bring the entire sector on-shore, and in the other country to preserve it, while making it compliant with EU regulation.

4. Purpose of the book

As it emerged that the papers prepared for the workshop were of a more general interest and as the literature on financial sector issues in central and eastern Europe is rather thin, it was deemed appropriate to make them available to the general public. Therefore, the papers prepared for the workshop were updated during the first half of 2002 and are presented in this volume. The papers cover the following areas:

- Banking sector structure
- Non-bank financial sector structure
  - Stock market
  - Bond market
  - Money and foreign exchange market
- Financial market functioning
- Challenges for the financial sector in view of EU accession

The issues arising as regards financial sector structure and functioning in accession countries are obviously vast. Given the limited space, the purpose of the book is not to explore any of them in great detail, but rather to give a broad overview of the issues involved. Efforts have been undertaken to partially harmonise the structure and presentation of individual chapters so as to facilitate cross-country comparisons (a table with bilateral exchange rates to facilitate such comparisons is provided at the end of the volume).

5. Acknowledgements

The organisation of the workshop and the preparation of this book have demanded substantial efforts from all parties involved. All authors invested significant efforts in the reviewing and updating of the manuscripts for their publication. All workshop participants (a list of whom is provided at the end of the volume) have contributed to the success of this event through their active participation. I would like to thank especially the colleagues at the ECB who co-chaired the sessions of the workshop and provided their expertise on the subject: Jesper Berg (Head of Capital Markets and Financial Structure Division), Denis Blenck (Head of Operations Analysis Division), Jean-Michel Godeffroy (Director General Payment Systems) and Mauro Grande (Head of Prudential Supervision Division). I owe special thanks to Pierre van der Haegen for his encouragement of this book project. The project has also required extra efforts within the EU Neighbouring Regions Division, in particular from Giacomo Caviglia and Gerhard Krause, for the processing, cross-checking and harmonisation of the manuscripts. Gudrun Becker provided untiring assistance in this process over the past few months, and Werner Breun supplied very efficient technical support.

I hope that the book will be useful in providing interesting information about the structure and functioning of financial sectors in accession countries and in highlighting some of the intriguing policy issues involved.

Frankfurt, July 2002

Key features of the financial sectors in EU accession countries

Giacomo Caviglia, Gerhard Krause and Christian Thimann

European Central Bank

I. Introduction[1]

Financial sectors in accession countries have undergone fundamental changes since the beginning of transition about one decade ago.[2] In the formerly planned regimes, financial markets were non-existent, and these sectors consisted almost entirely of so-called monobanks that collected deposits, remunerating them at regulated rates, and provided loans based on decisions in planning bureaux. Upon transition, the monobanks were broken up to form a two-tier structure of a central bank and commercial banks, with the latter being restructured, recapitalised and privatised. In addition, newly founded private banks entered the market, often supported by fairly liberal licensing and rather loose regulatory regimes. In many cases, this process went through – at times severe – banking crises, involving a collapse in financial assets and intermediation and often requiring massive amounts of public funds.[3] Tightened supervision, consolidation and liquidation of insolvent institutions as well as a massive entry of foreign banks, however, have ultimately led to a stable commercial banking sector. At the same time, money markets, bond markets and stock markets have been set up. At the current stage, the financial sectors can be characterised by overall financial stability[4] and a trend of gradual financial development in most of the sector's segments.

The purpose of this chapter is to give a short overview of the current structure of the financial sectors in accession countries, provide some cross-country comparisons and outline the extent of potential further financial development by providing some comparisons with the respective indicators in the euro area.[5] To this end, the chapter identifies three key features of financial sectors in accession countries and looks briefly at the importance of and scope for financial development. The three main features are: a relatively low level of financial intermediation, a strong dominance of the banking system within the financial sector owing to the particular underdevelopment of capital markets in most countries, and a high degree of foreign involvement in most sector segments.

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[1] This chapter is based on the introductory presentation at the workshop. Helpful comments by Gunnar Jonsson and Adalbert Winkler and excellent research assistance by Stefan Wredenborg are gratefully acknowledged.

[2] The chapter focuses mostly on the ten transition economies among the EU accession countries; Cyprus and Malta, which are not transition economies, possess a financial sector whose structure is more closely in line with that of the euro area.

[3] For example, for the Czech Republic, Hungary and Poland, the total fiscal cost of bank restructuring during 1991-98 is estimated at 25%, 13% and 8% of 1998 GDP respectively, see Tang et al. (2000).

[4] This assessment is confirmed by the available reports of the Financial Sector Assessment Programs (FSAPs) on these countries, conducted by the IMF and the World Bank.

[5] Given the caveats of using the euro area as a comparison mentioned in the summary chapter, such comparisons are only indicative of the potential of future change and should not be seen as normative.

II. The relevance of financial development for accession countries

Financial sector development is considered an important feature in the accession countries' real and nominal convergence process with the present EU members.[6] It is important for real convergence, as financial development – understood as an increase in the size, depth and efficiency of the financial sector – is closely linked to developments in the real economy. As financial development typically goes hand-in-hand with economic development, the financial sector is likely to be significantly larger and more sophisticated at the end of the real convergence process than it is today. Two figures can help to simply gauge the scale of the potential for financial development: today, financial assets of accession countries relative to GDP are roughly one-third of the corresponding share in the euro area, and GDP per capita levels are on average around one-fifth of those in the euro area (in current exchange rates). Hence, this roughest measure would suggest that the size of the financial sector might rise by as much as a factor of 15 in absolute terms during the catching-up process. These magnitudes also illustrate the importance of institutional support through sound regulatory and supervisory frameworks.

There may, however, be more to this process than simple parallelism. Numerous empirical studies of recent years have found a link from financial development to economic development, in particular to economic growth.[7] These studies have shown, both for industrial and for emerging market economies, that financial development can have a positive impact on the growth prospects of an economy by providing the financial tools necessary for economic development. These empirical findings have been underpinned by theoretical contributions that have highlighted the importance of efficient use of information on investment decisions and resource allocation. The beneficial role of the financial sector in this process is seen as stemming from all three "fundamental functions" (Tobin) of the financial sector, which are to supply, allocate and monitor funds for investment. While the allocation function has long been recognised, recent economic research has increasingly focused on the potential role of the sector in supplying and monitoring funds for investment. In particular, it has been argued that, first, more developed financial sectors may be able to raise savings by offering secure and attractive returns to savers and to ensure that any given unit of savings translates into higher investment by minimising "leakages" of funds in the transmission mechanism. Second, it has been contended that more developed financial sectors also perform better the monitoring function; for example, through various sets of arrangements and contracts, they are able to ensure a continued productive use of invested funds. Thereby, they are seen as fostering corporate performance and governance, which will lead to greater productivity in the corporate sector. These recent findings have led to a "new view", according to which policy measures that foster financial development – through the provision

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[6] See, for example, European Central Bank (2002).

[7] For an overview of this literature see Khan and Senhadji (2000), Levine (1997), Pagano (1993) or World Bank (2001); recent relevant studies also include Beck et al. (2000), De Gregorio and Guidotti (1995) and King and Levine (1993). An application to central and eastern Europe can be found in Iakova and Wagner (2001).

of an appropriate institutional infrastructure in areas such as information, law and regulation – ultimately also foster growth.[8]

For accession countries, financial development is also important for nominal convergence and the transmission of monetary policy, in particular in view of the countries' future integration into the euro area. At present, the exchange rate channel is of major importance in the transmission of monetary impulses. This reflects the high degree of openness of all countries, the relatively low level of intermediation through the domestic financial system and the relatively developed foreign exchange markets, which also benefited from early capital account liberalisation and large capital inflows. With the prospect of joining Monetary Union, however, monetary policy transmission will in the future increasingly have to rely on the interest rate channel. This requires a well-functioning money market to ensure an efficient distribution of liquidity in the banking system between deficit and surplus banks. It will be helped by a greater and more efficient role of financial intermediation, a sufficient degree of competition in the banking sector and a fully market-determined interest rate formation.[9] Many of the accession countries already enjoy liberalised financial markets, but the relatively high spreads between lending rates and deposit rates, the high share of liquid securities held and the non-negligible role of preferential loans in several economies are some of the factors that still weaken the efficiency of the interest channel at present.

III. Key features of financial sectors in accession countries

In analysing the structure of the financial sector in accession countries, it is useful to focus on the three features that are particularly characteristic: a low level of financial intermediation, a strong dominance of the banking sector and a high degree of foreign involvement.

1. Relatively low level of financial intermediation

Even after one decade of transition and successful bank restructuring, the level of financial intermediation in accession countries remains relatively low. This is reflected in a low penetration of both banking assets and capital market securities in the economy. Although banks are by far the most important pillar in the financial sectors of accession countries, the degree of financial penetration through assets and loans is much lower than in other emerging markets and the euro area. Given the specific history of most accession countries as formerly planned economies, capital markets have an especially short history and play an even smaller role.

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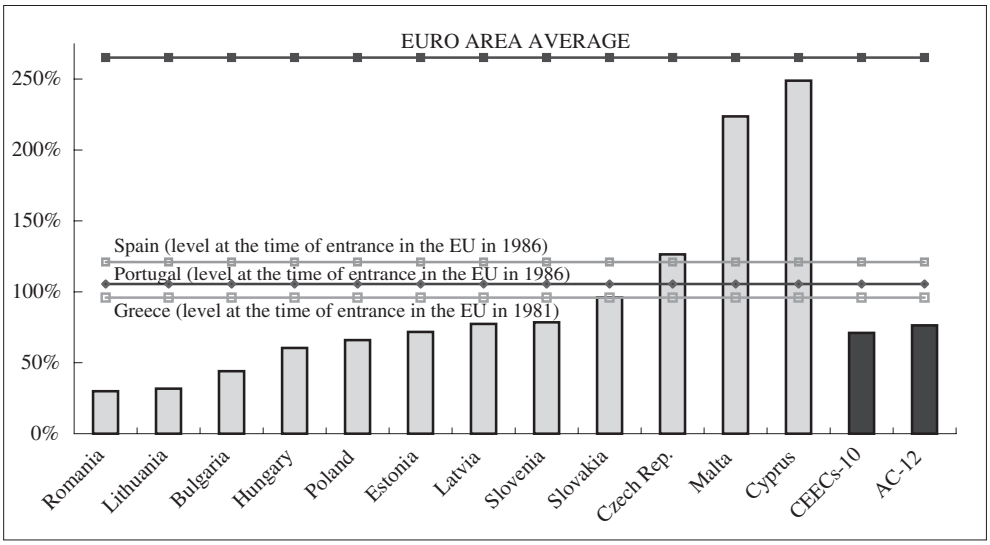
[8] This new view of financial development has, however, not remained uncontested and the "old view", according to which causality runs in the opposite direction with economic developments shaping financial developments (captured neatly in J. Robinson's turn of phrase that "where entrepreneurs lead, finance follows"), still receives much support. For example, Lucas (1988) asserts that economists "badly over-stress" the importance of the financial sector in growth. Experiences of high growth despite the lack of a fully developed financial sector would be, for example, those of Germany and many euro area countries in the 1950s and 1960s and that of Poland in the mid-1990s.

[9] The functioning of the interest rate also depends on the structure of private sectors' assets and liabilities (see, for example, Cecchetti (1998)); this structure is in many accession countries quite different from that in the euro area, as discussed below.

Chart 1: Size of the banking sector (2001)
(banking assets in % of GDP)



Sources: ECB, IMF's International Financial Statistics and Accession Countries' National Central Banks.

Banking sector

Notwithstanding its important role in the accession countries' financial system, the banking sector is currently still small relative to GDP. In most countries, the relation of banking assets to the economies' GDP amounts to about one-quarter of the corresponding figure for the euro area. Whereas, in the euro area, bank assets amount to about 265% of GDP, the bulk of accession countries' banking systems display asset volumes amounting to between 30% and 100% of GDP (Chart 1).[10] Only Cyprus and Malta, the two non-transition economies among the accession countries, display a ratio comparable with the euro area. Among the other economies, the Czech Republic and, to a lesser degree, Slovakia stand out as the two economies with the largest commercial banking systems, with bank assets amounting to about 130% of GDP and 95% of GDP respectively. The high share in these two countries is partially a result of the existence of a significant banking system already under the socialist regime. At the other end of the spectrum are Lithuania and Romania with banking assets of only around 30% of GDP, mostly as the result of particularly severe banking crises.[11]

The limited level of banking intermediation is also illustrated by the low share of domestic credit to GDP in accession countries (Chart 2). For the transition economies, on average, it amounts to around one-third of that in the euro area and to around one-half of the levels reached by Greece, Portugal and Spain at the time of their entry into the EU. For example,

[10] It should be noted that data in this chapter and other chapters in the books may differ owing to the use of different sources. Unless otherwise noted, data in this chapter refer to end-2001.

[11] For an overview of the financial sector in the five central European countries see Schardax and Reininger (2001).

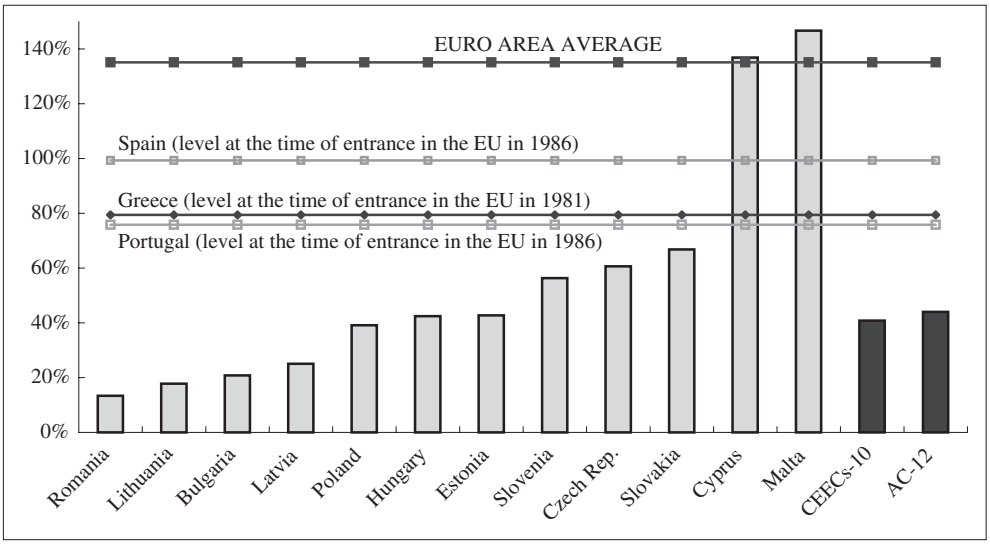
even in the Czech Republic as the transition country with the largest banking sector, domestic credit extended by the commercial banking system amounts to only about one-third of the banks' assets and only about 60% of GDP (compared with 135% of GDP in the euro area).

There are a number of reasons for the low levels of bank intermediation. All countries experienced a sharp economic downturn upon transition, with output falling between 10-15% in central and eastern Europe[12] and 35-50% in the Baltic States in the first few years of transition. These severe recessions led to massive bad-debt problems in the corporate sector, widespread defaults and a substantial reduction of banks' loan portfolio.[13] In many cases, these developments triggered rounds of banking crises, which, in turn, reduced banks' assets further and, moreover adversely affected their lending behaviour and induced a shift towards government securities or liquid assets on their balance sheets. For many economies, it took several years to break free from this circle of banking and macroeconomic crises.[14] In addition to these macroeconomic factors, microeconomic factors played an important role, as a private banking sector was newly established and the necessary legal framework had to be set up.

On the liabilities side, the low degree of intermediation is reflected in a low share of deposits to GDP that are only one-third of that in the euro area as a share of GDP. Given that household deposits constitute the main source of funding for the banking sector, they also constrain the role of the financial sector. The low level of deposits in the banking system

Chart 2: Domestic credit (2000)

(% of GDP)



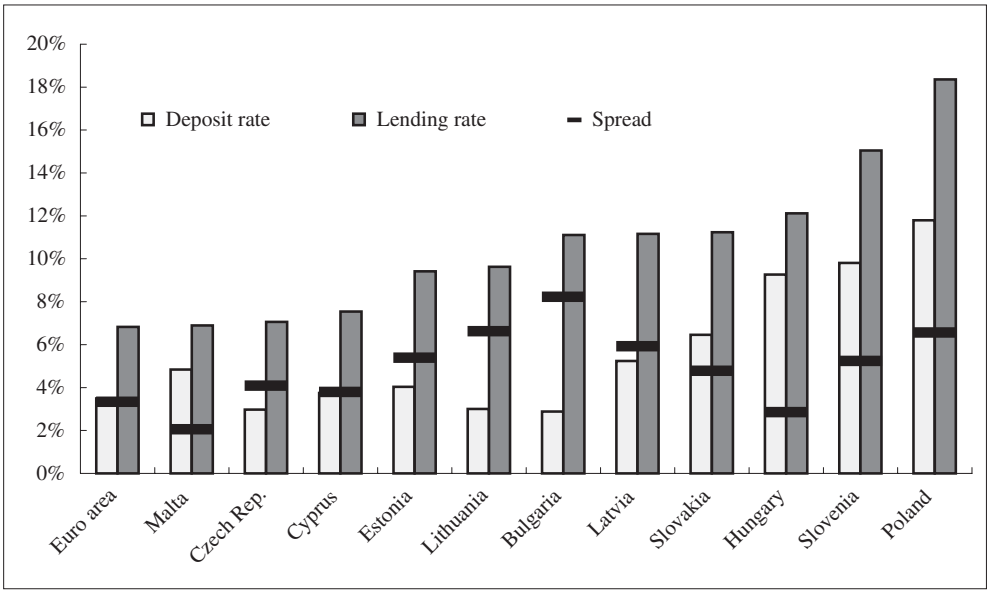
Source: IMF's International Financial Statistics

[12] An exception was Slovakia with an estimated initial output decline of 25%.

[13] For a discussion of this problem see, for example, Begg and Portes (1993).

[14] For an overview of the problems of the banking sector in transition see, for example, Anderson et al. (1996), Anderson and Kegels (1998) or Winkler (2002).

Chart 3: Deposit and lending interest rates (2001)



Source: IMF's International Financial Statistics (data for Romania n.a.).

seems mostly attributable to past experiences of high or hyperinflation, lower confidence in the banking system and, in part, non-attractive returns on deposits.[15]

Overall, the low level of financial intermediation reflects a limited ability of credit institutions to channel financial savings into investment. In some economies, this constraint is alleviated by specific features of the corporate sector, in particular the high share of foreign subsidiaries. This greatly reduces the firms' exposure to the domestic banking sector, as investments are financed through cross-border borrowing or foreign direct investment inflows. In Hungary and Poland, for example, foreign bank loans to the non-bank commercial sector account for more than one-half of all foreign loans directed towards these countries, and Hungary in particular is characterised by a corporate sector with extensive access to financing abroad due to the high share of multinationals.[16] By contrast, small and medium-sized enterprises cannot use such a channel as easily and are more dependent on the domestic banking sector, where they are typically more prone to problems of asymmetric information, often highlighted by a lack of credit track record and collateral.

Banks have, however, already significantly improved their efficiency in financial intermediation over the past few years. For example, in the Czech Republic and Hungary, spreads between short-term lending and deposit rates, as well as lending and interbank market

[15] An interesting piece of evidence of savings in the form of cash holdings was recorded in the context of the introduction of euro banknotes and coins in January 2002. In the run-up to the cash changeover, a large amount of cash in euro legacy currencies (mostly Deutsche Mark) of almost €10 billion was placed in euro-denominated deposits of the banking system in central and eastern Europe, including accession countries. This illustrates a gradual increase of confidence in the banking system and a decreasing degree of savings in cash holdings. For further details see Padoa-Schioppa (2002).

[16] See Iakova and Wagner (2001).

rates, have broadly converged to levels prevailing in the euro area. However, considerably higher spreads persist in most other economies (Chart 3).

Capital markets

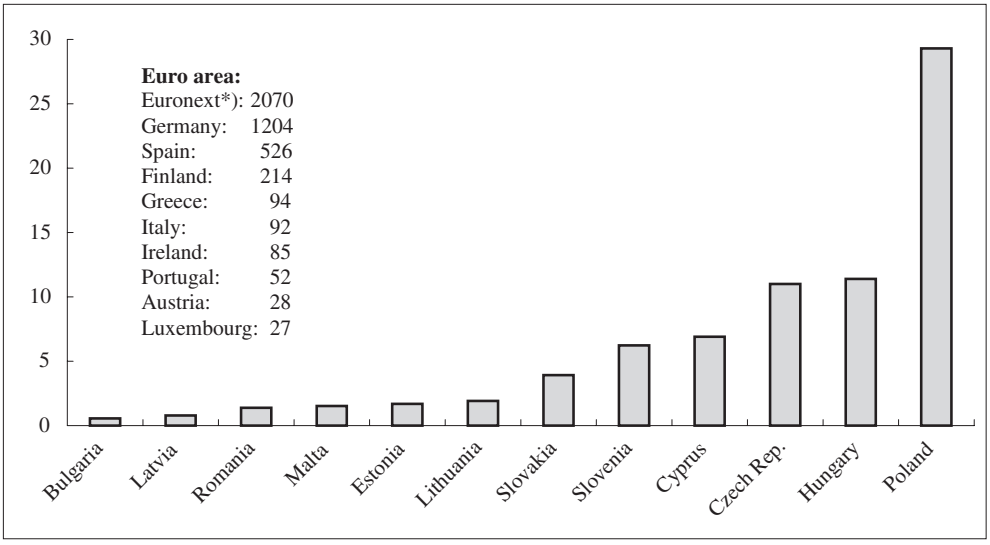
In accession countries, capital markets are little used as a source of finance. Capitalisation of both stock and bond markets relative to GDP is only a fraction of that in the euro area. In addition, given the relatively low levels of GDP per capita of the countries, market capitalisation in absolute terms is particularly low. Therefore, in an international context, only the capital markets of Poland and, to a lesser extent, of the Czech Republic and Hungary, play some role.

As for stock markets, the total stock market capitalisation of accession countries stood at around €80 billion at end-2001, equivalent to about 2% of total stock market capitalisation in the euro area. Accession countries' market capitalisation is broadly comparable with that of Ireland, which is the fourth-smallest stock market in absolute terms in the euro area. The largest stock market by far is that of Poland, accounting for about €29 billion or 40% of total stock market capitalisation in accession countries, broadly in line with Poland's GDP weight in the region (Chart 4). The capitalisation of the Polish market has recently exceeded by a narrow margin the size of the two smallest euro area stock markets, which are Austria and Luxembourg. The capitalisation of the stock markets in the Czech Republic and Hungary are each about €11 billion, while the markets of the other nine countries (on average about €3 billion) can be considered negligible by international comparison.

In relation to the respective economies, the average market capitalisation of accession countries amounts to 16% of GDP and represents less than one-quarter of the relative euro

Chart 4: Stock market capitalisation (2001)

(EUR billion)



Sources: International Federation of Stock Exchanges and Accession Countries' National Central Banks and Stock Exchanges.

*) Euronext comprises the stock markets in France, Belgium and the Netherlands.

area average market capitalisation (around 72% of GDP; Chart 5). It should be noted, however, that data for market capitalisation of euro area countries display a high degree of dispersion, ranging from 45% to 160% of GDP, with the notable exception of Austria, which has by far the smallest stock market capitalisation with only 14% of GDP. A similar variation can also be observed in accession countries. Apart from Cyprus and Malta, the stock market is relatively more important in Estonia and central European economies (with a capitalisation of around 20-30% of GDP) and of trifling importance in the other two Baltic states, Bulgaria and Romania.

The development of stock markets has been closely linked to the privatisation strategies of individual countries.[17] The first stock markets in accession countries appeared in the Czech Republic and the Slovak Republic in 1992,[18] as a consequence of mass privatisation schemes, followed by Bulgaria, Lithuania and Romania (Table 1). Stock markets in these countries quickly comprised a large number of companies, but widespread ownership actually limited the development of sound corporate governance structures and restrained liquidity.[19] This led to a loss of confidence in the market and massive delistings of ailing enterprises. In the Czech Republic, for example, 83% of firms were delisted between 1996 and 1997.[20] A different approach towards initial public offerings was chosen in countries such as Estonia, Hungary and Poland. Enterprises in these countries were only listed after the establishment of a framework for securities trading.[21]

Table 1: Origins of stock markets

Mass privatisation	Initial public offerings
Bulgaria	Estonia
Czech Republic	Latvia
Lithuania	Hungary
Romania	Poland
Slovakia	Slovenia
	Malta

Sources: ECB staff assessment and World Bank.

Stock market development is positively related to the countries' progress in governance and restructuring privatisation, as measured by EBRD indicators (Charts 6 and 7).[22] Moreover, those countries that have made strongest progress in large-scale privatisation, such as Estonia, the Czech Republic, Hungary and Slovakia, display a stock market capitalisation that is on average roughly 50% higher than in the countries with the lowest degree of progress in these areas (excl. Slovenia).

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[17] For an overview of stock markets in the transition process see Claessens et al. (2000).

[18] At that time these countries were not yet separate states. Also in Malta the stock exchange was founded in 1992.

[19] See Classens and Djankov (1999).

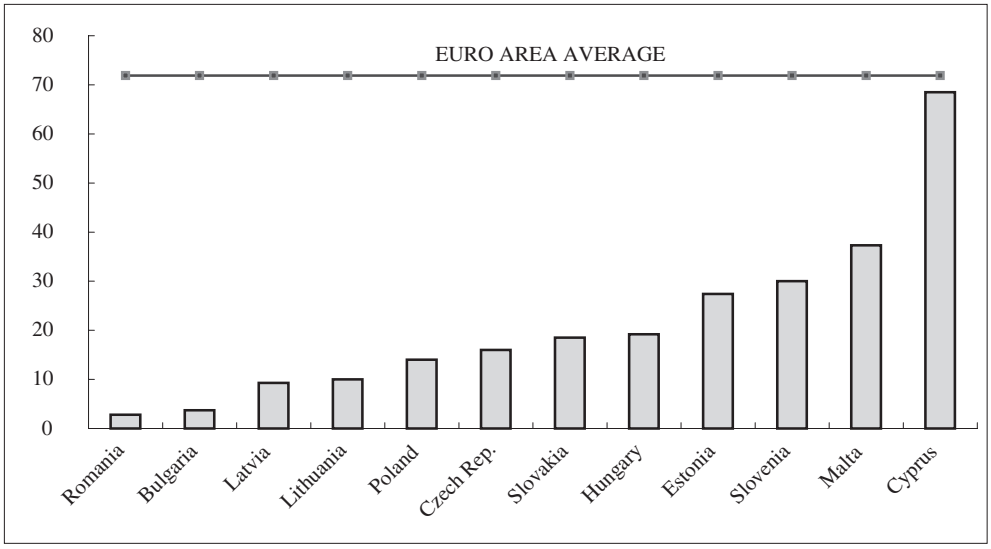
[20] In absolute terms, the number of listed firms fell from 1,590 in 1996 to 280 in 1997 (see the chapter on the Czech Republic in this volume).

[21] It should be noted, however, that privatisation strategies were not uniform over the transition period. For example, Poland switched in 1996 to a mass privatisation scheme, whereas the Czech Republic and Slovakia switched to a strategy relying on strategic foreign investors when privatising their banking system.

[22] Corporate governance as defined by the EBRD relates to effective corporate control exercised through domestic financial institutions and market participants, fostering market-driven restructuring. See EBRD (1998).

Chart 5: Stock market capitalisation (2001)

(% of GDP)



Sources: ECB, International Federation of Stock Exchanges and Accession Countries' National Central Banks and Stock Exchanges.

There are several reasons why stock markets play a much smaller role in accession countries than, for example, in the euro area. First, and most importantly, markets have a much shorter history of development (often significantly less than ten years), as their setting-up required enterprise restructuring, privatisation and the establishment of an appropriate legal and regulatory framework – including corporate governance and shareholder protection – which were multi-year processes. Second, foreign direct investment has been an important element in the transition process and has often been an alternative to domestic financing. Third, several countries have experienced a renewed recession after the initial output decline following the collapse of the planned economic system. For example, growth rates were

Chart 6: Stock market capitalisation vs. progress in large scale privatisation

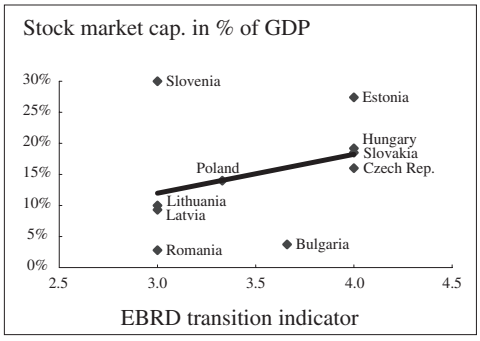
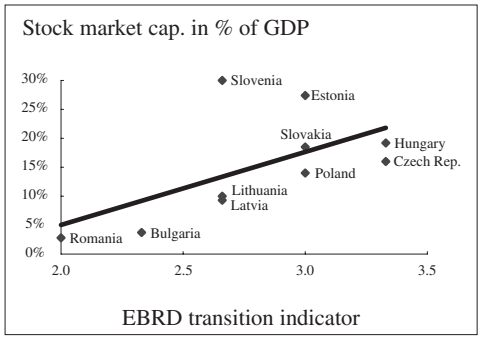


Chart 7: Stock market capitalisation vs. progress in governance and restructuring



Sources: Accession Countries' National Central Banks and Stock Exchanges, and EBRD.

negative again in the second half of the 1990s for at least two years in Bulgaria, the Czech Republic and Romania, with a further adverse effect on corporate profitability.

Turning to more country-specific factors, the mass privatisation scheme via vouchers, most prominent in the Czech Republic, failed, as the bulk of enterprises initially listed turned out not to be viable. The crisis of stock markets in mass privatisation schemes, of which similar experiences were made in Bulgaria, Romania and Slovakia, has had a negative effect on public confidence in stock markets until today. At the other end of the spectrum, Estonia is an interesting case of sustained stock market development, despite the small size of the economy. Two specific factors have helped the Estonian market: the stock exchange merged with that in Helsinki (to become "Hex-Tallin") and the strategic foreign owner (Swedbank) of the largest Estonian corporation (Hansapank) decided to acquire only 60% of the shares and leave the remaining shares floating. The first factor allowed Finnish investors to participate in the Estonian market at minimal information and transaction costs and thereby helped to enlarge the investor base; the second factor implied that shares remained in the domestic market even after foreign acquisition.

Liquidity levels in most segments of accession countries' financial markets (including foreign exchange and money markets) are relatively low. Stock market turnover in relation to capitalisation – often used as a rough proxy for liquidity – is somewhat lower than in many other stock markets, but is also low in absolute terms, given the small size of the markets. For example, the *annual* turnover of all stock exchanges of accession countries together (€43 billion in 2001) is roughly equivalent to ten days of turnover in the Dax shares at Deutsche Börse,[23] with the annual turnover in Poland being equivalent to five days, and in the Czech Republic and Hungary each being equivalent to about two days. Moreover, turnoverhas been declining on most stock exchanges of accession countries in recent years, as the domestic base of institutional and individual investors has remained narrow, and most markets have not reached a sufficient critical mass to attract foreign investors. In the first half of 2002, this picture changed somewhat, as activity in stock markets in central and eastern Europe picked up and most indices recorded gains due to progress in macroeconomic convergence and the accession process as well as some "positive contagion" from the crisis in Argentina that contributed to a reorientation of emerging market funds to Europe.

Turning to bond markets, their role has been limited, mainly as a result of low levels of outstanding government securities, in turn a consequence of the combination of low levels of marketable debt carried over from the planned regimes and overall prudent fiscal policy since then. Even though fiscal deficits have been high in some countries in certain years, the level of general government debt outstanding at end-2001 amounted to only around 37% of GDP (compared with an average of 69% of GDP in the euro area). The low level of government bonds may also have constrained the development of the corporate bond market, owing to the absence of government securities that could serve as benchmark instruments for corporate securities.

Liquidity issues are also relevant for bond markets. A liquid secondary government bond market only exists in the three largest accession countries, the Czech Republic, Hungary and Poland, while instruments of other accession countries' governments are mostly bought in the primary market and held until maturity. Moreover, in some countries with small bond markets, only short-maturity bonds are issued. Liquidity is even lower in the corporate bond market, as the outstanding volume of corporate bonds is particularly small.

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[23] On average in 2001, daily turnover in the Dax (top 30 companies) of Deutsche Börse AG was about €4 billion.

As regards foreign currency-denominated bonds, these instruments have recently gained significance in accession countries. Spreads on these instruments have fallen considerably since the beginning of 2001 against the background of broadly sound institutional and structural reforms as well as policies well entrenched in the framework of EU accession.

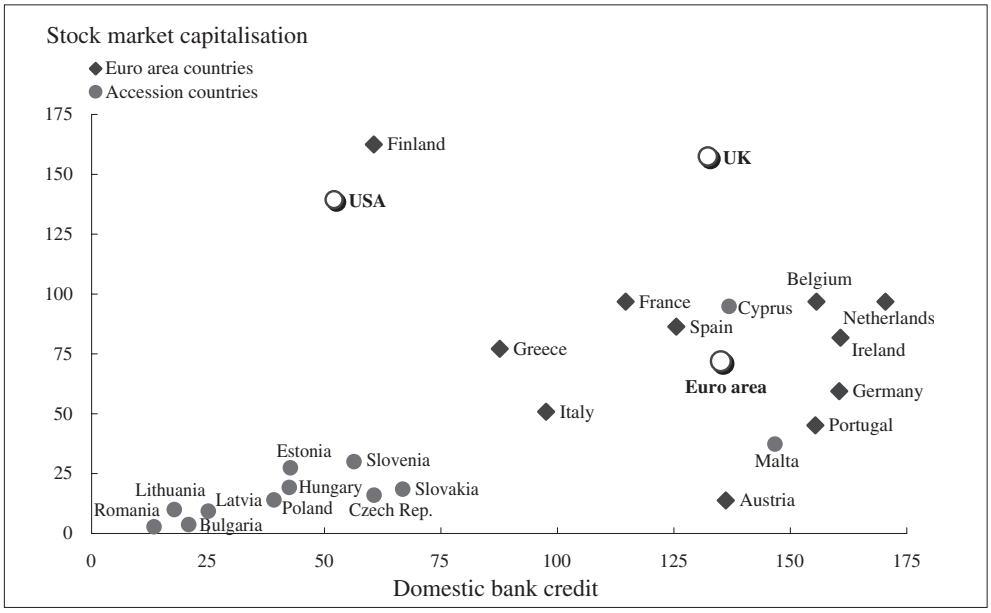
2. Strong dominance of the banking sector

Recent studies have revived the discussion about the advantages of bank-based versus market-based financial systems. Empirical evidence, however, suggests that neither system can *per se* be regarded as more appropriate than or superior to the other. The establishment of a proper legal and regulatory framework for financial services – i.e. establishing proper accounting standards, reinforcing minority shareholder rights and property rights, etc. – is generally regarded as more important than considerations as to whether stock markets or banks are better suited to supporting economic development. Indeed, the main finding of related studies is that the choice between banks and markets is less relevant than the adequate complementary provision of financial services, which appears to be the most beneficial device for sustained economic development.[24] Still, the composition of the financial sector is relevant, as different segments can react differently to shocks.

The financial systems in accession countries remain heavily bank-based after one decade of transition, and the dominance of the banking sector – or the corresponding underdevelopment of capital markets – is even more pronounced than in some euro area countries that are known for

Chart 8: Banking sector vs. stock market

(% of GDP)



Sources: ECB, IMF's International Financial Statistics, International Federation of Stock Exchanges and Accession Countries' National Central Banks and Stock Exchanges (Luxembourg is not displayed but included in the euro area average).

[24] See, for example, Levine (1997).

their bank-based systems (Chart 8).[25] For example, the relation of domestic bank credit to stock market capitalisation is about 2.8 in accession countries, compared with about 1.8 in the euro area. The contrast becomes even larger when considering the United Kingdom or the United States, where market financing is more important than bank financing. The financial structure of accession countries is therefore much closer to continental European financial systems than to Anglosaxon systems.

The gap between bank-provided financing and market-provided financing increases even further in accession countries once international linkages are considered as well. Various data on financial intermediation via foreign banks and foreign stock markets suggest that bank financing from abroad is even more important than market financing from abroad. Of the accession countries, Bulgaria and Romania have the most heavily bank-based systems, essentially because the stock market plays a negligible role with a capitalisation of less than 5% of GDP. The second group of heavily bank-based systems is led by the Czech Republic and Slovakia, due to the relatively larger size of the banking systems in these two countries within the group of accession countries and despite non-negligible capital markets.

3. High degree of foreign involvement

As already mentioned above in the review of the banking sector and capital markets, there is a strong presence of foreign owners and foreign investors. A high degree of foreign involvement can be observed in almost all financial market segments of accession countries. It is most visible in the domestic banking sector, which is predominantly in foreign ownership in practically all countries, but foreign involvement extends far beyond ownership in domestic banking.

Dominant foreign ownership in accession countries' commercial banks is a feature that sets accession countries apart from all current EU members, where cross-border ownership is limited. In the accession countries, as a result of transition, numerous banking crises and extensive opening of the domestic system to foreign direct investment, ownership in commercial banks has been largely converted from public to private and from domestic to foreign. The privatisation process, which in many countries had been delayed for a number of years by a combination of weak balance sheets, opposition from vested interests, and lack of clarity in legal frameworks and oversight, has gained significant momentum in recent years and can be regarded as largely completed in practically all countries. Major efforts and funds from public authorities to restructure and recapitalise the banking system have been essential to advance this process, and the degree of privatisation in accession countries has even exceeded the degree of private ownership in the banking system of some euro area countries.[26]

At present, foreign investors own more than two-thirds of the banking system in accession countries. Foreign ownership implies an effective control of over more than one-half out of the roughly 300 commercial banks in the region and is heavily geared towards the larger institutions. In most accession countries, at least three out of the top five banks are foreign-owned (this information is based on 2001 data and subject on ongoing changes in the ownership structure; see Table 2). In particular, in the Baltic States all major private banks

[25] The dominance of banks in the provision of financial services is also reflected in the greater weight of bank claims than security holdings in household portfolios; see Iakova and Wagner (2001).

[26] On average in accession countries, private ownership accounts for more than three-quarters of banking sector capital, compared with, for example, private ownership amounting to only about 60% of the banking capital in Germany.

Table 2: Strategic ownership of the largest commercial banks in accession countries (2001)[1]

	Bank	Main shareholder	Share[2]
Bulgaria	Bulbank A.D.	Unicredito (IT)	full
	United Bulgarian Bank	National Bank of Greece (GR)	full
	DSK Bank	Public	full
	Bulgarian Postbank	ALICO/CEH Balkan Hold.s LTD (CY)	full
	SG Expressbank	Société Générale (FR)	full
Czech Republic	CSOB	KBC (BE)	dominant
	Ceska Sporitelna	Erste Bank (AT)	dominant
	Komercni Banka	Société Générale (FR)	dominant
	Hypovereinsbank CZ	Hypovereinsbank group (DE)	full
	GE Capital Bank	GE Capital (US)	full
Estonia	Hansabank	Swedbank (SE)	majority
	Eesti Uhispank	SEB (SE)	full
	Sampo Leonia Bank	Sampo Leonia (FI)	full
Hungary	OTP	Dispersed private ownership	n.a.
	Kereskedelmi és Hitelbank	KBC (BE)	majority
	MKB	Bayerische Landesbank (DE)	dominant
	Central-Europ. Intern. Bank	COMIT and BancaIntesa (IT)	full
	ABN-AMRO	ABN AMRO (NL)	full
	General Banking & Trust	Gazprombank (RU)	significant
Latvia	Parekss Banka	Europe Holding (GB)	majority
	Latvijas Unibanka	SEB (SE)	full
	Aizkraukles	Board of Directors	significant
	Rietumu Bank Group	Orchard finance (GB)	full
Lithuania	Vilniaus Banka	SEB (SE)	full
	Lietuvos Taupomasis	Swedbank (SE)	full
	Bank Snoras	Incorion Investments (LT)	majority
	LZUB Agricultural Bank	Nord/LB (DE)	dominant
Poland	Bank Pekao	Unicredito (IT)	majority
	Bank Handlowy	Citibank (US)	dominant
	PKO BP	Public	full
	BPH	Hypovereinsbank group (DE)	dominant
	BRE	Commerzbank (DE)	majority
Romania	Romanian Commercial Bank	Public	
	Banka Romana pentru Dezvolatare	Société Générale (FR)	majority
	Bank Post SA	EFG (GR)	minority
	Commercial Bank Ion Tiriac	Redrum Int. Investments	significant
	Banca Agricola	Public	
Slovakia	VUB	Intesa (IT)	full
	Slovenska Sporitelna	Erste Bank (AT)	dominant
	Tatra Banka	RZB (AT)	dominant
	Citibank	Citibank (US)	full
	Hypovereinsbank	Hypovereinsbank group (DE)	full
Slovenia	NLB	KBC (BE)	significant
	NKBM	Public (65% share privatised in 2001/2002)	
	SKB banka	Société Générale (FR)	full
	Abanka	Dispersed private ownership	n.a.
	Banka Koper	Dispersed private ownership	n.a.

Source: ECB staff compilation, based on various sources including accession countries' central banks, Bank Scope database, Bank Austria studies (e.g. "Comparison of banks in Central and Eastern Europe 2001") and reports of other commercial banks.

1) The information in this table has been collected from various sources and mostly refer to late-2001. Due to sometimes limited comparability between sources and ongoing changes in the ownership structure, the information should be treated with caution.

2) Ownership shares are defined as follows: full 95-100%; dominant 60-94%; majority 50-59%; significant 25-49%; minority 5-24%; n.a. = non available.

Table 3: The 10 largest international banks in central and eastern Europe
(end-2001)

Ranking	Bank	Country	Total assets (EUR billion)	Share in total assets of foreign banks
1	KBC	BE	24.3	11.3%
2	Bank Austria / Creditanstalt[1]	AT	24.6	10.0%
3	Erste Bank	AT	20.4	9.5%
4	Unicredito	IT	18.1	8.4%
5	Citibank	US	14.9	6.9%
6	Société Générale	FR	14.7	6.8%
7	ING	NL	12.4	5.8%
8	Raiffeisen	AT	11.1	5.2%
9	Banca Commerciale Italiana / Intesa	IT	9.9	4.6%
10	Commerzbank	DE	7.8	3.6%

Source: Bank Austria (Comparison of Banks in Central and Eastern Europe 2001).
1) Part of Hypovereinsbank group (DE)

except for the third-largest Latvian and Lithuanian banks are controlled by foreign investors. In central Europe, all top five commercial banks in each of the five countries display dominant shares of foreign capital (65 to 100% of capital), except for one private Hungarian bank, one Polish bank and two banks in Slovenia. In Bulgaria, only the third largest institution is state-owned, while all other banks are in foreign hands. In Romania three out of the top five institutions have a majority of foreign ownership.

Overall, the Western banking groups currently most actively involved in accession countries' banking systems are KBC (Belgium), Bank Austria/Creditanstalt (Austria) that an part of the Hypovereinsbank group (Germany), Erste Bank (Austria) and Unicredito (Italy). Several other international banks also have a significant presence in the region (Table 3).

Although foreign involvement is most visible in the banking system, it is also highly relevant for other segments of the financial sector. For example, a substantial share of government and enterprise financing comes from abroad and many major firms are listed on stock exchanges outside accession countries – often in Frankfurt, Luxembourg or Vienna – with some of them even listed on several stock exchanges abroad.[27] Moreover, access to bank financing and capital markets abroad is significantly alleviating domestic financing constraints. Many of the larger corporations in accession countries are part of multi-national companies and receive financing from their home bases.

Furthermore, much of the activity on financial markets, including foreign exchange, stock and bond markets, is performed by foreign participants, implying also that accession countries' capital markets are significantly exposed to developments in larger international markets.

[27] For example, about 40-50 corporations each from Poland, the Czech Republic and Hungary are listed abroad, for a total of about 60-80 listings (owing to multiple listings at several stock exchanges). Although these figures do not appear large, it should be noted that the enterprises concerned are typically among the largest ones of the respective countries.

IV. Conclusions

This chapter has highlighted three key features of financial sectors in EU accession countries: the relatively low level of financial intermediation, the strong dominance of the commercial banking sector over capital markets, and the high and widespread degree of foreign involvement in the financial sector. The chapter has also outlined the main reasons that explain this current structure and highlighted the relevance and scope for financial development in accession countries.

A number of conclusions can be drawn from the main features of financial structure. First, the banking sector remains fundamental for the financial and economic development of the accession countries, as capital markets in most cases provide little alternative to financing and investment via banks. Sound banking supervision is therefore crucial to avoid any threat to banking instability, as this would immediately translate into financial instability and a credit crunch in the entire economy, given the absence of significant alternatives to bank financing. Second, the level of financial intermediation is bound to rise considerably over the coming years as the economies will grow and financial intermediation will deepen. Part of this rise will come from the completion of transition and fading of transition-related factors of the past, while other parts will come from a gradual catching-up in income levels and rising economic development. In line with findings from other emerging market economies, financial development as such could well be conducive to enhancing growth prospects and advancing the catching-up process. To foster such development, without compromising hard-won financial stability, it seems crucial at this stage to complete the transition agenda, including corporate restructuring, improvements in corporate governance and the implementation of well-functioning regulatory and legal frameworks. Finally, the high degree of foreign involvement implies a strong integration of the economies with western Europe, which may have been an important reason behind the low contagion effects from emerging market crises observed over the past few years, but it also makes accession countries' real and financial developments highly dependent on developments in the current members of the European Union and in particular their banking systems. Any shocks to those systems or to individual banks that are strategic foreign investors in central and eastern Europe could have repercussions on the subsidiaries and branches of the accession countries. Against this background, a close cooperation among supervisors seems crucial and is in particular in the interest of accession countries.

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The financial sector in Bulgaria: structure, functioning and trends

Victor Yotzov

Bulgarian National Bank

I. Introduction

Bulgaria's weak macroeconomic performance in the first half of the 1990s culminated in a severe economic crisis in 1996 and early 1997. The banking sector was at the heart of the crisis – it was plagued with non-performing loans, weaknesses in governance and unsound credit policies to finance consumption, income transfers, price subsidies and inefficient production. Nine out of the ten state-owned banks, which at that time accounted for over 80% of banking sector assets, had negative capital, and about half of the private banks were technically bankrupt as well.

Early attempts to restructure the sector included bank closures or recapitalisation, the signing of a Memorandum of Understanding and changes in the regulatory and legal framework. The credibility of the package, a major element of which was conservatorships imposed by the Bulgarian National Bank (BNB) in September 1996, was, however, undermined by the failure to implement key supportive policies such as the privatisation of state-owned banks and enterprises and the closure of loss-making enterprises. In the end, the banking crisis led to the closure of 17 banks, accounting for about one-third of the banking system.

During the banking crisis, the BNB increased liquidity injections to support the weakening banking sector. It attempted to sterilise liquidity through open market operations and support the exchange rate via interventions on the foreign exchange market. The overall result was, however, not successful: the open market operations resulted in interest rate hikes that aggravated the servicing of the domestic debt, while the foreign exchange interventions depleted the scarce foreign exchange reserves.

The escalating political turmoil in late 1996/early 1997 and a rising budget deficit made monetary control impossible. Faced with plummeting tax revenues and escalating debt service costs, and in order to avoid default on the domestic debt, the growing budget financing needs were met with central bank credit. The monetisation of the deficit, a rapidly depreciating currency and growing political unrest stimulated inflationary expectations, and by March 1997 inflation had soared to an annualised rate of over 2000%.

Under these circumstances, a consensus developed that another money-based stabilisation attempt would be equally unsuccessful and that stabilisation would need simple disciplinary rules and a fixed exchange rate to cure the problems of soft budget constraints related to commercial bank financing and the lack of fiscal discipline. Indeed, the subsequent change in political leadership, the introduction of the currency board arrangement (CBA) in July 1997, and the following implementation of sound macroeconomic and structural policies succeeded in restoring confidence, lowering inflation and resuming growth.

Under the CBA, the Issue Department of the BNB is allowed to hold only foreign (not domestic) assets, and is committed to buying and selling foreign or domestic currency at the

fixed exchange rate. As a result, the BNB is no longer able to control the money supply, and the supply of domestic currency is now determined by demand at the existing exchange rate. The implication for the fiscal authorities is that the deficit can be financed only through external borrowing or the sale of state assets, which obviously entails more fiscal discipline and leads to a strengthening of the fiscal position.

As for commercial banks, they are no longer refinanced by the BNB in the event of a liquidity crisis. However, the BNB still has access to IMF funding for the possible extension of a loan to the Ministry of Finance, and still has a Banking Department with a limited refinancing facility, which can be used in case of an emergency or systemic risk. Finally, it was decided that the government should hold the majority of its accounts with the BNB rather than with commercial banks, thereby reducing the volatility of the monetary base when IMF tranches are received or foreign debt payments are made.

Since the introduction of the currency board in July 1997, money supply growth has been linked mainly to balance of payments movements and inflation has dropped sharply, reflecting also the revised expectations of agents. Progress in macroeconomic stabilisation has been considerable under the currency board. In the first two years, its foreign reserves doubled, and there have been clear benefits in terms of greater transparency of economic policy. In particular, the achievements on the fiscal consolidation front have been impressive, with sizeable reductions in interest payments eventually leading to a budget surplus.

II. Banking sector

1. Dynamics and structure of the banking sector

During most of the communist era, all banking functions were concentrated in the BNB, which had absorbed through the process of nationalisation all existing commercial banks. At the end of 1989, following the dramatic political changes that year, the banking system moved to a two-tier system with a central bank on one tier and the commercial banks on a second tier. The sector-specific banks were then transformed into universal banks, which provided loans to all sectors of the economy.

These more independent (but still state-owned) commercial banks quickly proved to be highly inefficient. They lacked lending expertise as well as critical size. To overcome these shortcomings, the government established the Bank Consolidation Company (BCC) to encourage the formation of larger state-owned banks through mergers.

At the same time, and outside this consolidation process, many new private banks entered the market. Since only limited regulatory controls were in place at the time, these banks operated in an environment without the regulatory supervision found in developed market economies. In many instances the financial resources needed to open these private banks were borrowed from state-owned banks (or from other undetermined sources). The origins of the private banks would shape their later behaviour and contribute to the 1996/97 financial crisis.

Table 1 shows the number and type of banks in Bulgaria over the 1991-2001 period. The patterns of entry and exit reflect the changing legal and supervisory structure. To further strengthen the banking sector, the IMF and the World Bank encouraged the government to initiate a comprehensive programme to privatise all state-owned banks. The earlier policy carried out during the 1991-95 period when the Bulgarian banking community was given an opportunity to develop in an environment of restrictions on foreign bank entry was deemed a failure. The goal under the new policy was to quickly privatise the state banks and to foster

Table 1: Number of commercial banks by category

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Large banks [1]	**3**	**4**	**6**	**9**	**9**	**6**	**6**	**6**	**7**	**7**	**7**
Ownership by type											
State	3	4	6	9	9	6	5	4	3	2	2
Private	0	0	0	0	0	0	1	2	4	5	5
Ownership by country											
Bulgarian	3	4	6	9	9	6	5	4	3	2	2
Foreign	0	0	0	0	0	0	1	2	4	5	5
Small and medium-sized banks	**75**	**76**	**34**	**29**	**28**	**19**	**22**	**20**	**20**	**20**	**21**
Ownership by type											
State	69	65	19	6	3	1	1	1	3	2	2
Private	6	11	15	23	25	18	21	19	17	18	19
Ownership by country											
Bulgarian	75	76	34	29	25	14	14	12	9	8	8
Foreign	0	0	0	0	3	5	8	8	11	12	13
Branches of foreign banks	**0**	**0**	**0**	**2**	**4**	**4**	**5**	**7**	**7**	**7**	**7**
Savings banks	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**0**	**0**	**0**
Total	**79**	**81**	**41**	**41**	**42**	**30**	**34**	**34**	**34**	**34**	**35**

Source: BNB
[1] Assets > EUR 200 million

competition through extensive foreign ownership of the banks. With the privatisation of Bulbank, the largest bank in Bulgaria, only two large banks were still under state control at the end of 2001. These state-owned banks hold less than 20% of total banking system assets.

Since most banks were privatised only between 1998 and 2000, it is still too early to determine whether this strategy will be successful. If foreign banks bring experience and new products that foster competition, this will be a successful policy. But if foreign banks do not support Bulgarian enterprises, channel scarce funds abroad, treat foreign companies preferentially and do not develop a full range of banking services, then the economy will continue to suffer from an inadequate financial system.

Bank behaviour during the pre- and post-crisis period displays a different pattern. In the 1991-95 period, banks borrowed heavily from the BNB or from one another through the interbank market. As a result the share of funds attracted from non-financial institutions was only 25-50% of total liabilities. At the same time, lending policies were lax as banks came under government pressure to extend loans to state-owned enterprises and to businesses with relationships to bank management teams. Bank claims on non-financial institutions were in the range of 40-50% of total bank assets, a relatively high share compared with the post-crisis period and with the experience in other countries in transition.

These ratios have changed significantly since 1996. Under the currency board the BNB cannot make loans to commercial banks, and the interbank market performs its normal function of providing only short-term and emergency financing. As a result, the share of bank funds attracted from non-financial institutions has increased to over 70% of all liabilities (Table 2). At the same time, banks have implemented new stricter lending requirements. Given the high risk of lending to the real sector of the economy and more conservative bank credit policies, the relative share of bank claims on non-financial institutions has declined to roughly 30% of all assets.

Table 2: Consolidated balance sheets of commercial banks

	1998		1999		2000		2001	
	EUR million	% of total	EUR million	% of total	EUR million	% of total	EUR million	% of total
Assets								
Vault cash and current Accounts with the BNB	402.8	10.4	469.4	11.2	376.8	7.6	658.0	10.5
Claims on banks and Other financial institutions	1,278.4	32.9	1,363.6	32.4	1,980.7	39.8	2,070.4	33.1
Securities in trading portfolio	649.9	16.7	532.3	12.7	544.5	10.9	777.8	12.4
Securities in investment portfolio	242.6	6.2	319.0	7.6	223.4	4.5	266.2	4.3
Credits to non-financial institutions and Other clients	943.7	24.3	1,226.6	29.2	1,541.0	31.0	2,119.7	33.9
Total earning assets	*3,114.6*	80.1	*3,441.5*	81.9	*4,289.7*	86.2	*5,234.2*	83.8
Other assets	193.4	5.0	113.0	2.7	103.3	2.1	120.3	1.9
Fixed assets	176.0	4.5	180.5	4.3	208.1	4.2	235.7	3.8
Total assets	**3,886.9**	**100.0**	**4,204.4**	**100.0**	**4,979.0**	**100.0**	**6,248.3**	**100.0**
of which pledged assets					270.0	5.4	346.1	5.5
Liabilities and capital								
Deposits by banks and other financial institutions	301.9	7.8	325.7	7.7	378.9	7.6	463.9	7.4
Deposits by non-financial Institutions and other clients	2,525.1	65.0	2,797.3	66.5	3,269.2	65.7	4,421.8	70.8
Total deposits	*2,827.0*	72.7	*3,123.0*	74.3	*3,647.6*	73.3	*4,885.7*	78.2
Other liabilities	483.6	12.4	428.0	10.2	569.6	11.4	516.5	8.3
Total liabilities	*3,310.6*	85.2	*3,550.9*	84.5	*4,217.6*	84.7	*5,402.2*	86.5
Capital	420.7	10.8	454.5	10.8	559.9	11.2	616.8	9.9
Reserves	155.6	4.0	198.9	4.7	201.4	4.0	229.2	3.7
Total own capital	576.3	14.8	653.4	15.5	761.3	15.3	846.0	13.5
Total liabilities and Own capital	**3,886.9**	**100.0**	**4,204.4**	**100.0**	**4,979.0**	**100.0**	**6,248.3**	**100.0**
Off-balance sheet liabilities	376.2	9.7	548.6	13.0	604.9	12.1	782.2	12.5

Source: BNB

In retrospect, it is also clear that the banking system performed its intermediation function very poorly during the pre-crisis period. Money deposited with banks was lent to businesses that did not repay the loans. This is a strong indication that savings were not invested properly. Thus far for a large part of the transition period the banks have not demonstrated widely that they have both the expertise and the motivation to perform sound intermediation (Tables 3 and 4).

2. Efficiency of the banking system

Because it is difficult to define exactly what product banks produce, it is hard to identify a single indicator of overall banking efficiency. Table 5 presents information on the two most common indicators of bank efficiency: return on assets (ROA) and return on equity (ROE).

Table 3: Credit portfolio of commercial banks
(% of total credit unless otherwise indicated)

	1998	1999	2000	2001
Total credit (EUR million)	2,334.2	2,577.9	3,781.0	4,419.4
Standard	83.5	86.2	91.8	92.3
Watch	4.7	4.4	2.8	2.9
Substandard	2.4	1.4	1.2	0.8
Doubtful	0.7	0.9	0.8	0.7
Loss	8.6	7.2	3.4	2.7
Provisions	12.3	10.0	6.5	5.2

Source: BNB

Table 4: Domestic credit ratios
(in % of GDP unless otherwise indicated)

	1995	1996	1997	1998	1999	2000	2001
Domestic credit in % of M3	108.7	153.4	85.3	64.1	57.6	50.1	47.2
Domestic credit	72.1	115.0	30.1	19.6	18.6	18.3	21.5
Government sector	32.2	51.5	9.6	2.4	0.7	1.9	1.7
Non-government sector	39.9	63.4	20.5	17.2	17.9	16.4	19.8
Claims on non-financial public enterprises	18.3	26.5	7.4	4.4	3.1	1.7	1.3
Claims on private enterprises	20.4	35.3	11.6	10.4	12.2	12.2	14.8
Claims on households	0.6	0.2	1.0	2.2	2.3	2.4	3.4
Claims on non-bank financial institutions	0.5	1.4	0.5	0.2	0.2	0.1	0.1

Source: BNB

The data have been drawn from the consolidated balance sheets and the income statements of two groups: (a) large banks and (b) small and medium-sized banks.

The ROA ratio in the banking system as a whole over the period surveyed varied between –0.3% and 5% whereas the ROE ratio ranged from –3.7% to 116%. The high values for ROE in 1996 and 1997 were due to hyperinflation, when high interest rates led to high nominal returns. ROA values did not rise because the nominal value of the assets also rose with inflation. Capital, however, was not revalued along with inflation, so that higher nominal interest income raised the ROE ratio. Profits created by inflation were taxed as normal corporate profits at the same time as banks were losing business in the crisis. After-tax returns were significantly lower than the inflation rate, which decapitalised the banks in real terms.

Following the crisis, inflation was low as the macroeconomic situation stabilised. Banks reported positive real ROE, i.e. higher than inflation. Large banks reported higher efficiency ratios than small and medium-sized banks throughout the period. Sometimes the ROA and ROE values for large banks were several times larger than the ratios for small and medium-sized banks. Even in the "hyperinflationary" period in 1997, small and medium-sized banks experienced losses, while large banks registered profits. The higher efficiency of large banks is not surprising given the economies of scale in banking. Also, large banks reported a higher leverage, indicating that they were able to attract more money per unit of capital. Until 1999

Table 5: Bank's efficiency ratios
(%)

		Large banks [1]	Small and medium-sized banks	Total
1995	ROA	-0.1	-1.3	-0.3
	ROE	-2.6	-6.7	-3.7
1996	ROA	3.3	2.0	3.2
	ROE	86.2	13.2	65.2
1997	ROA	6.8	-0.6	5.0
	ROE	303.1	-6.0	115.5
1998	ROA	2.0	0.9	1.7
	ROE	36.5	6.9	21.5
1999	ROA	3.0	1.4	2.4
	ROE	30.2	10.5	20.9
2000	ROA	4.8	0.8	2.8
	ROE	29.6	5.7	22.6
2001	ROA	3.4	0.7	2.6
	ROE	24.4	5.22	19.3

Source: BNB
[1] Assets > EUR 200 million

the funds borrowed by large banks per unit of capital were three to four times higher than for small and medium-sized banks.

These findings support the contention of some analysts that there are too many banks in Bulgaria, which are too small and inefficient. While further consolidation can be encouraged by government policy, the long-term stability of the banking sector would be enhanced if further consolidation were left to the market.

3. Competition in the banking sector

The level of competition in a sector is often gauged by the degree of concentration, especially among the largest firms in an industry. Measured by commonly used indicators, concentration followed a similar pattern over the pre-crisis and post-crisis periods. From 1991 to 1995 concentration levels fell; they rose in the immediate post-1995 period as insolvent banks were closed, and thereafter decreased again over the 1997-2002 period.

There are other aspects of banking sector competition. Over the first decade of transition, bank services have become more diverse. New types of deposits are now offered, credit and debit cards are available and e-banking services are being developed, although on a very limited scale. While these services cannot match the diversity and quality of services in the developed market economies, they are expanding.

While banks have competed to supply new financial services, price competition has been less evident, as the spread between deposit and loan interest rates was high throughout the 1990s. In the pre-crisis period the relatively high interest rate spread reflected the financial difficulties of troubled state-owned banks. Interestingly, the new private banks did not opt to compete by offering narrower spreads. Instead, competition was directed towards offering

new services, and banks made an all-out effort to capture new customers. Since 1997, with the establishment of the currency board, spreads have fallen but they remain very high at 8-9 percentage points. These spreads are especially high considering that inflation has stabilised and interest rates on deposits have fallen to a level of 3-4 percentage points.

The reasons for these large spreads deserve further study. Low deposits rates discourage savings and high credit rates discourage investment. Two possible explanations are: (1) a lack of competition and (2) a risky loan environment. The banks have a dominant position from the viewpoint of the saver since the capital market still does not provide a viable alternative. Private sector pension funds are only beginning their operations, investing abroad was forbidden until 2000, and it is not straight forward for individuals to invest in government bonds. In short, there are still no significant alternatives to bank deposits. Furthermore, there is little competition within the banking sector. With the exception of the largest cities, there are only one or two bank branches in a town, which is not enough to generate effective competition.

On the credit side, high interest rates may reflect high risks related to changing ownership structure, changing management, limited markets, and unstable economic conditions that are still part of the economic landscape in Bulgaria. But lack of competition may be an important issue here as well. Because the capital markets are still so underdeveloped, enterprises that need credit have no other place to go but to the banks.

III. Non-banking sector

1. Money market

The interbank market includes transactions between primary dealers in the deposit market (collateralised or uncollateralised) as well as outright sales and repo transactions in government securities. The average monthly turnover on this market is increasing, but as a ratio of the outstanding stock of liabilities is quite low by international standards (even in central and eastern Europe), reflecting a low level of financial intermediation in the economy.

The deposit and repo transactions with a maturity of less than one week are most prevalent, comprising more than 90% of the market. Since the banking crisis in 1996/97, the proportion of interbank deposits that are collateralised has been falling steadily, reflecting increased confidence between counterparties. The large domestic banks have the largest deposit base, and hence are the main suppliers of liquidity to the foreign-owned banks.

There is some degree of dispersion in interest rates on the interbank market, reflecting both a differentiation of risk and differences in market power. For instance, the average interest rate on repo transactions is often higher than the rate on uncollateralised deposits, and collateralised deposits are also frequently conducted at higher interest rates than uncollateralised. This reflects the fact that some of the smaller domestic banks with larger stocks of government securities face counterpart limits that other banks have in place, which restrict their ability to make uncollateralised interbank transactions. Thus smaller banks must conduct either a repo transaction or a collateralised transaction. Since other banks are aware of these limitations, the smaller banks are effectively segmented from the rest of the interbank market, and consequently pay a higher price for interbank credit.

The shortage of available government securities contributes to the segmentation in the market, since the volume of transactions for many smaller banks is constrained by their ability to conduct repo operations. With a larger supply of securities, banks would be able to

Box 1: The State Securities Commission

The State Securities Commission (SSC) was established to ensure the protection of investors' interests and to promote the development of the securities market. The seven officers of the Commission are appointed by the Council of Ministers on the recommendation of the Finance Minister for a period of five years.

The Commission regulates the issuance of new securities and monitors transactions in securities. It oversees the establishment and operation of stock exchanges, investment intermediaries and investment companies. It also proposes and drafts new legislation. For example, the Commission deserves credit for the important role it played in bringing the new securities law in line with the EU acquis.

Licensing and supervision are at the core of the Commission's activity. Institutions regulated by the Commission are required to submit reports to the Commission on a regular basis and notify the Commission of important changes. The Commission can require the disclosure of information and/or carry out onsite inspections. If the Commission finds violations or identifies an investor who needs protection, it can authorise and impose sanctions and administrative penalties directly.

To trade on the Sofia stock exchange an intermediary must become a member of the exchange, and establish a trading post manned by stockbrokers certified by the SSC. The SSC also reviews the capital adequacy, liquidity, and managerial competence of investment intermediaries. The SSC issues two types of licences: partial licences allowing intermediaries to render brokerage services and full licences which also allow intermediaries to deal on their own account and underwrite new issues.

conduct more repo and compete more for funds from the net suppliers of liquidity in the market, as repo transactions would become a more attractive alternative to deposits with a deeper and more liquid market. A shortage of instruments, coupled with the volatility of liquidity flows from the impact of fiscal operations, necessitate a heavy reliance on foreign markets for liquidity management, further reinforcing the relatively low volumes on the domestic interbank market. This in turn undermines the development of local financial markets, as banks place a large portion of their assets abroad in search of higher certainty.

The interbank market infrastructure functions efficiently. Both the payment system and settlement arrangement provided by the BNB for government securities are viewed as cost-effective and relatively efficient by market participants; nevertheless, steps towards further improvement should be taken, especially concerning the payment system. The lack of real-time settlement information and the need of banks to have real-time balances on their accounts with the BNB limit the volume of transactions that banks are willing to conduct.

2. Capital market and capital market institutions[1]

The establishment of the currency board and the financial stabilisation that has come with it coincided with the end of the first wave of mass privatisation. This first wave was modelled on an earlier Czech programme where citizens paid a small fee for vouchers that could be

[1] This section draws heavily on Miller and Petranov (2001).

used to bid for shares in state-owned enterprises in national auctions. Once the mass privatisation auctions were concluded, there was increased pressure to develop new capital markets so that the new shares could be traded. New regulations were passed and, unlike in the Czech Republic where a regulatory agency was not immediately established, a Securities and Stock Exchange Commission (SSEC) was created in Bulgaria.

At about the same time pressures began mounting to find better ways to manage the pension system. The value of state pensions had seriously eroded during the early 1990s, and the government turned its attention to creating private institutions that could provide additional channels for retirement savings. Increased stability and lower inflation after the CBA implementation also made it easier for a private insurance market to develop. By passing new laws and making it more difficult to obtain a licence, the government was also able to reduce external (illegal) influence that had been very extensive in the insurance industry.

2.1 Laws and institutions

In June 1995 the Law on Securities, Exchange and Investment Companies (LSSEIC) was passed and actions were undertaken to create a regulatory structure and reorganise the capital market. The Securities and Exchange Commission, now the State Securities Commission (SSC) (see Box 1) was established in January 1996 and the Central Depository opened in August 1996. Following the last auctions in the first wave of mass privatisation, the Sofia Stock Exchange and the Bulgarian Stock Exchange merged and formed the Bulgaria Stock Exchange-Sofia (BSE-Sofia), which opened in October 1997.

The LSSEIC was later amended and in 2000 was superseded by the Public Offering of Securities Act. The changes incorporated in this Act reflected the experience gained during the early years of capital market development and brought the Bulgarian law into close alignment with the EU acquis. While it is too early to judge what the full impact of these changes will be, there already appears to be an improvement with regard to general corporate governance procedures.

2.2 The Bulgarian Stock Exchange in Sofia

The Bulgarian Stock Exchange in Sofia (BSE-Sofia) operates three separate markets, an official market, a free market and a bond market. In addition, there is also a separate market where shares of state-owned enterprises are sold as a part of the state's privatisation programme. The official stock market is subdivided into three segments. Although the barriers to official market listing are very low, there are still very few market participants. For individuals, trading directly in the market is relatively expensive. Few companies have tried to raise additional capital by issuing new bonds and none have tried by issuing shares.

Municipal and corporate bonds can also be listed on the bond market. New bond issues must have a volume of at least BGN 1 million (about EUR 0.5 million), and the maturity must be at least six months. Issuers of corporate bonds must have completed at least three financial years. Government securities could also be listed on the bond market but are not intensively traded at present because their market is technically organised by the BNB.

The BSE-Sofia is organised as a joint-stock company, the state has a 38% interest, and the remaining shares are owned by financial institutions, i.e. banks, investment intermediaries, financial brokerage houses and insurance companies. The BSE-Sofia is managed by a Board of Directors which is responsible for the operations of the exchange. The

BSE-Sofia is striving to improve its operation by focusing on the trading system and the clearing and settlement system. It is trying to improve its information technology systems and even create a system where remote trades can take place.

By end 2000, there were 101 licensed investment intermediaries, of which 29 were commercial banks. For such a small and shrinking market, this is a large number. Seven or eight large investment intermediaries control between 55% and 65% of the BSE-Sofia turnover and the twenty most active intermediaries account for about 80%.

An important part of the mass privatisation programme was the participation of privatisation funds. These funds collected vouchers from citizens and then used these vouchers to bid for firms in the privatisation auctions. After the first round of the mass privatisation programme concluded, these funds became investment companies.

Later, however, these companies were required to declare themselves holding companies or continue their status as investment companies. Holding companies can make loans to companies in which they hold 25% or more of the shares. Investment companies are intended to have more diversified portfolios and are not permitted to hold more than 10% of the shares in any one company.

2.3 General conditions of the capital market

In spite of the establishment of extensive market institutions and regulatory agencies, trading has been so light that it is threatening the viability of the market and raising important issues regarding the mass privatisation programme upon which the capital markets were built.

The general price level of Bulgarian shares, measured through the weekly price index of *BSE Sofia Warburg* (renamed *BSE Sofia Lazard [BSE SL]* in August 2000), indicated significant fluctuations. The largest stocks performed most successfully in the initial period.[2] The index was set at 100 in December 1997 and reached a high in May 1998 of 165, but fell rapidly to its lowest level so far of 28.7 in July 2000, reflecting the downward trend in share prices which started in mid-1999. In 2001, the market recovered somewhat, but overall activity remained depressed and the index ended the year with a value of 43.9.

Other market indicators have followed a similar trend. For instance, total market capitalisation peaked in the 2nd quarter of 1998 at EUR 1.6 billion but had fallen to EUR 0.5 billion by mid-2001. Also market activity fell over the 1999-2001 period, the number of listed companies declined and activity diminished.

As Table 6 shows, large block trades are an important percentage of overall turnover. Block trades, although recorded as taking place on the exchange, are not regular trades. These are agreements negotiated off the exchange and reflect attempts by large shareholders to gain more concentrated ownership positions. A better gauge of the liquidity of the BSE-Sofia auction market is turnover and the number of non-block market transactions. Liquidity has fallen dramatically based on both of these measures. Turnover has fallen from a high of EUR 28 million in the 4th quarter of 2000 to EUR 12 million at the end of 2001.

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[2] The Bulgarian Stock Exchange continued to cooperate in computing the *BSE Sofia Lazard* weekly index, but launched its own daily price index of shares – *SOFIX*, which was officially announced on October 23, 2000. It is calculated on a daily basis after the end of the trading session as a correlation of the sum of the market capitalisation of the companies included in the index portfolio on the current day, and the sum of the market capitalisation companies included in the index portfolio on the previous day. Since then, there are two indices representing the stock prices and they go (more or less) in line, though the daily index appears to be more vulnerable.

Table 6: Indicators of trade on BSE-Sofia

	1999				2000				2001			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Official market												
No. of companies	25	31	33	33	33	33	27	46	29	30	31	30
No. of shares (mln.)	0.546	0.611	0.265	0.928	0.467	3.906	0.260	0.222	0.175	0.162	1.726	0.856
No. of transactions	2,047	1,807	808	1,222	1,150	1,340	973	1,448	1,307	966	924	1,216
Turnover (mln. EUR)	0.74	3.88	0.33	0.80	0.45	0.77	3.07	0.12	0.12	0.09	0.70	0.50
Mkt. capitalisation (mln. EUR)	137.3	137.1	123.8	112.0	130.7	166.2	141.7	145.0	138.4	124.6	119.1	100.3
% GDP	1.19	1.18	1.05	0.92	1.04	1.29	1.06	1.06	0.99	0.87	0.80	0.66
Free market												
No. of companies	844	844	826	828	811	734	545	478	483	465	407	372
No. of shares (mln)	1.287	0.624	0.479	2.804	0.81	1.266	0.375	5.908	1.943	1.802	2.901	1.761
No. of transactions	3,982	2,711	935	1,757	1,494	1,463	809	1,318	1,621	1,668	1,922	2,252
Turnover (mln. EUR)	5.80	2.12	1.43	7.39	3.35	2.44	0.65	5.58	2.94	3.855	9.902	2.672
Mkt capitalisation (mln EUR)	742.4	677.0	615.1	590.0	589.0	517.4	467.3	512.8	552.0	489.3	512.2	464.7
% GDP	6.4	5.8	5.2	4.9	4.7	4.0	3.5	3.7	3.9	3.4	3.5	3.1
Subtotal												
No. of shares (mln)	1.833	1.235	0.744	3.732	1.277	5.172	0.634	6.131	2.118	1.964	4.627	2.617
No. of transactions	6,029	4,518	1,743	2,979	2,644	2,803	1,782	2,766	2,928	2,634	2,846	3,468
Turnover (mln. EUR)	6.53	6.00	1.76	8.19	3.80	3.22	3.72	5.70	3.064	3.945	10.601	3.169
Block trading												
No. of shares (mln)	4.33	1.82	1.60	2.85	2.65	5.82	1.38	18.06	11.53	17.21	14.59	12.70
No. of transactions	51	42	14	46	46	40	29	157	132	102	58	69
Turnover (mln. EUR)	19.51	8.57	1.91	8.14	7.58	4.04	6.95	27.98	13.56	14.22	18.73	12.01
Bond market												
No. of companies			1	1	1	1	1	2	2	2	2	2
No. of bonds			3,235	1,007	20	1	11,449	16,805	801	3,964	983	621
No. of transactions	0	0	23	12	1	1	17	21	15	7	7	9
Turnover (mln EUR)	0.00	0.00	0.11	0.13	0.01	0.00	0.59	1.22	0.11	0.22	0.08	0.41
Total												
No. of shares (mln)	6.16	3.06	2.35	6.58	3.92	10.99	2.02	24.21	13.65	19.18	19.22	15.32
No. of transactions	6,080	4,560	1,780	3,037	2,691	2,844	1,828	2,944	3,075	2,743	2,911	3,546
Turnover (mln. EUR)	26.04	14.58	3.78	16.46	11.38	7.25	11.27	34.90	16.73	18.38	29.41	15.59

Table 6 also clearly shows that the cautious and even negative attitude towards stock transactions has not been overcome so far. For the time being the banking sector remains as the only funding source. Despite the fact that average daily trading increased in 2001 by 22%, the traded volumes are still so low that the operational costs of the Bulgarian Stock Exchange can hardly be sustained. Even though Bulgarian Depository Receipts (BDRs) were introduced as trading instruments on the Exchange in late 2000,[3] the expectations for expansion of the stock trade and for increased confidence in it because of the BDR issues were not fulfilled.

Certain market expansion can be expected only after the listing of attractive and profitable enterprises. At the Balkan regional economic forum, held in Sofia in November 2001, the

[3] Initially there were four BDR issues based on shares of "Deutsche Bank", "Deutsche Telekom", "Siemens" and SAP.

government announced plans for listing between 15% and 30% of the shares of 15 big Bulgarian state-owned enterprises. This is conditional on changes in the Public Offering Act. Along with Bulgartabac Holding, companies such as the Bulgarian Telecommunication Company (BTC), the Black Sea and Danube Marine, DSK Bank and several companies from the energy sector are nominated for listing.

Another important event in 2001 was the signing of the Memorandum of Understanding and Co-operation in the area of stock trade between the Bulgarian Stock Exchange – Sofia and the Athens Stock Exchange. The Memorandum aimed at enhancing the efforts of the stock market participants towards harmonisation of the domestic rules with those of the EU and at improving the investment climate in South Eastern Europe.

In spite of the high cost of borrowing from banks, the capital market has provided only a limited alternative. Investment banking has not really developed. Until the end of 2001, there had been only two offerings of corporate bonds and no primary issues of stocks.

In the past years the capital market as a whole did not register any significant development with the exception of the bond market, which was slightly more dynamic. This only confirms that the stock market is not being used as an alternative source for raising capital, although the statistics show that there is a large amount of cash held by the population. There are several factors, external (Russia crisis in 1998 and Turkey in 2000) and internal, explaining the slow pace of development of the capital market. The core problem lies with the very genesis of the Bulgarian capital market in the mass privatisation programme. Over one thousand companies initially traded on the BSE-Sofia were part of the mass privatisation programme. Unlike companies in the West that come to the capital market to acquire new financing, these companies were registered as public companies in a purely administrative way without any motivation to become publicly traded companies.

The other reasons for the slow development of the capital market can be summarised as follows:

– confidence in the stock market remains low;
– the interests of minority and portfolio shareholders are not well protected and the public companies lack transparency;
– the functioning of the capital market and its role for the development of the economy remains poorly understood;
– the exchange was not used by the government as an instrument in the privatisation process;
– residual shares of formerly state-owned companies are not sold through the exchange;
– the tax regime is not favourable to investors in corporate securities;
– the legal framework does not fully guarantee the rights of retail investors.

While new laws should improve market conditions, it is vital that efforts are made to ensure an effective enforcement. This is particularly important if good corporate governance is going to be supported and shareholders' rights are to be protected. The government could provide further support for the market if new laws were passed that provided equal tax treatment of all institutional investors and motivations for companies to go public.

2.4 Other financial services

Other financial institutions that are commonly found in countries with more developed financial markets have not made serious inroads in Bulgaria. For example, the development of mortgage banks, investment banks, savings banks, savings and loan associations, finance companies, leasing companies and public financial agencies is very limited. In part this is due to the breadth of activities in Bulgaria's universal banks.

Only few commercial banks extend housing loans backed by real estate as collateral, but this activity is expanding. A new local market for these bonds opened in October 2000, offering the opportunity to attract additional resources by underwriting mortgage bonds, thus giving rise to bond trading. This should foster supply and lead to the expansion of the housing loan market.

The State Savings Bank (SSB) functioned as a savings bank until 1999 when its legal status was changed and it became a commercial bank, broadening its range of activities (e.g. to make loans and to offer additional banking products). Still, the SSB has the largest branch network and customer base of any bank in Bulgaria. Its business is still oriented towards consumer loans. The ongoing restructuring of the SSB will present a number of challenges since it lacks expertise in risk evaluation and still has a negative image concerning its customer service.

Other financial institutions include two institutions set up under EU programmes. One is related to the accession process to provide financial support to the agricultural sector and the second, the Encouragement Bank, is supposed to provide finance to small and medium-sized enterprises (SMEs). The latter was established in 1999 by the government and enjoys a special status. After a little more than a year of unsuccessful operation, the SME Act, under which the bank was established, was amended by Parliament, removing restrictions on the bank's lending operations.

When considering the development of non-bank financial institutions, there are important lessons to be learned from the early experience with commercial banks in Bulgaria. In the early 1990s, commercial banks were not properly regulated, leading to disastrous results. Real progress has been made since 1997, however, in creating the appropriate legal and regulatory framework for the expansion of non-bank financial activities. While these steps are important, it is equally vital that these new laws are efficiently enforced. Furthermore, regulatory organisations must find the right balance between enforcement that builds up confidence and regulation that stifles growth.

As yet, the insurance sector is the only sector that has seen significant expansion, but pension funds should also begin to grow. The development of the capital market is less certain, but the expansion of the insurance and pension sectors should assist its development by providing new demand for shares. An important question is, however, whether this will be enough to create sufficient liquidity in the capital market. If capital markets remain illiquid, serious consideration should be given to closing the local stock exchange and organising or participating in a larger regional effort.

IV. Monetary transmission mechanism under the currency board arrangement

In contrast to the orthodox currency board arrangement (CBA), the CBA in Bulgaria preserved the possibility of conducting monetary policy to some extent, meaning that the BNB is able to affect intentionally money supply dynamics. Active monetary policy in Bulgaria can be divided into two types: traditional channels and new channels. The first type is associated with the functions inherited from the classical central bank and the second is determined by the specific design of the CBA.

1. Monetary policy operations – traditional channels

In a fully liberalised system, including full convertibility of the currency, the central bank cannot set both an independent domestic monetary policy and the exchange rate. Therefore, a typical currency board has to accept the interest rate and the quantity of domestic money corresponding to the fixed exchange rate, implying that there should be no room for monetary policy operations. In the case of Bulgaria, it is important to know why the Law on the BNB has left some room for such operations, and what kind of problems could arise from their use in contradiction with the operating principles of an orthodox CBA.

Reserve requirements

Reserve requirements are subject to a regulation, issued by the BNB according to the law on the BNB. Its main provisions are as follows:

- the basis on which the amount of minimum required reserves is determined includes banks' liabilities in both Bulgarian levs and foreign currency;
- banks maintain minimum required reserves of 8% of their deposit base either in levs, euro, US dollars or Swiss francs;
- reserve requirements are averaged on a monthly basis, but should a bank make use of over 50% of them, it shall pay interest for the excess over 50% for each day of use;
- the BNB may decide to pay interest on the lev component of the minimum required reserves but its rate may not exceed the income that the BNB receives from its investments in euro.

In the case of the CBA in Bulgaria, reserve requirements play predominantly a short-run role in suppressing excessive volatility of daily market interest rates by allowing reserve averaging and permitting banks to have automatic recourse to their cash balances with the BNB on a daily basis. However, the BNB currently does not pay interest on reserve requirements. Less than fully remunerated reserve requirements are a tax on the banking system, which is absent in a typical currency board.

Lender of Last Resort (LOLR)

The strictly limited LOLR function of the Banking Department is subject to a regulation as required by the law on the BNB. The main provisions are as follows:

- in the event of a liquidity crunch affecting the banking system's stability the BNB may extend credits to solvent banks which experience an acute need for liquidity but only against liquid assets as collateral;
- the existence of a liquidity risk is determined as a function of delays of settlement transactions in the Banking Integrated System for Electronic Transfer;
- credits may be extended only up to the amount of available funds, which are placed on the Banking Department deposit of the Issue Department;
- credits may be extended only as a temporary short-term support with an original term of up to 30 days, and renewed no more than twice;
- decisions on loan applications have to be made by the Managing Board of the BNB under clear lending procedures.

In an orthodox currency board there is no LOLR function since foreign exchange transactions may operate as a standing facility and the market can always adjust its holdings of domestic currency reserves by executing foreign exchange transactions against the reserve

Table 7: Debt statistics
(31 December 2000, EUR million)

Instrument / Issuer	Total amount outstanding (in EUR million)				
	Money market	Bond market			
	Total	Short-term	Long-term		
		T ⩽ 1	1 < T < 5	5 ⩽ T < 10	T ⩾ 10
Central government and other general government	6,304.1	94.6	416.6	57.7	5,735.2
Monetary financial institutions	n.a.	n.a.	n.a.	n.a.	n.a.
Non-financial and non-monetary financial corporations	12.7	6.7	5.8	0.1	n.a.
Total	6,316.8	101.3	422.4	57.8	5,735.2

Source: BNB; Ministry of Finance; Central Depository.

currency. However, banks may experience liquidity problems for a very short period if foreign exchange transactions can be settled only in two days (which is the international standard and the normal practice in Bulgaria). Reserve averaging helps to overcome this problem to a certain extent but only when there is no systemic liquidity risk in the banking system as a whole. Given the fragile stability of the banking system in Bulgaria at the time of CBA adoption, it was reasonable to stick to this strictly limited LOLR function. It is applicable only to systemic risk situations as provided for by law and hardly could be used to abuse the operating principles of an orthodox currency board. On the contrary, the LOLR function in the case of Bulgaria has even contributed to the arrangement's credibility.

Open market operations (OMO)

- The Law on the BNB prohibits open market operations, since the BNB may not extend credits in whatever form to the government except credits against purchases of special drawings rights from the IMF. Securities issued or guaranteed by the government are not permissible as reserves and can serve only as collateral against credits according to the LOLR function discussed above. The abolishment of open market operations as a monetary policy tool of the BNB is fully in line with the principles of an orthodox currency board. However, some small scope for such operations has been left to the Ministry of Finance.

The role of the Fiscal Services Department within the BNB in the government securities market is a passive one (just an agent of the Ministry of Finance), while the Ministry of Finance plays an active role by determining the schedules of new issues, the amounts issued and the amounts repurchased prior to maturity (Table 7). This enables the Ministry of Finance to influence the liquidity of the banking system and money supply in a manner similar to open market operations, since the funds of the government are deposited with the BNB.

2. Monetary policy operations – new channels[4]

The choice of liabilities that need to be backed by reserve currency and the degree of their backing relate to the emergence of new monetary policy channels under the Bulgarian CBA. First generation CBA are backed at least 100% by assets issued by non-residents. Any departure from this principle under a quasi CBA provide some room for manoeuvre for the pursuit of a discretionary monetary policy.

The inclusion of government fiscal reserves in the liabilities of the CBA is the major channel of monetary policy transmission in the Bulgarian model of a CBA. Therefore income and expense policies in combination with structural and privatisation policies in the period of transition impact directly on reserve money and money supply. In other words, the government may conduct, intentionally or not, discretionary monetary policy. This mechanism destroys the automatic link between the balance of payments dynamics and the reserve money dynamics. Therefore, money market disequilibria do not disappear with interest rate adjustments, as they do under an orthodox CBA, but rather require the management of government reserves in the CBA balance sheet.

The major argument in favour of inclusion of government reserves in CBA liabilities relates to the negative impact of volatile capital flows on reserve money and interest rates as a consequence of the free movement of capital and a high capital mobility. Discretionary monetary policy via fiscal policy (approximated with money reserve dynamics) may offset such shocks. In addition, for countries like Bulgaria that are characterised by large annual service obligations, the inclusion of government reserves in CBA liabilities – backed with international reserves – enhances the quasi CBA credibility. At the same time, such a design also reduces reserve money volatility as large payments on external debt are accommodated by government reserves.

V. Implications of EU accession on the financial sector

As in many areas of the Bulgarian economy, developments in the financial sector have been strongly influenced by the desire to meet the criteria for EU accession and the eventual participation in the euro area. The establishment of the currency board and the macroeconomic stability that has followed have made the prospects for accession more realistic, although it remains many years away.

Joining the euro area also provides an exit strategy from the currency board. Critics of currency boards argue that they are inflexible and must be abandoned at some point. The Bulgarian currency board need not last forever. If reasonable stability can be maintained and inflation is reasonably low, the euro can eventually be adopted to replace the board.

The desire to join the EU has provided a strong motivation for the reform of the financial sector. However, despite the progress accomplished in the past four years to improve financial market operations and institutions, Bulgaria's financial market is still in the process of development. Postponing the restructuring of the real sector for most of the decade was clearly a major impediment to the development of the financial market. Now, as the restructuring process is taking hold and as key institutions and rules are established, authorities need to continuously evaluate their adequacy. In particular, a close inspection needs to be conducted with regard to proper governance, supervision and transparency standards.

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[4] For more details see Nenovsky and Hristov (1999).

1. Legal framework to support EU standards

The legal framework for operations of financial institutions, especially in terms of property rights protection, the Commercial Code, the Criminal Code, bankruptcy, and pledge laws, should be refined to strengthen contract enforcement. In the banking sector, the liquidation of closed banks is still ongoing and the procedures are lengthy, notwithstanding the costs involved. Amendments to the Banking Law of 1999 are expected to accelerate the liquidation of these banks.

The capacity and the skills of the judicial system to enforce the laws that lay the foundations of the operations of the market economy are crucial. Key participants in the judiciary process need training to adapt to the changing legal infrastructure for a market economy.

The desire to join the EU has been a catalyst for legal changes and the development of more sophisticated and well-functioning institutional arrangements. The EU acquis has provided valuable guidance on how this should be done. However, it will take years before a sound and well-functioning financial sector is established and there will be bumps along the road ahead. Nevertheless, there is now a broad consensus on the direction of reform in the financial sector.

2. Regulatory harmonisation

Regulatory harmonisation with the EU directives is seen as a means to establish the overall operating rules of the EU common market of financial services. The 1995 EU White Paper recommends a sequencing approach for the adoption of EU directives for the financial sector, while distinguishing between first and second stage measures. The key conditions for financial markets embodied in these directives are: (a) the free movement of capital, (b) the free provision of financial services, and (c) the creation of institutions capable of ensuring the stability of prices and financial markets.

Before accession, a country needs to have the EU directives fully in place or negotiate an agreement for transition periods during its accession negotiations. Bulgaria has largely implemented Stage 1 directives regarding capital movements and banking. Improvements are needed in harmonising the regulations with the directives in both Stages 1 and 2, especially with regard to annual and consolidated accounts, supervision on a consolidated basis and capital adequacy (asset classification and provisioning, and market risk capital).

3. Suitable and effective supervisory bodies

The EU directives aim at ensuring the stability and reliability of financial markets and their participants. The directives stipulate supervision by competent authorities, but do not give direct guidelines as to the supervisory structure. EU Law requires that the authorities (public or other) designated for the supervision of financial markets have all the powers necessary to fulfil their duties. Consequently, different Member States have developed different solutions for their supervisory structures.

Recently, a trend in EU countries towards splitting financial supervision from the central bank and moving towards single supervisory authorities could be observed. The increased complexity of financial supervision and the growing conglomeration of mature markets may pinpoint the need for a single supervisory structure in more developed EU markets. But in Bulgaria, the scarcity of resources, the need for institutional capacity building, and the fragility of the financial system may call for a higher degree of flexibility in the design of supervisory structures keeping banking and non-banking supervision separate for a while.

As the financial sector is still in its early stages of evolution in Bulgaria, the structure and capabilities of the supervisory bodies need to be tested and assessed. As for banking supervision, the BNB's supervisory capability is being upgraded. However, co-operation between the BNB supervisory activities and the Deposit Insurance Fund needs to be enhanced, demanding from the Fund a higher awareness of banking sector developments.

In order to streamline costs and achieve better co-ordination of information for stronger supervision, careful thought should be given to consolidating non-bank financial institutions' supervisory activities under an umbrella institution. In the short run, immediate consolidation could be beneficial in the insurance sector where there seem to be overlapping roles for the National Insurance Council and the Insurance Supervision Department of the Ministry of Finance. In addition, in view of the similarity between life insurance and private pension instruments, supervision of these activities by a single entity may be warranted.

VI. Conclusions

The economic transition period of the 1990s was very difficult for Bulgaria. Although the movement to a two-tier banking system was swift, this organisational change masked many operational difficulties. While serious challenges remain, the establishment of the currency board in 1997 and the parallel changes in the commercial banks represent an important positive reform effort. Since 1997, banking sector soundness has improved drastically, thanks to the sector consolidation and the tightening of regulation and supervision, which followed the introduction of the CBA. Although the banking sector is liquid and profitable, monetary aggregates as well as credit and deposit indicators suggest that public confidence in banks has not yet been fully restored. Similarly, the banks' conservative stance towards lending demonstrates their high degree of risk aversion and their low capacity for credit risk assessment. These shortcomings are compounded by the intensification of the industrial restructuring process, marked by substantial market exits and new entries, leading to an uncertain customer base with short or absent credit history.

The rest of the financial sector appears to be underdeveloped. Although the regulatory and supervisory foundations are now largely in place, capital markets are still either inactive or non-transparent. Some financial institutions such as finance companies and investment holdings are still unregulated. Furthermore, non-competitive state provision of financial services in the insurance sector has not yet been fully eliminated. Further strengthening of the regulatory framework and supervisory bodies appears necessary. The implementation and the enforcement need to be enhanced, while the privatisation of the provision of financial services needs to be continued.

Bulgaria needs to complete the privatisation of the financial services industry and vigilantly focus on the maintenance of the hard-won stability of the financial system. Still too small in size and equity, the banking sector needs to enhance its credibility, streamline its operational expenses, increase its core banking earnings from lending rather than relying on low-risk government securities and strengthen its managerial and technical capabilities to be able to play fully its intermediation role and effectively contribute to growth. This is also key for EU accession, which requires the presence of stable, competitive and open markets, as well as the necessary institutions to support them.

In compliance with EU financial sector directives, most of the enhancements to the regulatory and legal framework have been made. The establishment of the institutional infrastructure needs to be strengthened in order to comply effectively with the EU acquis. This, in turn, requires enhancing the skills and capability of the supervisory and judicial

bodies as well as the financial institutions operating in these markets. An overall EU accession strategy in the area of financial services should aim to establish a well-regulated, stable and competitive system operating according to market-based rules, with clear rules for entry and exit. The existence of an independent central bank, supervisory authorities, a regulatory framework and a market infrastructure is crucial for the proper functioning of the financial markets.

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The financial sector in Cyprus: structure, performance and main developments

Lenia Georgiadou

Central Bank of Cyprus

I. Introduction

Cyprus, an island in the eastern part of the Mediterranean, was an agricultural country for many years but made great strides after gaining independence from Britain in 1960. It evolved from an exporter of agricultural products and minerals in the 1960s and 1970s to a tourist and international business centre in the 1990s. The country has a well-functioning market-oriented system, with most economic activity taking place in the private sector. Nowadays, the economy is dependent mostly on tourism and services. Per capita GDP for 2001 is estimated at about €15,000. The macroeconomic environment has been stable, and economic growth strong in recent years, with annual GDP growth averaging 4.2% in the years 1995-2000, while unemployment and inflation have been low. Unemployment averaged 3.3% and inflation 2.9% over the same period.

The financial sector has exhibited rapid growth in recent years, both in the level of financial intermediation and in the range and quality of services. This is associated with the good performance of the economy, stable macroeconomic conditions, the development of Cyprus as an international business centre and the gradual liberalisation of the past few years.

The contribution of the financial sector to GDP is estimated at 7.5% for 2000, compared to 4.9% in 1995, with the banking sector dominating. Employment in the sector rose to about 16,000 persons or 5.2% of the gainfully employed population in 2000, compared with 4.3% in 1995.

Supervision in the financial sector is divided between different bodies, reflecting the traditional segregation of the various segments of the financial sector. The Central Bank of Cyprus has responsibility for the regulation, including licensing and prudential supervision, of banks. Co-operative credit societies are supervised by the Commissioner of Co-operative Development, under the Minister of Commerce, Industry and Tourism. The Superintendent of Insurance, under the Minister of Finance, is the regulator of insurance business, and the Cyprus Securities and Exchange Commission is the regulator of the securities markets and has responsibility for the overall supervision for the functioning of the Stock Exchange. It should be mentioned that there is no legislation governing the provision of financial and investment services. A draft bill, which is in line with the EU directives on these matters, has been prepared and submitted to the House of Representatives for review and enactment. It is expected to be enacted soon and thus fill this legal vacuum.

Banking plays a dominant role in the financial sector. Although non-bank financial firms such as insurance companies, investment companies and mutual funds are increasing in number, their contribution in mobilising savings and allocating resources for investment purposes is still very limited. The banking system is well developed and stable. Banks are adequately capitalised and have a good record of profitability. The rest of the financial sector is developing steadily.

With regard to foreign exchange policy, following a successful ECU-peg policy since 1992, the Cyprus pound was pegged to the euro on 1 January 1999, with the same central parity rate (CYP 1 = €1.7086) and, initially, the same fluctuation bands of +/-2.25%. In view of capital account liberalisation, wider bands of +/-15% were introduced on 1 January 2001, which coexisted temporarily with the narrower "softer" bands of +/-2.25%. On 13 August 2001 the narrower bands were abolished, so that only the +/-15% bands are currently in place. Cyprus is therefore unilaterally shadowing ERM II.

The decision of the government to apply for membership to the EU propelled reforms and changes in the economy and the financial sector in particular. The statutory ceiling on interest rates was abolished on 1 January 2001, enabling the Central Bank to proceed further with the gradual liberalisation of exchange controls on capital flows. The enactment of the Law liberalising interest rates enhanced competition in the banking market. Banks have been expanding the range of their products and services, offering a wider choice to the public and better terms to borrowers.

Further to that, the authorities have intensified their efforts for the adoption of the EU acquis. Harmonisation measures include the enactment of legislation transposing the EU directives and also strengthening the administrative capacity. The Central Bank speeded up the process of harmonisation of the banking legislation with that of the EU, and strengthened banking supervision. The legal and regulatory framework is in line with EU directives and BIS standards. International Accounting Standards are also in place.

II. The current state of the financial sector

Cyprus has a well-developed market economy, and the island's financial sector has enjoyed continued growth in recent years in line with the high growth experienced by the economy and the development of Cyprus as an international business centre. The share of financial intermediation to GDP increased from 4.9% in 1995 to an estimated 7.5% in 2000. The financial sector is dominated by the banking sector.

1. Banking

Banking, which has a history of over 140 years in Cyprus, is quite well developed. The banks are small by international standards, but they operate as fully-fledged universal banks. They are the overwhelming providers of finance to the economy through an extensive branch network and they have the leading role in financial intermediation and compete aggressively amongst themselves.

1.1 Number and types of institutions

Domestic banks

The domestic banking sector consists of 12 banks, divided into commercial banks and specialised institutions. Both groups of credit institutions are licensed to carry on banking business and are referred to as "banks" in this paper. There are currently of nine commercial banks, with a network of 488 branches as of end-2001. The specialised financial institutions comprise three institutions: the Housing Finance Corporation, a government controlled institution which grants loans for housing purposes mainly to medium and low income

families; the Cyprus Development Bank, which provides mostly long-term and project finance; and the Mortgage Bank, a mortgage subsidiary of the biggest domestic bank.

Altogether, the above institutions (both banks and specialised institutions) offer their services through a network of 495 branches, which corresponds to around 1,365 inhabitants per branch. Three of the domestic banks have operations abroad either through a branch network or subsidiaries.

Co-operative credit institutions

There is also a separate group of credit institutions that consists of co-operative credit societies and savings banks. These are mutually owned organisations established to serve their members and their communities on a co-operative basis, not for profit making. Their activities are confined basically to the core banking services. There are currently 363 registered co-operative credit institutions, most of them small village concerns. Their supervision has been assigned by Law to the Commissioner of Co-operative Societies and Co-operative Development. Co-operative credit institutions have experienced rapid growth in recent years. Their total assets amounted to the equivalent of €6.2 billion at the end of December 2001. Co-operative credit institutions control about 33% of local currency deposits and 25% of lending (as at the end of December 2001) and are quite important in the system (Table 1).

International banking institutions

Reference should also be made to another group of banking institutions, the International Banking Units (IBUs), which are licensed to operate from within Cyprus but are required to confine their activities mostly with non-residents and in foreign currencies. Hence this group, which at end-2001 comprised 26 IBUs and 2 Administered Banking Units, is not included in the domestic banking system. As from 1 January 2001 IBUs have been permitted to grant medium and long-term loans in foreign currencies to residents.

The total assets of IBUs at end-2001 amounted to the equivalent of €11.5 bn, compared to €25.5 bn, of the domestic banking system.

At this point it should be clarified that reference in this paper to the "banking sector" and "banks" covers only the 9 commercial banks and the 3 specialised credit institutions. The other two groups i.e. co-operative credit institutions and international banking units are not included.

Table 1: Type and size of banking institutions

Sector	Type of institutions	Number of institutions	Total assets (EUR billion)
Domestic banking sector	Commercial banks	9	25.2
	Specialised banks	3	
International banking sector	International banking units	28	11.5
Co-operative sector	Co-operative credit institutions	363	6.2

Source: Central Bank of Cyprus

1.2 Ownership

Banking started entirely through private initiatives and there is no state ownership in the sector. With the exception of two very small government controlled credit institutions (Housing Finance Corporation and Cyprus Development Bank), which account for only 4.3% of banking assets and around 2.3% of the total registered capital of the banking sector as of end-2001, the banking industry and the wider financial sector is in private hands.

Of the nine commercial banks four are foreign controlled, one is operating as a branch of a foreign incorporated bank and the other three are locally incorporated subsidiaries of foreign banks. Three of the foreign controlled banks are of EU origin. Despite the fact that in terms of the number of institutions, the number of foreign controlled banks is high, they account for only 13% of banking assets reflecting the fact that foreign controlled banks are the smaller ones in the banking system. In terms of capital, foreign controlled banks account for 18.7% of the registered capital of the banking sector. However, the foreign investors' stake in the banking sector is higher coming to around 33% of registered capital if we include the strategic investment of the European Investment Bank in the Cyprus Development Bank, the investment of HSBC in the Cyprus Popular Bank, and also the shares acquired by foreign investors in the four commercial banks which are quoted on the Cyprus Stock Exchange.

Foreign banks are allowed to operate on level terms with domestic institutions with respect to licensing and regulatory matters. They enjoy national treatment and may provide the full range of banking services.

1.3 Size, concentration and employment

Although the banks are small by international standards, mirroring the size of the economy, the banking sector is well developed. Banks offer a wide range of services which compare well with European standards. The total assets of domestic banks have expanded at an annual growth rate of 16% in the period 1996-2001 and amounted to the equivalent of €25.5 billion or about 250% of GDP at end-2001.

Due to the way the banking sector has developed over the years with competition leading to rationalisation and some take-overs, the sector is highly concentrated. The three largest banks account for 75% of banking assets and 73% of lending. Concentration of the five largest banks reaches 89% of banking assets and 85% of lending.

Employment in the above institutions stood at 7,800 persons at end-2001, accounting for around 2.6% of total employment.

1.4 Structure of balance sheets

Assets

Lending, the major asset of the banks, amounted to the equivalent of €13.3 billion or 52% of total banking assets as at the end of December 2001. The bulk of credit goes to the private sector. Lending to public institutions and corporations, which includes lending to government, municipalities and public corporations accounts for only 2.9% of total lending. Holdings of Treasury Bills and Government Securities are not included in lending. They are reported under investments, because banks opt to invest their surplus funds in these securities. Banks serve both corporate and retail business. The great majority of enterprises

Table 2: Balance sheet of the domestic banking sector
(EUR million)

Assets	31.12.96	31.12.01	Liabilities	31.12.96	31.12.01
Balances with central bank	788	1,545	Deposits	9,862	19,947
Balances with local banks	33	325	Liabilities to central bank	11	0
Balances with foreign banks	2,123	4,341	Placements from local banks	36	335
Government			Placements from foreign banks	420	1,044
securities (incl.T-Bills)	1,255	2,387	Loan capital	412	1,033
Investments	548	2,874	Share capital and reserves	576	2,297
Lending	6,744	13,300	Other liabilities	539	818
Less spec. provision	-335	-590			
Fixed assets	219	368			
Other assets	480	923			
	11,856	25,474		11,856	25,474

Source: Central Bank of Cyprus

are small and medium sized reflecting the size of the domestic market. Lending to corporate customers is estimated at around 35-40% of total lending and is fairly well diversified covering commercial, tourist and industrial enterprises.

The annual average growth rate of total lending has been quite high (about 15% in the period 1996-2001), at the same time credit standards have been good. In recent years banks have strengthened their credit and risk management information systems and also set up systems to monitor more closely the performance of their loan portfolio.

The loan portfolio of banks is fairly well diversified with respect to economic sectors, type of customers and geographical regions within Cyprus. Most loans are adequately secured by tangible security. Personal and professional loans account for the largest part of the total (over 40%). This sector includes loans to professionals for their business needs as well as loans to individuals for a variety of personal purposes (e.g. purchase of ready made houses or flats, lending connected with credit cards, medical and education purposes etc). Loans to financial companies (e.g. stock brokers and financial services companies) and loans to individuals for the purchase of shares are also included in this category.

Table 3: The sectoral distribution of credit

	31.12.00		31.12.01	
Sector	EUR million	% of total	EUR million	% of total
Public institutions and corporations	299	2.5	387	2.9
Agriculture	206	1.8	209	1.6
Mining	46	0.4	51	0.4
Manufacturing	951	8.1	958	7.2
Transport and communications	167	1.4	198	1.5
Foreign and domestic trade	2,417	20.5	2,694	20.3
Building and construction	1,587	13.5	1,833	13.8
Tourism	1,170	9.9	1,359	10.2
Personal and professional	4,950	42.0	5,611	42.2
Total	11,792	100	13,300	100

Source: Central Bank of Cyprus

Four banks, including the three largest domestic banks, are public companies quoted on the Stock Exchange with widespread shareholding. The largest of these banks, namely the Bank of Cyprus, is also quoted on the Athens Stock Exchange. Banks have no close linkages to business groups. There are strict limits in place to the extent banks may have shareholdings in non-banking entities. Banks are not permitted to acquire holdings in companies other than those which are doing business integral or closely related to banking, in excess of 10% of the share capital of the company (direct or indirect) or 10% of the bank's own funds. In addition, the total of such holdings may not exceed 25% of the bank's own funds.

Liabilities

The liability structure of banks is quite diversified. Their deposit base is widespread and stable with most of it coming from retail sources. Banks rely on their extensive branch network to collect deposits and secure business. Customers' deposits account for over 70% of liabilities (excluding contra accounts). The dependence of banks on short term funding through the interbank money market is limited.

1.5 Foreign currency business

The foreign currency business of banks has expanded rapidly in recent years. This is mainly attributed to the rapid growth of foreign currency deposits from both customers and foreign banks. As at 31 December 2001 foreign currency deposits amounted to the equivalent of €7.1 billion, representing 36% of total deposits. In the last five years (December 1996 to December 2001) foreign currency deposits grew at an average annual growth rate of 20%. In addition to deposits, banks also resorted to the issue of subordinated Eurobonds for raising foreign currency funds. During 2001 an amount equivalent to €553 million of such bonds were issued. Total foreign currency liabilities reached €8.6 billion or 34% of the banks' balance sheet size as at 31 December 2001.

Foreign assets have grown correspondingly. The major part of foreign assets (50% of the total), was in the form of placements with foreign banks, followed by foreign currency investments with 25%. Investments comprise mainly tradable securities issued by first class banking institutions and foreign governments. Foreign currency lending accounts for 20% of the banks' total foreign currency assets or 7% of total assets. Mismatches in foreign currency assets and liabilities are limited.

1.6 Asset quality and provisioning

As already stated, most loans are adequately secured with tangible collateral (mainly real estate). Furthermore, banks review at least once a year their loans for determining the level of provision for bad and doubtful debts. In addition, the Central Bank in the course of its on-site examination carries out extensive review of the loan portfolio in order to determine the adequacy of provisions. This review covers all customer accounts which are potentially non performing and which may require provision. In determining the need for provision the realisable value of the collateral is taken into account. Non-performing loans include all loans

for which specific provision for bad and doubtful debts has been set up. Non performing loans at end-2001 amounted to 9.0 % of total lending (at end-2000: 7.8%; at end-1999: 7.5%).[1]

1.7 Capital adequacy

All banks are subject to the capital adequacy requirement prescribed by the Central Bank, to which they are required to adhere on a solo basis and on a consolidated basis. The required minimum has been raised to 10% at end-2000.

Locally incorporated banks are well capitalised. At end-2001 the total capital base in the banking system amounted to the equivalent of €2,541 million of which 82% was in the form of tier 1 capital. This represented a capital adequacy ratio of 14% compared to the minimum of 10% required by the Central Bank of Cyprus and well above the 8% recommended by the Basel Committee and the respective EU directive. The capital adequacy ratio of individual banks ranged from 11.7% to 21.9%

The capital adequacy requirements for banks are determined in accordance with specific rules and regulations, which shadow the recommendations of the Basel Committee on Banking Supervision and the EU directives. The components of the capital base and the computation of the risk asset ratio is in full compliance with the respective EU directives.

1.8 Bank performance

During recent years the banking sector has expanded without interruption by leaps and bounds and banks have achieved a good level of financial performance, as reflected in their yield on assets and their return on capital employed. The average return on assets excluding contra accounts for all banks rose from around 0.86% in the period 1995-1997 to 1.75% in 1999 and 1.92% in 2000. Average return on equity of local banks has increased from around 11% in the period 1995-1997 to 22.4% in 1999 and 17.3% in 2000 with variations from bank to bank. The cost to income ratio improved from around 72.0% in the period 1995-1997 to 66% in 1998 and 54.5% in 1999. However, the 1999 results of banking were boosted by the exceptionally good profitability associated with the performance of the stock market, just as the 2000 results were adversely affected by the correction that followed the boom of the previous year. In 2000 this ratio rose to 61% after adjusting for non-recurring items.

Increased competition has squeezed margins. The interest spread between local currency deposit and lending fell from 2.9 percentage points in 1996 to 2.8 percentage points in 2000. This, however, has been more than counterbalanced by increased lending and also expansion of non-interest income. The contribution of net interest income to total operating income fell from around 55% in 1995 to around 46% in 2000, with the respective contribution of non-interest income rising from around 45% to 54%. Competition is bound to increase further. With a view to enhancing their capacity for sustainable earnings, banks have been improving their operational efficiency and are diversifying their earnings through fee earning services.

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[1] Up until recently provisions was a matter for the banks to decide, based on their assessment of the likelihood of loss, subject to review by the Central Bank and adjustments where the latter deemed necessary. This was essentially a judgemental process. In October 2001 the Central Bank formally introduced the concept of non-performing loans and regulations requiring banks to suspend interest when loan repayment is in arrears for more than 9 months and there is no adequate tangible collateral held. Hence, there will be more objective criteria and greater uniformity in reporting non-performing loans.

Expansion abroad is also considered by banks as a major source of profit and banks have high targets in this area.

1.9 Banking intermediation

The level of banking intermediation as reflected in the ratio of banking assets to GDP is high and compares well with that of euro area countries.

The ratio of bank deposits to GDP (current prices) amounted to 195% at end-2001, lending to GDP stands at 130%, while banking assets to GDP amount to 249%. Bank deposits remain by far the most important financial instrument/product. The number of accounts amount to around 1.2 million corresponding to 1.8 accounts per person (2.5 accounts per adult in the population). Furthermore, banks have responded to changes in the economic environment and expanded their services to meet customers needs. They now offer the whole gamut of banking services including personal and investment banking; the latter service is offered mostly through subsidiaries. Banks serve well individuals, small or medium size enterprises (the majority of enterprises in Cyprus are in this group) as well as big corporates. They provide long-term finance for capital expenditure and also short-term finance for working capital or seasonal requirements. Both the range and the standard of their services compare well with those of developed countries. The banking system aided by rapid growth encouraged domestic savings and allocated financial resources to investments. Banks have fulfilled very satisfactorily their financial intermediation role as evidenced by the economic growth record and the financial stability that the island has enjoyed. The equities and bond market have been less important.

2. Non-banking sector

2.1 The stock market and the Cyprus Stock Exchange

The development of the securities market started effectively in the late 1970s. The growth of the market however was rather slow until the establishment of the Cyprus Stock Exchange (CSE). The latter started operation in March 1996, after the enactment of the Stock Exchange Law and the preparation of required regulations. Since then there has been fast growth and the CSE has become a source of growing importance for corporate fund procurement.

At the end of 2001 there were 149 public companies with securities listed on the CSE compared to 42 in 1996. The three largest banks belong to the largest 20 companies listed on the CSE while another smaller bank is also quoted. Market capitalisation amounted to the equivalent of €9.6 billion or 94.8% of GDP. Government bonds and corporate bonds were of a total value €2.4 billion and €0.2 billion respectively. Very few domestic enterprises – in fact only the three largest banks – have sought financing on international capital markets through floating rate bonds.

During 2001 the total value of transactions (turnover) reached the equivalent of €3.8 billion with the average daily trading volume estimated at €15.5 million. Liquidity, measured by the annual turnover to market capitalisation appears to be reasonable amounting to 39% in 2001, but this figure has not been stable because of the exceptional circumstances prevailing in the period 1999-2001.

Other developments

During 1999 there was an explosive growth in share prices with the all share price index rising from 101 at the end of January to 850 in November 1999. The rise in stock prices together with the increasing number of new listings resulted in a huge increase in market capitalisation to €24.3 million at the end of 1999 compared to €1.8 billion in 1996. Following the spectacular rise in 1999, correction was inevitable; share prices have been on a downward slide since November 1999 with the CSE index declining dramatically. At the end of December 2001 the CSE index stood at 129 and market capitalisation amounted to the equivalent of €9.6 billion. The bursting of the speculative bubble of 1999 has shattered investors' confidence in the stock exchange and resulted in a considerable reduction in activity.

2.2 The bond market

The long-term fixed income market is at an embryonic stage and comprises basically the government bond market. There are also very few corporate bonds issued mainly by banks and to a smaller extent other corporates, which account for a very small part of the market (less than 2% of market capitalisation as at the end of 2001 or 1.9% of GDP).

The government bond market increased in size over the last 5 years. The total nominal value of outstanding issues amounted to €2.38 billion as at the end of December 2001 compared to €1.77 billion as at the end of 2000 and €0.75 billion as at the end of 1995. The total nominal value of the outstanding Government bonds as at the end of 2000 amounted to 18.5% of GDP and 23.2% of GDP as at the end of 2001.

The Central Bank issues on behalf and for account of the Cyprus Government bonds with maturity of 2, 3, 5 and 10 years, which pay interest semi-annually. Furthermore, the first issue of Government bonds with 15 years maturity, was launched in October 2001, but the amount accepted was the equivalent of only €7 million (C£4 million). As from 1 June 1996 the Central Bank uses auctions as a means of primary sales. The bonds with maturities 2, 5, 10

Table 4: Stock market – basic indicators

		1996	1999 [1]	2000	2001
Number of listed companies		42	60	120	149
Number of warrants		14	37	86	80
Number of corporate bonds		10	16	13	9
Number of government bonds		-	31[2]	21	39
Market capitalisation (end of year)	EUR billion	1.8	24.3	14.4	9.6
of which: Shares	EUR billion				6.9
Warrants	EUR billion				0.1
Corporate bonds	EUR billion				0.2
Government bonds	EUR billion				2.4
Market capitalisation/GDP (%)		25.9	279.0	151.2	94.8
Total annual turnover, EUR billion (volume of transactions)		0.4	6.7	10.8	3.8
Average daily trading volume, EUR million		1.5	30.6	44.1	15.5

Source: Central Bank of Cyprus
[1] Cyprus Stock Exchange Factbook 1999 and 2000
[2] Listing of government bonds started in January 1997

and 15 years are sold through auction. Bids may be made on a competitive or non-competitive basis. Non-competitive bidders pay the average weighted price at which competitive bids are accepted. The issues are of the conventional type (no index linked issues) and all at fixed rates.

Investors comprise mainly commercial banks, which hold about 40% of the outstanding issues, pension funds (19%), private individuals (15%) and insurance companies (13%). There are no restrictions for foreign/non residents investors to acquire and hold government bonds but holding by this group is very limited.

Though government bonds are listed on the Cyprus Stock Exchange, trading volumes are thin; government bonds are usually bought in the primary market and are held to maturity; there is not much of an active secondary market for the moment.

2.3 The money market and monetary policy transmission

Interbank market

The money market is characterised by the dominance of the interbank market. The latter, which has a relatively short history, has been developing and is becoming an additional source of short-term funds for the banks. The only participants are the 12 banks. The interbank market provides an investment outlet for surplus funds or, where necessary, a source of borrowing for banks in order to meet their liquidity requirements without resorting to the Central Bank's more expensive Lombard facility. Interbank transactions are confined to placements (unsecured deposits) of short term duration. Dealings are for periods up to one year. The bulk of transactions are in short term maturities, more than half of the funds are placed for periods up to one month. The market is still small.

The monthly average volume of placements has been in the region of €295 million (£170 million) during 2001. There has been no signifcant volatility in the interbank rates which hovered around 4.9% and remained within the band determined by the Central Bank's official rates. (The interest rate for the Lombard facility – currently 5.5% – and for the overnight deposit facility – currently 2.5% – constitute the upper and the lower bounds of the money market interest rates.) Variations within this range are associated with the Central Bank's repo operations. Benchmark rates for the interbank market are reflected in the NIBOR rates (Nicosia Interbank Offered Rates) which are quoted daily by banks for overnight and up to one year. The spread between bid and offer is around 50 basis points.

Repo market

Following the introduction of the new monetary policy framework and the abolition at the end of 1995 of the liquidity ratio as an instrument of monetary policy, the Central Bank of Cyprus intervenes in the market through repo auctions or reverse repo operations to adjust liquidity conditions according to the monetary policy objectives. Repos are for fortnightly periods. The repo market is still in early development. There are no repos between commercial banks yet. They are only conducted between the Central Bank and commercial banks.

During 2000 the combined effect of fast credit expansion and the upward trend in inflation prompted the Central Bank to cut back on the amount of liquidity provided through repos. Only six repos were conducted for the aggregate amount of €541 million compared to 16 repo auctions of total value €1,484 million in 1999. During 2000 there was also one reverse

repo auction absorbing liquidity of €52 million carried out in February. In 2001, in view of the liquidity surpluses in the banking system associated with inflows of foreign exchange, the Central Bank carried out eight reverse repo auctions and six deposit collection auctions amounting to €1,099 million and €1,196 million respectively.

Treasury bills

The money market also includes the market for short-term securities, mainly Treasury Bills. As from the beginning of 1996, Treasury Bills, which hitherto were issued on tap basis at fixed prices (administered rates) and were rediscountable at the Central Bank, are issued through auctions. Institutional investors, firms and individuals have been allowed to take part in the auction in an effort to promote the development of a more competitive environment for the determination of interest rates. Treasury Bill auctions, with maturities of 3 months (13 weeks) and 12 months (52 weeks), are carried out regularly, usually twice a month by the Central Bank.

During 2000 primary sales of Treasury Bills with maturity of 13 weeks amounted to € 425.9 million compared with €455.4 million in 2001, while for maturities of 52 weeks the total amount auctioned was €122.0 million for 2000, compared with €729.6 million for 2001. The outstanding amounts of Treasury Bills sold by auction as at the end of 2001 amounted to 7% of GDP. The average Treasury Bills yield during 2001 fluctuated around 6.00% for the former and 6.35% for the latter. In the first auction of 2002 the average interest rate for the 3 months Treasury Bills was 4.00% compared to 5.49% and 6.02% in June 2001 and January 2001 respectively. Treasury Bills provide an alternative avenue for short-term investment. With the aim of encouraging the development of an active secondary market, Treasury Bills are not rediscountable by the Central Bank.

The transmission of monetary policy actions

A major landmark was the abolition of the ceiling on interest rates which took effect as from 1.1.2001 with the simultaneous liberalisation of medium and long-term borrowing in foreign currencies. The abolition of the cap on interest rate will allow the Central Bank to pursue its monetary policy objectives more flexibly and efficiently. With the liberalisation of interest rates, competition has increased. Banks have also come out with offers of a variety of mortgage and other lending products in various currencies with differing maturities and interest rates.

With the move towards market oriented monetary policies, the focus of monetary management has shifted to money market and interest rate management. Following interest rate liberalisation, banks were required to adopt a base lending rate as a reference rate on to which a margin would be added according to the risk and credit worthiness of the client. As a transitional measure, the base rate of banks was set to equal the marginal lending facility rate (Lombard rate) of the Central Bank, so that until experiences of the new system are acquired, changes in interest rates by the Central Bank would be transmitted to market rates automatically.

In August 2001, the Board of the Central Bank, acting pre-emptively to avert adverse developments on the growth of the economy, stemming from the slowdown in the international economy and the further fall in stock prices and taking also into consideration the need to curb excessive inflows of foreign exchange, decided to reduce the Bank's official interest rates by 50 basis points. Following the terrorist attacks in the US, a further reduction

on interest rates by 50 basis points was initiated in September 2001, followed by an equivalent reduction of 50 basis points in November 2001. The above reductions in interest rates were promptly transmitted to the money market interest rates and the base rates of commercial banks as explained above.

2.4 The foreign exchange market and exchange rate policy

Within the context of the comprehensive reforms currently being undertaken, the Central Bank of Cyprus has proceeded with the liberalisation of spot and forward transactions in the foreign exchange market as of 1 January 2001. The aim was to allow more scope for market forces, particularly as regards the process of daily determination of the parity between the Cyprus pound and the euro.

A major element of the reforms was the introduction of a new feature in the market namely the fixing process. Meetings with representatives from commercial banks are held at the Central Bank once a day and, through an auction, the parity of the Cyprus pound against the euro and other major currencies is determined, with the Central Bank being a key-player in this process. The resulting "fixing" rates are important benchmark rates especially for the inter-bank foreign exchange dealings. The aggregate value of the foreign exchange transactions carried out at the fixing sessions for the 12 months of 2001 amounted to the equivalent of €1.903 million (average monthly turnover €158.6 million). The dominant currency is the euro followed by the US dollar and the pound sterling.

Given the small size of the market and the seasonality of the flows as well as the existence of some capital controls, the Central Bank is playing a significant role in the market for the time being. Nevertheless, this is considered to be a useful transitional stage that will help all players acquire the necessary experience in preparation for the full liberalisation of the foreign exchange market.

Following a successful ECU-peg policy since 1992, the Cyprus pound is now pegged to the euro since 1 January 1999. The central parity rate is CYP 1 = €1.7086, with a fluctuation margin set initially at +/-2.25%. On 1 January 2001, a wider band of +/-15% was introduced in order to enable the Central Bank to absorb any shocks from possible destabilising capital movements and deter speculative capital flows, particularly as capital account liberalisation progresses. At the same time, maintenance of the "softer" band of +/-2.25% continued to be the declared policy of the Central Bank as a guideline to market expectations.

Recent developments, however, have led to the abolition of the narrower band with effect from 13 August 2001, so that only the +/-15% margins are currently in place. These developments are primarily connected with the significant rise in capital inflows following the abolition of restrictions on medium-term and long-term borrowing with maturities of over two years, as of 1 January 2001. In particular, capital inflows have risen significantly, mainly as a result of increased borrowing by residents. To a large extent foreign currency borrowing, mostly in euro, may be associated with the interest rate differential between euro-denominated and pound-denominated loans. Increased borrowing in foreign exchange has exerted some pressure on the exchange rate, but more importantly, has exposed borrowers to exchange rate risks. The abolition of the narrower band was intended to drive home to borrowers the reality of the increased exchange rate risk inherent in foreign currency borrowing. Indeed subsequent to the abolition of the softer band, inflows have been reduced and the intervention of the Central Bank at the fixing was substantially reduced.

III. Trends in the financial sector in view of integration in the EU

As mentioned earlier there has been a gradual liberalisation of the financial sector and an easing of exchange controls in the last few years. Further to that, the abolition of the statutory ceiling on interest rates as from 1.1.2001 was an important development in banking. All the above shifted emphasis from regulation to competition and created more opportunities to banks to deploy their resources more profitably. Further to the gradual liberalisation, the concurrent progress in information technology was another factor that led to increased competition and contributed to changes in the banking scene.

In the changing and more competitive environment commercial banks have been under pressure to innovate. Their response has been on two fronts. First, they have taken steps to increase their competitiveness by upgrading technology, adding to their automation capabilities and improving their operation efficiency. Second, they have started to innovate with new products and services adding to their sources of income. They have expanded and diversified beyond the boundaries of traditional banking from which they had up until recently earned the largest part of their income.

The former fragmentation of the financial system in banks, insurance companies and stock market players is becoming increasingly blurred, with banks taking up insurance and other financial services, insurance companies moving into banking and stockbrokers moving into financial services and mutual funds. Banks have expanded into these areas either through setting up subsidiaries or through acquisitions. With regard to insurance activities, banks are permitted to engage in insurance brokerage services; they are also allowed to hold up to 100% of the capital in an insurance company, but such investments are deducted from their capital base for purposes of computing the capital adequacy ratio. Banks have also expanded to services like underwriting, advising for IPOs and to the whole range of investment services, private banking, portfolio management including mutual funds and stock brokerage activities. They have managed to diversify their income; some 53% of their total operating income now comes from sources other than interest such as fees, commissions, dividends, compared to 44% in 1996.

This trend of diversification is also seen in the other groups of financial services. The biggest insurance company has recently (February 1998) acquired a majority holding in a small domestic bank while stock brokerage companies have established subsidiaries to offer the whole spectrum of investment and financial services.

Another development in recent years has been the considerable expansion of the foreign currency business of banks. This has been largely due to the development of Cyprus as an international business centre and also to the gradual liberalisation of the financial sector. Furthermore, banks recognising that the home market offers limited opportunity for further expansion, have turned their attention to geographical diversification through expansion overseas. Already three of the local banks have set up branches or subsidiaries in EU countries and two of them in Australia. The drive for overseas expansion is very likely to intensify. While this is expected to have a positive impact on growth and profitability, it also carries greater risks at least until the stage is reached where the foreign environment has become fully familiar.

Up until recently the corporate sector had depended almost wholly on the banking sector. There is now a trend for disintermediation, which though still at the incipient stage is clearly discernible. As more and more funds move into the capital market the level of bank intermediation decreases correspondingly. As the capital market develops, it is expected that companies may find it to their advantage to tap the capital market. At the same time

depositors searching for higher return, are more willing to move out of the conventional deposit products and turn to other forms of investment (stocks and shares, mutual funds). Banks are being prepared for this challenge by expanding their services in private and investment banking. It is worth noting at this point that the three long established investment fund companies are controlled by the three biggest domestic banks. Banks are also developing strategies in the area of private banking and fund management.

EU membership and the single market will increase competition further. This may come either through the establishment by foreign banks of places of business in Cyprus or through offering by them of services on a cross border basis. Banks will also face loss of income from foreign exchange transactions in the single market. As a result of increased competition, there may be further erosion of margins. However, banks are alerted and active to develop strategic responses to these new developments. The key challenge for banks is to improve their operational efficiency and strengthen their earning capacity in order to cope with the increased competitive pressures.

With respect to the legal framework, the enactment of the Banking Law in 1997, was a major step. The Law sets the legal framework within which banking business may be carried out. It prohibits the acceptance of deposits from the public, defines banking business and provides that a licence from the Central Bank is required for the acceptance of deposits and the conduct of banking business in or from within Cyprus. It also prescribes the minimum licensing requirements, which are based on the EU banking directives.

The Law has been the main instrument for implementing the EU banking directives and has also provided the basis for the establishment of a Deposit Protection Scheme. A Deposit Protection Scheme in full conformity with the respective EU directive has been in operation as from 1 September 2000.

Concerning the harmonisation process, some further measures are required for the implementation of the Capital Adequacy Directive and its subsequent amendments. In this respect, it should be noted that banks in Cyprus have not up to now been involved to any significant extent in trading activities exposing them to market risk. Their trading book business is small, well below the threshold laid down by the directive under reference. Therefore Cyprus is not really in breach of the requirements of this directive. Preparatory work is already being carried out with a view to adopting the provisions of the directive, which may be accommodated within the present legal framework through the amendment of the existing directive on the computation of the capital adequacy ratio of banks issued under the Banking Law.

A serious drawback in the legal framework is the lack of legislation governing the provision of financial and investment services. In this respect a draft Law has been prepared and has been placed before the House for enactment.

In the payments systems area, though there are no explicit provisions in the present Law for the oversight of payments systems, the Central Bank takes an active interest and aims to ensure that the payments system operates safely. In this respect it has under its auspices the operation of the Clearing House. The Cyprus Clearing House operates on a deferred net settlement basis, whereby the banks' net positions are settled via the accounts kept at the Central Bank within the hour following the conclusion of the daily meeting of the clearing house. Furthermore, it operates the Credit Transfer System, which is a paper-based bilateral gross settlement system and transactions are settled directly onto accounts held at the Central Bank, on an end-of-day batch basis. Direct participation to the system is restricted to those organisations entitled to hold accounts with the Central Bank. Currently there are 30 participants, which are the commercial banks, the Treasury and other government departments.

The Central Bank of Cyprus Law has been revised to encompass specific provisions regarding the Bank's role relating to payment systems. The proposed new legislation has undergone legal vetting and it is expected that it will soon be submitted to Parliament. Considering the intention of Cyprus to join EMU as early as possible and the fact that TARGET is an essential component of EMU, it is planned that a RTGS system will be set up by the time of accession to be eventually linked to TARGET.

Cyprus has a well functioning market economy and is at an advanced stage of harmonisation. The economy has been performing well and the financial system has not been subject to stresses or instability. Furthermore, Cyprus banks, though small in the global rankings, are financially sound, have comfortable cushions of capital and good profitability growth. They are also progressive in outlook and have the required technology and human resources to enable them to face the competitive pressures of the integrated European market. It is expected that they will hold their ground in the new environment and their strong position in the home market.

The financial sector in the Czech Republic: an assessment of its current state of development and functioning

Pavol Ihnat and Petr Prochazka*

Czech National Bank

I. Introduction

The Czech financial system is considered to be near the completion of a fairly rapid phase of restructuring and reform, with particularly considerable progress achieved in improving the legislative and regulatory framework.[1]

In comparison with other transition economies, the Czech Republic has a relatively large financial sector, with total assets amounting to around 160% of GDP (Table 1). Banks are still dominating the sector, with a share in total assets of about 85%. Although this dominance has

Table 1: Key figures of financial institutions

	Number of institutions	Total assets (EUR billion)	Total assets (% of GDP)	Relative share in total assets (%)
Deposit money banks	38	87.0	132	85
Insurance companies	43	6.4	10	6
Investment funds [1)]	136	2.5	4	2
Pension funds	14	1.7	3	2
Credit unions [2)]	52	…	…	…
Leasing companies	115	4.4	7	4

Sources: CNB, MoF, CSC

1) Members of the UNIS (Union of Investment Companies)

2) Relative share in total assets at the end of 2001 was 0.05%.

been declining slightly over the past ten years, the role of insurance companies, investment funds and pension funds is still underdeveloped by international comparison. Thus, the banking sector is at the core of domestic financial intermediation. Bank intermediation in the Czech Republic puts the country at par even with some advanced market economies (e.g. Italy).

One of the key features of the financial sector of the Czech Republic is its high level of concentration (Table 1). In both banking and insurance, the top five companies basically control the market. The situation is similar in the securities sector, where business is concentrated among a few blue chips, carried out by a very limited number of large dealers for some large investors. This concentration is due to the relatively modest size of the sector as a whole and to the effects of the former state ownership of the sector.

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[1] This was also the conclusion of the IMF and World Bank mission, which during the period November 2000 - April 2001 performed a Financial Sector Assessment Programme in the Czech Republic.

Table 2: Key figures of the financial sector
(4Q2001)

	Value (EUR billion)	% of GDP
Value added in financial services [1)]	2	3
Domestic credit to private sector	26	39
Bond market capitalization	11	16
Stock market capitalization	11	16
Market share of top 5 companies	**Value (EUR billion)**	**% of assets/premiums**
Commercial banks	59	68
Stock market	7	67
Insurance	2	76

Source: CNB
[1)] Employment in financial services accounted for around 2% of total employment.

Over the past few years, the number of banks has considerably declined and may continue to shrink further because of the positive effects of the privatisation process (e.g. further improvements in services provided and greater efficiency and competitiveness in the banking sector).

This process of consolidation has brought a substantial change in the ownership structure in the sector, resulting in a large share of foreign-controlled financial assets (e.g. roughly 95% in the banking sector). Thus, more improvements and further consolidation across all segments of the sector can be expected, particularly in view of its future integration into the EU single market for financial services.

II. Banking sector

1. Market structure

The structures of commercial banking have only developed since the early 90s, when the state banking monopoly was dismantled, and the establishment of new banks along with the entry of foreign institutions permitted. The relative size of the Czech banking sector exceeds however those of most other countries of comparable size and stage of development, as banks in the former Czechoslovakia had been more extensively utilised as a source of corporate financing. Furthermore, the authorities were able to avoid a high rate of inflation during the early stage of transition, which contributed to the erosion of bank asset values in other transition economies.

The structure of the banking sector has undergone a profound change in the second half of the 1990s. After an extensive phase in the early 1990s, when the number of banks rose sharply, a qualitative phase followed (Table 3) with the number of banks gradually declining since 1995 and with the bank privatisation process finalising in the first half of 2001. Up until 1999, licenses had been revoked mainly because of the poor financial situation of the banks in question, whereas the decline in last two years was primarily due to bank mergers. As of

Table 3: Number of banks
(end of period)

	1993	1994	1995	1996	1997	1998	1999	2000	2001
Banks, total									
of which:	52	55	55	53	50	45	42	40	38
Large banks	5	5	5	5	5	5	5	4	3
Medium-sized banks	2	5	10	9	13	12	12	11	10
Small banks	32	30	24	19	13	12	9	8	8
Foreign bank branches	7	8	10	9	9	10	10	10	10
Building societies	5	6	6	6	6	6	6	6	6
Banks under conservatorship	1	1	0	5	4	0	0	1	1
Banks without licences	0	1	4	6	10	18	21	23	23

Source: CNB

31 December 2001, the Czech banking sector consisted of 38 active banks, including foreign bank branches.

Despite the large overall number of banks, and in particular of foreign banks, the market remains dominated by a few large institutions (Table 4). The three largest banks had a combined market share of 58%. Nevertheless their market share has been steadily declining – since mid 90's by 14% of total assets, 20% in terms of total credits and 13% of primary deposits. Particularly apparent is the growing significance of medium-sized banks, which

Table 4: Banking sector structure
(end of period)

	1996	1997	1998	1999	2000	2001 [1)]
Total assets						
Large banks	72	67	64	62	59	58
Medium-sized banks	14	17	18	19	22	22
Small banks	3	3	3	2	2	3
Foreign bank branches	9	10	10	12	12	12
Building societies	2	3	4	5	5	5
Total credits (gross)						
Large banks	79	75	71	66	59	59
Medium-sized banks	10	13	15	18	23	23
Small banks	3	3	3	3	3	3
Foreign bank branches	7	9	9	11	11	11
Building societies	0	1	2	3	4	4
Total clients' deposits						
Large banks	82	78	73	72	72	69
Medium-sized banks	8	11	14	15	14	17
Small banks	3	2	2	1	1	2
Foreign bank branches	3	4	4	4	4	4
Building societies	4	5	7	7	9	8

Source: CNB
[1)] Q3 – Reference period of latest data.

mainly comprise foreign bank subsidiaries. Additionally, the share of building societies is also increasing, although this is only of marginal significance.

The main factor influencing the ownership structure of the banking sector has been the ongoing privatisation of large banks. Foreign capital has already an important effect on the Czech banking sector. With the privatisation process being completed in mid-2001, almost 95% of the total assets of the banking sector are foreign-controlled to date. During 2000, the concentration process in the Czech Republic was affected in particular by the privatisation of Ceska sporitelna, into which the Erste Bank Sparkassen subsidiary was subsequently integrated, and by the sale of Investiční a Postovni banka to CSOB. Of the larger foreign-controlled banks and branches, most have German, Dutch, Austrian, French or US parent companies or headquarters.

The concentration has continued in 2001 with a merger between Bank Austria Creditanstalt CZ and Hypo-Vereinsbank CZ under the name of HVB Bank CR. The size of the banking sector has further been affected significantly by the transformation of Konsolidační banka into a specialised non-bank agency since 1 September 2001, which will continue to administer poor-quality assets. Moreover, in mid-2001 the state's stake of Komerčni banka banka amounting to 60% was sold to Société Générale.

which is divided into two segments. The first is the demand-side-determined segment for strong performers, mostly companies under foreign control. The second is the supply-side-determined segment for weak performers, mostly companies controlled by domestic capital.

The maturity structure of loans is slowly extending to the long end, following the general stabilisation of the economy and the inflation. At the end of 2000 more than a third (44%) of all credits were long-term, 19.6% medium-term, and the rest of short-term maturity.

2. Banking sector assets

The balance sheet of the aggregate banking sector (Table 5) reflects the broad picture of the state of financial intermediation in the country. As of 31 December 2001, total assets of the banking sector amounted to €81.7 billion, representing a year-on-year increase of €11.2 billion, or 15.9% on a year earlier. The growth rate accelerated in comparison to 2000.

Total assets increased most rapidly in the group of building societies with a year-on-year growth of 22.3%. In contrast to that, large and medium-sized banks along with foreign bank branches recorded minimal growth rates of around 10%. The latter, however, typically show a high volatility of total assets. Strong rises were also recorded by small banks (17.3%).

The economic recession in recent years, which in 2000 was replaced by a modest recovery that continued in 2001, fed through mainly into the asset structure. Reduced lending activity resulting from a shortage of creditworthy projects coupled with the banks' generally stricter lending criteria led to a decrease in credits as of total assets by the end of 2000. However, the results from the previous year indicate a slight improvement in this respect (up by a modest 0.9 points). Banks invested their liquid assets in securities, whose share of total assets accounted for around 23% in 2001. They invested mainly in highly liquid securities like government bonds, CNB bills and other bonds.

The breakdown of the stock of credit in business and households shows that the share of households has risen in last two years almost twice reaching 12.3% in total credits at the end of 2001. Nevertheless, the corporates remain further the most significant credit recipients. As of 31 December 2001, these accounted for 56% of all credits granted, a fall of 10.3 percentage points from the previous year. Despite this development, the credit market is still

Table 5: Banking sector balance sheet

	EUR billion			% of total		
	1999	2000	2001	1999	2000	2001
Assets						
Cash	1.0	1.0	1.2	1.6	1.4	1.5
Deposits / credits with CNB	7.3	8.0	9.2	11.7	11.4	11.3
Deposits / credits with banks	15.3	15.9	16.5	24.4	22.5	20.2
T-bills	2.2	3.1	4.2	3.5	4.4	5.2
CNB bills	5.6	6.8	8.0	9.0	9.6	9.8
Credits	21.9	22.7	27.1	34.9	32.2	33.1
Tradable securities	2.0	2.6	1.5	3.2	3.7	1.9
Long-term financial investments	1.6	4.6	4.8	2.5	6.6	5.9
Tangible and intangible assets	1.7	1.7	1.7	2.7	2.4	2.1
Other assets	4.2	4.1	7.4	6.7	5.9	9.1
Total assets / liabilities	**62.8**	**70.5**	**81.7**	**100**	**100**	**100**
Liabilities						
Resources from CNB	0.1	0.2	0.1	0.2	0.2	0.2
Deposits / credits from banks	10.0	10.0	10.8	16.0	14.2	13.2
Deposits received	32.8	35.5	43.3	52.2	50.4	53.0
Bond issues	5.5	6.7	6.1	8.8	9.5	7.5
Reserves	1.0	1.5	1.3	1.6	2.1	1.6
Reserve funds	1.0	0.8	0.9	1.5	1.2	1.1
Capital funds	0.4	0.2	0.3	0.6	0.3	0.3
Initial capital	2.2	2.3	2.4	3.5	3.3	3.0
Other liabilities	9.8	13.3	16.4	15.6	18.8	20.0

Source: CNB

predominantly a corporate sector market, which is divided into two segments. The first is the demand-side-determined segment for strong performers, mostly companies under foreign control. The second is the supply-side-determined segment for weak performers, mostly companies controlled by domestic capital.

The maturity structure of loans is slowly extending to the long-end, following the general stabilization of the economy and declining inflation. At the end of 2001 almost the half (46%) of all credits were long-term, 20% medium-term, and the rest of short-term maturity.

3. Banking sector liabilities

On the liabilities side of the balance sheet, client deposits are still dominant, amounting to 53% (up by 2.7 points from the previous year) as of 31 December 2001. Citizens tend to deposit their free funds at banks, although other forms of saving such as supplementary pension insurance, life insurance and collective investment are gradually developing. The share of deposits from banks (13.2%) recorded a year-on-year decrease by 1 point owing to a reduced need to replenish funds for asset operations due to the limited lending activity. The own funds of the banking sector amounted to €5.8 billion at the end of 2001, a rise of 2.7% compared with the end of 2000, thus demonstrating their growing influence to cover the underlying risks.

Off-balance sheet items have increased dramatically over the past years, reaching a level around 140% of total balance sheets at the end of 2001. Most of them represent currency swaps, closely followed by currency forward contracts and interest rate swaps.

III. Non-banking sector

1. Money market

The CNB instruments of monetary policy are nowadays fully harmonised with those of the European Central Bank (ECB). The CNB uses these monetary instruments for draining excess liquidity from the banking sector. Those instruments are used by the CNB in the same way as in the ECB with small differences described below:

– 2-week repo tender is organised every day starting at the same day when announced;
– 3-month repo tender is not used recently;
– other instruments are used in the same way as in the ECB, however very rarely.

With regard to minimum reserves, domestic banks' liabilities are subject to minimum reserve requirements set by the Central Bank. These requirements have been gradually lowered over the past years for commercial banks, from 12.5% in 1995 to 2% recently. Although the reserve requirement is currently of little significance as a monetary policy instrument, it fulfils an important role as a cushion for the smooth functioning of the interbank payment system at the CNB Clearing Centre.

In late 1999 the CNB introduced a new deposit facility to enable commercial banks to deposit their money overnight at the central bank at the discount rate. The deposit facility is an operation symmetrical to Lombard loans. The measure is targeted at reducing the fluctuations of short-term interest rates and limiting their movements within the corridor between the Lombard and discount rates. Through the introduction of this service, the CNB has almost fully harmonised its range of monetary instruments with those of the ECB.

The interbank deposit market, as the core of the money market, is well developed. The standard instruments follow international standards and practice. The bulk of transactions takes place in relatively short-term maturities of up to 2 weeks. Benchmark prices are reflected in the Prague Interbank Offered Rate (PRIBOR). In respect to the average daily turnover of the money market it increased between 1997-2001 by €0.9 billion reaching around €2 billion in October 2001.

The short-term securities market has been introduced in 1992 via Treasury bills, with a denomination of CZK 1 million and with maturities of 3, 6, 9, and 12 months, issued by the Ministry of Finance. Main investors are mainly domestic banks and to a certain degree also other financial and non-financial institutions.

Securities are in book-entry form only. The central register is managed by the Central Bank. Its so-called "TKD system" allows also settlement to be conducted on a delivery versus payment basis.

2. Foreign exchange market

After achieving external convertibility of the currency the foreign exchange market has rapidly developed in terms of volume, structure and liquidity to a level comparable of developed economies of similar size. Due to the relatively deep and liquid koruna market its development has gained a more international character than in other accession countries.

The average daily turnover of the FX market dropped between 1997-2001 by €2.5 billion to around €0.8 billion. The reasons behind include the consolidation process of foreign exchange dealing operations, foreign banks' preference to operate from locations outside the Czech market and a reduction in speculative trading activity through domestic FX market. Interventions of the CNB were also very limited in this period. The CNB also acts as an agent

to the government when purchasing or selling foreign currency by arranging the transactions directly with banks.

The main traded instruments are foreign exchange swaps, forwards, spots and, to a much lesser extent, foreign exchange options. The dominant currency pair for spot trading is euro/koruna and for forwards and swaps US dollar/koruna.

3. Long-term fixed income market

The domestic bond market has grown over the past decade, with 82 bond issues at the end of 2001. Nowadays, the fixed income market has become an important part of the securities market. The bond market has been initially dominated by non-government bond issues, but larger government deficits in the recent years have resulted in a steep increase in the number and value of government bonds traded in the marketplace.

Trading in bonds outperforms trading in equities, with bonds accounting for 93.5% of the total value of trading in 2001. The fixed income market also encompasses the large T-bill and CNB bill markets as well as a number of OTC derivatives including an active swap market.

Although 80% of outstanding bonds are listed at the Prague Stock Exchange, actual bond trading takes place directly in the over-the-counter market. Liquid issues are traded by around 10 active market makers. All trades are cleared and settled through UNIVYC (a subsidiary of Prague Stock Exchange).

3.1 Government bond market

The Czech government issues two types of government securities: treasury bills and government bonds (Table 6). The treasury bills are discount bonds with a face value of CZK 1 million and maturities of up to one year – usually 13, 26, 39, and 52 weeks. The government bonds are fixed-coupon bonds with a face value of CZK 10,000. In the past they were issued in maturities of two and five years only. However, the government's issuing strategy involved recently also 3, 7, 10 and 15-year issues.

The stock of domestic central government debt (T-bills, bonds and direct credits) stood at the end of 2001 at €10.78 billion (Table 6) or roughly 16% of GDP (up from 12% in 1999). The debt to GDP ratio is among the lowest in the OECD countries, but the official figures do not include the large government guarantees extended to Konsolidacni banka created in order to absorb non-performing loans. The inclusion of these contingent liabilities would roughly double the stock of public debt.

Table 6: Structure of the central government debt by type of instruments
(EUR billion, end 2001)

	1995	1996	1997	1998	1999	2000	2001
T-Bills	1.24	1.84	2.02	2.87	3.60	4.69	5.85
Government bonds	1.24	1.28	1.52	2.01	2.13	2.96	4.68
Other [1)]	0.03	0.03	0.03	0.03	0.03	0.03	0.05
Direct credits	2.06	1.40	1.00	0.69	0.55	0.54	0.23
Total debt	4.54	4.52	4.54	5.60	6.31	8.21	10.78

Source: Ministry of Finance
[1)] Securities issued for IBRD and EBRD membership.

Debt management responsibilities are shared between the Ministry of Finance and the CNB. The CNB is acting as an agent for the issuance of government debt. T-bills and the medium-term government bonds are sold through auctions, organised by the CNB, to primary dealers (a group of selected banks and security dealers).[2]

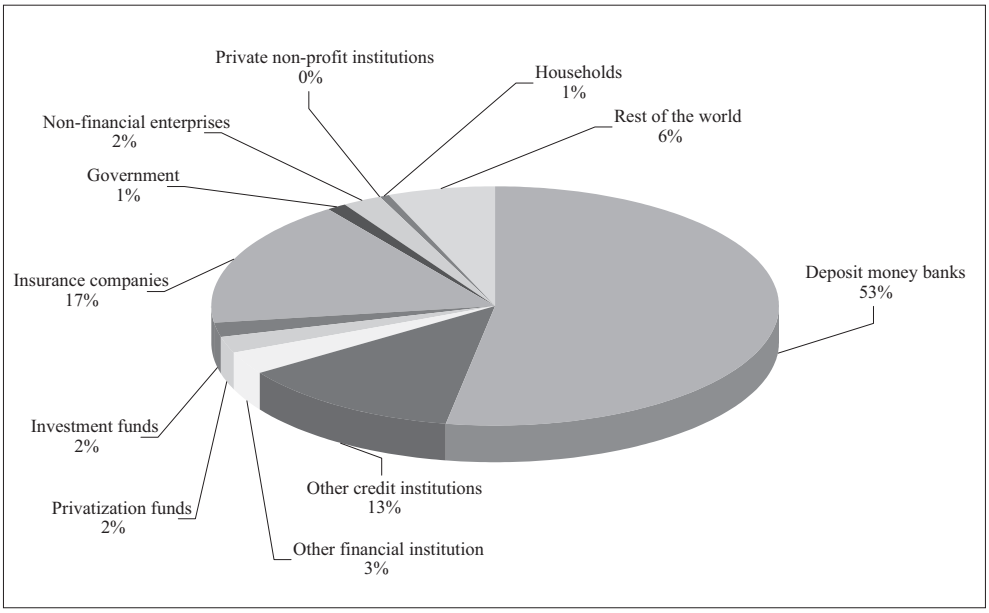
One additional problem in debt management is the short duration of the debt stock. The marketable domestic debt is concentrated in short term instruments, with almost 67% of domestic debt maturing in 2003. In OECD countries the typical duration ranges from 4 to 8 years. Funding in longer term government bonds has, however, been introduced, aiming to increase the duration of the domestic debt.

The average daily trading volume of treasury bills and bonds on the secondary market has been steadily rising from €0.1 and €0.02 billion, respectively, in 1997 to €0.3 and €0.06 billion in 2001. The largest holders of government securities are banks and insurance companies (Chart 1).

3.2 Non-government bond market

The non-government bond market is almost twice the size of the government bond market both in terms of number of issues and values. However, liquidity is more concentrated in the government bond sector. Three corporate bonds (KOB 2004, EIB 2009, and CSOB 2002)

Chart 1: Structure of the central government debt by holder



Source: Ministry of Finance

[2] The Ministry of Finance uses Dutch auctions for the sale of T-bills and American auctions for the sale of government bonds. In case part of the issue remains unsold, the Ministry of Finance could record this part as having been sold at the average auction price. This is a book-entry transaction that does not reflect any actual transfer of money (these securities could be sold on the secondary market later on). At the end of 2001, the Ministry of Finance held around 1% of its own debt (Chart 1).

account for more than 17% of all trading in the long term bond market. Major factors in the development of the market have been two issues from the EIB. The main corporate issuers are blue chip financial institutions, utilities and some production companies. Mortgage bonds are developing, but more slowly than expected.

4. Stock market

The market infrastructure consists of two authorised exchanges, a central securities registry,[3] and a clearing agency.[4]

The two authorised exchanges are the Prague Stock Exchange (PSE) and the RM System (RMS), which is an electronic over-the-counter market that is accessible to retail investors and market participants (brokers, institutional investors, etc.). Shares can be traded through a variety of channels at the PSE and the RMS, and also over the counter outside the two exchanges.[5]

As a legacy of the particular start of the Czech securities markets with the mass privatisation, a relatively large number of securities dealers are licensed to operate on the Czech market. This is the still the case despite the recent re-licensing procedure under which the number of market participants has already considerably shrunk, with 90 licensed brokers at the end of 2001 operating on the market. Of these dealers more than 20 were banks, having received a securities licence.

Securities' trading is concentrated on a number of larger investment companies. The top ten companies combined more than 80% of securities trading on the PSE in 2001. The banks licensed for securities trading typically represent the more important market participants. They are prominently represented in the list of largest securities' firms on the PSE in terms of total securities traded. Overall, they accounted for more than two thirds of all securities trades on the PSE.

Many of the shares traded on the PSE were, and still are, highly illiquid. The main liquidity is concentrated on a few stocks. Until 1997 around 1600 companies were listed on this segment before the Stock Exchange started a substantive delisting exercise of companies which had trading volumes or market capitalisation below a certain threshold. This resulted in a delisting of around 1500 companies, decreasing the number of listed companies on the PSE to 102 at the end of 2001.

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[3] The Securities Center (SCP) was established by the Ministry of Finance and is responsible for the registration of shares and debt instruments with maturities longer than one year. It maintains registers of dematerialised and immobilised securities.

[4] UNIVYC is a wholly owned subsidiary of PSE that provides clearing and settlement for trades conducted on the PSE. UNIVYC is also approved by the Czech Securities Commission (Securities regulator) and therefore able to provide settlement services.

[5] On the PSE securities are traded in three segments. The Main and Secondary Markets are differentiated by different listing requirements – higher requirements on the Main Market. In the Free Market, securities are not listed and there is simply a required minimum value of the registered issue. The PSE has applied for, but not received, authorization to trade derivatives. The RMS was originally designed to complement the PSE and to cater small voucher privatization investors.

IV. Functioning of the financial sector

1. Banking sector

Due to the strong position of banks in the Czech financial market their activities as a market maker constitute the core of the domestic financial market and its liquidity. However, compared to the initial conditions of the transformation process when credit business made up a substantial part of overall total assets (and profits), distinct positive developments have occurred since then and have changed markedly the character of banking in the Czech Republic.

The growing importance of financial markets for banking activities is reflected also in dynamic growth of derivative transactions in recent years, although in practice they are realized by only 11 banks and a limited range of CZK-denominated products instruments.

As far as specific segments of the financial market are concerned, banks occupy an exclusive position in the money and foreign exchange market. However, taking into account the universal status of the Czech banks, they are simultaneously active in the securities business, having a dominant position in the stock and bond market.

1.1 Performance

The banking sector achieved in 2001 a net profit of €0.5 billion (up by 14.4% on a year earlier), representing a ROA 0.64%. The year 1999 was the last one when the banking sector recorded a fall in profit caused predominantly by the group of big banks. The main factors influencing the level of net profit in 2001 were an increased growth rate of general operating expenses along with the provisions and reserves creation.

Profit from banking activities at the same time amounted to €2.7 billion, representing a year-on-year increase of 15.4%. The profit was, moreover, achieved in a highly competitive environment characterised by lowering interest rates and narrowing banks' margins.

The decisive reason for the strong level of profit was an increased income from securities and derivative transactions, which turned back to a profit-making in 2001 compared with the previous year. Nevertheless, the dominant factor in profit structure remains interest income with €1.6 billion at the year-end, or 58.2% of total profit. The positive development recorded further the profit from fees and charges with a year-on-year increase of 21.3%. The increased profits from the latter activities reflect banks' attempts to change the profit structure of banking activities.

In addition, this level of profit was achieved in the steadily declining volume of employment (down by 8.8% on a year earlier), which shows the considerable restructuring efforts undertaken by large banks.

1.2 Quality of credit portfolio

The Czech banking sector's main problem is a relatively high burden of non-performing credits. Since 1997 the share of these credits (classified either as substandard, doubtful or loss) in the total volume of credits has been 20.6% on average, peaking at 22% in 1999 and hitting a low of around 14% in 2001. Underlying this recent decrease is the transfer of non-performing assets from Investiční a Poštovní banka after its sale to ČSOB to the Czech Consolidation Agency.[6]

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[6] Konsolidační banka was transformed to the consolidation agency of the Government; it is not part of the Czech banking sector anymore.

As of 31 December 2001, the provisions and reserves of banks amounted to €2.3 billion and covered nearly two-thirds of the expected losses using the weighted classification of all classified credits. The remainder of the expected losses was covered by collateral.

The volume of non-performing credits has remained persistently high due to a relatively high credit exposure of big banks and some medium-sized banks to troubled enterprises, lengthy legal procedures on the enforcement of creditor rights (resulting also from overburdened courts) and limits for tax deductible loan loss provisions that motivate banks to postpone write-offs.[7]

Nevertheless, the banking sector appears to have accomplished the final stage of its stabilisation and negative trends among the large commercial banks were suppressed successfully thanks to their privatisation, the clean up of banking operations and radical actions taken against unsound practices of Investiční a Poštovní banka. However, stabilisation of banking sector turned out to be relatively costly. The IMF estimated total fiscal costs spent from the start of the transformation together with expected future costs to around 20% of GDP at the end of 2000.

2. Non-banking sector

2.1 Money market

PRIBOR interest rates were rising across all maturities from May 1994 until 1997, following a gradual tightening of money supply. The liquidity crisis in late May/early June 1997 marked the dramatic end of this gradual tightening with overnight offer rates reaching nearly 200% on 29 May 1997. After abandoning the exchange rate targets a gradual easing policy brought money market rates back to levels of around 5% in 2001. The decline in 2001 has been accelerated, especially at longer maturities, by the CNB's decision in further reduction of key interest rates at the end of November. As a result, PRIBOR rates reached a historical low at the end of 2001.

The market has become increasingly liquid and efficient when taking differences of offered and bid rates for different maturities as a proxy. Such spreads have come down considerably over the past few years to levels of around 10 basis points, and are therefore not far from spreads in the euro area money market.

2.2 Long-term fixed income market

Long-term rates were fairly stable during 2001 but more volatile than the rates on the money market. One of the main reasons for this is their greater sensitivity to economic and inflation expectations, which were changing during the course of the year. On the bond market, there were 15 issues with a total volume of €2.2 billion on the primary government market, experiencing strong investor interest in all auctions. In 2001, government bonds with maturities of 15 years were issued for the first time. The outstanding volume of government bonds was €4.7 billion at end-2001 (compared with €3 billion in 2000).

The short-term bond market developed during 2001 in line with PRIBOR rates. During the year there were 36 primary auctions of T-bills with one-year maturity. At the close of the

[7] The IMF in its recent Financial Sector Stability Assessment concludes that the current level of non-performing loans – high by international standards – in the banking sector does not represent a systemic threat to the stability of the banking sector, as the level of provisioning appears sufficiently high. However, the IMF strongly recommends their full tax deductibility.

year, the outstanding volume of T-bills was €5.9 billion. As in other money market segments, gross T-bill yields remained stable (at around 5%). Almost all auctions saw a demand overhang, resulting in gross yields below the announced limit yields. The CNB also issued its own bills into its own portfolio and used them subsequently in repo operations with commercial banks.

2.3 Stock market

Developments on the stock market were strongly dependent on events on foreign markets. Stock prices also responded to news about the privatisation of key domestic companies. Prices surged at the very beginning of 2001, but started to fall back at the end of January. This decline – with occasional corrections – lasted until the end of September. Although the behaviour of the PSE price index looked reasonable, the index was solely based on PSE auction prices, disguising large differences in the price of the same security across different trading places. The differences between share prices in the auction systems of the PSE and the RMS were small, but the differences between auction prices and the prices in direct (OTC) trades were very large and these direct trades accounted for a very large share of total turnover.

If judged by the traditional indicators of size, liquidity and prices (Table 7) the Czech securities market looks very developed.

These traditional indicators, however, overestimate the real degree of market development and also fail to reveal distortions in the Czech market due to the large number of rarely traded companies. The same applies to market capitalisation ratio. The true size of the market is also overestimated due to large state holdings and double counting of investment funds shares. Thus, the formal market capitalisation is less than half the size indicated. Market turnover ratios overestimate largely market liquidity as well because of multiple counting and other factors specific to the Czech Republic. Overall, trading volumes in shares are relatively moderate, as compared to the very considerable market capitalisation. This is not only due to the relatively large number of highly illiquid shares stemming from the voucher mass privatisation programme, but also due to the structure of financial intermediation that remains dominated by the banking sector, similar as in other European countries.

V. The role of the financial sector in the monetary transmission mechanism

1. The functioning of the interest rate channel

Two main channels of the monetary policy transmission process are directly related to the role and the functioning of the financial sector:

– transmission of the central bank key rate decisions into the money market and to other fixed income interest rates; and
– transmission of money market rate movements into the rates of lending to non-banks.

The two additional questions often highlighted in this context are the importance of autonomous factors in the quantity of money growth, and the money market rate's impact on the exchange rate.

Table 7: Equity market indicators for Prague Stock Exchange (PSE)

	1995	1996	1997	1998	1999	2000	2001
Number of listed companies	1,716	1,670	320	304	195	151	102
Number of licensed brokers	466	519	451	382	140	115	90
Market capitalization (% of GDP)	35	34	30	23	26	22	16
Market turnover (% of GDP) [1)]	32	62	47	30	23	27	12
Share of 5 largest issues in capitalization (%)	43	35	57	64	77	65	67
Price/Earnings ratio [2)]	10.4	12.7	13.7	14.3	15.9	16.7	7.5

Sources: Ministry of Finance and PSE
1) PSE, RMS and trades settled directly through the SCP
2) PSE, Turnover for PSE only

However, as in other transition countries, the link between changes in monetary policy and their interaction with the financial and real sectors in the Czech economy appears weak and is insufficiently explained. This fact was highlighted by periods when credit conditions for the non-banking entities were reluctant to react logically to central bank key rate decisions, posing challenges for policymakers.

Certain developments such as strong capital inflows and the restructuring of the financial sector have limited the capacity to impact monetary conditions directly. Although low interest rates succeeded in stimulating net portfolio outflows, strong inflows of foreign direct investment including substantial privatisation revenues have kept the currency strong. Moreover, efforts to limit upwards pressure on it, such as the special account at the CNB into which foreign-denominated privatisation proceeds can be deposited, have been implemented with limited success.

As far as the impact of monetary policy steps on the domestic economy is concerned, the fall in interest rates did not stimulate market participants to increase their borrowing. The volume of real credits continued to fall in 2000 and money supply, as measured by M2 and "L" (M2+T-bills+CNB-bills held by domestic banks) grew less quickly in 2000 than in 1999. The impact of low interest rates on money supply was limited to a substitution effect from time deposits towards demand deposits. Several factors contributed to a drop in the volume of corporate borrowing. On the supply side: banks tightened the terms under which they lend, following a strengthening of prudential standards, and lending activity was scrutinised more carefully as a consequence of the loss of implicit state guarantees after the privatisation process. Furthermore, the financial difficulties of IPB, which culminated in the forced administration and sale, forced it to reduce lending in order to clean up its balance sheets. Also demand side factors played a role. In particular, the weak financial condition of borrowers coupled with a lack of profitable investment projects resulted in a reduction in the demand for credits, and financially sound corporates, especially those with strong strategic foreign partners, used alternative sources of financing (e.g. own funds, cross-border credits, credit lines from mother companies, international capital market instruments etc.) more heavily.

Thus, the restructuring in both the banking and non-financial sectors has weakened the domestic transmission mechanism and, as a result, the exchange-rate channel has been a more important determinant of monetary conditions than it would otherwise have been.

Nevertheless, as domestic credit remains subdued, the use of low interest rates to minimise upward pressure on the currency appears to be an appropriate strategy. The alternative of using sterilised intervention to raise interest rates and restrain domestic demand seems problematic, given the likely sensitivity of portfolio inflows to interest-rate differentials and the current state of domestic intermediation.

2. Specific circumstances of monetary transmission in the Czech Republic

With regard to the contraction of domestic credit it is important to take into account specific circumstances, which have influenced the monetary-policy transmission mechanism in the Czech Republic.

Although this mechanism has been affected, as in other Central European economies, primarily by transition, the Czech economy was far more monetised at the start of its transformation. Measured in terms of money supply as a percentage of GDP, the degree of monetisation was closer to the level of advanced economies, forcing therefore an underdeveloped financial sector to allocate and raise a large volume of savings. As pointed out above, financial institutions were not well prepared for such a task. Consequently, many projects had a lower-than-expected rate of return and savings were not always increased in value effectively.

Until 1997 a combination of rapid credit expansion and an imperfect market system (e.g. non-functioning corporate governance and internal controls in many banks, state influence in large banks, insufficient regulation of the capital market, etc.) with an inadequate control mechanisms led to a fast growth of classified credits in the banking sector. The currency turbulence in 1997 and in particular the subsequent slowdown in economic growth further exacerbated the banks' financial situation.

Structural causes of the credit contraction in 1997, including a shift towards increased prudence on the part of banks and a re-assessment of banks' business strategies (owing to the sharp rise in interest rates during the crisis), the planned privatisation of large banks, and the banks' worsened credit portfolios, limited the ability of monetary policy to stimulate economic growth via the lending behaviour of the banking sector in the short run. Until these structural causes are eliminated, a major recovery in lending to businesses by banks remains unlikely.

Besides the aforementioned factors, the monetary conditions in the economy are increasingly being affected by two further factors. First, given the subdued lending activity of banks and the continuing – albeit relatively sluggish – growth in deposits, banks have started to look for other, safer, options for allocating their liabilities, including CNB bills and government bonds. Secondly, widening public budget deficits financed via the issuance of bonds purchased by banks appear to crowd out private sector investments. (At the start of 1998, banks' net credit to the government was negligible, whereas at the end of 2000 it exceeded 8% of the total credit volume).

Against this background, monetary policy measures are not sufficient in themselves to bring about renewed credit growth in the economy. The easing of monetary policy in 1998-2000 has reduced companies' financial burdens, as has the sizeable state support provided to banks. But also essential for a recovery in lending is completion of the reform of the legislation governing relations between creditors and debtors, completion of the privatization of the remaining state-owned companies and, last but by no means least, financial stability in the economy and a renewal of positive corporate expectations as regards future economic growth.

3. Microeconomic aspects of the transmission mechanism

The conclusions above are also confirmed by a recent CNB study into microeconomic aspects of the transmission mechanism based on figures for the corporate sector in 1995-1999, which generated the following findings:

– Total lending in the Czech Republic is largely influenced by factors associated with the financial situation of businesses.
– Foreign-controlled corporations display the greatest sensitivity to changes in interest rates and they are affected in particular by demand for short-term credits. However, the effect of interest rates on the volume of credits is limited given the considerable possibilities for these enterprises to substitute bank loans with other funding sources.
– As for private corporations, whose operations and investment activities are strongly dependent on credit flows, changes in the stock of credits financing investments are less sensitive to changes in interest rates.
– As for public corporations, the effect of changes in interest rates on changes in the credit volume is minimal. Such changes are dependent rather on non-financial aspects of the lending to this sector.

The monetary-policy transmission mechanism appears to be only evident in the case of companies drawing new loans, during determination of their "risk-free" interest rate level. However, corporate interest-rate differentiation is dependent on non-financial aspects rather than on financial factors.

VI. Trends in the financial sector in view of integration in the EU

1. Banking sector – future trends

The fundamental market allocation and the structural transformation of the banking sector and its ownership structure have been completed. Nevertheless, the income and structural disparity between accession countries and the EU is still affecting the banking sector. The gradual convergence of the Czech banking sector to the parameters of the banking sectors in EU Member States will probably be at least a medium-term process. Nevertheless, reserves allowing the efficiency of the large banks to be increased exist and the new owners of the privatised large banks will make use of these.

It can be expected – and the current trend indicates this – that foreign owners of large banks will exert pressure for streamlining operations. They will endeavour to improve performance, to raise efficiency indicators (e.g. assets per employee), to enhance savings and to boost productivity. Given foreign investors' financial strength, their know-how and their ability to offer clients new and innovative products/services, it is likely that these banks will develop at a faster pace. As a consequence of increased competition, it is expected that pressure to modify the prices of banking services will increase.

Furthermore, we can also expect a trend towards centralisation of activities at foreign head offices (e.g. for sophisticated activities on international financial markets) as one of the ways to optimise banks' operations. As a consequence, the strategy for building up the banking sector will be derived from abroad as an imported strategy of large banks.

As regards banking sector growth, it will be closely linked with the domestic economy and posses therefore significant potential during the convergence process. Although a major expansion into other countries – and especially into the already overcrowded EU banking market – is unlikely, the opportunity for participation in the EU market is possible via co-operation with strategic partners. However, the comparative advantage of Czech banks lies in combining their local knowledge, mentality and customs with the plans and possibilities of their strategic partners.

The key segments for development of the banking sector in Central European countries will be retail banking, insurance banking and lending to small and medium-sized businesses, as these areas allow best use of existing branch networks. An extensive branch network is not necessary for investment and corporate banking. It can be expected that established financial groups will join forces in particular areas and that the domestic banking sector will evolve in line with the trends in world banking.
The typical structure of the banking sector in the Czech Republic will comprise:

– Foreign-controlled medium-sized and small banks (on the European scale) with an optimised branch network, whereby the strong strategic partner will continue to develop banking products and services. It will make use of established branch networks and will combine them with existing activities and geographical orientation. In its effort to optimise its investment it will endeavour to boost performance and investment yields with the assistance of high-quality management, the transfer of new technology and know-how.
– Branches of foreign banks, which will not specialise in retail banking and will not have an extensive branch network, but will be able to compete with the aforementioned banks by using electronic banking.
– Credit unions, which under EU law are included among credit institutions. These credit unions, however, do not have bright prospects of development in the Czech Republic.
– Specialised banks (mortgage banks and building societies), whose prospects are determined by their specific purpose and state ownership, as their market segment can not be freely accessed.

2. Expected trends in the financial sector development

The banking sector is likely to maintain its crucial role in the financial intermediation process in the country, given the domestic and Central European tradition. However, its relative importance could diminish due to the following trends:

– The dependence of enterprises on domestic credits will decrease (that covered around 80-90% of their financial needs) and will be increasingly replaced by funds of the parent companies, own funds and/or access to international/national capital markets as a consequence of the ongoing presence and entry of foreign strategic investors in the corporate sector;
– There will be an increasing level-playing field, eliminating regulatory differences between particular segments of the financial sector (e.g. level of the capital adequacy, consumer protection etc.), as the harmonisation of the legal and institutional infrastructure with the EU acquis advances. A particular challenge for the banking sector and regulators will be the implementation of the new Basel capital accord.

These trends are likely to have the following effects:

– elimination of competitive disadvantages of banks relative to the other market participants in some markets;
– a relative increase of bank's fee-related income compared to the income from credit business, improving the risk profile of the banking sector;
– the use of new opportunities for financing via the domestic capital market by corporates (if the implementation of the EU acquis is to foster an increasing quality of oversight, to enhance liquidity in the market, to increase financial strength and to improve the quality of services providing institutions);

– a stronger co-operation between supervisors both nationally and internationally (Memoranda of Understanding being currently under negotiation/preparation) forced by an increasing sophistication of services and a more important role of financial conglomerates;
– an increased competition for deposits (e.g. through pension funds and life insurance companies);
– bringing the services closer to the client, thus underlining the need for new forms of his protection.

The EU/international co-operation in supervision will be crucial because of the large presence of foreign/multinational institutions across all segments of the financial sector.

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Structure and performance of Estonia's financial sector

Ilmar Lepik, Jaak Tõrs

Central Bank of Estonia (Eesti Pank)

I. Introduction

The development of the Estonian financial sector began in 1992 with the reintroduction of the national currency. Hence, financial sector reforms started in an environment characterised by the currency board arrangement (CBA) and liberalised external policies, as most restrictions on capital account transactions were immediately abolished. In this environment, the strength of the financial sector became a crucial issue, given the limited scope for the lender of last resort function provided under a CBA by the central bank. Moreover, the real economy was faced with the hard budget constraints that are necessary to maintain a CBA.

The development of the financial sector entered into a second phase in the mid-1990s, the beginning of which was marked by increasing creditworthiness of Estonian enterprises, a growing presence of Estonian banks as investors and borrowers in European financial markets, and general integration of the financial sector into European markets. This period was also characterised by extensive privatisation and consolidation in the financial sector.

The third major wave of changes came in the aftermath of the Asian and Russian crises and led to higher concentration in the banking sector as well as to the entrance of foreign (mainly Scandinavian) strategic investors. By the end of 2000, privatisation had been fully completed, and the deepening integration with European markets had also led to the internationalisation of domestic money markets.

Similar to financial intermediation in other emerging markets, Estonian financial intermediation is based on a universal banking model, in which the banking sector plays the dominant role and the share of the securities market is relatively modest. All leading banking institutions have evolved into banking groups covering all main financial sector services, including leasing, investment fund management, insurance and electronic banking services.

There are some specific features of the economic and institutional environment that have profoundly shaped Estonia's financial sector: the small size of the country, the short period of development and the status of Estonia as an EU accession country. Against this background, the money market has close links with the foreign exchange market (and the short-term securities market), and the dominant role of Scandinavian financial institutions has led to an extension of the money market beyond national borders.

Also with regard to monetary transmission, a number of special features need to be considered. First, monetary policy signals under the CBA are exogenous for the banking system (and are often hardly distinguishable from external shocks). Second, a government securities market does not exist in Estonia, which affects – although not profoundly – traditional monetary transmission channels. As a result, the information contained in monetary transmission is reflected not in a traditional yield curve, but rather in the money market curve (at the short end) and the credit curve, i.e. the swap and lending rates (at the long end).

One notable feature of the structure of financial intermediation concerns the integration of markets. Owing to high international integration of the economy through foreign direct investment and extensive trade links, a high share of the economy is financed on an intra-company basis or directly from European financial markets. Therefore, competition in the financial market is not limited to locally licensed institutions.

With regard to financial stability, the continuous improvement of supervision activities and banking sector legislation in accordance with EU directives and BIS recommendations has had a remarkable impact on the strengthening of the banking sector. As regards the financial sector safety net, all major building blocks are present: (a) a monetary operational framework which is supportive despite the limited lender of last resort function under the CBA; (b) an operational deposit guarantee scheme; and (c) mechanisms for effective crisis prevention and resolution.

This chapter outlines the main features of Estonia's financial sector and is structured as follows (see Table A1 for the main indicators and Chart A1 for the structure and volume of intermediation). Section II deals with general features of the banking sector together with leasing subsidiaries, while Section III provides an overview of money, debt securities, foreign exchange and stock markets. Section IV is devoted to a more general discussion of financial intermediation and monetary transmission issues. The part discussing the functioning of the financial intermediation focuses mainly on the evolution of the banking sector and financial flows. Box 1 looks at the evidence of financial deepening in Estonia. The sub-topics relating to monetary transmission issues include the cross-border transmission of interest rates (specific to a CBA), the transmission of retail rates and the impact on real activity and inflation. One issue of particular relevance is monetary transmission in the absence of a government securities market.

Finally, Section V addresses the changes in the payment and settlement systems as well as financial stability issues, including the harmonisation of legislation, the issues of banking supervision, the process of building up the new unified financial supervisory agency and topics related to the lender of last resort function.

II. Banking sector

1. Institutional developments

Over the recent years, the Estonian banking sector has displayed an enhanced creditworthiness and competitiveness relative to the situation prevailing in other advanced transition countries. Private ownership reached approximately 96% in the banking sector in terms of total capital already by end-1997. Rapid improvements in the legal and regulatory infrastructure have resulted in a banking system that can be considered as sound and whose regulatory framework is in line with international practice.

In the course of the banking sector restructuring, the number of credit institutions dropped from 42 banks in 1992 to 11 banks by end-1997 and further to only 6 banks after the Russian crisis in 1998 (Table 1). In 1999 a new bank received a licence from Eesti Pank (Bank of Estonia), so that currently there are 7 banks in the market. At the same time, consolidation has driven the asset concentration index of the three largest banks up to more than 90%. Concentration was forced mainly by foreign capital inflows, strengthening of internal governance rules and the promotion of operational efficiency. Financial conglomerates of Swedish and Finnish origin hold 82% of the banks' share capital. The consolidated capital adequacy ratio of Estonian banking groups is a comfortable 14% on the average, with no banks below the 10% minimum.

Table 1: Selected banking indicators

	1996	1997	1998	1999	2000	2001
Number of commercial banks	13	11	6	7	7	7
Number of private banks	12	11	5	6	7	7
Number of state-owned banks	1	0	1	1	0	0
Concentration C3, %	59	70	93	92	91	91
Concentration C5, %	75	83	99	99	99	99
Total assets, EUR million	1,467	2,594	2,620	3,008	3,695	4,372
ROE, %	30.6	34.9	-10.1	9.2	8.4	20.9
ROA, %	2.9	3.3	-1.2	1.5	1.2	2.7
Capital adequacy, %	12.4	13.6	17.0	16.1	13.2	14.4
Total assets / GDP, %	44	63	56	62	68	72
Foreign ownership in share capital, %	33	44	61	62	84	85
Major foreign ownership in total assets, %	3	2	90	90	97	98

Source: Bank of Estonia

During the booming years of 1995-1997, the quarterly return on capital (ROE) ranged between 10-20%, but after the stock market crash in late 1997 profitability measures turned negative. Only from 1999 onwards did the banks' return to capital ratio turn positive again and ranges around 3% on a quarterly basis. Economies of scale and advanced technologies exploited over recent years have played an important role in improving the banks' profitability outlook.

2. Bank assets and liabilities

Banks are still the dominating financial intermediaries with total assets accounting for over 70% of GDP. Annual asset growth has amounted to over 20% after the crisis in 1998 and was

Table 2: Loan portfolio structure

(%)

	1996	1997	1998	1999	2000	2001
Domestic bank credit to total credit	94.1	92.5	95.0	95.3	96.0	97.0
Institutional sectors share in total credit						
Corporate sector	67.9	61.9	63	55.4	46.5	43.6
Financial institutions	15.1	16.1	18	22.5	30.8	30.3
Households	15.5	20.5	17.7	20.1	19.9	22.4
Public sector	1.6	1.5	1.3	2.0	2.8	3.7
Economic sectors share in total credit [1)]						
Industry	23.3	16.2	21.8	19.6	18.2	16.2
Real estate	20.7	27.1	25.6	35.0	36.4	41.0
Merchandise	21.7	19.1	15.6	13.4	14.6	12.5
Agriculture	6.0	4.1	2.8	2.7	2.1	2.5
Transport, storage and communications	4.0	4.9	5.6	5.2	4.6	4.7
Other	24.3	28.6	28.7	24.2	24.0	23.1

Source: Bank of Estonia

[1)] Loans on banks and financial intermediation excluded

accompanied by a strong increase in deposits. Since the end of 1999 deposit growth has been running clearly above the level of loan growth, supported by new attractive Internet and ATM facilities for customers as well as by better access to different bank services (credit cards, small financing etc). As a result, Estonian banks have become less dependent on foreign institutional borrowing and interest rates have fallen to a favourable level for banks.

In parallel, foreign depositors, mainly private corporate clients have gained importance in funding Estonian banks, making up about one quarter of all corporate deposits and 15% of total deposits. The client and maturity profile of non-resident-owned funds indicates their primary nature as a source for everyday cross-border business transfers (Table 2).

Bank credits are predominantly granted to domestic residents, whose share in total credits even increased in the last five years. Asset structure changes since 1996 indicate an increasing share of loans granted to financial institutions, mostly internal group members (leasing subsidiaries). However, the largest share of assets is still attributable to claims on the non-financial private sector, averaging 40% of total assets and representing around 65% of the total loan portfolio.

In terms of economic sectors, industry, real estate and merchandise receive about 40% of bank loans, which reflects the strong development in these areas of business (Table 2). The most pronounced decrease of lending to economic sectors was encountered in the agricultural sector. The largest portion of loans under item “other” is to be ascribed to non-bank financial intermediation.

An improving client profile has allowed banks to advance client relationships, which helps to monitor and assess credit risk more effectively. In addition, diversification of products and services offered reduces the concentration of instrument-related risks. Therefore, the loan portfolio shows good quality, with the average share of loans past due in total loans standing below 7% and with provisions of non-performing loans at less than 2.5% during last two years. This also implies that banks have adopted provisioning rules and risk management standards in line with international practice.

The increasing open net foreign exchange positions are still mostly due to net foreign asset-liability positions (Table 3). However, given the increasing share of different derivative and off-balance-sheet commitments the enhanced surveillance and regulation addresses effectively these new risk categories.

Table 3: Asset quality indicators

	1996	1997	1998	1999	2000	2001
Share in total loan portfolio (in %): [1]						
Provisions of non-performing loans	2.3	2.5	4.9	3.6	2.2	2.0
All loans past due	4.5	5.2	5.5	7.7	6.1	6.7
All loans past due over 60 days	2.5	3.1	3.1	4.6	2.	3.2
Foreign currency position (EUR million)						
Open net foreign asset-liability position	61.2	104.8	442.5	54.1	623.1	1050.1
Open net forward contracts position	0.5	-217.6	-212.1	15.6	26.1	39.3
Open net swap-position	-	-	-	-101.1	-147.1	-26.0
Open net position of futures and other off-balance-sheet commitments	9.4	-10.4	-2.9	0.0	8.2	0.2
Open net foreign exchange position total	71.0	-123.3	227.6	468.7	510.2	1063.6

Source: Bank of Estonia.

[1] excluding loans to banks and financial institutions.

The banks' securities portfolio has followed a rather conservative pattern after the decline in the stock market in 1997. Foreign debt securities are the dominant segment in the securities portfolio of banks. However, growth of shares – strategic investments in associated and affiliated enterprises – has been significant since April 2001 due to the extension of the market share of Estonian banking groups in other Baltic countries (mainly in Lithuania). In contrast, the amount of shares held for trade or short-term investments has diminished remarkably over the last years, reaching a low 3% in 2001.

III. Non-banking sector

1. Money market and foreign exchange market

The Estonian kroon money market comprises short-term interbank deposits/loans, corporate debt securities and forex forwards and swaps instruments. There are no treasury bills issued by the state. Compared to the forex forward or debt securities market, interbank money market activity is concentrated more in the short end of the yield curve, with main trading volumes in less than three-month segment. In terms of turnover volumes, the most liquid segment is the forward market. The integration between the three markets is strong and comes about through interest arbitrage at the short end of the maturity spectrum.

1.1 Foreign exchange market

As a consequence of the currency board arrangement, Eesti Pank offers credit institutions an unlimited forex purchase and sale facility for all major currencies (including the euro and USD) against the Estonian kroon. In practice, Estonian commercial banks nowadays purchase the euro only from the central bank. This is related to the fact that there is no bid-offer spread for euro transactions. The forex window offered by Eesti Pank is the key element of the liquidity system. The fact that credit institutions are free to move their liquidity cross-border practically without costs makes liquidity management in deeper euro money and capital markets particularly attractive.

The turnover of the Estonian forex market (both spot and forward) amounts to around €4 billion per month. Transactions involving Estonian kroon represent about one-fourth of the total trading volume. The other key trading currencies are the euro and the US dollar.

The main counterparts to domestic credit institutions are non-resident banks and resident companies. Non-resident banks are active equally in the spot and forward market and their share in total forex market turnover is nearly 50%. Companies have been relatively more active on the spot market and their share in total forex market turnover is about one-third.

The main instruments traded in the Estonian forex market are spot transactions and forex swaps, with more or less equal trading volume in both. The forex swap market in Estonia is more liquid than the money market and the transaction volumes are larger. The main participants in the forex swap markets are domestic and foreign banks, followed by non-financial companies.

1.2 Interbank money market

The interbank money market has undergone a remarkable development in the past nine years. At the beginning the volume of money market transactions was low and, despite the large number of institutions, active trading was performed only in overnight funds. In general, the

interest rate margin between the Estonian kroon and German interest rates showed a narrowing pattern mainly due to high capital mobility, the absence of capital account restrictions and declining risks.

The currency crisis in Asian and Russia impacted significantly interest rate developments in Estonia. The Asian crisis triggered short-selling of the Estonian kroon in the forex forward market in autumn 1997, and a similar jump in short-term interest rates took place during the Russian crisis one year later, even though trading volumes both in the forward and money market were more modest. In the aftermath of the Russian crisis, the banking system was recapitalised, whereby the rapid growth of private sector savings in 1999 supported the increase in the liquidity buffers of the system. By the end of 1999 the spread between TALIBOR and EURIBOR had fallen below pre-crisis level and, interestingly, most of the trading volume is derived from transactions with non-residents.

The introduction of the euro established a new reference rate for the Estonian money market and created an attractive opportunity for liquidity management in the large euro area money and capital markets. In 2000 and 2001, the Estonian interbank money market rates have followed EURIBOR rates more closely than ever before and this trend is expected to continue. The recent changes in the minimum reserve system, whereby banks are allowed to fulfil the reserve requirements partly with high quality euro-denominated securities, should foster liquidity management on the euro markets.

As far as market participants are concerned, foreign banks are highly active in the short-term deposit and loans interbank market, which can be seen by their participation in the fixing of money market quotations (TALIBID/TALIBOR). According to present rules, fixings are executed by Eesti Pank daily at 11 a.m. according to the quotations by five major market players (Estonian: *Hansapank, Eesti Ühispank* (Union Bank of Estonia), *Sampo Pank*; *Nordea Pankki* (Finnish); *Svenska Handelsbanken* (Swedish).[1]

2. Fixed income market

Unlike in other countries, government debt securities have not been one of the driving forces of capital markets development, which is a result of prudent fiscal policies (see also Box 2). Therefore, the securities market in Estonia consists primarily of an equity market, and the debt market has developed only due to the issuance of corporate debt instruments (Table 4). The debt market is mainly a primary market with private placements and a modest secondary market. However, despite its small size, the fixed income instruments market has been an increasingly important provider of alternative financing for marketable companies and local governments. The main issuers on the market are Nordic financial conglomerates, which are also major stakeholders in Estonian credit institutions. Their bond issues account for approximately 80% of the primary market, reflecting the high integration of Estonian and Nordic financial markets.

Because of widespread refinancing schemes, maturities are mainly short-term. The most common instruments are 3-6 month commercial papers (75% of bonds issued). Interest rates of debt securities have been following quite closely the interbank offer rate of TALIBOR. The benchmark for shorter maturities is the three-month interbank offer rate, while interest rates of bonds with longer maturities coincide with interest rates of bank loans having a corresponding maturity.

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[1] The quotations cover 1, 2, 3, 6, 9 and 12-month maturities.

Table 4: Debt securities market

	1996	1997	1998	1999	2000	2001
Debt market capitalization to GDP (%)	4	6	5	4	4	5
Debt market capitalization (EUR million)	150	258	235	205	237	281
o/w non-resident investors (%)	19	32	16	10	3	1
Debt market turnover (EUR million)	20	482	1,078	466	194	106
Debt market turnover to capitalization (%)	13	187	458	227	82	38
New debt securities' issues (EUR million)	325	324	100	228	253	419
o/w public issues (%)	2	2	4	4	6	0

Source: Bank of Estonia

3. Stock market

The structure and framework of the securities market have strongly evolved during the last five years (Table 5). The successful opening of the Tallinn Stock Exchange (TSE)[2] in 1996 was backed by investors' interest (both local and foreign) and characterised by a remarkable activity. After increasing threefold up to 1997 the stock index declined back to its starting point after the Asian and Russian crises. The resulting relatively low price level of stocks attracted foreign investors – mainly from Sweden and Finland – to acquire resident companies, which led to the delisting of several shares from the stock exchange and to a decrease of market capitalisation. The trend was reversed only in 1999 with the listing of Eesti Telekom that increased the capitalisation of the stock exchange by a factor of 2.5.

Considering the small size and high openness of the Estonian economy, the development of the TSE called for integration with other securities markets in the region. In April 2001, the Helsinki Stock Exchange (HEX) acquired a 52.4% ownership in the TSE with the main aim to offer trading facilities for Estonian securities in the HEX trading system. The new ownership and co-operation arrangements between the HEX and the TSE should have a positive impact on the liquidity of Estonian securities and should foster the integration of the Estonian securities market into the European markets.

Table 5: Stock market (Tallin Stock Exchange)

	1996	1997	1998	1999	2000	2001
Stock market capitalization to GDP (%)	15	20	11	37	36	28
Stock market capitalization (EUR million)	508	837	531	1,809	1,982	1,687
o/w non-resident investors (%)	36	42	54	75	76	77
Stock market turnover (EUR million)	147	1,396	853	286	352	262
Stock market turnover to capitalization (%)	29	167	161	16	18	16
Number of stock listed (end of period)	8	22	25	23	20	16
Number of licenced securities brokers	45	45	34	23	22	18
o/w member firms of the TSE	18	25	20	12	8	9

Source: Tallin Stock Exchange

[2] TSE operates on an electronic online interactive trading system offering continuous quotation within an order-driven system. Clearing and settlement is processed on DVP basis.

The present regulatory and supervisory structure of the securities market involves three principal authorities: the Ministry of Finance, which is responsible for the elaboration of the securities market related policy; the Estonian Financial Sector Authority, which is responsible for securities market supervision and licensing of professional market participants; and the TSE, which acts in a self-regulatory role in the supervision of its member firms.

IV. Functioning of the financial sector

1. The evolution and structure of foreign capital flows: impact on the financial sector

1.1 Foreign investment

Since the monetary reform in 1992, the net inflow of foreign capital into Estonia has been relatively large and has played a significant role as an alternative to domestic savings in financing the economy. In the early 1990s foreign capital inflows took place mostly in the form of direct investments to the private sector and to some extent also in the form of long-term government loans. Although other capital inflows have increased by today, the role of FDI has remained crucial. During 1993-2000 the annual average inflow of FDI amounted to 7.8% of GDP. This share has been stable during several years, as FDI inflows are not only attributable to privatisation proceeds but also to investments into new and already existing private companies.

In 1996-97 non-FDI capital inflows into Estonia reflected to a large extent active borrowing by banks from international markets and were accompanied by additional funds in the form of syndicated loans and foreign bond issues.[3] On the one hand, this foreign borrowing relaxed the banking sector's dependence on domestic resources; on the other hand, Estonian companies did not have enough creditworthiness to get direct loans at that time. The role of the real sector in attracting foreign loan capital directly from abroad – both from mother companies and from other foreign financial investors – has gained only more importance during recent years, decreasing the significance of domestic banks[4]. This trend is common for small countries, as the growing interdependence of financial companies and the real sectors of Estonia and the euro area naturally fosters direct borrowing abroad.

1.2 Financial sector and foreign capital flows

Foreign capital flows of the financial sector are closely connected to liquidity management of the domestic banking sector, which is favoured by the set-up of the Estonian Currency Board framework.[5] The evolution of the monetary policy framework together with the small size of domestic financial markets has enhanced the integration of Estonian financial sector with foreign money and capital markets. As a result, the importance of banks' foreign reserves as

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[3] For example, foreign liabilities' inflow into banking sector was €72 million in 1995, €209 million in 1996 and €723 million in 1997. At the same time the banking sector intermediated capital outflow into foreign assets increased from €46 million in 1995 to €284 million in 1997.

[4] Capital inflow from real sector foreign borrowing has been roughly at the same level (4-5% of GDP).

[5] The most important monetary policy instruments are reserve requirements and unlimited and without spread forex exchange facility with euro area currencies. From 2001 the credit institutions can partially fulfil their reserve requirement with a certain type of foreign securities.

liquidity buffer has increased and the liquidity management of the banking sector has shifted towards a more active use of banks' foreign reserves since 1996-97. Closer integration with foreign markets, the use of foreign reserves as liquidity buffers and the fixed exchange rate have created the necessary preconditions to allow foreign monetary signals (especially interest rate signals from the anchor currency) to pass more clearly into the domestic financial sector (see Section IV.3).

Additionally, the financial sector capital flows are largely due to activities in other Baltic countries, becoming more evident since 1999-2000. Those flows are a result of the fact that Estonian financial companies have subsidiaries in other Baltic countries, whose activities are financed mostly through foreign capital markets via the Estonian headquarters (partly also by deposit growth in Estonia). As a consequence of the accumulation of large foreign liabilities in combination with the use of foreign reserves for liquidity management, Estonian banks hold considerable gross balances in both foreign assets and foreign liabilities.

Such differences between gross and net foreign capital flows and balances are typical for all sectors of a small economy such as Estonia. Diversification needs force companies to include a substantial share of foreign assets in addition to Estonian assets in its portfolio. Moreover, to invest into shares of foreign companies listed on a foreign stock exchange that have made substantial direct investments into Estonia can in same cases be the only opportunity to get direct exposure to an Estonian company. This may have caused some capital flows in the opposite direction, where FDI inflows into Estonia are partially offset by portfolio outflows from Estonia.

2. The role of financial sector intermediation

The main channels for financing the Estonian economy are the banking sector, international capital flows and, to a lesser extent, the securities market and leasing. As for the structure of debt-creating financing of the real sector, the share of foreign financing is approximately 45% (30% without intra-company loans). As far as lenders are concerned, Estonian companies obtain half of their debt-creating financing from banks and one fourth from other parts of the Estonian financial sector. While companies obtain external funding also from non-banking segments of the domestic financial sector (e.g. leasing and securities market), the financing of households is mainly based on bank loans (85% of household debts). However, the financial sector's exposure to households is relatively small, as the indebtedness of households' amounts to only 10% of GDP.

The increase in bank assets has been accompanied by a deepening of financial intermediation, as funds are increasingly intermediated via extending the instrument range to numerous clients from different sectors. Approximately 30% of banks' assets are invested in liquid instruments in the central bank and abroad as a consequence of the banks' conservative business approach and the high rate of reserve requirement. Approximately 60% of bank assets are invested into domestic real sector, of which one third via leasing subsidiaries.

The prevailing saving instruments and the main channel for financial intermediation to collect the savings in Estonia are bank deposits. During last years the rapid growth of household deposits turned households into the most important source of funding for banks. By end-2001, household deposits exceeded 28% of total liabilities, and the share of corporate deposits declined below 23%.

The banks' total liabilities constitute 61% of GDP, of which approximately 30% are related to non-resident deposits and borrowed funds from foreign financial institutions. Since 1997 banks have been active in borrowing in international markets. These liabilities exceeded 30%

Table 6: Asset and liability composition
(% of GDP)

	1996	1997	1998	1999	2000	2001
Banks' claims						
Claims on enterprises	15	19	18	17	17	18
Claims on financial companies	5	5	6	8	12	13
Claims on households	3	6	6	7	8	10
Claims on non-residents	7	12	9	11	12	16
Banks' liabilities						
Liabilities to enterprises	9	11	10	12	13	14
Liabilities to households	8	11	11	13	16	18
Liabilities to public sector	5	5	3	2	3	3
Liabilities on non-residents	7	18	16	18	19	18
Leasing claims						
Claims on enterprises	-	-	7	7	9	10
Claims on households	-	-	1	1	2	3

Source: Bank of Estonia

of total liabilities between 1997 and 1999. However, the share of this kind of financing has been diminishing, while the share of syndicated loans and foreign bond issues represent approximately one-fourth of liabilities in 2001. When domestic liabilities are mainly short term and domestic assets long term, the structure of foreign assets and liabilities is inverse, as foreign funds and investments are used partially to reduce the domestic maturity mismatch of the banks' assets and liabilities.

Although the banks' external liabilities exceed external assets, the difference between the banks' foreign liabilities and assets is small and those balances have been largely countervailing since 2000 (Table 6). In other words, funds mediated by banks between residential groups are also balanced, meaning that the Estonian real sector and government deposits are intermediated to residents: companies (68%), households (27%) and public sector (5%).

Despite the fact that the financial sector is bank-dominated, an important role in the intermediation of financial flows between different economic sectors also belongs to the securities market in Estonia. Especially in the early 1990s, banks played a more dominant role in financing local companies. Since 1996 the securities market has become an important channel for accumulating capital in particular for those branches of the economy that possess a more dynamic capital structure (financial companies) or relatively low credit risk (local governments and big companies).

Table 7: Financial sector structure: asset composition
(% of total assets)

	1994	1996	1998	2000
Banking	91	43	50	43
Leasing	5	9	17	21
Stock market	2	45	26	33
Debt securities	2	3	7	3
Total	100	100	100	100

Source: Bank of Estonia

Box 1: Financial deepening – Evidence of convergence

Financial deepening in broader terms can be characterised by the dynamics of the position of the real sector against consolidated financial sector and in terms of expanding of financial markets. The process of financial deepening in Estonia has been dependent on foreign capital inflows and movements of price level and income. One way to measure the process of deepening of financial intermediation is to measure the increase in broader money aggregates, but also the increase in the volume and liquidity of the securities market.

In the early 1990s, the level of financial deepening was relatively low, and the ratio of banks' assets to GDP less than 40%. During the initial transition period, financial deepening was hampered by several banking crises, in which most of the former state-owned banks went bankrupt or were liquidated. Therefore, funds deposited in the banks are based on new savings, the share of claims from planning economy period has been relatively low. During this period, the process of financial deepening was mainly supported by the convergence of Estonian price level towards that prevailing in the EU.

After 1996, the banks' loan portfolio began to expand and banks' assets exceeded 60% of GDP, and from 1996 onwards also the securities market became an important channel for drawing capital for companies. Against the background of an increased number of traded securities as well as a dynamic growth of the stock exchange index, the stock market capitalisation rose at some point to over 50% of GDP (by end-2001, it declined to 28% of GDP).

The process of financial deepening experienced a setback after the Asian and Russian crisis as reflected by the moderate growth rate of financial assets and the even declining stock market capitalisation. However, financial deepening regained some momentum in the last two years on the back of relatively rapid deposit growth and subsequent loan portfolio growth rates. Bank assets exceeded 71.9% of GDP at the end of 2001. In general, in the early 1990s financial deepening was more dependent on the convergence of price level, but during the last four years the convergence of income level has become the dominant factor.

However, the overall share of financing by debt securities has been modest with outstanding debt securities issued by local companies making up less then 3% of GDP and less then 10% of all securities market' flows (Table 7). The Estonian government's strict fiscal policy stance substantially lowered the need to issue government debt securities. Therefore, foreign banks have been the main issuers in the local debt securities market followed by domestic real sector companies. Additionally, some companies use international markets as an alternative place for issuing bonds. The total value of Estonian companies' outstanding debt securities and tradable stocks amounts to approximately 40% to GDP, whereby around two-thirds are owned by foreigners. According to the international investment position, investment of non-residents into Estonian exceeds investment of Estonian residents into foreign securities.

When the financial sector is based on the universal banking model, the most important source of financing for the real sector is bank lending. During the last five years, the credit

exposure of the banks and their leasing subsidiaries to Estonian real sector enterprises and households has increased from 25% of GDP to 40% of GDP, illustrating the progress of financial deepening. In the recent period of banking sector consolidation (since 1999), net interest margins have declined and enterprises have used more actively the option of getting funding from abroad in the form of FDI or loans. This development has exposed the Estonian financial sector to a higher degree of competition.

3. Monetary transmission process in Estonia

3.1 Cross-border transmission of interest rates – the interbank money market

The basic features of Estonian monetary system are (1) a fixed exchange rate, (2) the absence of traditional monetary policy instruments, and (3) free capital movement. Therefore, the first link in the transmission chain is the link between domestic and foreign money markets.

The Estonian money market can be considered as an internationalised market: TALIBOR quotations involve the three biggest domestic commercial banks and two foreign (Scandinavian) banks. The operational framework encourages commercial banks to manage their liquidity not through the domestic money market but rather through European markets. Additionally, the unlimited and free-of-charge forex window offered by the central bank enhances a foreign asset-based liquidity management. About 90% of domestic commercial banks' transactions with short-term (up to three months) claims on credit institutions are contracted with non-residents. A relatively similar but more volatile pattern can be observed on the liability side of commercial banks; the share of non-residents' counterparts in short-term money market transactions has fluctuated between 97% and 60% over the last two years. The closer and deeper integration with European markets has also been reflected in declining spreads between domestic and foreign (three-month) money market quotations. After August 2000 the spread between Estonian commercial banks three-month bid rate (both quoted and effective) and European interbank offer rate ceased to exist (Chart 1).

Technically the domestic money market yield curve consists of the European yield curve and the Estonian kroon's forward differential, reflecting the prevailing risk premium between Estonia and the euro area. The low difference between technical calculations and actual quotations displays the effectiveness of domestic money market quotations[6]. This technical error measure has steadily declined after the Russian crisis and has been relatively stable after the second half of 1999. Therefore it can be concluded that at times when there are no pressures on the foreign exchange forward market, domestic money market yield curve mimics the European one quite closely.

3.2 Transmission of impulses to retail rates

The critical question in Estonian transmission process lies in the role of domestic and foreign money markets. If money markets were used only/mostly for liquidity management, then interest rate developments on these markets would not necessarily transmit into domestic retail rates. But if these markets were also used to finance banks' assets, developments on these markets should transmit into retail rates more directly.

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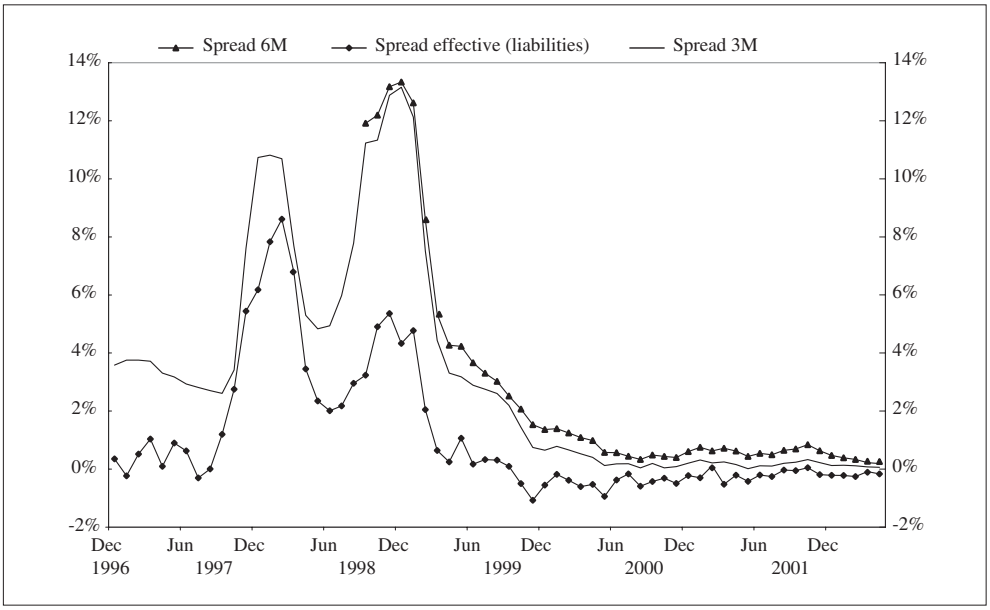
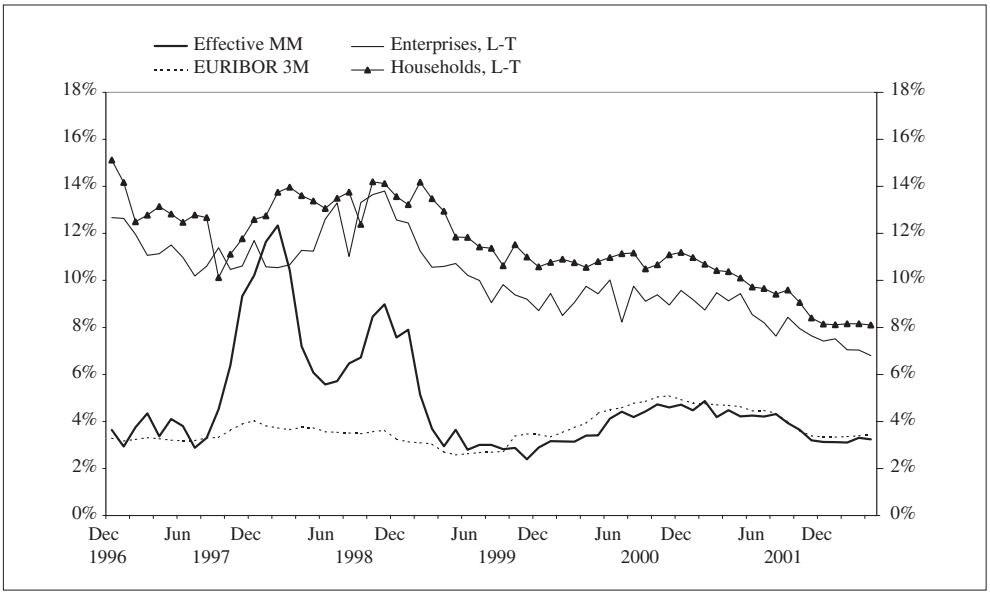
[6] Reliable effective yield curves cannot be calculated as turnover in maturities over three months is very rare and homogeneity problem would arise more drastically

Chart 1: Money market rates and spreads with euro money market rate
(between Estonian bid and European offer rate)



Source: Bank of Estonia

Chart 2: "Effective" money market rates and banks' lending rates
(MM: money market; S-T: short term, L-T: long term)



Source: Bank of Estonia

Box 2: Determination of the yield curve in the absence of government securities market

Partly due to restrictions imposed by the currency board, but even more due to successful economic reforms, Estonian fiscal deficits and government lending over the last ten years have remained modest by European standards. The general economic policy has lent support to a continuation of the conservative government borrowing policy. An additional supportive factor has been the strong financial sector, which has assumed an important role also in financing infrastructure projects. Against this background the government securities market is likely to stay thin.

The absence of a long-term government securities market means that there is no "classical" benchmark yield curve in Estonia. However, there are a number of alternative ways to derive the cost of Estonian kroon funds in the Estonian financial market. One possibility for the construction of the Estonian kroon yield curve is to use money market instruments up to the one-year segment, and euro interest rates adjusted for the forward premium of the Estonian kroon and corporate bonds for longer maturities. Foreign exchange markets in Estonia are relatively deep compared to other market segments and daily price quotations for funds up to three years are available.

Given the key role of the financial sector in financial intermediation, a representative yield curve (or credit curve) can be derived from bank lending rates. Empirical analysis shows that Estonian credit curve dynamics (e.g. changes in the spread of long and short-term rates) particularly on the sectoral level include some information about ex ante developments in the real sector. However, the interpretation of credit curve signals is somewhat complicated as shifts in the credit curve are subject to a variety of demand- and supply-related factors (e.g. changes in risk assessments, cost of funds, competition, etc.)

A general observation is that short-term lending rates are prone to shifts in the general liquidity stance, if compared to long-term rates. Short-term lending rates react more quickly to domestic or external shocks and have historically followed money market rates relatively closely. Longer-term rates on the other hand show the cost of funds for investment goods and the more than the three percentage point downward shift during the past three years depicts the on-going large scale structural shifts in the economy.

For an indirect test of the role of domestic money market, prices paid on domestic deposits and on foreign financing could be compared. In the Estonian case there is a clear evidence of a close correlation between "effective" money market rates[7] and interest rates on domestic deposits with maturities up to three months and the corresponding euro area interest rates. This finding supports the hypothesis of a close substitutability between domestic deposits and financing through both foreign and domestic money markets, making domestic deposit rates heavily dependent on foreign rates and on monetary shocks (which make the "effective" money market rate diverge from its convergence path) (Chart 2).

Only long-term credit rates to households reflected the increase in European money market rates although with much a smaller amplitude than the increase in the base rate. This credit aggregate consists mostly of mortgages and its spread over European money market rates has

[7] "Effective" money market rate is defined as (actual) cost of short-term funds traded between credit institutions and financial institutions.

been lower than other rates over the entire after-shock period. This finding supports the conclusion that actually European money market rates are fully transmitted into the entire spectrum of Estonian interest rates, but that the simultaneous decline in the spreads has overshadowed its direct effect on interest rates in some periods. Therefore, there seems to be evidence of a convergence of Estonian towards European retail rates.

V. Trends in the financial sector in view of integration in the EU

1. Interbank clearing and settlement system

From the introduction of the interbank clearing and settlement system in 1992, Eesti Pank has been the operator and owner of that system. Seven credit institutions (including a foreign bank branch) and the Estonian Central Depository for Securities have opened settlement accounts at Eesti Pank and are considered direct members of the clearing and settlement system. Until recently, all payments, both large value and retail payments, were cleared and settled through this single system. Starting from January 21, 2002, Eesti Pank introduced a new interbank payment and settlement system, which is based on two subsystems: a real-time gross settlement (RTGS) system for processing large-value and urgent interbank payments, and a designated-time net settlement (DNS) system for processing retail payments (see Table 8 for an overview of main payment system indicators).

The objective of the new payment and settlement system is to improve the efficiency of settlement of interbank payments. Payment orders coming in the DNS system are forwarded to the receiving bank three times a day. The payments in the RTGS system are processed and settled individually throughout the day. In addition, the new system enables to decrease settlement risk. In the DNS system, the financial liabilities resulting from bank-originated payments must not at any time exceed the collateral paid in the system collateral account. In the RTGS system, receiving bank is announced only of those payments, which have been settled at the settlement accounts of paying and receiving banks in the central bank.

Table 8: Payments system indicators

	1997	1998	1999	2000
Payments (turnover, EUR million)	20,696	71,688	67,475	80,466
Cash payments (%)	14	6	4	2
Non-cash payments (%)	86	94	96	98
Cheques (%)	0.05	0.03	0.02	0.03
Card payments (%)	8	16	25	30
Direct debit (%)	0	1	3	7
Credit orders (%)	78	78	68	62
Paper-based credit orders (%)	56	33	19	11
Telephone and telebank credit orders (%)	41	57	60	58
Internet bank credit orders (%)	1	8	18	28
Number of bank cards issued	607,400	697,600	770,000	858,400
Credit cards (%)	2.47	2.75	2.66	5.04
Number of bank cards to population (%)	42	48	54	60
Number of ATMs	427	490	591	630
Number of POSs	2,153	2,586	3,267	4,084

Source: Bank of Estonia

The new interbank payment and settlement system is fully compliant with EU requirements. Efficient payment and settlement systems ensure the readiness of Estonia, after joining EU, for settling large-value payments via the Trans-European gross settlement system (TARGET).

2. Banking supervision

Until 2002, financial supervision in Estonia was carried out by three institutions. The Banking Supervision Department (BSD) of Eesti Pank performed the supervision of credit institutions. Supervision of the insurance sector was undertaken by the Insurance Supervisory Authority as a financially independent organisation under jurisdiction of the Ministry of Finance. The securities market was supervised by the Securities Inspectorate, again under the jurisdiction of the Ministry of Finance.

The unification of three financial sector supervisory authorities – the Banking Supervision Department of Eesti Pank, Securities Inspectorate and Insurance Supervisory Agency – into a single Estonian Financial Supervision Authority (EFSA) is based on the Financial Supervisory Authority Act and amendments to other acts governing present supervisory authorities that were adopted in May 2001. The EFSA started to operate on 1 January 2002. According to the Financial Supervisory Authority Act, the EFSA is an independent institution affiliated with Eesti Pank.

The independence of the EFSA is supported by its organisational structure. The governing bodies of the EFSA – the Supervisory Board and the Management Board – are not part of the central bank governance hierarchy. According to the Act, the EFSA has its own budget formed on the basis of supervisory fees collected from market participants. When exercising its control functions, designing financial regulations and making decisions regarding market participants, the ESFA is unconditionally independent from any other institution.

The EFSA is administratively affiliated with Eesti Pank and is located in the same complex of buildings. The EFSA will use several services rendered by Eesti Pank (information technology, building maintenance, etc), as it notably cuts down the expenses of the EFSA and avoids duplication of tasks. After commencing its operations the EFSA will formalise co-operation with Eesti Pank and the Ministry of Finance in the fields of crisis management, development of financial sector legislation and information sharing.

The main rationale for the unification lies in the central role of financial conglomerates in the financial market. Although the universal banking model is clearly prevalent in Estonia, requiring efficient co-operation between the supervisory authorities, the actual situation indicated several weaknesses in inter-agency communication. Secondly, shortcomings in the quality and coverage of the mushrooming non-bank financial sector supervision necessitated steps for reorganisation.

3. The currency board arrangement (CBA) and the lender of last resort (LOLR) function

Under a CBA, the scope of LOLR support is limited to the amount of foreign reserves in excess of those required for backing currency in circulation (i.e. to excess currency board cover). In general, the greater the excess coverage, the greater the credibility of a monetary system. Currently the excess coverage is over EUR 140 millions, or about 20% of base money and six per cent of broad money. In addition to their cash and liquid interbank deposits, banks have maintained a sizeable liquidity buffer through investments in foreign treasury bills and

bonds, which has allowed them to cover over 80% of their liquid liabilities. This kind of conservatism reduces moral hazard and reflects largely the lessons learned during the two attacks on the kroon when Eesti Pank firmly adhered to the strict rules imposed by the CBA including the absence of LOLR facilities. A related issue is the fact that the presence of foreign strategic investors in the big banks reduces the need to have explicit operational rules for LOLR operations. However, the role of foreign shareholders should not be overestimated. Accumulated liquidity buffers are more valuable considering domestic lending activities.

Notwithstanding the absence of a formal framework, Eesti Pank has been at times actively involved in the resolution of financial instability incidents, providing liquidity support or participating in re-capitalisation**.** These actions of the central bank have occurred on a case-by-case basis, with the aim to avoid spreading the problems of an individual bank to the whole banking system. These episodes did not have a discernible impact on excess reserves of the central bank. The availability of emergency credit from the central bank could certainly ease solving liquidity problems of an individual bank and even avoid systemic liquidity crises, but it would at the same time encourage banks to take higher risks. The history of the Estonian banking system allows the conclusion that a stable currency and the presence of a general financial safety net can compensate the absence of classical LOLR facility and ensure the development of an effective and reliable banking sector.

Under a CBA, the reserve requirement system should create sufficient liquidity buffers for commercial banks that substitute for the limitations of the LOLR facility and the lack of other monetary policy facilities. By using the reserve requirement, automatic access to central bank liquidity can be facilitated. As the reserve requirement has to be met on a monthly averaged basis, it can be considered an automatic source of kroon liquidity for banks.

Compared to other transition countries, the ratio of required reserves in Estonia is relatively high (13%). In addition to large liquidity buffers built up in that framework, the reserve requirement is in a sense to some extent able to substitute for the LOLR facility by partly fulfilling the requirement or reducing the rate of requirement under the discretion of the central bank. In that case, the penalty rate for not fulfilling the reserve requirement functions largely like a central bank lending rate. However, a sophisticated system of required reserves does not fully replace a lending facility, because these funds are part of the banks' assets.

The scarcity of eligible assets for backing central bank lending activities is one of the most often mentioned barriers for developing an LOLR instrument under CBA. In Estonia, the reform of required reserves has involved building up reserves of eligible assets (at least AA rating euro-denominated papers). Today, the option to meet reserve requirements with eligible foreign assets (up to 50% of the requirement) helps banks to improve their liquidity management. The prominent role of the reform of the reserve requirement system was to promote integration into European and world financial markets that is a prerequisite for smooth functioning of the CBA.

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Appendix

Table A1: Main financial indicators of banking sector
(EUR million)

	1996	1997	1998	1999	2000	2001
Financial claims	1,045.7	1,758.2	1,892.2	2,175.5	2,843.4	3,236.0
Domestic	875.3	1,449.9	1,626.3	1,894.7	2,447.7	2,556.8
Reserves in central bank	77.0	194.0	233.8	310.2	365	231.8
Credit institutions	70.7	23.2	1.2	4.3	9.0	10.9
Financial institutions	113.4	196.9	262.4	364.8	668.8	807.7
Public sector	10.9	12.9	13.4	32.1	55.2	61.2
Enterprises	487.9	760.2	848.5	847.8	917.2	967.6
Households	115.4	262.7	266.9	335.5	432.5	477.8
Non-residents	170.4	308.4	265.9	280.8	395.7	679.1
Credit institutions	126.2	205.8	190.5	206.4	314.3	604.2
Financial sector	1.5	13.6	11.9	18.5	5.7	7.6
Non-financial sector	42.6	89	63.4	55.9	75.7	67.4
Securities portfolio	222.5	544.5	405.6	495.3	532	578.7
Residents	153.3	360.3	271.3	242.4	287.8	279.1
Non-residents	69.2	184.3	134.3	252.9	244.2	299.6
Non-financial assets	198.3	290.9	322.3	337.5	319.9	296.8
Total assets	1,466.5	2,593.7	2,620.0	3,008.4	3,695.3	4,111.6
Financial liabilities	1,158.1	1,846.0	1,749.9	2,122.5	2,652.0	2,996.1
Domestic	919.3	1,246.8	1,229.7	1,444.6	1,906.4	2,191.0
Central bank	3.1	1.5	0.9	0.7	0.5	0.5
Credit institutions	66.6	29.1	0.8	5.9	11.4	19.3
Financial institutions	32.0	34.9	40.9	48.9	71.6	88.7
Public sector	220.5	266.4	189.6	148.7	198.5	249.6
Enterprises	217.4	462.7	486.6	595.5	734	803.5
Households	279.9	452.1	510.9	644.8	890.4	1,029.5
Non-residents	238.8	599.2	520.2	677.9	745.6	805.0
Credit institutions	131.0	400.4	340.5	392.1	388.9	380.2
Financial sector	1.3	4.8	49.3	45.2	53.1	50.3
Non-financial sector	106.5	194	130.4	240.5	303.5	374.4
Securities issued	34.2	261.0	250.7	225.2	331.9	348.3
Residents	4.3	23.6	12.8	28.6	27.6	10.1
Non-residents	29.9	237.4	237.9	196.6	304.3	338.1
Other liabilities	115.0	145.3	119.9	121.9	180.5	170.3
Capital items	159.1	341.4	499.5	538.7	530.9	596.9
Total liabilities and capital	1,466.5	2,593.7	2,620.0	3,008.4	3,695.3	4,111.6

Source: Bank of Estonia

Chart A1: Structure and volume of financial intermediation
(EUR million)

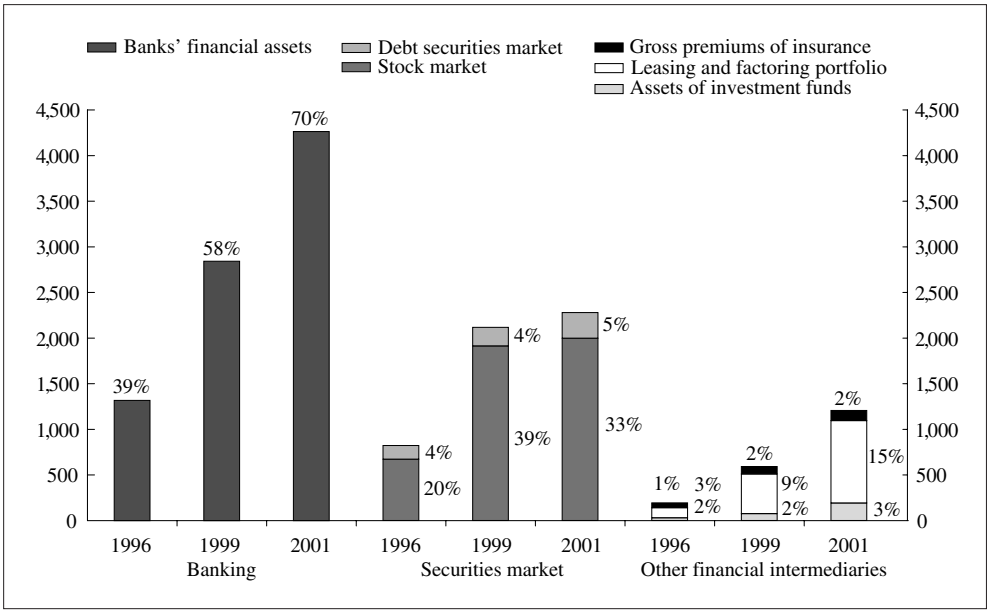
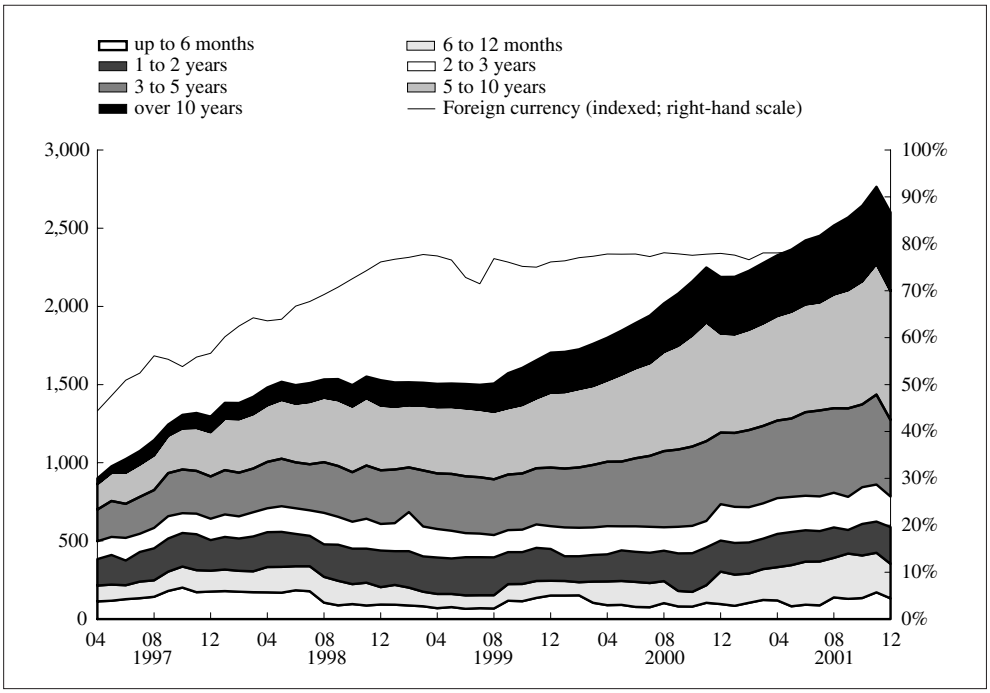


Chart A2: Commercial bank's loan portfolio
(EUR million)



The financial sector in Hungary

Balázs Zsámboki

National Bank of Hungary

I. Introduction

The structure of the Hungarian financial sector has undergone a dramatic change in the past decade, and new types of institutions have appeared on the market. Today the financial system consists of almost all types of institutions which usually form an integral part of a developed market. However, the relative importance and market share of the Hungarian financial institutions are in some cases rather different from those in the current EU countries. Although non-bank financial intermediaries are rapidly gaining ground in Hungary, they are still small in size by western standards. Not only the scope of their activity, but also the capital markets themselves are relatively narrow in Hungary. As a result, nearly three-quarters of financial intermediation in Hungary is still performed by credit institutions.

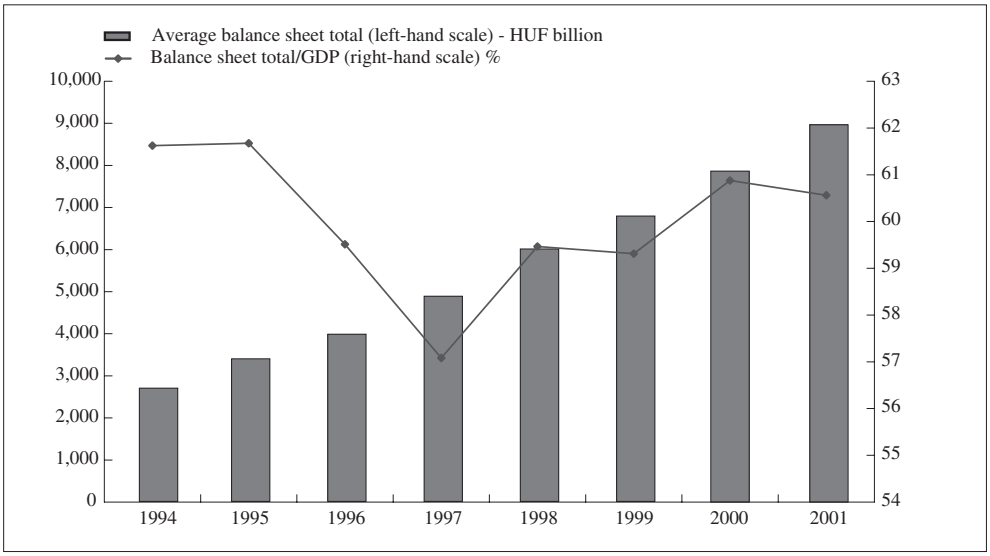
II. Banking sector

There are 41 credit institutions operating in the form of joint stock companies, of which 33 are licensed as banks and 8 as specialised credit institutions. The number of banks has slightly decreased in recent years owing to liquidations and acquisitions. M&A activity became significant only in 2001, when two large foreign-owned banks (the Belgian KBC and the Dutch ABN-AMRO Bank) merged their Hungarian subsidiaries KHB and ABN-AMRO Hungary, creating the second-largest institution in the sector. Moreover, as a consequence of the merger between Hypovereinsbank and Bank Austria, their Hungarian subsidiaries (two medium-sized banks in Hungary) also merged, establishing the fifth-largest credit institution (see also Table A1 in the appendix for an overview of the main banking sector indicators).

Beside commercial banks, there are a large number of mostly small co-operative credit institutions. At the end of 2001 their number amounted to 184 savings co-operatives and 7 credit co-operatives, 7 less than a year earlier. The decrease was primarily due to regulatory factors, as several savings co-operatives had to merge in order to comply with the minimum capital requirement set by the Banking Act. Despite the large number of co-operative credit institutions, their aggregated market share is only around 6%.

The balance sheet total for the sector of credit institutions (including banks, specialised credit institutions and co-operative credit institutions) reached HUF 10,145 billion (€42 billion) at the end of 2001, exceeding the figure for the previous year by 13.2%, or 5.8% in real terms. Both banks and co-operative credit institutions grew above the inflation rate. However, owing to the relatively fast growing economy, the banking sector's total balance sheet as a percentage of GDP declined slightly to 60.5% by year-end, which is quite low by international comparison (Chart 1).

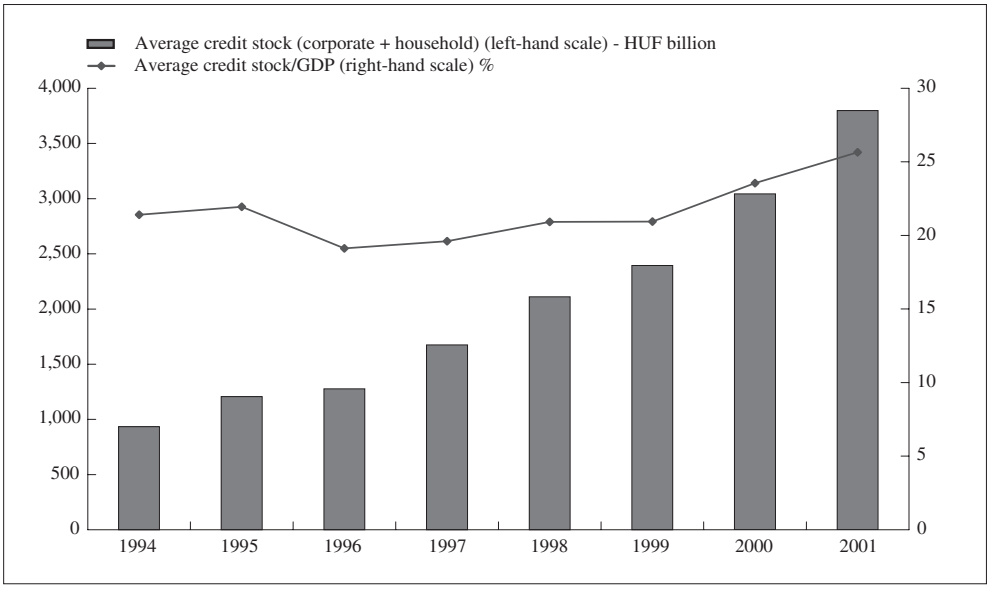
Chart 1: Size of the banking sector's assets



Source: National Bank of Hungary

The driving force behind business expansion is robust lending activity, so that traditional banking intermediation deepened significantly, following the pause in 1999. The stock of outstanding lending to the corporate and household sectors was 25.7% of GDP at end-2001 (Chart 2).

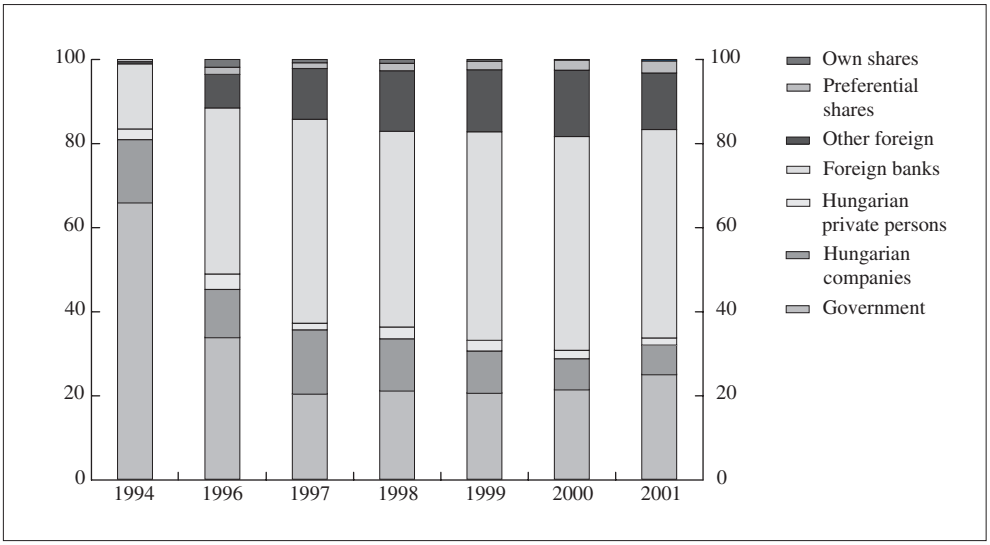
Chart 2: Size of the banking sector's credits



Source: National Bank of Hungary

Chart 3: Ownership structure of the banking sector

(%)



Source: National Bank of Hungary

The development of the different groups of the banking sector (clustered by size) and the members of such groups has been exceedingly varied over the last couple of years. As in previous years, the proportion of large banks continued to decline in 2001, while medium-sized banks increased their market share for the fifth successive year. Small banks were typically characterised by high volatility in their balance sheet totals. Those engaged in providing consumer credit have been performing particularly well lately.

The performance of the group of specialised institutions is very mixed as well. The vigorous growth of home savings and loan associations is a natural consequence of the steady flow of savings into deposit contracts concluded earlier, as well as of the fact that the number of contracts increased faster than in 2000, thanks to rates of return competing with market returns. The activities and performance of the state-owned Land Credit and Mortgage Bank as well as the Hungarian Development Bank are primarily driven by new government programmes, which contributed to high growth in their balance sheet total last year. Nevertheless, the market share of the specialised credit institutions is still relatively modest, reaching only 6% in 2001.

The year 2001 witnessed only minor changes in the ownership structure of the banking system (Chart 3). Foreign ownership decreased by 3.6 percentage points to 63% at the year-end, while the share of state ownership within residents' domestic equity holdings rose at the expense of credit institutions, enterprises and individuals. (Excluding the Hungarian Development Bank, a special-purpose state development institution, from the statistics, and focusing only on commercial banks, the foreign ownership amounted to 76%.)

The number of employees working in the banking sector has been steadily decreasing for years now, while the branch density remained relatively stable. Between 1996 and 2001 the number of employees decreased by more than 20% to 26,198. The branch network consists of around 1,200 units (i.e. 8,400 inhabitants / branch).

III. Non-banking sector

1. Money and foreign exchange markets

1.1 Money market

As far as money market instruments are concerned, interbank deposits are the most commonly used facility in Hungary. The vast bulk (nearly 90%) of total interbank money market turnover is transacted with overnight maturity. Market participants consist of 39 commercial banks and authorised financial institutions. However, seven banks account for approximately 50% of money market turnover. Spreads in this segment depend on liquidity conditions and the maturity of the instrument: for shorter maturities the spread ranges from 10 to 20 basis points and for longer ones from 20 to 25 basis points.

1.2 Foreign exchange market

The foreign exchange market is reviving in Hungary. Although market activity was relatively modest in the first half of last year, average daily turnover on the FX markets increased considerably after the liberalisation steps implemented in June 2001. The number of market participants is 29, all of them being commercial banks. Among these institutions 10-12 banks are market-makers, of which 8-9 institutions are actively trading on the market.

The average spread in the spot foreign exchange market fluctuates between 20-30 fillers (HUF 0.2-0.3). The weighted average maturity in the forward market is 40-60 days. Transactions having a maturity of over 1 year account for only 1% of the total foreign exchange turnover. Swaps are available only up to a maturity of 1 year. The options market is practically non-existent as monthly turnover amounts only to an approximate €2 million in this market segment.

1.3 Central bank operations

Central bank operations include O/N repos and depos as well as a 2-week deposit facility, which is the main monetary policy instrument in Hungary. Moreover, the NBH issues bills, including with a maturity of 3 months. NBH bill auctions are held weekly. Only banks and specialised credit institutions are authorised to deal with the central bank.

Table 1: Daily turnover in the foreign exchange market

(EUR million)

	1995	1996	1997	1998	1999	2000	2001
Spot	1,209	1,457	2,296	2,574	1,709	1,722	1,613
Forwards	92	88	517	449	114	155	124
Swaps	107	134	109	371	162	277	449

Source: National Bank of Hungary

Data are duplicated and include foreign currency/HUF and also foreign currency/foreign currency transactions (on 250 day/year basis)

Table 2: Basic data on government securities

	1996	1997	1998	1999	2000	2001
Stock of government securities in % of GDP	36.2	31.6	32.5	34.9	34.3	35.1
Government bonds	26.1	20.9	22.4	23.3	23.8	24.4
of which:						
marketable	10.7	12.2	13.3	15.8	17.4	18.9
consolidation	5.2	3.1	2.6	2.3	2	1.8
other	10.2	5.6	6.5	5.2	4.4	3.7
Treasury bills	10.1	10.7	10.1	11.6	10.5	10.7
of which:						
discount bills	8.3	7.8	6.7	7.2	6.5	7.0
other T-bills	1.8	2.9	3.4	4.4	4	3.7
Share of government securities in turnover of BSE [1)]	54.5	56.1	49.6	56.6	18.5	12.0

Source: National Bank of Hungary
1) Budapest Stock Exchange

2. Fixed income market

Secondary market turnover in government securities fell considerably in both 2000 and 2001: stock market trading in these instruments amounted to HUF 788 billion (€3 billion) in 2000, merely 17% of the figure for the previous year. This tendency also continued in 2001, when stock market trading declined further to a level of HUF 196 billion (€0.8 billion). However, OTC trading, which is characterised by lower transaction costs, has been increasing recently, replacing the shrinking stock market activity. Nowadays more than 90% of secondary market transactions are realised on the OTC market.

3. Stock market

Capitalisation of the equity section of the Budapest Stock Exchange (BSE) equalled around 20% of GDP at the end of 2001, down from 26% of GDP a year earlier and 36% of GDP in 1999. Besides capitalisation, turnover at the BSE has also been declining for years now

Table 3: Basic stock market data

	1999	%	2000	%	2001	%
Number of listed securities	135		112		112	
of which: shares	66		60		56	
Turnover (HUF billion double entry)	16,006	100	8,513	100	3,254	100
Turnover (EUR billion double entry)	63.3		32.7		12.7	
of which (HUF billion double entry)						
Shares	6,862.7	42.88	6,834.1	80.28	2,771.36	85.16
T-Bills	2,558.6	15.99	306.5	3.60	74.76	2.30
Government bonds	6,508.6	40.66	1,268.1	14.90	317.71	9.76
Government securities total	9,067.2	56.65	1,574.7	18.50	392.47	12.06
Corporate bonds	64.4	0.40	97.4	1.14	71.71	2.20
Mortgage bonds	n.a.		n.a.		5.59	0.17
Mutual funds shares	0.9	0.01	1.1	0.01	1.5	0.05
Compensation certificates	4.6	0.03	6.0	0.07	0.64	0.02

Source: Budapest Stock Exchange

Table 4: Stock market turnover

	1996	1997	1998	1999	2000	2001
Turnover in equities (single-entry, % of GDP)	3.6	16.8	34.3	30	27	9.3
Number of transactions (thousands)	154	478	1,012	1,462	1,613	912
Average daily number of transactions	621	1,936	4,091	5,846	6,424	3,721
Average daily turnover (single-entry, HUF million)	989	5,815	13,953	13,725	13,614	n.a.
Average daily turnover (single-entry, EUR million)	5.2	27.5	57.9	54.3	52.4	n.a.
Average amount per transaction (HUF million)	1.6	3	3.4	2.3	2.1	n.a.
Average amount per transaction (EUR thousand)	8.4	14.2	14.1	9.1	8.1	n.a.
End-of-period equity capitalisation, % of GDP	12.4	35.8	29.7	36.2	26.3	19.2

Source: National Bank of Hungary

(Table 3 and 4). This seems to be a common trend in all emerging countries in recent years. This tendency is also reflected in the declining share of foreign ownership in exchange traded equities, which dropped from 80% to 70% in 2000 and remained around that level in 2001 as well. However, this figure is still high by international comparison, indicating that the Hungarian market is significantly exposed to the "appetite" of foreign investors.

IV. Functioning of the financial sector

1. Credit institutions

The key development experienced recently in the system of credit institutions is a marked rise in the share of loans within the banks' balance sheets.

As credit institutions are not completely able to support their sharply increasing lending by funds from customers, nowadays they implement a major on-balance-sheet restructuring of assets basically at the expense of advances to the central bank. Within the term structure of the balance sheet, the share of lending for the long term is growing. As a positive change, the proportion of long-term liabilities within bank liabilities is also rising, thanks primarily to increases in internal funds and long-term foreign liabilities.

The foreign currency composition of the balance sheet reflects the changes in the exchange rate regime. With the introduction of the crawling peg in 1995, banks were heavily engaged in speculation in favour of the forint. This general tendency was interrupted by the Russian crisis in 1998 and on- and off-balance-sheet open positions remained relatively low, with some variation in the past three years.

1.1 Corporate business line

Corporate lending of the banking sector grew by 10% in 2001, which lagged somewhat behind the growth rate of total assets. After the exceptionally high growth rates recorded in 1999 and 2000, co-operative credit institutions increased corporate lending by 24% last year, accounting for 7.4% of total corporate lending by credit institutions. Annual lending growth stemmed entirely from forint-denominated loans, and in contrast to the year 2000, which witnessed a robust expansion in foreign exchange lending, FX loans shrank even in nominal terms last year.

Credit expansion to finance office and business centre construction, which accounted for about 14% of the change in the stock of lending in 2000, came to a halt last year. The share of

these loans within total corporate loans is approximately 4.5%. Typically banks with an outstandingly large market share in the corporate lending market provide loans of this type. Lending to small, medium and micro-sized enterprises expanded at a faster rate (14.6% in 2001) than corporate lending as a whole. At the end of 2001, credit to such enterprises slightly exceeded 30% of the total stock of corporate lending.

An analysis by economic sector reveals that the banks are increasingly reluctant to finance agriculture and food industry enterprises, which has resulted in a significant fall in total lending to these sectors in the past two years. These firms are viewed as involving the greatest risk, mainly due to a shortage of capital and slow technological progress.

1.2 Household business line

Household lending represents the fastest growing area of the banking system's operations, although households were previously treated only as a source of deposits. Households' motivation to borrow is based on the ever-wider range of products and services available, higher incomes held by certain sections of the population as well as favourable macroeconomic conditions. This trend is expected to continue over the coming years. Nevertheless, Hungarian households' level of indebtedness (i.e. the ratio of household financial liabilities to disposable income) – currently at around 7% – falls far short of the above 50% rate seen in the EU member countries.

The stock of household lending by credit institutions was up by nearly 50% in 2001. Credits extended by savings co-operatives rose at a rate of 29%. This raised the share of household lending within total credit institution assets from 5.9% in 2000 to 7.4%. Loans with a maturity of over one year are predominant in this market segment, accounting for nearly 90% of total lending. The five commercial banks most active in the household market accounted for 51% of lending, reflecting a gradual decline in concentration compared with the previous years.

Currently, consumer credit represents the largest share of household lending by credit institutions. In this field a rise of 46.6% could be recorded in 2001. Of consumer credits, auto financing, offered largely by specialised institutions, is worth mentioning. The year 2000, and even more 2001, witnessed a breakthrough in housing credit by credit institutions. After a steady decline over the previous few years, housing credit started to pick up pace. Accordingly, mortgage-type household credit rose by HUF 136 billion (€560 million) in 2001, amounting to HUF 324 billion (€1,330 million) at the end of the year, indicating a growth rate of 70%.

1.3 Capital adequacy of the system of credit institutions

The capital adequacy ratio of the banking sector has been floating somewhat above 14% for years now, which provides an adequate level of cover against the increasing exposure to credit and market risks. With regard to the capital structure of the banking system as a whole, the own funds of credit institutions mainly consist of Tier 1 capital, and the stock of Tier 2 elements – mainly subordinated loans – runs only to 15% of Tier 1 capital. Although from January 2000 the calculation of the banks' own funds can include the subordinated loan capital only to the extent of 50% of Tier 1 capital (previously the limit was 100%), even this lower limit has not been utilised by banks (see also Table A.1 in the appendix).

The risk-weighted assets are growing at a similar rate to the regulatory capital. Therefore, as far as capital adequacy is concerned no problem is expected in this field in the near future.

1.4 Profitability of credit institutions

Pre-tax profits for 2001 amounted to HUF 164 billion (€660 million), 1.5 times the figure for 2000. The favourable tendencies in earnings have been experienced for two years now. Factors behind this marked improvement in profitability include a rise in interest earnings arising from stronger lending activity; a considerable increase in income from fees and commissions; moderately rising costs and improved cost-efficiency.

Return on equity (ROE) figures also reflected a significant improvement in the profitability of credit institutions. Banks experienced the most spectacular change, with their ROE up from 4.1% in 1999 to 11.6% and 16.6% in 2000 and 2001 respectively. The market share of loss-making banks and the size of the losses are also declining. Interest earnings are improving mainly because interest-bearing assets expand faster than interest-bearing liabilities. This is also reflected in the development of the spread, which, after narrowing somewhat until September 2000, rose to a slightly higher level.

An analysis of interest receipts reveals that interest income realised on loans increased sharply both in nominal terms and in terms of proportion in the two years under review (from 44% of interest income to 54% in 2000 and 61% in 2001). At the same time, interest expenditure on customer deposits decreased within total interest expenditure.

Contrary to earlier experience, the operating costs rose around the inflation rate in 2000 and 2001. One factor contributing to the improving cost-efficiency is the stricter human resource management, as in the past couple of years the average number of employees in the banking system decreased continuously. Other factors behind the favourable trend include a drop in IT costs, which can be attributed to two key developments. First, the years 1998 and 1999 witnessed major development projects undertaken for the purposes of modernising household banking services. Second, many banks updated their IT systems earlier than originally planned, on account of the millennium date change.

An analysis of the profitability, capital adequacy and market share of banks reveals that the group comprising 6 or 7 large and medium-sized banks, with exceptionally profitable operations in the previous years, continued to reinforce its position in 2001. However, the profitability of state-owned banks remained low.

1.5 Portfolio of the banking system

The proportion of classified assets within the total portfolio increased in 2001, reflecting a moderate deterioration in portfolio quality. Although classified assets rose slightly, the increase mostly affected the category "special watch", while the other categories involving higher risk (substandard, doubtful and bad) hardly changed. Loss provisions allocated for the risks are sufficient to cover the possible losses.

2. Non-bank financial intermediaries

The non-bank financial sector includes investment funds, insurance companies, pension funds and investment firms. In recent years, vigorous growth has characterised non-banking financial intermediation in Hungary, although its depth is still low by international standards. The activity of these institutions has risen at a rate considerably in excess of that of credit institutions in the last few years. While the number of participants in the market of the non-bank financial intermediary system is relatively high (exceeding 500), including insurers, investment funds and private pension funds, the degree of concentration is very high.

Investment funds have experienced a dynamic development over the past few years, with the exception of last year, which was characterised by only a modest increase in the net value of the assets. The first funds were typically established as closed-end funds. On the back of changes in tax legislation allowing the use of tax credits for open-end funds, the market shifted towards these instruments, exploiting their advantages (primarily liquidity). At the end of June 2001, 96 open-end and 3 closed-end investment funds were operating in Hungary. At present, investors may choose among equity, bond, mixed, hedging, money market, foreign equity, foreign bond funds and real estate funds. As a consequence of the stagnating equity market, only the bond and the mixed funds could produce significant growth in the last one and a half years.

As of January 2002, foreign investment funds that wish to market their shares in Hungary only have to comply with the disclosure rules. Certain rules governing the operations of both Hungarian and foreign UCITS will only come into effect with Hungary's accession to the EU.

V. Trends in the financial sector in view of integration in the EU

The possible effects of EU accession on the Hungarian financial market are analysed by a study recently published in the NBH's Report on Financial Stability.[1] The study focuses its attention on the banking system and reveals that the economic strength of Central and Eastern European countries would imply larger and more developed banking sectors, and that the banks in accession countries have considerable growth potential. This is underlined by the low balance sheet total-to-GDP ratio, which is at least two or three times higher in European states than in Hungary.

There is a clear relationship in developed countries between per capita GDP and the balance sheet total-to-GDP ratio, i.e. the development of the banking sector not only keeps pace with economic growth, but also exceeds it as a tendency. It can also be seen that the higher a country's GDP, the higher the proportion of the retail segment within banks' assets. All this implies that in the emerging Central and Eastern European countries, including Hungary, the statistical relationships project a robust expansion of the retail sector.

Looking at average interest rates and the role banks play in the economy, the data show that there was a correlation between lower interest rates and the size of the banking sector relative to GDP. Consequently, a low inflation environment – characterised by low interest rates as well – achieved with the accession to the EU and, later, the euro area is expected to influence positively the development of the Hungarian banking sector.

With regard to the current level of balance sheet total, there appear to be too many banks, implying that the average size of banks is below the optimum level. However, looking at the density of branches, Hungary is not overbanked, although technological development will certainly make a few branches redundant.

[1] Zsámboki, Balázs (2001).

1. Liberalisation of establishing branches

Hungarian legal regulations are compatible with the legislation of the EC in many respects. The latest amendment to the Banking Act incorporates practically all the EU acquis in force. Provisions which apply to the single market will come into force upon Hungary's accession to the EU. Of these, the implementation of the 'Single European Passport' may cause significant changes, which will allow European banks to provide services in Hungary as well, either directly or via branches, without the need to apply for an additional licence. In Hungary, regulations on branch opening continue to include some restraints, the most important of which is the endowment capital requirement, which should be terminated upon accession.

It is fairly difficult to forecast the consequences of the liberalisation of branch opening, as there are no available international examples in this field. Foreign ownership amounts to less than 10% in other European states, in contrast with Hungary, where foreign investors own more than two-thirds of the banking sector. A number of these banks are already operating like branches, which is perceptible in many areas ranging from decision-making mechanisms to risk management activities. Therefore, strategic decisions to be taken by parent banks will be crucial for the future of Hungarian banks. The transformation into branches from subsidiaries currently operating in Hungary is not expected to have a significant influence on the banking market, as the transformation is likely to affect banks operating as quasi-branches, and the operations of these will have a limited impact on the retail market. Servicing personal clients and creating the required infrastructure is a very costly process and, therefore, the foreign banks that want to break into this segment will probably want to make their own way by exploiting the new technological innovations (Internet, mobile and telephone banking). These processes are likely to spur Hungarian banks into implementing further technological development.

2. Transformation of market structures

Analysing the growth potential of Hungarian banks reveals some interesting features of future developments. The European experience shows that growth potential related to traditional banking activities (deposit collection, lending, and payment transactions) has become very low by now. Moreover, Hungarian banks' lending activities are not so much concentrated on the entire corporate sector, but primarily on large companies, which will have much easier access to international sources of finance following accession. The shift in large companies' focus towards the capital market is very likely to impede the development of domestic banks. However, large-scale restructuring is expected in the corporate sector as a result of accession. The related waves of acquisitions and mergers may facilitate the expansion of bank lending. Generally, it can be expected that the Hungarian economy, becoming increasingly stable as a result of the convergence criteria, will grow at a high rate, which may also contribute to the expansion of bank lending.

Lending is likely to be shifted towards small and medium-sized enterprises as well as households in Hungary. The borrowing capacity of these market segments will improve due to robust economic growth and the increase in real incomes, which will reduce banks' risks. Moreover, experience has shown that the pick-up in lending not only accompanies economic growth, but even outperforms it.

The Hungarian financial market is much more bank-oriented than the European average, with banks playing the dominant role in corporate finance. The underdevelopment of the

Hungarian non-bank intermediary system (equities and bond markets) is even more striking relative to EU Member States, which makes it likely that growth will concentrate on this sector. This process will be further reinforced by the ageing of the population, increasing the importance of long-term forms of saving. These factors, in turn, will impede banks' growth, and so the expansion of market activities will affect mostly the non-bank sector.

Joining the single European market is likely to further strengthen competition in Hungary. As a consequence of intense market competition, interest margins and fee charges are expected to fall, in line with the general trend, although the income from fees could even increase due to the expansion of universal banking. The deterioration in profitability is likely to force banks to pursue more stringent cost-saving policies, which will imply cutting operating costs, rationalising branch networks and improving the efficiency of human resources management. It is also expected that non-bank entities will take an increasingly higher share of profit-making within banking groups.

Joining EMU will certainly confront Hungarian banks with new challenges also in the field of monetary policy. Institutions may struggle to acquire access to ECB funding if they do not have the required quantity and quality of collateral. However, obtaining foreign interbank finance will probably not cause problems for the majority of Hungarian banks and only possibly for those that do not have the backing from a foreign parent bank.

Generally, it can be expected that the parents of Hungarian banks will concentrate treasury operations in their own headquarters, which will narrow the room for manoeuvre of Hungarian branches and subsidiaries. More likely than Hungary's accession to the EU, joining the euro area will induce perceptible changes in the Hungarian banking sector.

Annexes

Table A1: Banking system indicators

(HUF million, commercial banks and specialised credit institutions)

	Assets		
	1999	2000	2001
Public sector	966	1,122	1,328
Corporate sector [1]	2,379	3,087	3,399
Households (until 05/2001 without entrepreneurs)	295	428	714
Non-residents	888	768	1,209
Central bank and financial institutions	2,335	2,495	2,237
Shares and other assets	484	524	617
Total assets	7,348	8,427	9,505
	Liabilities		
	1999	2000	2001
Public sector	227	2641	309
Corporate sector [1]	1,292	1,523	1,753
Households (until 05/2001 without entrepreneurs)	2,406	2,713	3,173
Non-residents	1,398	1,596	1,668
Central bank and financial institutions	689	834	899
Own funds	632	782	956
Subordinated debt	146	149	135
Other liabilities	489	516	579
Total liabilities	7,348	8,427	9,505
	Income statement		
	1999	2000	2001
Net interest income	276	310	363.3
Dividends received	12	6.7	4.1
Change in provisions	-3.2	-1.7	-28.3
Net commissions and fees [2]	60	78	102.2
Profit from financial transactions	7	55	65.1
Other profits/losses	-47	-49.8	-32.6
Gross profit from financial and investment services	306	400.2	473.9
Costs of banking operations	271	294.1	327
Profit before taxes	36	96.7	159
After-tax profit	24	77	133,7
Profit of the year	3	53	131
	Profitability ratios (%)		
	1999	2000	2001
ROE (denominator: own funds-profit)	4.10	11.56	16.61
ROA (before taxes)	0.55	1.23	1.81
Interest margin (interest income/av.total assets)	4.08	3.94	4.13
Spread	3.68	3.69	3.93
Non-interest income/costs of operations	11.81	31.78	42.77
Profit before taxes per capita	1.3	3.6	6.1

[1] Loans to individual entrepreneurs are classified as corporate until 05/2001 and to households since 06/2001

[2] Until 05/2001 net commissions include commissions from financial services only; commissions from investment services come under “profit from financial transactions”.

	Portfolio quality		
	1999	2000	2001
Problem free	7,122,667	8,383,001	10,283,767
To be watched	405,754	522,283	1,047,467
Substandard	72,259	79,472	176,713
Doubtful	119,103	97,224	80,368
Bad	94,919	76,267	90,209
Ratio of qualified claims (%)	8.86	7.76	11.94
Ratio of risk-weighted qualified claims (%)	2.24	1.53	1.75

	Capital position		
	1999	2000	2001
Share capital	354,467	396,790	419,165
Subordinated debt included in regulatory capital	124,715	127,322	117,215
Regulatory capital	589,639	741,131	797,091
Capital adequacy ratio (%)	15.00	15.21	14.15
Capital leverage	12	11	10

	Other information (%)		
	1999	2000	2001
Off-balance sheet liabilities / total assets	43.10	41.89	50.89
- contingent liabilities	28.83	28.43	32.50
- forward liabilities	14.27	13.46	18.39
Investments / regulatory capital	45.85	37.25	27.33

	Interest rate risk, maturity mismatch, exchange rate exposure (%)		
	1999	2000	2001
90 days' cumulated HUF gap / total assets	-10	-3	0
90 days' cumulated foreign exchange gap / total assets	-4	-1	0
Interest-bearing assets / interest-bearing liabilities	108	109	108
30 days' cumulated basis position / total assets	-16	-22	-30
30 days' cumulated net basis position / total assets	1	-5	0
Balance sheet open position (monthly average) [1]	0	41,607	1,271
Total open position (monthly average) [2]	0	60,725	117,404

[1] Positive value means long foreign exchange (short HUF) open position.

[2] Sum of absolute value of short and long positions.

VI. References

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Latvia's financial sector: stage of development and challenges in EU accession

Jelena Zubkova, Egils Kauzens, Ivars Tillers and Martins Prusis

Bank of Latvia

I. Introduction

The Latvian financial sector has undergone a considerable transformation over the past decade. Latvia has made significant progress in the development of its financial sector and has created the institutional infrastructure and legislative framework to support a market-oriented financial system. The current growth of the financial sector seems well entrenched as it goes hand in hand with positive changes in the real economy.

II. Banking sector

There are 22 commercial banks operating in Latvia, which dominate the banking sector as well as the overall group of financial institutions (Table 1). Other banks and financial institutions, including 22 co-operative banks, leasing companies and insurance companies only play a minor role. The number of commercial banks is higher than in its Baltic neighbours (Estonia 7, Lithuania 13 commercial banks), underlining Latvia's strong regional role in banking.

Although the Latvian banking market displays already a significant degree of concentration, the concentration ratio is expected to increase further, as larger banks are currently developing more rapidly than small banks.

Latvia has adopted a universal banking system. The commercial banks offer a wide range of traditional banking services, such as account maintenance and settlements, credit and leasing, asset management and other services. In recent years competition has led to some specialisation, whereby banks developed a comparative advantage in one business area, but still, with the exception of the smallest banks, the full range of services is usually available in all banks.

Table 1: Features of the Banking Sector
(end of 2001)

	Commercial banks	Branches of foreign banks	Cooperative banks
Number of credit institutions	22	1	22
Number of branches	184 [1)]	0	0
The share in total assets, %	96.60	3.35	0.05
Number of employees	7,763 [1)]	100 [1)]	n.a.

Source: Bank of Latvia, Association of Latvian Commercial Banks
[1)] data for end 2000

Table 2: Structure of banking capital and assets
(end of 2001, %)

Banking capital			Banking assets		
Foreign owned	Owned by domestic private sector	State owned	Foreign owned	Owned by domestic private sector	State owned
68	28	4	62	33	5

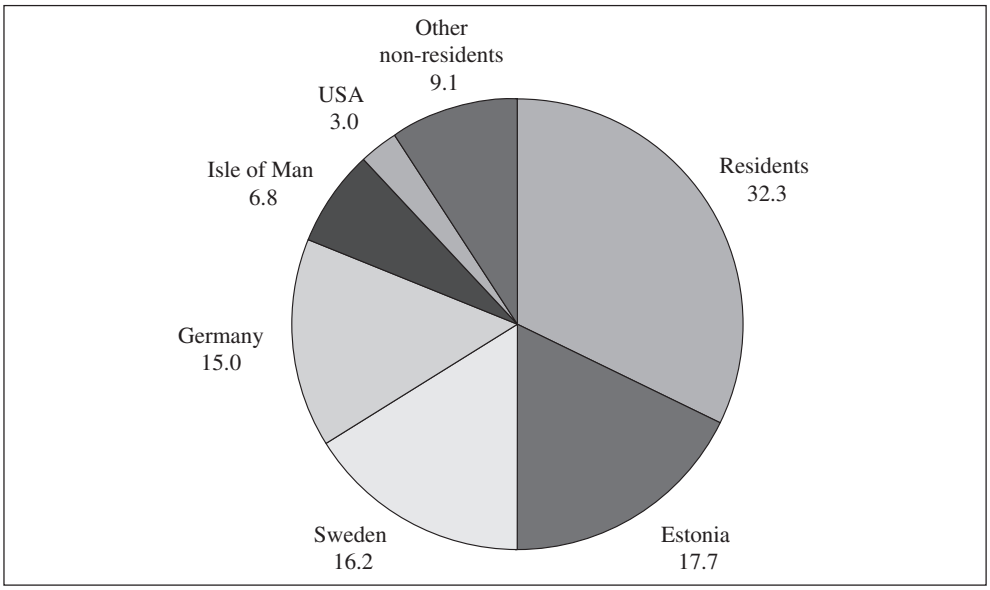
Source: Financial and Capital Market Commission, Bank of Latvia

The Latvian banking system has grown rapidly over the past years. Total bank assets grew by a factor of five since 1995 and reached €6.2 billion (73% of GDP) at the end of 2001. During 2001 total assets and capital of the banking sector increased by 32% and 38% in euro terms, respectively.

The high share of foreign assets and liabilities held by Latvian banks is particularly noteworthy. This is mainly the result of the traditional ties of Latvia with CIS countries. In particular, Latvian banks serve clients from Russia due to Latvia's stable macroeconomic and financial framework, its geographic proximity, and the quality of its banking services.

Also foreign investors play an important role in the Latvian banking system. At the end of 2001, non-residents owned 68% of Latvian banks' capital (Table 2). Their participation in the banking system has provided capital and helped to make the sector more resilient to external shocks. These investors, however, are not from CIS countries but mainly from Scandinavian countries and Germany (Chart 1). Ten domestic banks are now majority foreign owned and among them there are five foreign subsidiaries doing business in the country. This points out

Chart 1: Ownership structure of the capital of commercial banks
(end of 2001, %)



Source: Financial and Capital Market Commission

that the national banking system is already a constituent part of the international environment. The latest large deal was signed in autumn 2000 when Swedish *Skandinavska Enskilda Banken (SEB)* increased its stake in *Latvijas Unibanka,* the country's second-largest bank, from 51% to nearly 100% through a cash offer for outstanding shares. *SEB* also acquired full ownership of its subsidiaries in Lithuania and Estonia in the same period, and has become the dominant player in the Baltic banking market.

State involvement is now limited to *Hipoteku un zemes banka* (Mortgage and Land Bank) and a 32% stake in *Krajbanka* (Savings Bank). These holdings together account for 4.5% of paid-up share capital of banks.

Interest income on loans and commissions for payments and other services are the major income sources for banks. The structure of their income and client base has changed since the Russian crisis, and only a limited number of banks are still working mainly in the CIS market. As a consequence of trade reorientation towards the EU and a reduction in the banking sector's exposure to Russia, Latvia is now far less vulnerable to shocks stemming from its eastern neighbour. At the same time, competition for local clients has increased and encouraged banks to move into new market segments. In particular, the financing of small- and medium sized enterprises and households has expanded. Banks are shaping their strategies and defining their target client base as well as their prime income sources.

At the end of 2001 Latvian banks kept capital at a level of 14.2% of risk weighted assets, well above the 10% threshold stated in regulations. In recent years, the Latvian banking sector operated with profits, except for 1998 when banks' business was influenced negatively by the Russian crises.

Macroeconomic stability has fostered the favourable development in the domestic credit market. Tight monetary policy and the exchange rate peg to the SDR helped to stop hyperinflation and keep inflation under control. For several years Latvia has witnessed an inflation rate, which was very close to the levels of EU member states.

At the same time, growth rates have been positive and significant in recent years. In 2000 GDP growth amounted to 6.8% and in 2001 to 7.6%, which was one of the highest growth rates among EU accession countries.

The stable macroeconomic environment has improved credit conditions, as indicated by the decrease in interest rates and an increase in the maturity of credits (some banks issued credits with a maturity of 30 years). Domestic credits accounted for 86% of total credits at the end of 2001 as well as at the end of 2000. Credit growth has accelerated in recent years, but there are signs that growth will slow down slightly. The ratio of credits of domestic enterprises and households to GDP was 8.7% in 1995 and 28.2% at the end of 2001. Also credits per capita have grown from €174 in 1995 to €1,228 in 2001. Given the high capital adequacy and fact that the formerly sizeable non-performing loans have decreased to just 4.4% of assets and are well provisioned, however, the strong credit growth does not seem to pose systemic risks to the banking system.

At the end of 2001 bank lending to residents stood 51% higher than a year before. Favourable trends were recorded concerning the term structure of total loans. Since the end of 2000, short-term loans have increased by 46%, while long-term loans have expanded by 54%. As a result, the share of long-term loans has increased from 73% at the end of 2000 to 74% at the end of 2001. This serves as an indicator of successful developments in mortgage lending, as such lending doubled from end 2000 to end 2001. The share of mortgage credits in the banking sector's total credit portfolio has increased from 7% to 15% since the beginning of 2000. However, the fast development of the mortgage lending cannot cause any potential problems to banking system stability, as the level of lending remains low. At present,

Table 3: Breakdown of domestic banking credits by sectors
(end of 2001, %)

Private enterprises	Households	Central and local government	Public enterprises	Total
76.4	15.2	3.2	5.2	100

Source: Bank of Latvia

mortgage credits are still used only by 5% of the Latvian population (compared, for example, with a ratio of 80% in Scandinavia).

Commercial credits and industrial credits account for the largest share of domestic credits, at 37% and 27%, respectively, followed by mortgage lending (17%). Consumer credit and credit card credits still have a small share of only around 5%.

In terms of sectors, 23% of all credits in the domestic economy went to the trade sector, 18% to manufacturing enterprises, 10% to transport, storage and communications companies. There is a clear shrinking trend with regard to the trade sector, whose credit share decreased considerably since the beginning of the nineties. Many companies have actively searched foreign ownership in order to acquire sufficient financing as foreign partners also offer technologies, know-how and access to cheaper funds.

Private enterprises are major recipients of banks' credits, as the privatisation process led to a sharp decline in the share of public enterprises among all enterprises (Table 3).

The credit quality of Latvian banks appears to be good. The net foreign exchange position of Latvian banks is also small, and usually varies from 1 to 3 percentage points of assets that do not exceed prudential requirements.

Competition among banks has put pressure on margins: the net interest margin of Latvian banks has narrowed to an average of 4%.

Another tendency that could be singled out refers to interest rates of long-term loans in lats which have been falling steadily to about 9.8% in December 2001, following average lending rates in OECD currencies which fell to about 5.6%. Real interest rates of long-term loans denominated in the national currency are one of the lowest among Eastern and Central Europe countries. Real interest rates have been stable around the level of 8%. Several factors suggest, however, that interest rates are unlikely to fall further. First, dynamic economic growth increases domestic demand for credits. Second, periodic changes in the banking sector's liquidity and relatively high interbank market rates in 2001 had some impact on long-term loans with floating interest rates. Third, the different term structure of banks' funds (short-term) versus their lending structure (long-term) has a bearing on the interest rate level.

Rapid growth of credit activities is facilitated by the substantial increase of the deposit base, which in turn signals the strengthening of public confidence in the banking sector. The establishment of a deposit insurance scheme in 1998 has also helped increase confidence in the sector.

In 2001 resident deposits have increased by 25% compared to the end of 2000. Thus, deposits have reached the highest level in the history of Latvian banking. The share of demand deposits dropped from 60% to 59%, while time deposits have increased by 28% since 2000 and their share in total deposits has risen from 40% to 41%.

In the near future one of the key factors contributing to decrease of interest rates in Latvia will be the penetration of foreign capital into the financial sector, together with macroeconomic developments and low inflation. Banks with a high share of foreign capital

already have access to cheaper financing. Besides, due to the low overall level of Latvia's external debt[1] access to foreign borrowing by financial intermediaries could be an effective means for reducing the cost of borrowing in general.

III. Non-banking sector

1. Foreign exchange and money market

Latvia had liberalised capital flows already early on in transition. An agreement was signed with the International Monetary Fund in 1994 on a continuation of the policy of liberalised capital flows without any controls and influence. The Bank of Latvia has pegged the lats to the SDR basket of currencies and keeps the exchange rate fixed through passive interventions in the forex market. As no restrictions are imposed on capital flows, the exchange market became early on one of the most developed and liquid financial markets (Table 4). Its average daily turnover amounted to €831 million in 2001, including trades with non-residents. For comparison, the average daily turnover of the Latvian interbank money market amounted to €539 million (including deals with non-residents) of which only €24 million were traded within domestic banks in the national currency (Table 4).

The derivatives market is emerging at a rapid pace. This development was facilitated in 2000 by the necessity to hedge the exposure of exporters resulting from the depreciation of the euro against the US dollar at that time. Furthermore, the derivatives market is driven by overall financial markets' developments as well as increasing competition. Derivative instruments (forwards, swaps) of short-term maturity are prevailing. At the end 2001 the outstanding volume of derivatives reached €1.4 billion, almost doubled from the end of 2000.

The interbank market turnover has considerably increased over the past few years, but fluctuations of lats money market rates (especially, overnight rates) remained higher than those rates in the SDR basket. In 2001 the overnight RIGIBOR averaged 5.75% with a

Table 4: Interbank foreign exchange market and money market data in 2001

	Foreign exchange market	Comment on foreign exchange market	Money market	Comment on money market
Bid-ask spread (basis points)	5	USD/LVL exchange rate	64	Overnight money market rate
Participants	All banks		All banks	
Main component	Spot transactions	69% of all transactions	Overnight loans	77% of all transactions
Average daily volume	€141 million	Transactions with residents	€24 million	Domestic national currency market
Average daily volume	€482 million	Including non-residents	€31 million	Domestic market including foreign currencies

Source: Bank of Latvia

[1] At the end of 2001 government's external debt was 9.6% of GDP, and the private sector's net foreign liabilities were 25.4% of GDP.

standard deviation of 1.3.[2] Fluctuations in lats short-term interest rates partly resulted from the exchange rate peg, but reflected also the relative thinness of the domestic money market (see Bank of Latvia, 2001). The Bank of Latvia, however, plays an important role in managing the banks' liquidity so as to avoid excessive volatility in interest rates. It disposes of a wide set of monetary instruments (repo, reverse repo, outright purchases and sales of securities on the secondary market, currency swaps) which allows it to impact the liquidity of banks in an efficient way.

2. Fixed income market

While the domestic fixed income market is still small by international standards, it has developed with a relatively versatile legal framework and adequate institutions. This market offers government debt securities, debt securities of joint stock companies, mortgage bonds and other securities.

The government securities play a far more significant role than corporate debt securities (Table 5). At the end of 2001 the amount of outstanding government securities was €884 million (10.5% of GDP), €425 million of which was euro-denominated (see Bank of Latvia, 2001). During the year 2000 the government has extended the domestic issues' yield curve up to 5 years (Chart 2).

The government securities market started in December 1993 and these securities were the only ones for some years in the public market. Trading was mostly conducted on the OTC market. Since 1999 government securities were actively traded at the Riga Stock Exchange (RSE). The foreign investors' share in government securities has been up to 20% depending on yields and market sentiment on emerging markets. At the end of 2001 foreigners owned 9.2% of government securities. The attractiveness of Latvian government securities is determined by the good country rating (long term, domestic currency: S&P A-, Fitch A, Moody's A2), an attractive real interest rate, and the lack of private fixed income bonds.

Usually all Latvian banks hold government T-bills or bonds, but only a few banks have invested in Latvian private debt securities. The daily turnover of government fixed income securities was €2.8 million in 2001, the daily turnover of private fixed income securities amounted to €0.2 million on the RSE (see Bank of Latvia, 2001).

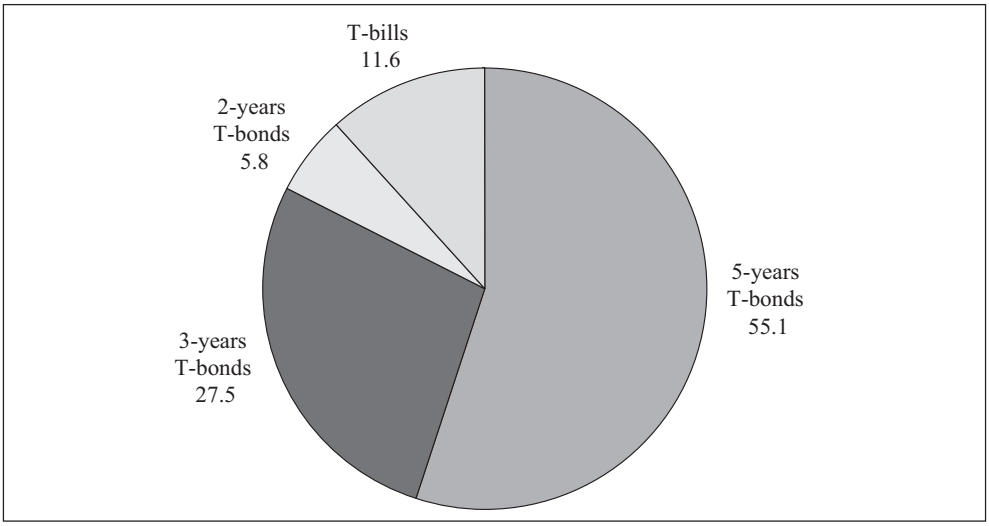
Table 5: Outstanding amount of fixed income securities
(end of 2001, EUR million)

Issuer	Total	Short-term [1]		Long-term [1]	
		$T \leqslant 1$	$1 < T < 5$	$5 \leqslant T < 10$	$T \geqslant 10$
Central government	884	53	153	678	0
Monetary financial institutions	48	0	9	30	9
Non-monetary financial intermediaries	35	14	21	0	0
Non-financial enterprises	2	0	0	0	2
Total	969	67	183	708	11

Source: Bank of Latvia.
[1] T = years to maturity

[2] The 1-month RIGIBOR averaged 6.6% with standard deviation 0.7. SDR rates averaged 3.8% and 3.7% respectively.

Chart 2: Structure of outstanding government domestic currency securities
(end of 2001, %)



Source: Bank of Latvia

One of the basic features of the capital market in Latvia is that non-financial companies rely more on credits from their banks than on bond issuance. Bond yields are usually higher than credit rates and therefore refinancing via bonds is not an attractive alternative to companies. Only a few issuers (mostly banks) are able to ensure the successful placements of securities. Many companies prefer to attract funds through closed issues of debt securities that cannot be traded at the RSE. However, there are positive signs indicating future growth in the volume of public traded private debt securities. Likewise, their maturities become longer, which is a sign of stability in the market, and this yield curve lengthening also promotes inflows of long-term investments from insurers and pension funds. The end of privatisation of large state companies will help to accelerate the development of local bond markets, because they are able to enter the domestic bond market via large issue volumes.

3. Stock market

Latvia, like many other accession countries, started with a small number of stocks, all of which were offered via IPOs. Many stocks had a fairly liquid trading and the number of listed companies grew gradually. Besides those, which appeared in the list through privatisation programmes, there were also newly established companies.

Total nominal value and total real value of public-issue shares has increased every year (Table 6). The value of closed-issue shares is approximately 5 times that of public-issue shares. In 2001 the monthly average turnover of shares on RSE was €15 million, about 19% of the total RSE turnover.

At the end of 2001 the shares of 63 companies were listed at the RSE. The main recent events in the share market are related to dynamic, high-growth, enterprises: Swedish *Skandinaviska Enskilda Banken* acquired the JSC *Latvijas Unibanka,* which is one of the largest banks in Latvia; Danish *Codan* purchased the insurance company *Balta;* shares in the

Table 6: Riga stock exchange key data for the equity market

	1996	1997	1998	1999	2000	2001
Equity capitalization (EUR million)	122	303	341	368	623	782
Equity capitalization (as % of GDP)	3.0	6.1	6.3	5.9	8.0	9.3
Total turnover (EUR million)	10	74	61	40	302	184
Number of listed shares	34	50	69	68	63	63

Source: Riga Stock Exchange, Bank of Latvia

gas company Latvijas Gaze were successfully auctioned to German and Russian investors, and privatisation of this company was successfully completed; privatisation of shipping company *Latvijas Kugnieciba* has started (see Bank of Latvia, 2001 and Q1-Q4 2001).

Privatisation has to be completed to increase the stock market turnover in the RSE, in particular concerning large companies such as the joint-stock companies *Ventspils Nafta (Ventspils' Oil), Latvenergo, Lattelekom* and the already mentioned *Latvijas Kugnieciba (Latvian Shipping Company).*

IV. Functioning of the financial sector

The dominant position of the banking system puts it in an important position concerning the impact of monetary policy to the real economy and represents the most important starting point for central bank policy measures. The new, liberalised, financial environment, the ongoing process of financial innovation and the development of open market operations by the Bank of Latvia have changed and continue to change the ways in which monetary policy is transmitted. Empirical research also supports the view that the transmission mechanism of monetary policy in Latvia is found to be relatively unstable.

In a market economy there are typically at least four possible transmission channels: interest rates, credit and liquidity constraints, real balance effects and the exchange rate channels (see Kamin, Turner and Van't Dack, 1997).

In many developing countries – in particular those with markets for bonds, equities and real estate being at the initial stage of development – the exchange rate is probably the most important asset price affected by monetary policy. In small open economies the exchange rate channel (whether a country has a fixed or flexible exchange rate regime) is likely to be even more important.

Exchange rate targeting was considered as the optimum monetary policy strategy for Latvia during the transition period, given that the country is a small economy heavily engaged in international trade. This option was supported by the fact that, due to the fundamental structural changes in the economy, money demand in Latvia is unstable and volatile. Furthermore, the fixed exchange rate can be the main factor contributing to the overall price level in the economy through import prices, as Latvia heavily depends on imports (46% of GDP). Since 1994 the Bank of Latvia has pegged the national currency to the SDR basket and is committed to keep this peg in the future. It is important to note that the currency composition of Latvia's foreign trade corresponds closely to that of the SDR basket. About 50% of foreign trade transactions are carried out in US dollars and about 30% in European currencies. The exchange rate channel currently plays a major role in Latvia, despite the fact that policy-induced changes in interest rates do not affect the nominal exchange rate.

Although the interest rate channel is regarded to be one of the most important channels of monetary transmission, its influence on the Latvian economy, especially at the beginning

stage of financial reforms, has been limited. At the initial stage of transition inflation was very high and the behaviour of interest rates did not influence the rate of investments and, consequently, aggregate demand.

The combination of capital mobility and the fixed exchange rate constrained the ability of the Bank of Latvia to pursue an independent monetary policy, including an impact on interest rates. However, since Latvian and foreign assets are not perfect substitutes, monetary policy is able to influence interest rates, at least in the short run. In this sense, a deviation of Latvian interest rates from the foreign ones will not necessarily cause immediate capital inflows (see Pietrobelli and Zamagni, 1999).

Yet, the Bank of Latvia does not pursue any specific interest rate target, but tries to smooth excessive fluctuations in money market rates, or uses interest rate policy in case of possible pressure on the exchange rate. As a matter of fact, the two variables – exchange rate and interest rate – can react instantaneously to one another. A number of empirical studies at the Bank of Latvia explore the links between foreign exchange and money market in Latvia.

As it follows from the model analysis (Annex II), the foreign exchange market reacts to changes in the interest rate spread between 3-month RIGIBOR and 3-month USD LIBOR with a lag of about one week. The increase of the interest rate spread attracts the foreign capital to the domestic money market, raises the demand for lats and appreciation of the exchange rate within the intervention corridor. The closing of the foreign exchange positions leads to market pressures on the currency and depreciation of the exchange rate within the corridor with lag of one-two weeks.

Research shows that the role of the interest rate channel in Latvia gradually becomes more important (Annex III). With the development of open market operations, the interest rate on central bank's repo operations becomes a benchmark in the domestic money market. A change in the central bank's rate is immediately transmitted to short-term lats money market rates of maturities up to 3 months.

The model in Annex III can be applied to basic monetary policy simulations identifying structural shocks in the interbank money market (see Evans and Kuttner, 1998). The innovations in money market rates are identified solely as monetary policy shocks. In order to obtain more accurate estimates of the monetary policy impact on lending rate dynamics, it would be necessary to separate monetary policy shocks from other types of shocks relevant to Latvian money market developments, like foreign capital inflows and government finance operations.

The increased share of floating rate credits with rates pegged to the money market rate will facilitate the Bank of Latvia's impact on long-term credit interest rates and spending/investment decisions by households and enterprises. However, the impact of the Bank of Latvia on interest rates will remain rather limited due to a number of reasons:

– with foreign capital entering the financial sector, many banks dispose of a wide access to foreign capital markets
– due to fast economic growth, the interest rate setting on credit instruments supplied by banks is a positive function not only of money market rates, but also of credit demand by potential borrowers.
– due to the relatively high degree of dollarisation (the share of the foreign currency component in broad money is approximately 30%), the leverage of central bank policy rates is somewhat limited.
– despite the rapid growth in volume, loans still comprise only around 40% of bank assets. Although this figure has increased consistently, it still does not correspond to the needs of the economy. The other similar indicator, domestic credit/GDP ratio, also stands at a rather low level of 25%, still being far from the economy's full lending capacity.

There has not been any statistical evidence observed in favour of an influence of interest rates on inflation. Interest rates might influence investment and spending to some extent, but their effects are still negligible. Moreover, a higher aggregate demand might induce higher aggregate supply through imports or additional production (in case of excess capacity). Besides traditional external and internal factors, there is a complex set of other factors influencing tradable/non-tradable prices (administratively regulated prices, income and price convergence with the EU, relative productivities of tradable/non-tradable sectors etc.)

V. Trends in the financial sector in view of integration in the EU

As Latvia is well advanced in the transition process and moving quickly in its preparation for EU accession, many of the issues that it confronts in the financial sector are those of a typical small economy.

The crises that have hit some emerging markets in recent years have highlighted the importance of a sound and well-regulated financial sector. The legislative framework for banking in Latvia meets, and in some respect even exceeds, all EU requirements. Practical supervision is tight and bank inspections are more frequent than in EU countries. The latest EU directive imposed on credit institutions in Latvia in January 2001 was a capital charge for market risks. IAS accounting and audit practices are compulsory. Annual reports are prepared in accordance with IAS and audited by internationally recognised auditing firms. Therefore no significant changes in the regulatory framework for banks are planned in the near future.[3]

The required minimum initial capital to establish a bank is €5 million. Foreign banks that want to establish subsidiaries or branches in Latvia face no restrictions. The prudential requirements that they have to meet are the same as for domestic banks.

Latvia is likely to lift the requirement to obtain a banking licence for banks registered in the EU member states, which seek to open a branch in Latvia. Pursuant to the respective amendments to the law "On Credit Institutions", the supervision body of the relevant EU Member State will only have to inform the Latvian banking sector supervisor, the Financial and Capital Market Commission, about the banking licence issued to the given bank in the country of its registration. At present foreign banks are required to obtain a banking licence to launch their operations in Latvia.

Perhaps the most significant changes in the institutional infrastructure are related to the unified financial supervisory authority, the Financial and Capital Market Commission, which started its activities on July 1, 2001. The new independent supervisory authority took over the responsibilities of the Bank of Latvia Credit Institutions Supervision Department, Insurance Supervision Inspectorate and Securities Market Commission. The new unified regulatory body enjoys significant independence and is working hard to close all remaining regulatory loopholes that are concentrated largely in the small non-bank area (see www.fktk.lv and Bank of Latvia, Q3 2001).

In view of Latvia's integration into the European Union the banking sector should be ready to provide services and guarantees meeting the efficiency level of the European Union. The banking sector should be able to deal with the increasing degree of competition, which undoubtedly is going to intensify. With the emergence of a highly liquid euro market, the customer base of Latvian banks may shrink. Under such circumstances Latvian banks will

[3] Other important laws include a law on money laundering (conform with the EU directive) and a law on deposit guarantees, both in effect since 1998.

benefit from the advantage of having local expertise in sectors where domestic companies prevail as well as in business activities with Russia.

One cannot deny that, gauging Latvian banks on a worldwide basis, they are very small. This aspect can turn out to be a serious obstacle for Latvian banks to successfully compete in the domestic and international market as well as to join large financing projects. Nevertheless one can assert that the consolidation within the Latvian banking system is still going on and now assets of the three largest banks account for 52% of total assets of the whole banking sector.

Pursuant to ECB policies, Latvia will not start considering membership in the euro area until it has been accepted for membership in the EU. The Bank of Latvia will be prepared to join the European System of Central Banks at the time of Latvia's accession to the EU. The structure and objectives of the Bank of Latvia, the degree of its independence and its set of monetary policy instruments are fully in line with those defined for the European System of Central Banks. A two-year transition period will be set for Latvia before it joins the EMU, highlighted by Latvia's participation in ERM II and the lat's peg to the euro. The Bank of Latvia is strongly committed to ensure stability of the national currency also in the future, so formal participation in the ERM II will hardly affect Bank of Latvia's daily operations.

ANNEX I

Table I.1: Main macroeconomic and financial indicators of Baltic countries at the end of 2001 or in 2001

	Estonia	Latvia	Lithuania
Population (million)	1.4	2.4	3.5
Real GDP growth (%)	5.4 [1)]	7.6	5.9 [1)]
GDP per capita (EUR)	4,474 [1)]	3,572	3.905 [1)]
CPI (%) – year on year	5.8	2.5	1.3
Current account (% of GDP)	-6.5	-10.1	-4.8 [1)]
Export (% of GDP)	61.4 [1)]	26.5	38.2 [1)]
Import (% of GDP)	78.9 [1)]	46.4	53.0 [1)]
State debt (% of GDP)	2.9 [1)]	15.0	23.1 [1)]
Bank claims on domestic private sector (% of GDP)	27.6 [1)]	26.5	11.5 [1)]
Domestic private sector deposits in banks (% of GDP)	33.0 [1)]	20.5	19.1 [1)]
Banks' assets (% of GDP)	71.8 [1)]	77.4	31.8 [1)]
Banks' foreign assets (% of total assets)	23.0	47.4	19.7
Banks' foreign liabilities (% of total liabilities)	31.8	58.5	15.7
Equity market capitalization at stock exchange (% of GDP)	27.4 [1)]	9.3	10.0 [1)]
Bond market capitalization at stock exchange (% of GDP)	0.3 [1)]	5.7	4.1 [1)]
Long-term real interest rates on credits in national currencies in December 2001 (%)	5.94	6.60	6.06
M2/GDP (%)	42.9 [1)]	32.5	26.5 [1)]
Currency in circulation/M2 (%)	17.0 [1)]	31.5	23.0 [1)]

Source: Bank of Latvia, Bank of Lithuania, Central Bank of Estonia, Central Statistical Bureau of Latvia, Statistical Office of Estonia, Department of Statistics of Lithuania.

[1)] at the end of Q3 2001

ANNEX II

Determination of the exchange rate spread

The major difficulties faced when applying an econometric model to financial data are the statistical properties of data. In practice the stationarity tests do not reject the hypothesis of a unit root while, from an economic point of view, interest rate series could be stationary processes. On the other hand, long-term dependence even in covariance stationary data may lead to misleading statistical inference (see Granger, Hyung and Jeon, 1998), since the distribution of standard test statistics is heavily skewed. Moreover, the exchange rate spread used in a linear regression could be a non-linear process because the range of exchange rate movements is restricted within the bounds of the intervention corridor, which has never been abandoned in Latvia (see Vilasuso, Cunningham).

Model specification:

$$\delta e_t = c_0 + c_1 \delta r_{t-1} + c_2 fxp_{t-1} + P(L)\delta e_t + \varepsilon_t \qquad \text{(II. 1)}$$

where

δe	Exchange rate spread for USD/LVL: Commercial banks' bid – Bank of Latvia's bid
δr	Interest rate spread: RIGIBOR (LVL 3M) - LIBOR (USD 3M)
fxp	Foreign exchange position
P(L)	Polynomial lag operator

all observations are weekly average values of the corresponding variables.

Table II.1: Coefficient estimates of the model (II, 1)

Dependent Variable: δe
Method: Least Squares
Sample: 7/02/2000 8/26/2001
Included observations: 61

Variable	Coefficient	t-Statistic	
c	0.0039	6.33	
δr (-1)	-0.0008	-5.56	
fxp (-1)	-0.0836	-5.70	
δe (-1)	0.4048	3.57	
δe (-2)	0.3179	2.68	
δe (-6)	-0.3736	-6.12	
R-squared	0.9582	F-statistic	252.69
Adjusted R-squared	0.9544	Prob(F-statistic)	0.0000
S.E. of regression	0.0007		
Durbin-Watson stat	2.0427		

The statistical properties of the model (II. 1) are satisfactory, as residuals are independently distributed and parameter values are stable (test results available upon request).

According to the theory, both the exchange rate and interest rates can be endogenously determined. In this case OLS estimates are inconsistent and biased. The statistical procedure we have chosen to test for endogeneity is the Hausman test. As the instrument variable we have chosen the weekly average exchange rate USD/LVL set by the Bank of Latvia. The results of the Hausman test equations, available upon request, allow us to reject the hypothesis of endogeneity of interest rates.

ANNEX III

To study the impact of money market rates to the rates on deposits and loans to households and firms, we concentrate solely on the interbank money market and the short-term credit rate. We use the structural VAR methodology, which is a frequently used approach in monetary transmission research (see Bredin and O'Reilly, 2001) and for estimation of the impact of monetary policy shocks on relevant economic variables (see Evans and Kuttner, 1998).

The economic theory of monetary transmission suggests that interest rates, output and prices should be modelled jointly as endogenous variables. However, in a small open economy with a fixed exchange rate, demand shocks can influence the current account rather than price dynamics. Hence, inflation could be treated as an exogenous factor. We suppose that the pattern of price dynamics is largely determined by the price adjustment process, while the decrease in credit rates can be partially attributed to price stabilisation and successive declines in inflation expectations. According to these assumptions the annual inflation rate is incorporated into the structural model

$$By_t = \Gamma_0 + \Gamma_1 y_{t-1} + \Gamma_2 x_t + u_t \qquad \text{(III. 1)}$$

as an exogenous explanatory variable, where the components of the column vector y are the weighted average interbank money market rate r_M and the short-term lending rate for credits in lats r_L. Both components of the column vector x are annual inflation rates.

In order to identify disturbances of the structural model (III, 1) from the unrestricted VAR

$$y_t = A_0 + A_1 y_{t-1} + A_2 x_t + e_t \qquad \text{(III. 2)}$$

we assumed that short-term credit rate innovations do not have a contemporaneous effect on the interbank money market. This assumption is implemented by imposing a zero restriction on the coefficient β_{12} of the structural matrix B.

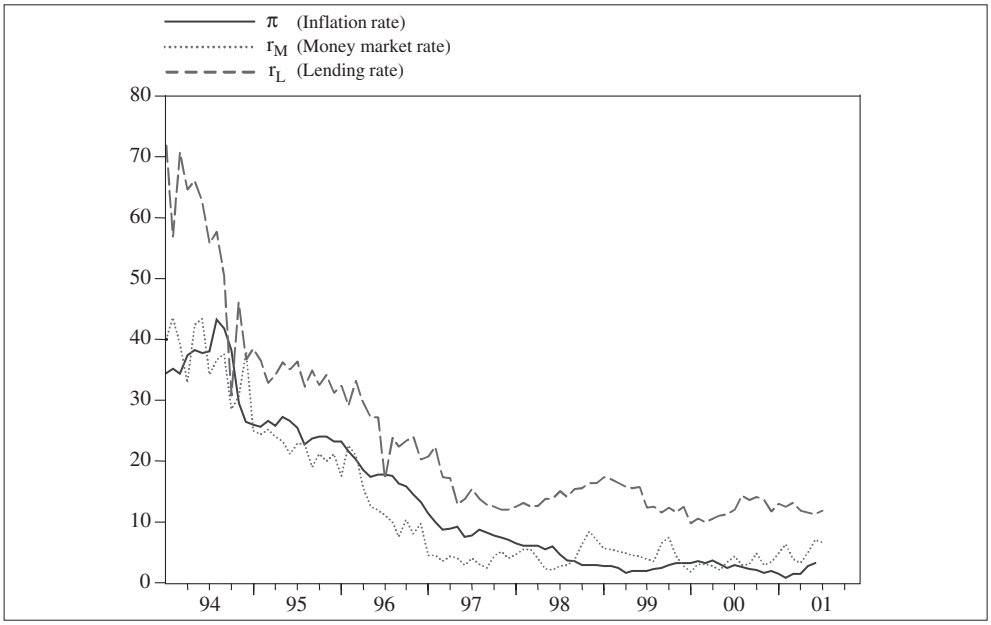
$$B = \begin{pmatrix} 1 & 0 \\ \beta_{21} & 1 \end{pmatrix} \qquad \text{(III. 3)}$$

The estimated model can be applied for basic monetary policy simulations observing the effects of shocks in the interbank money market. The money market rate disturbances capture shocks of different sources – interest rate policy of the central bank, government finance operations, foreign capital inflows and external factors. Due to the major importance of monetary operations of the central bank, the innovations in the money market rates can be interpreted mainly as monetary policy shocks.

The majority of the lag selection criterions point to a lag length of 7, which was chosen as optimal, while other variants suggested by Schwarz's (1) and Hannan-Quinn's (2) information criteria yield a too parsimonious model specification.

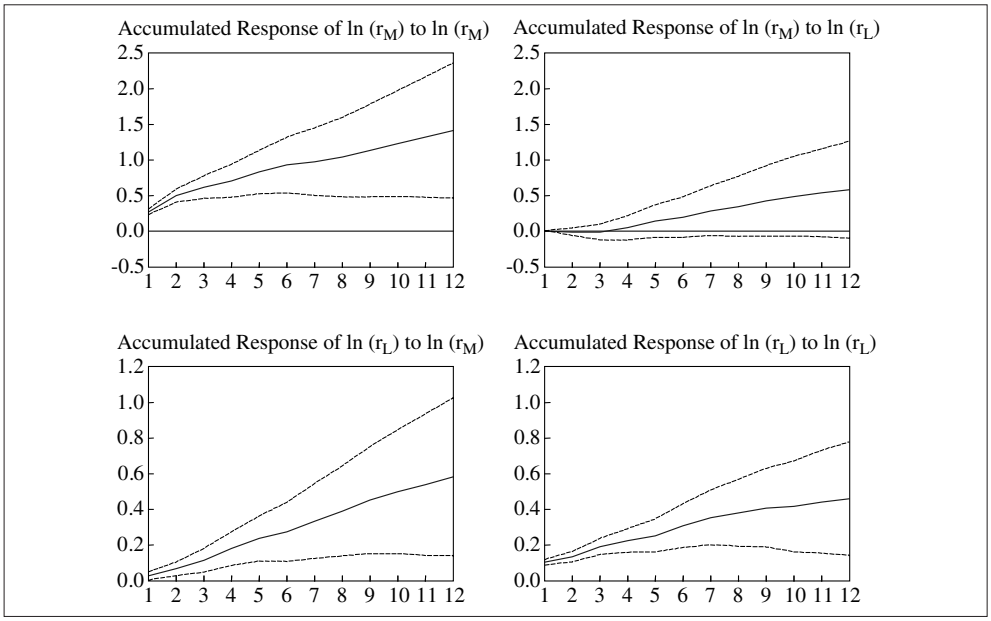
According to VAR model estimates inflation is a statistically significant variable that justifies the assumption on the role of price dynamics for credit rate developments.

Chart III.1: Time series of data in levels



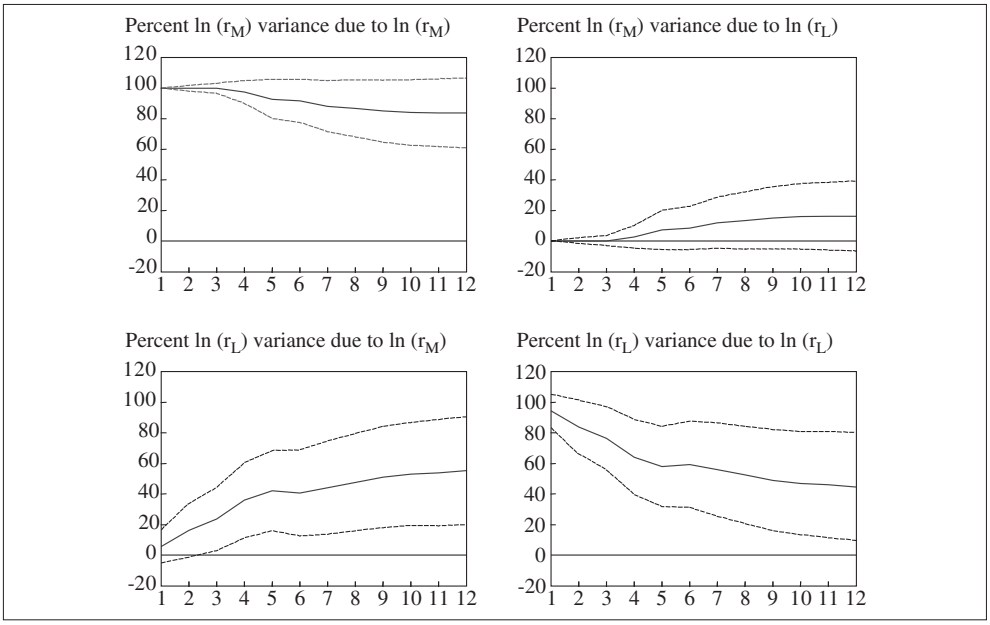
The accumulated impulse responses (Chart III.2) trace the effects of a shock from one endogenous variable onto other variables in the VAR. A monetary policy impulse spills over to lending rates, which stabilise approximately after one year. Propagating through the system this monetary policy shock raises feedback on the money market.

Chart III.2: Accumulated response to structural one S.D. innovations



The variance decompositions (in Chart III.3.) show the proportion of the variance forecast error of the endogenous variables explained by the structural shocks. According to these estimates, approximately one fourth of the variance forecast error of the lending rate could be attributed to the shock in the money market after one quarter.

Chart III.3: Variance decomposition ± 2 S.E.



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Lithuania's financial sector: an overview

Tomas Garbaravicius and Raimondas Kuodis

Bank of Lithuania

I. Size and structure of the financial sector

As in other financial systems in their early stages of development, the commercial banking sector represents the most important part of Lithuania's financial system. In 2001, bank assets constituted 32% of GDP and nearly two-thirds of those of the overall financial system, while other financial intermediaries (credit unions, insurance, investment, leasing and other financial companies) have only recently been gathering momentum.

The size of the securities market, as measured by the capitalisation of listed stocks and bonds, is 2.3 times smaller than the total assets of the banking sector, and its importance for financial intermediation is not yet significant. In terms of absolute volume, the financial sector is rather small by international standards – at the end of 2001 bank assets and the capitalisation of the securities market amounted to €4.35 billion and €1.92 billion, respectively.

In 2001, the share of financial intermediation in real Gross Value Added (GVA) amounted to 3.2%, which is also relatively low by international standards. However, financial intermediation expanded much more rapidly than GDP during the period 1999-2000, partly owing to the influx of foreign strategic investors and a relatively low starting base. In 2000, the banking sector created 60% of real GVA in financial intermediation, the central bank accounted for 23%, insurance generated 14% and the remaining 3% came from activities in the securities market.

Table 1: Financial sector structure
(in % of GDP)

	1993	1994	1995	1996	1997	1998	1999	2000	2001
Assets of:									
Commercial banks	30	31	25	19	22	25	26	29	32
Insurance companies	-	-	-	-	1	1	2	2	2
Leasing and factoring companies[1)]	-	-	-	-	1	1	1	2	3
Investment holding companies[2)]	-	-	-	-	1	0	1	0	0
Capitalisation of:									
Listed stocks	0	1	3	11	18	10	11	14	10
Bond market	0	1	3	3	4	4	3	3	4
Total	31	34	31	33	46	41	43	50	51

Source: Bank of Lithuania (BoL), Department of Statistics, National Stock Exchange of Lithuania (NSEL), State Insurance Supervisory Authority

1) Leasing and factoring portfolio

2) Net (own) assets

II. Banking sector

The first commercial banks were founded in 1989 and at that time their operations were governed by the laws regulating corporate entities, until the adoption of the separate Law on Commercial Banks in 1992. Early developments in the banking sector mirrored experiences of other transition economies. Initially the number of banks soared up to 27 in 1993, followed by a major shake-up of the banking system in 1995, which was caused by imprudent and sometimes fraudulent management activities, as well as the lack of regulation and relevant skills. As a result, the number of banks shrank to 13 in 1996. The fiscal costs of cleaning up the banking system through the special state-owned asset management company amounted to around 2.5% of GDP (USD 300 million) and were rather moderate due to the small size of the banking system and its early stage of development.

As an alternative to bank financing, the first credit unions (co-operative banks) were established in 1995 and their number rose to 41 at the end of 2001, although their assets amount to less than 0.2% of bank assets.

Foreign ownership in the banking sector has increased dramatically in recent years, because strategic investors from Sweden (SEB and Swedbank) acquired the two largest banks, while the last state-owned bank, with 12% of the banking sector's assets, was sold to a German bank (Nord/LB) in the first quarter of 2002. After full privatisation, foreign investors own more than 50% of the registered capital in 7 out of 9 banks. Foreign banks started opening their branches in 1997 and there are 4 branches at the moment (one from Poland, one from Finland and two from Germany).

The banking sector is highly concentrated – the three largest banks control almost 80% of the market. Challenges related to this high degree of concentration are the increase of systemic risk of "too big to fail" as well as lower competition. At least 4 banks accept deposits and grant loans in each county's centre, while elsewhere in the counties only 2-5 banks compete for deposits and loans. However, branches of foreign banks have intensified competition recently, but mostly in the loan market, since they do not dispose of a branch network and operate only in the capital. Their weight is growing quite rapidly – at the end of 2001 their market share in terms of assets, loans and deposits increased to 7%, 10% and 3% respectively up from 4%, 5% and 2% at the end of 2000.

The problem of a rather high concentration in the banking sector may be further intensified by the dominant position of banks in the entire financial system, as their subsidiaries are very active in other segments of the financial sector. All commercial banks and one branch of a foreign bank own a leasing company, and these leasing subsidiaries control almost the entire

Table 2: Ownership of the banking sector
(end of 2001)

	Domestic institutions			Foreign banks				
	State-owned[1)]	Private-owned	Total domestic	Foreign-owned[1)]	Foreign-controlled	Branches	Total foreign	Total
Number of banks	1	1	2	6	1	4	10	13
% of registered capital	10	3	13	76	3	8[2)]	87	100
% of banking assets	12	2	14	78	1	7	86	100

Source: Bank of Lithuania
[1)] A state-owned bank (foreign-owned) is defined as a bank with more than 50% of the registered capital in the government's (foreign investors') hands
[2)] Funds, received from headquarters

Table 3: Profitability and soundness of the banking sector
(in %)

	1996	1997	1998	1999	2000	2001
ROE[1) 2)]	-	-15.8	10.8	1.1	4.0	n.a.
ROA[1)]	-	-1.0	1.0	0.1	0.4	n.a.
Capital adequacy ratio (10%)[3)]	10.5	15.3	23.8	17.4	16.3	15.6
Liquidity ratio (30%)	55.7	65.5	58.7	45.4	49.7	48.0
Net loans to assets	46	39	42	46	40	41
Non-performing loans to:						
Total loans	32	28	13	12	11	7
Capital	300	215	46	47	43	34
Provisions to:						
Total loans	20.7	18.5	5.9	4.5	3.7	2.6
Non-performing loans	64	66	48	38	35	34
Provision expenses to:						
Net banking income[4)]	30	31	8	18	11	n.a.

Source: Bank of Lithuania, published audited annual accounts of commercial banks
1) 13 end-of-month averages
2) Funds received from headquarters were taken as a proxy for equity in the case of branches of foreign banks
3) Without branches of foreign banks
4) Net interest and net non-interest income

leasing market. Three out of nine life insurance companies and four out of 22 non-life insurance companies belong also to commercial banks, although their market share is not as important as in the case of leasing. Furthermore, banks are major players in the securities market as well.

Banks are well capitalised and comply with all prudential requirements. However, traditional profitability ratios (ROE, ROA) indicate insufficient profitability, which cannot be explained only by the credit risk issues. Other factors include: a low share of non-interest income (in 2000, non-interest income accounted for only 42% of net banking income and less than 30% of gross income), which makes banks vulnerable to interest rate competition; a high portion of non-interest bearing assets (reserves and tangible assets); and high general operating expenses, making up 79% of net banking income in 2000.

At the end of 2001, only 5 out of 9 banks and none of the branches of foreign banks had assets in excess of EUR 100 million, which means that smaller banks cannot reap even minimal benefits from economies of scale.

High operating expenses are partly attributable to the over-branching and overstaffing in some (usually formerly state-owned) banks. Although the average number of inhabitants per branch (4,305 including customer service sub-branches) is more than twice as high as the euro area average (1,800), at least several banks need to reconsider their branching policy in order to be well prepared for the technological innovations threatening traditional banking.

Bank credit to the private sector has remained at a rather low level and constituted 13.1% of GDP in 2001, while funds were mostly redirected to the public sector and foreign assets during the last few years. The slowdown might be explained by cautious lending behaviour following the banking (1995) and the Russian crisis (1998) as well as a general scarcity of lending opportunities. Furthermore, structural changes with regard to the three largest commercial banks – the largest commercial bank absorbed a smaller bank, whereas the

Table 4: Domestic credit

Stocks in % of GDP	1993	1994	1995	1996	1997	1998	1999	2000	2001
Domestic credit and net foreign assets of domestic banks									
Credit to private sector	13.9	17.7	15.4	10.9	10.0	10.5	11.7	10.8	13.1
Corporate sector	12.3	15.5	13.7	9.6	8.4	8.2	9.1	8.4	9.9
Households	1.6	1.6	1.0	0.8	1.0	1.2	1.6	1.3	1.5
NBFI[1)]	0.0	0.1	0.2	0.1	0.4	1.0	1.0	1.1	1.6
Net credit to public sector[2)]	-7.3	-5.2	-4.7	-2.2	0.0	1.1	1.4	3.1	4.8
Credit to public sector	3.5	3.8	3.1	3.2	5.3	5.4	4.9	5.9	6.6
Liabilities to public sector	10.8	9.0	7.8	5.4	5.3	4.3	3.5	2.9	1.8
Net foreign assets	2.3	0.3	0.5	1.2	0.8	-1.1	-0.7	1.7	1.3
Foreign assets	2.6	2.3	2.0	3.6	3.7	2.7	3.9	6.1	6.3
Foreign liabilities	0.3	2.0	1.5	2.4	2.9	3.8	4.6	4.5	5.0
Foreign credit to private non-banks[3)]	-	-	-	5.3	8.8	8.4	8.0	8.1	7.7
Loans	-	-	-	5.3	7.2	7.9	7.8	7.9	6.9
Bonds	-	-	-	0.0	1.6	0.5	0.2	0.2	0.8

Source: Bank of Lithuania, Department of Statistics

1) Non-bank financial institutions

2) Public sector does not include monetary authorities

3) Foreign credit includes cross-border loans and bonds held by foreign investors, but excludes trade credit and intercompany loans by foreign (parent) company

second and third largest banks were prepared for privatisation – made them reluctant to extend new credits.

As far as the demand for credit is concerned, the borrowing side appears to be constrained by relatively high lending interest rates caused by insufficient competition among banks and their inflexibility to adapt to client demands, in particular to those of SMEs. In 2001, the stock of foreign credit to private non-banks was lower than the ratio of domestic bank credit to private non-banks by more than 5% of GDP. Although the economy has returned to positive growth, domestic bank lending still lags behind, as the recovery in 2001 is partly attributable to the abolishment of corporate profit tax deductions for reinvestments from 2002.

After a spike in 1998 and 1999, the growth of foreign liabilities slowed down in 2000 and 2001, since local commercial banks cannot use locally even domestic resources (mainly household deposits), which have been expanding strongly during 1999-2001.

At the end of 2001, enterprises constituted only 11% (individuals 88%) of bank borrowers, but their debts accounted for 78% (individuals 11%) of the total bank loan portfolio. The majority (81%) of corporate credit recipients owed less than USD 125,000. 27% of them owed even less than USD 5,000. On the other hand, corporate loans above USD 125,000 accounted for 91% of credits to enterprises and 71% of the total loan portfolio value. These figures explain why banks make a lot of effort to attract large corporate clients, but competition may also force them to look more closely at SMEs.

Loans to the manufacturing, trade, energy and transportation sectors account for 23%, 22%, 7% and 6% respectively (at the end of 2001) and dominate the loan portfolio of commercial banks. Leasing companies are becoming an important lending channel for banks, as the share of loans to non-bank financial institutions, mostly to subsidiary leasing companies, has been expanding quite rapidly and amounted to 10% at the end of 2001. The breakdown of the credit portfolio by sector corresponds roughly with the structure of GDP, although loans to transportation, construction and agriculture are slightly underweight.

III. Non-banking sector

1. Money market and foreign exchange market

Unsecured deposits are one of the most prevalent money market instruments in Lithuania, although banks also use collateralised loans and deposits and government debt securities. Sell buy-back and repo markets do exist, but the activity in this market segment is partly constrained by legal uncertainties related to collateralised lending and the absence of respective open market operations. Interbank rate fixings exist for maturities of up to 12 months.

The relative importance and development of FX instruments is attributable to the currency board arrangement, an early capital account liberalisation and to the openness as well as the dollarisation of the economy. FX swaps are as popular as unsecured deposits, also partly due to their limited credit risk. Starting from a low base, the volume and number of forwards has been augmenting impressively as well.

Domestic banks and branches of foreign banks are major players in the money and foreign exchange markets, although liquidity and efficiency was greatly enhanced by Scandinavian participants, namely parent banks from Sweden and Finland. However, the efficiency of the litas money market, as evidenced by money market spreads, is still rather low, albeit gradually improving.

Notwithstanding the small market size and an insufficient number of market participants, a further reason for high interest rate spreads relates to the legacy of the banking crisis in 1995, after which banks became used to relying only on themselves for liquidity management. This practice of self-reliance is further reinforced by the high degree of concentration, where the three largest banks control almost four-fifths of the market and, in the case of substantial

Table 5: FX and money market statistics

	Annual turnover, USD billion			Average daily turnover, USD million			Average daily number of transactions		
	1999	2000	2001	1999	2000	2001	1999	2000	2001
Foreign exchange market	25	21	32	99	82	127	-	-	-
Spot	22	17	24	87	68	97	-	-	-
Forward	0	0	1	1	2	4	2	3	5
Swap[1)]	3	3	6	10	10	24	7	8	12
Options	0	0	1	2	2	3	0	1	1
Interbank loans & deposits	25	35	52	99	138	205	28	39	47
in LTL	2	2	3	6	9	13	9	10	13
in foreign currencies	24	33	49	93	129	192	19	29	33
between local banks	2	1	2	6	5	8	8	6	8
in LTL	1	1	2	3	4	7	5	4	7
in foreign currencies	1	0	0	3	1	1	3	2	2
with non-resident banks	24	34	50	93	133	197	20	33	38
in LTL	1	1	2	3	5	6	4	6	7
in foreign currencies	23	32	48	90	128	191	16	28	32
Treasury securities	0	0	0	1	1	1	7	5	6

Source: Bank of Lithuania, NSEL

1) Only second (long) leg of the transaction

liquidity swings, face the constraints of the shallow domestic money market. The local money market would greatly benefit from the abolishment of the anchor currency conversion costs charged to banks by the central bank, enabling an instantaneous link with international markets and more effective liquidity management. Levels of more than 10% of excess reserves can be viewed as a clear symptom for the rigidities of the domestic money market.

2. Stock and bond markets

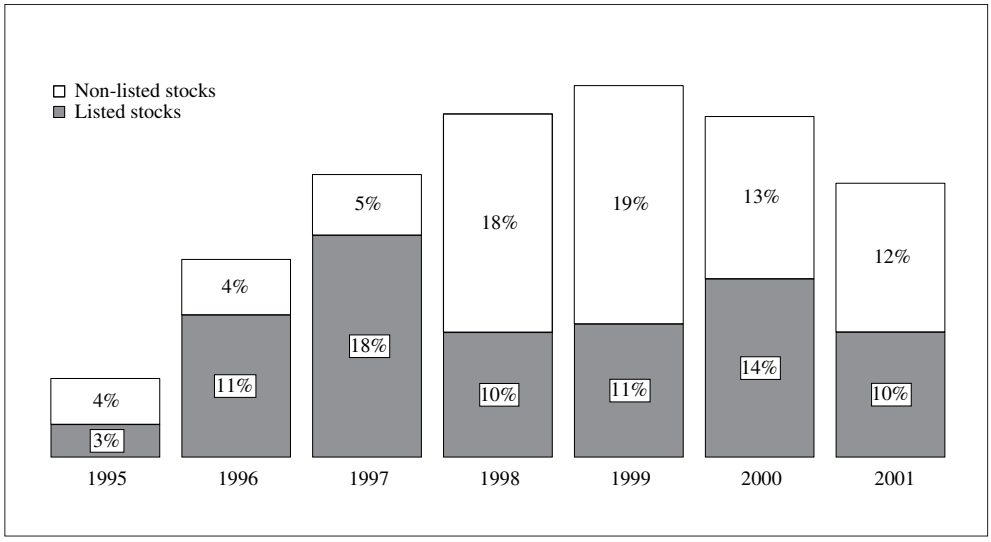
A marked and still ongoing consolidation phase has significantly decreased the number of market participants in the Lithuanian capital market. At the end of 2001, there were 20 brokerage houses and 8 brokerage divisions of commercial banks in Lithuania. A low demand for asset management and consulting services has resulted in only a few firms ready to provide related services. The first, and as yet the only, index fund was launched in 2000, while only 11 investment holding companies managed to carry on with their operations after the boom of such companies during the mass voucher privatisation.

Listed stocks constitute only 10% of GDP and, therefore, do not constitute a vital pillar for the financial intermediation process in Lithuania. The official list comprises only 6 companies. Telecom's capitalisation makes up 2.1% of GDP, 60% of the capitalisation of the stocks in the official list and more than 20% of the capitalisation of all listed stocks, while the top five listed stocks account for more than 60% of the listed stock capitalisation.

The outstanding stock of domestic debt instruments (capitalisation above 4% of GDP) is dominated by treasury securities, whereas corporate debt securities are negligible. The rationale for the relatively low level of development of the local debt market is linked to the, in general, low public debt burden and its high share of foreign currency-denominated debt. The latter restrains the local bond markets' development in combination with the prohibition

Chart 1: Stock market capitalisation

(in % of GDP)



Source: NSEL, Department of Statistics

Table 6: Stock market indicators

Number of:	1997	1998	1999	2000	2001
Listed stocks	53	62	54	54	46
Official list	5	6	7	6	6
Current list	48	56	47	48	40
Non-listed stocks	1,120	1,100	1,044	981	895
Government debt securities	38	46	47	55	47
T-bills	35	43	32	22	10
T-bonds			3	12	19
Retail bonds			9	14	11
Special purpose T-bonds[1)]	3	3	3	7	7
Corporate bonds	11	6	3	8	9

Source: NSEL, Securities Commission, Ministry of Finance, Central Securities Depositary of Lithuania
[1)] For bank recapitalisation and restructuring after 1995 banking crisis

to issue debt securities denominated in foreign currencies domestically. Other non-supporting factors include the lack of institutional investors and a rather limited number of potential larger corporate issuers.

Debt instruments other than plain fixed-rate bonds – such as floating-rate, inflation-indexed or exchange-linked debt securities – are non-existent in the Lithuanian market. In 1999, the government tapped the market for T-bonds for the first time and since then the longest maturity of issued bonds has been 10 years. The first 10-year bond was issued in March 2002. The weighted average maturity of treasury securities outstanding exceeded 22 months at the end of 2001. By extending the yield curve, the government has established benchmark securities, thereby paving the way for corporate bonds with longer maturities.

Liquidity in the stock market, as measured by the ratio of turnover to capitalisation, is rather moderate and trading in the central market is thin, since block trades account for more than four-fifths of the stock trading volume. Lower liquidity may stem from the fact that local companies are rather small and foreign strategic investors prefer to buy up large proportions of share capital, thereby reducing free-float capitalisation to less than 15% of the total listed stock capitalisation. As for the bond market, liquidity of the treasury securities market is higher (2.2% of GDP, €289 million, or 59% of the average of two year-end capitalisations), albeit far from the levels common in the EU countries. The growing liquidity of treasury securities is also derived from the fact that turnover of government debt securities exceeded stock market turnover for the first time in 2000.

As indicated by the international investment position (IIP), in 2001 foreign portfolio equity investors held approximately 8% of the total listed stock capitalisation or more than a half of the estimated total free-float capitalisation. The influence of foreign investors appears quite substantial, although the estimated minimum foreign share of equity turnover remains rather modest.

The absence of pension funds, the lack of mutual funds as well as other institutional investors result in an insignificant role for the securities market. The securities market still awaits the implementation of the pension reform, which is scheduled to take place in 2004. Other explanations may also relate to the lack of an investment culture, the low knowledge of financial markets within the society, the long bear trend and a still low level of savings. Enterprises cannot rely on the stock market in their funding decisions, as indicated by

the latest statistics. Over the last three years the majority of equity issues were private placements and in 2001 constituted a mere 1% of GDP.[1]

IV. Functioning of the financial sector

1. Capital account liberalisation

Lithuania liberalised its capital account at the outset of economic reforms. The free movement of capital, coupled with the currency board arrangement introduced in 1994, was believed to foster the inflow of foreign investment and to fill the gap between domestic savings and the capital needed to restructure the economy. So far, the results have justified such an early liberalisation, as evidenced by the successful track record of FDI inflows.

Debt-creating flows have not threatened macroeconomic or financial stability yet, and the vulnerability to sudden capital outflows is minimised by the favourable profile of external debt liabilities. By the same token, equity portfolio flows do not pose any major risks either. It seems that the small market size shelters the economy and the financial sector from sizeable capital movements.

2. Stock of financial savings

As for the supply side of the intermediation process there are, generally, five major financial assets available for retail investors (households and enterprises): cash, debt securities, stocks, deposits and life assurance contracts. Table 7 summarises the size and the distribution of the present stock of financial savings. Naturally, the table does not contain data for cash in

Table 7: Stock of financial savings

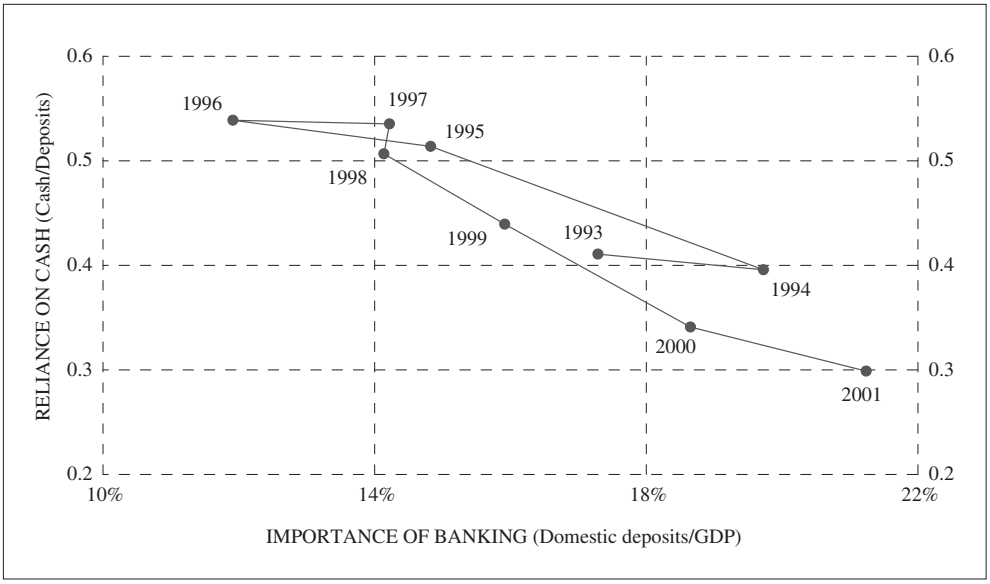
Holdings at the end of 2001, in % of GDP	Cash in litas	Domestic securities market		Bank deposits	Life insurance[3)]	All financial assets
		Government securities[1)]	Stocks[2)]			
Residents		4.5	2.9	21.2	0.2	28.7
Households		0.3	0.7	13.0	0.2	14.7
Corporate		0.6	1.6	6.3		8.5
Non-residents		0.0	2.5	3.1		5.6
Total	5.8	4.5	5.3	24.3	0.2	40.1

Source: Bank of Lithuania, Department of Statistics, Central Securities Depositary of Lithuania, State Insurance Supervisory Authority

1) At par value
2) In the accounts of brokerages
3) Technical provisions of life insurance companies at the end of September 2001

[1] Insurance companies, which have become the second largest (next to banks) domestic institutional investor, still pursue a rather conservative investment strategy, preferring fixed-income instruments to stocks. Indeed, domestic government securities and term deposits constituted 63% and 6% of their investment portfolios respectively at the end of 2001. Investments in shares, corporate bonds and mortgage loans accounted for only 10% of total investments. Therefore insurers do not represent an important source of funds for the corporate sector yet.

Chart 2: Banking deposits vs. cash holdings



Source: Bank of Lithuania, Department of Statistics

foreign currencies, but it is reasonable to assume that households hold a significant amount of this – according to some estimates up to 10% of GDP.

Banks have been becoming increasingly important in mobilising domestic savings, as the ratio of domestic deposits to GDP has been rapidly increasing at the expense of regular cash holdings. The significance of cash will be further reduced by the expected expansion of electronic payments, as the number of payment cards (credit, debit, prepaid) amounted to only 23% of the total population at the end of 2001. Bank depositors with credit balances in excess of USD 10 amounted to less than half of population (end of 2001), while only 0.5% and 0.2% of the population invested in stocks and government debt securities (mostly retail bonds) at the end of 2001.

It has to be stressed that banks dominate the financial intermediation process at the expense of the securities market, as the stock exchange is not very successful in transferring funds from savers to investors. Although there is no clear evidence that loan-based or securities-based intermediation performs better, a more balanced structure would be desirable, as each of these intermediation forms offers complementary advantages. An over-reliance on banks may lead to costlier crises and could likely disrupt the entire intermediation process.

3. Allocation of funds to the corporate sector

The predominance of internal funding sources (depreciation and retained profits) over external funding sources indicates the huge potential for the financial sector to contribute more actively to the corporate sector's funding. The ratio of domestic commercial banks' new net lending to the corporate sector (i.e. the change in the stock of credit to the corporate sector) to gross fixed-capital investment (GFCI) (see Schardax, 2001) declined rapidly from

Table 8: External corporate funding
(relative to gross fixed capital investment (GFCI))

Changes in stocks in % of GFCI	1993	1994	1995	1996	1997	1998	1999	2000	2001
Domestic sources					11.3	12.8	13.4	4.0	20.0
Bank credit to corporate sector	41.1	30.9	12.2	-3.6	1.8	2.9	3.8	-1.0	10.5
Equity issues[1)]	-	-	-	-	9.4	8.1	10.0	2.6	5.0
Leasing	-	-	-	-	-	1.8	-0.4	2.4	4.5
Foreign sources	-	-	-	-	31.9	5.1	1.6	10.4	9.5
Intercompany loans	-	-	-	-	3.9	4.2	1.1	4.5	3.0
Bank Loans	-	-	-	-	11.6	6.2	-0.8	2.7	-2.6
Bond issues	-	-	-	-	6.4	-3.7	-1.3	0.0	3.3
Trade credit	-	-	-	-	9.3	-0.9	1.9	1.9	5.6
Other liabilities	-	-	-	-	0.6	-0.7	0.7	1.3	0.2

Source: Bank of Lithuania, Department of Statistics, Securities Commission
1) Flows

1993, hovered around zero from 1996-2000 and picked up in 2001 (11% of GFCI), as corporate profit tax deductions for reinvestments were abolished from 2002. Adding up equity issues and even rapidly expanding leasing finance instruments still results in a rather low level of external corporate funding domestically (20% of GFCI).

4. Funding of the public sector

A preference for foreign financing over domestic financing characterises the funding of the public sector, mostly because foreign funds were cheaper and available in greater amounts. The public sector on aggregate also preferred bond financing to loans. In 1999, after the turmoil in Russia, the public authorities not only increased the overall funding but were also forced temporarily to switch to foreign funding, as domestic costs were too high.

5. Foreign exchange exposure

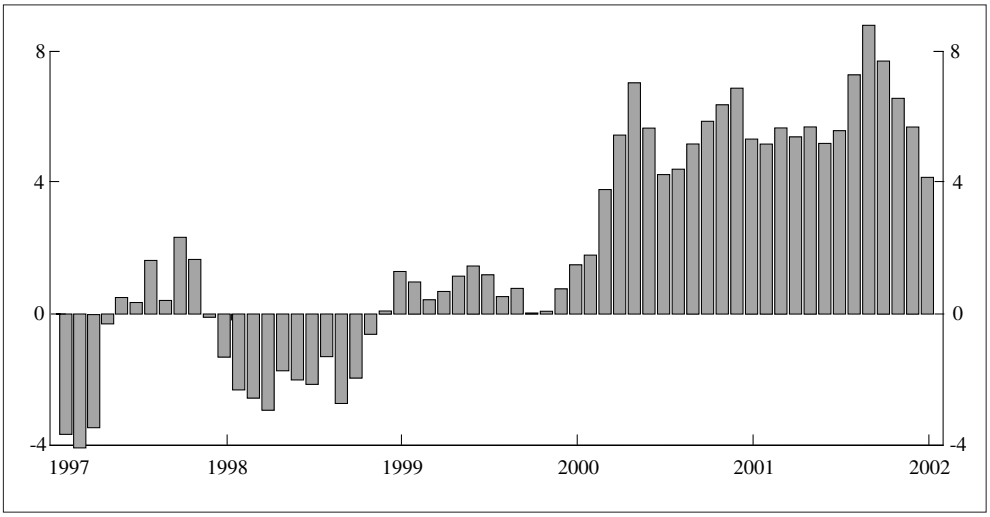
The banking sector displays a small currency mismatch between its overall assets and liabilities due to the prudential requirement concerning open foreign exchange positions. Balance sheet assets in foreign currencies exceed foreign currency liabilities, i.e. banks have a short litas balance sheet position, which is also a consequence of the limited availability of suitable litas investment opportunities. This mismatch is covered with off-balance sheet instruments.

At the end of 2001, 62% of total bank credits to the corporate sector were denominated in foreign currencies and this share has been gradually increasing during 1995-2000, despite the currency board arrangement. As normally enterprises are net debtors towards the banking system, they have a short foreign exchange position towards domestic banks, and their foreign currency liabilities to banks exceed their claims to banks in foreign currencies. Relations with non-residents augmented the corporate sector's total net short foreign exchange position to 19% of GDP in 2001.

Not all companies match their foreign currency liabilities with foreign currency assets or receipts, as corporate customers base their borrowing decisions almost exclusively on the

Chart 3: Difference between banking sector's balance sheet assets and liabilities in foreign currencies

(in % of balance sheet assets)



Source: Bank of Lithuania

interest rate level and do not attach particular importance to their currency risk, despite bank efforts to promote "plain-vanilla" hedging tools. In 2000, the share of euro denominated loans increased from 8% to 17% of the total loan portfolio and to 20% in 2001, reflecting lower euro interest rates than US rates as well as expectations of a further euro depreciation. While part of the advance was clearly attributable to the natural hedge in the light of changing trade patterns and the repegging of the litas from the US dollar to the euro on 2 February 2002, companies focusing exclusively on the domestic market also used euro loans.

In contrast to the corporate sector, the household sector is a primary provider of funds to commercial banks, preferring to keep assets in foreign currencies. The phenomenon of unofficial dollarisation is still widespread in Lithuania, albeit almost non-existent in daily life. Almost two-thirds (65%) of household time deposits and more than half of total household deposits are denominated in foreign currencies, while credits denominated in foreign currencies are not as intensively used as in the corporate sector. Therefore households have a significant net long foreign exchange position against banks – 6.2% of GDP at the end of 2001. Cash holdings denominated in foreign currencies further increase this net long foreign exchange position of households.

The currency breakdown of domestic credit provides some interesting information on the exposure of certain sectors to currency risk when viewed against the background of the repegging of the litas from the US dollar to the euro. Enterprises with dollar loans and litas or euro income will need to adjust the currency composition of their liabilities either directly or with derivative instruments. In addition, loans issued in litas but bearing a clause that indexed payments to the dollar/litas exchange rate will also be affected by currency risk. However, loans with such a clause have become less common on account of greater credibility for the currency board arrangement, increased competition in the banking sector and some concern among banks that it may not be legally enforceable.

Table 9: Foreign exchange positions
(against domestic banks and non-residents)

in % of GDP	1993	1994	1995	1996	1997	1998	1999	2000	2001
Corporate sector									
Foreign assets[1)]	-	-	-	7.5	7.8	6.6	8.2	6.2	6.4
Foreign liabilities[2)]	-	-	-	-15.3	-20.4	-19.4	-19.9	-20.7	-21.4
Net foreign exchange position against non-residents[3)]	-	-	-	-7.8	-12.6	-12.8	-11.7	-14.5	-15.0
Bank credit to corporate sector	-12.3	-15.5	-13.7	-9.6	-8.4	-8.2	-9.1	-8.4	-9.9
of which in foreign currencies	-5.1	-5.9	-5.1	-3.7	-3.5	-4.9	-5.9	-5.8	-6.1
Bank liabilities to corporate sector	4.7	5.0	5.0	4.7	5.4	4.5	4.1	5.0	5.7
of which in foreign currencies	1.6	1.9	1.7	1.5	1.3	1.1	1.4	1.5	1.6
Net foreign exchange position against domestic banks	-3.6	-4.0	-3.4	-2.2	-2.2	-3.7	-4.5	-4.3	-4.5
Households									
Bank credit to households	-1.6	-1.6	-1.0	-0.8	-1.0	-1.2	-1.6	-1.3	-1.5
of which in foreign currencies	-1.1	-0.7	-0.2	-0.1	-0.1	-0.2	-0.5	-0.6	-0.7
Bank liabilities to households	5.4	8.5	7.6	5.1	5.7	6.8	9.2	11.0	13.0
of which in foreign currencies	1.8	3.3	3.4	2.4	2.5	3.2	4.7	6.1	6.8
Net foreign exchange position against domestic banks	0.7	2.6	3.2	2.3	2.4	3.0	4.3	5.5	6.1

Source: Bank of Lithuania, Department of Statistics
1) Including intercompany loans by domestic (parent) companies, intercompany claims to foreign (parent) companies, trade credits and other debt obligations
2) Including intercompany loans by foreign (parent) company, intercompany liabilities of domestic (parent) company, trade credits and other debt obligations
3) Assuming that all foreign assets and liabilities are denominated in foreign currencies

Private individuals have the greatest net foreign exchange position and were therefore highly affected by the change of the base currency of the CBA, as roughly 90% of foreign currency deposits and a substantial share of loans are in dollars. Individuals receive their income and make expenditures in litas and do not have the motivation and/or sophistication to hedge their foreign currency exposure. Therefore the Bank of Lithuania has been trying to increase public awareness of the potential impact on their savings denominated in dollars.

6. Efficiency of the banking sector

The equilibrium between savings and investment is – in addition to taxes and transaction costs – affected by the difference of returns to savers and financing costs for investors arising from bank interest spreads. In the case of Lithuania, financial funds are still provided at comparatively high cost as a consequence of the relatively high interest rate spreads, although the downward trend in interest rate spreads over time is apparent. There appear to be two main technical factors making interest rate spreads wider than in EU and some EU accession countries, such as higher reserve requirements and deposit insurance.

Recently the Bank of Lithuania started a long-term strategy of lowering the minimum reserve requirement by reducing the requirement ratio from 10% to 8% in October 2000 and to 6% in March 2001 (2% in the euro area). The high level of reserve requirements in Lithuania is mainly the result of liquidity concerns, while initially it also served as a tool for curbing credit growth and inflation. However, the improving expertise of individual banks as

well as the strengthening supervisory capacity of the Bank of Lithuania diminish liquidity concerns and should allow further reductions towards the euro area level. As reserve requirements account for more than 5% of assets, and are not remunerated, they sustain wide interest rate spreads.

Costs related to the setting-up of a deposit insurance regime represents another factor that contributes to the wide interest spreads.[2] Already in 2000 deposit insurance premia paid by banks amounted to €12 million or 10% of net interest income or 7% of operating expenses.

Although interest spreads are one of the basic indicators for the efficiency of financial intermediation, some researchers look at the net interest margins as well. The difference between the two indicators reveals the magnitude of losses on non-performing loans. In the case of Lithuania the difference is gradually diminishing, indicating that the banking sector has been recovering from the long-lasting effects of the banking crisis and is decreasing the burden of non-performing loans.

7. Monetary transmission mechanism

Due to the US dollar-based currency board arrangement, the Bank of Lithuania did not conduct an independent monetary policy and therefore imported US monetary conditions until the repegging of the litas to the euro on 2 February 2002. Thereafter, ECB monetary actions have started to influence domestic monetary conditions. Nevertheless, the following analysis is based on the past, looking therefore at the interdependence between the Lithuanian and US money markets.

A visual inspection of the Fed Funds target rate and the 1-month VILIBID dynamics reveals a strengthening of links over time between key central bank interest rates and money market rates. The correlation coefficient of the respective non-lagged daily time series was equal to 0.83 in 2001 and was the same for a lag of one day. One-month money market rates were taken because they should be free from the factors related to the fulfilment of the minimum reserve requirements.

Monetary impulses seem to feed through to commercial bank lending rates with a lower intensity. Interestingly, rates on lending to residents in litas were more affected by fed funds target rates than USD lending rates in 2001, while almost no impact of ECB rates on euro lending rates was observed.

An analysis of the monetary transmission mechanism needs to include also interest rates on household time deposits, as deposit rates influence saving and consumption decisions, too. Until end-2000/early 2001, USD and EUR household time deposit interest rates did not move in line with key Fed or ECB interest rates and were sticky upwards, raising doubts about insufficient bank competition. However, the banks' behaviour started to alter and more frequent changes of household time deposit rates have brought this segment more in line with international developments, thereby improving the transmission of monetary impulses. Further progress could be made with the introduction of floating interest rates on household time deposits.

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[2] As from 27 February 2001 banks have to pay 0.45% per annum of covered deposits. However, the present maximum compensation level of €13,033 probably is too high for Lithuania, since it is more than three times higher than nominal GDP per capita, necessitates speedier accumulation of the Deposit Insurance Fund and thereby means higher current costs for banks.

Table 10: Impact on deposit and lending rates

Correlation coefficients[1]	(Monetary transmission)							
	Household term deposit rates				Lending to residents rates			
	Lag-0		Lag-1		Lag-0		Lag-1	
	2000	2001	2000	2001	2000	2001	2000	2001
Fed funds target rate[2]								
with LTL rates	-0.02	0.49	-0.23	0.22	-0.19	0.37	0.17	0.44
with USD rates	-0.26	0.36	-0.15	0.40	-0.37	0.16	-0.20	0.22
ECB rate[2]								
with EUR rates	-0.14	0.38	0.29	0.61	0.12	0.21	-0.50	-0.07

Source: Bank of Lithuania

[1] First differences of the monthly time series were taken in order to remove the non-stationarity of the data

[2] Monthly averages

V. Trends in the financial sector in view of the integration into the EU

Lithuania has volunteered to participate in the Financial Sector Assessment Program (FSAP). Reports from the World Bank and the IMF will help to understand, assess and address key risks, vulnerabilities and inefficiencies in the financial sector that may impede a fast convergence and smooth integration into the EU.

The Bank of Lithuania intends to proceed with its policy of a gradual reduction of minimum reserve requirements until full harmonisation with ECB requirements with respect to scope and level. The practice of calculating and fulfilling minimum reserve requirements has already been harmonised in March 2002. Nevertheless, closer links with euro area markets and improvements in banks' risk management systems will lessen the importance of minimum reserve requirements as a liquidity buffer and pave the way for a speedier reduction of this wedge between savers and investors.

While there are no plans for the foreseeable future to reduce deposit insurance premiums paid by banks and credit unions, the Law on Deposit Insurance envisages an upper limit on the funds accumulated by the Deposit Insurance Fund equal to 4% of covered deposits.

After the successful repegging of the litas in February 2002, the issue of foreign currency usage is being reconsidered. Before the repegging, only banks and credit unions were allowed to extend credits in foreign currencies, thereby sheltering them from the domestic bond market competition and hampering the development of the entire bond market.

As EU integration proceeds at a fast pace, the future of the shallow domestic stock market will become uncertain. Therefore, mergers with the Warsaw Stock Exchange or Scandinavian Stock Exchanges should be seriously considered.

Relaxation of the still valid foreign investment limits would allow a wider range of domestic financial institutions to acquire experience, contacts and relevant skills of transactions in the euro area and other foreign markets, allowing them to become well prepared for the integration into EU financial markets.

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The financial sector in Malta: structure, performance and trends

David A. Pullicino and René G. Saliba*

Central Bank of Malta

I. Introduction

Financial liberalisation and privatisation fundamentally transformed the Maltese financial system during the 1990s. Restrictions on bank interest rates were gradually removed and the relaxation of capital controls facilitated the growing integration of Maltese financial markets with those abroad. Laws governing the sector were entirely overhauled and a regulatory framework was introduced based on European Union legislation. Today, banks are almost entirely in private hands, the importance of non-bank intermediaries has increased and domestic financial markets have deepened somewhat. These developments have broadened considerably the scope and potential for further growth and deepening of the financial sector. On the other hand, the process has to be viewed within the context of the physical size of the Maltese economy. The latter – with a population of only about 391,000 and a geographical area of just 316 square kilometres – obviously imposes significant natural constraints, although these constraints could be mitigated somewhat by the opportunities arising from the globalisation process, particularly the provision of cross-border financial services from Malta.

II. The banking sector

Despite the growth of non-bank financial intermediaries and the development of a domestic capital market, banks remain the principal financial institutions in Malta. As at the end of 2001, there were 18 banks licensed to operate in or from Malta. Of these, five are deposit money banks catering largely for the domestic market. These are licensed to transact both in domestic and foreign currencies. The remaining 13 banks are licensed to carry on banking business almost exclusively with non-residents and in foreign currencies only.

1. Domestic deposit money banks

The Maltese banking industry is highly concentrated, reflecting the small size of the domestic market and the history of the industry. Two large banks accounted for around 90% of deposits and loans at the end of 2001, with two small institutions taking up most of the remainder. The fifth institution, which is a subsidiary of one of the larger banks, focuses on housing finance by providing mortgage loans. The deposit money banks operate through seventy-five branches, or 0.2 branches per 1000 inhabitants – less than half the euro area average. At the

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end of 2001, they employed just over 3,600 people. This is equivalent to 10 per 1000 inhabitants, significantly higher than the euro area average of about 7 per 1000[1].

In aggregate, the total assets of the five deposit money banks amounted to €9.2 billion at the end of 2001[2]. The value of their total assets more than doubled during the last seven years (Table 1). Meanwhile, in an indication that their role in the economy became even more important, the deposit money banks' assets rose from 164% of GDP in 1995 to 224% in 2001. These data suggest that the level of bank intermediation in Malta is high, albeit possibly less intense than before due to the increasing influence of alternative funding and investment sources.

The high financial intermediatory role of the deposit money banks is also evidenced by the high propensity of residents to place their savings in bank deposits. In relation to GDP, such resident deposits have grown from 116% in 1995 to 141% in 2001. The bulk of these deposits emanate from the personal sector which, in 2001, accounted for 82% of total residents' deposits. The private corporate sector, meanwhile, held 15% of the total, whereas public sector bodies held 3%. Of total residents' deposits at the end of 2001, 90% were denominated in Maltese Lira and the rest in foreign currency. Conversely to the sustained popularity of bank deposits, currency in circulation has been consistently losing appeal. In fact, as a proportion of broad money, currency in circulation has declined from 21% in 1995 to 15% in 2001, well below the 30% level of the early 1990s and the historically high 46% share of the early 1980s.

Table 1: Deposit and money banks
(in million Maltese Lira (Lm) and EUR million)

	1995			2001		
	Amount		% of total	Amount		% of total
	Lm	EUR		Lm	EUR	
Assets						
Cash and deposits with central bank	101	225	5.4	172	430	4.7
Loans and advances	938	2,087	49.9	1,866	4,662	50.9
Local investments	234	521	12.4	661	1,651	18.0
Foreign assets	557	1,239	29.6	792	1,979	21.6
Fixed and other assets	50	111	2.7	175	437	4.8
Liabilities						
Deposits	1,330	2,959	70.7	2,313	5,779	63.1
of which:						
Time	741	1,648	39.4	1,433	3,580	39.1
Savings	510	1,135	27.1	667	1,666	18.2
Current	79	176	4.2	213	532	5.8
Capital & reserves	87	194	4.6	191	477	5.2
Other domestic liabilities	270	601	14.4	561	1,402	15.3
Foreign liabilities	193	429	10.3	601	1,501	16.4
Total assets/liabilities	1,880	4,182		3,666	9,159	
Bank assets/GDP (%)		164.2			223.7	

Source: Central Bank of Malta

[1] European Central Bank (1999).
[2] Central Bank of Malta (2002), Table 1.2.

Although residents' deposits remain the deposit money banks' most important source of funding, alternative sources of finance are becoming more important. Thus, deposits as a proportion of the banks' total liabilities declined from 71% in 1995 to 63% at the end of 2001 (Table1). During the same period, the banks have been increasingly borrowing short-term funds from the Central Bank, in line with the development of open market operations, as well as longer-term finance from the domestic capital market. Syndicated loans from international banking consortia have also become a regular feature of the banks' funding sources, in the wake of an easing in capital account controls and a noticeable decline in international interest rates.

As for the banks' assets, the proportion of loans and advances to residents has remained largely constant, hovering around half the banks' total assets during the 1995-2001 period. However, with the growth in advances outpacing deposit expansion in recent years, the banks' advances-to-deposits ratio rose from 71% in 1995 to 81% at the end of 2001. In relation to GDP, credit by the domestic banks has surged from 95% in 1995 to 114% in 2001, again confirming the banks' dominant financial intermediation role.

The Maltese banking system is almost entirely in private hands, with around 90% of the share capital of the deposit money banks being held by private shareholders at the end of 2001. After having nationalised most of the banking system during the 1970s, the Maltese government privatised three banks between 1994 and 1999. In particular, it sold the majority stake in one large bank to a major international banking group in 1999. The government's only remaining direct interest is a minority stake in one of the larger banks, which is slated for full privatisation in 2002. In this regard, consultations are currently under way between the government and an international banking group. This should extend further the involvement of foreign banks in the Maltese banking scene, with foreign banks already controlling or having significant stakes in three of the other four local deposit money banks.

Maltese banks enjoy a broad capital base, with the ratio between the deposit money banks' own funds and risk-weighted assets standing at 13.2% in 2001, compared with the statutory minimum of 8%. Aggregate profit before tax as a proportion of total assets has fluctuated during the past six years, rising to 1.2% in 2000 before falling to 0.7% in 2001. The banks' return on equity stood at some 12% in 2001.

2. International banks

At the end of 2001, thirteen banks were licensed to conduct business from Malta almost entirely with non-residents and in foreign currency only (Table 2). The number of international banks fell during 2001, as the financial crisis in Turkey led to the surrender or revocation of the licences of three branches of Turkish credit institutions in December. Of the remaining banks, ten are licensed in terms of the Banking Act 1994, whereas three operate as offshore banks in terms of the Malta Financial Services Centre Act. The latter type of banks is being phased out, reflecting the radical review effected in the Maltese legislative framework in 1994 when the policy objective shifted decisively away from the concept of promoting Malta as an offshore centre and towards fostering Malta as an international financial centre of repute. Accordingly, no new offshore banks were permitted to register in Malta after 1996, and by 2004, all banking licences granted prior to 1996 in terms of the Malta Financial Services Centre Act will expire. Discussions are under way with such existing licence holders to make them subject to the provisions of the Banking Act by the end of 2002.

As at the end of 2001, three international banks operated in Malta through branches, with the remainder being incorporated locally. The total assets of the international banks expanded from €908 million in 1995 to €6.2 billion at the end of 2001.

Since these international banks deal almost entirely with non-residents, they have a significant impact on Maltese balance of payments flows on a gross basis. On a net basis, however, their effect on the balance of payments is rather limited because inward and outward flows largely neutralise each other. Similarly, as yet, they contribute only marginally to employment and national income.

III. The non-banking sector

1. The foreign exchange market in Malta

The Maltese lira exchange rate is pegged to a trade-weighted basket of currencies comprising the euro (56% weight), US dollar (22%) and sterling (22%). The Central Bank of Malta publishes daily opening middle exchange rates and quotes real time exchange rates for spot deals throughout the day on Reuters. It also quotes on a daily basis forward rates (in terms of discount or premium expressed in pips) for up to one year on Reuters. Moreover, it quotes swap rates up to one year on request. On the other hand, there is as yet no market for futures and options.

The inter-bank foreign exchange market in Malta was liberalised in April 1995. Since then, the banks are allowed to keep open positions and only square their books with the Central Bank if they deem fit or if they breach their authorised prudential limits. In terms of the Central Bank's prudential regulations, the maximum open net foreign currency position (spot net of forward) that the domestic banks may maintain cannot exceed 20% of the banks' own funds. Banks have also to abide by a maximum percentage limit of 12% of own funds for the amount of euro held and 5% for each of other individual currencies held.[3]

The Central Bank is continuously prepared to buy or sell spot foreign currency against the Maltese lira at a fixed spread of 0.25%. This commitment by the Central Bank to constantly provide liquidity to the deposit money banks has been very instrumental in instilling and

Table 2: International banks
(End of period)

	1995	1996	1997	1998	1999	2000	2001
Number of banks	7	10	11	12	14	17	13
Total assets (EUR million)	908	1,481	447	4,297	6,548	7,626	6,197

Source: Central Bank of Malta

[3] In this context, it is interesting to note that while the banks' overall net open position within the 20% limit tends to be relatively stable, the banks have been effecting substantial shifts in their spot and forward foreign currency positions. These shifts have been largely driven by changes in the interest rate differential between the Maltese lira and the currencies of the Lm exchange rate peg. Thus, during periods when the Lm premium widens – as in 1999 and 2001 – the banks tend to move to a decisively short spot position in favour of a long forward book. Conversely, the spot position is replenished and the forward book scaled down when the Lm premium narrows, as was the case in 2000.

maintaining the market's confidence with regard to the sustainability of the Maltese lira exchange rate peg and the relative stability of the Lm exchange rate. In the spot market, the Central Bank readily deals with the banks and financial institutions in the three currencies constituting the Maltese lira exchange rate basket.[4] In the forward and swap market, the Central Bank in principle would prefer that deals are transacted in the inter-bank market without the involvement of the Central Bank. Accordingly, the Central Bank generally only conducts forward and swap deals with the banks for smoothing purposes, normally in circumstances where such deals cannot be cleared smoothly by the market.

1.1 Foreign exchange turnover

The annual volume of foreign exchange deals against the Maltese lira is around €5.5 billion (Table 3). The bulk of this turnover, €4.6 billion, is transacted by the deposit money banks with the public to service the general economy's balance of payments needs. As a proportion of total turnover, however, the banks' share has been contracting noticeably, from 94% in 1998 to 83% in 2001.[5] In relation to GDP, foreign exchange deals against the Maltese lira were equivalent to 134% in 2001, down from the 152% level of 1999. This ratio is on the low side considering that Malta has a very open economy and that the combined gross value of Malta's imports and exports of goods and services exceeds 200% of GDP. A contributing factor to this low ratio is the extensive use of foreign currency accounts by importers and exporters whereby export proceeds are retained as foreign currency in order to finance subsequent import payments, with a view to minimising on exchange costs and exchange rate risk. Another factor is that the non-cash component of the foreign exchange market is still somewhat underdeveloped, partly due to certain restrictions on the capital account.

Bid-offer spreads for spot quotations in the foreign exchange market in Malta have been narrowing gradually in recent years in the wake of increasing capital account liberalisation. By 2001, spreads for Central Bank dealing with the banks and for inter-bank transactions were 25 basis points, whereas the banks' dealing with the public was at a spread of around 50 basis points. Such spreads, however, are still significantly on the high side, largely attributable to the small number of banks and the low level of competitive conditions.

Table 3: Foreign exchange turnover in Malta
(in million)

	1998		1999		2000		2001	
	Lm	EUR	Lm	EUR	Lm	EUR	Lm	EUR
Overall turnover	1,593	3,618	2,217	5,364	2,247	5,517	2,202	5,501
Turnover/GDP (%)	116.9		152.3		144.2		134.4	

Source: Central Bank of Malta

[4] There are seventeen authorised foreign exchange dealers in Malta. Of these, four are deposit money banks and thirteen are financial institutions licensed to operate as foreign exchange bureaux and to provide money transmission services.

[5] The financial institutions' turnover with the public is on a much smaller scale, being largely confined to the retail level. The volume, nevertheless, has been rising moderately in recent years and the share of the financial institutions has grown from 1% to almost 6% of overall turnover in the past four years.

1.2 Net foreign asset position

After declining during the 1995-97 period, the net foreign assets of the banking system in Malta have been picking up once more and at the end of 2001 stood at €2.7 billion, equivalent to 165% of GDP. Over two-thirds of these external assets are held by the Central Bank of Malta.[6] In terms of the Central Bank of Malta Act, the level of external reserves held by the Central Bank must not be less than 60% of the Bank's demand liabilities. This minimum ratio which has been in existence since the Central Bank's inception in 1968, was meant to provide sufficient flexibility to enable the economy to grow without undue shocks or constraints arising from adverse developments on the external account. In actual fact, however, the Central Bank's stock of external reserves has historically been maintained consistently at 100% and over. The Bank's reserves stood at 134% of the monetary base at the end of 2001. This strong backing, coupled with various healthy external indicators, gives considerable support to the credibility of Malta's exchange rate peg (Table 4).

Taking the commercial banking system as a whole, some 57% of total assets were denominated in foreign currency while 51% of all liabilities were foreign currency denominated. Whereas in the case of the international banks, all assets and liabilities were in foreign currency, in the case of the domestic money banks, foreign items accounted for 22% of assets and 16% of liabilities. This suggests that, on aggregate, foreign assets and liabilities are generally fairly matched. The domestic banks tend to hedge their open external position against exchange rate risks by maintaining the currency composition of their foreign portfolio broadly in line with the relative proportion of each currency within the exchange rate peg.

Table 4: External reserve position
(in million unless otherwise stated)

Net Foreign Assets	1995		2001	
	Lm	EUR	Lm	EUR
Central Bank of Malta (CBM)	581	1,293	760	1,899
Domestic money banks	225	501	106	265
International banks	17	38	223	557
Total net foreign assets	823	1,831	1,089	2,721
CBM reserves/monetary base (%)	130		134	
CBM reserves as months of imports	6.7		7.4	
CBM reserves/gross central government external debt (%)	1,096		1,882	
CBM reserves/gross public sector external debt (%)	230		282	
Gross public sector external debt servicing/GDP (%)	4.1		1.2	

Source: Central Bank of Malta

[6] The remaining third of Malta's external reserves are held by the rest of the banking system. Whereas the international banks have been recording a substantial build-up in their net foreign assets, the deposit money banks had scaled down their external holdings significantly up to 1999 before replenishing them somewhat subsequently. While the foreign assets of the international banks are a function of these banks' external operations and hardly have any bearing on the domestic economy, those of the deposit money banks are highly instrumental in contributing to the economic development process in Malta.

2. The money market in Malta

2.1 The situation until the mid-1990s

Until 1994, the money market in Malta was dormant or practically non-existent except for a marginal amount of 91-day Treasury bills that was consistently rolled over at a fixed rate of interest, a rate which was administered by the Malta Treasury. At the time, monetary policy played a very subdued role as an instrument of economic policy and the system relied almost entirely on administered (direct) controls.

In 1994, responsibility for the formulation of monetary policy was statutorily transferred from the Finance Minister to the Central Bank. The Bank embarked actively on a programme to develop an appropriate monetary policy operational framework and to foster conditions in the financial system that would promote more competition and efficiency in a more liberalised financial environment. The focus was four-pronged, aimed at introducing open market operations, kick-starting the interbank market, revamping the Treasury Bill market, and gradually liberalising interest rates and exchange controls. As a result of these measures, money market activity picked up strongly and from a level equivalent to 2% of GDP in 1993, it hiked to 126% by 1998, before levelling off and declining thereafter to 79% in 2001 (Table 5).

Table 5: Selected indicators of the money market
(EUR million)

Money market	1993	1994	1995	1996	1997	1998	1999	2000	2001
1. Treasury bills secondary market	36	72	188	595	1,091	782	693	184	371
(a) CBM Sales	36	46	104	254	344	179	107	29	43
(b) CBM Purchases	0	26	83	288	625	264	107	48	151
(c) Non-CBM Deals	0	0	0	52	123	338	479	107	177
2. Interbank Deals	0	35	265	558	1,345	2,168	2,306	740	519
3. CBM Open market operations	0	788	457	580	997	941	1,255	1,268	2,339
(a) Auctions of Term Deposits	0	738	0	23	58	323	1,058	667	193
(b) Repos	0	49	198	28	126	548	198	601	2,146
(c) Reverse Repos	0	0	259	529	813	70	0	0	0
4. Total money market deals	36	895	909	1,733	3,433	3,892	4,254	2,192	3,228
5. Total as a % of GDP	2	39	36	64	114	126	121	57	79

Notes:
1) Money Market turnover excludes primary issues of Treasury Bills which as from 1995 are auctioned on a weekly basis.
2) The Central Bank of Malta (CBM) acts as market maker for Treasury bills in the secondary market.
3) Weekly auctions of CBM Term Deposits were launched in July 1994 and continued until January 1995. Reverse Repos were introduced by the Central Bank on a bilateral basis in late December 1994. Weekly auctions of repos/reverse repos were introduced in March 1995. In February 1998, term deposit auctions were reintroduced and replaced repos as the CBM's absorption tool.

Source: Central Bank of Malta

2.2 Open market operations

The Central Bank's repo operations are fully collateralised by Malta government securities (with an initial margin of 1%) and are open to credit institutions licensed to operate in Maltese liri. The volume of open market operations has been rising gradually, reaching €2.3 billion in 2001. Whereas in previous years, the Central Bank mainly engaged in net absorption operations, in 2001 the Bank has been injecting strongly. This reflects a shift in the credit institutions' liquidity position from one of a structural surplus to one of structural shortage (although the system reverted back to surplus towards the end of 2001 under the impact of strong capital inflows, a deceleration in credit growth and a reduction in the Reserve Deposit Requirement from 5% to 4%).

2.3 Treasury bill market

Although the Treasury bill instrument was instituted in Malta about half a century ago, it played a very minor role in the financial system throughout most of this period as the government preferred to finance its funding requirements from alternative sources including a short term advance facility from the Central Bank. In 1995, the Treasury bill primary market was given a new lease of life by the Treasury's decision to start holding weekly auctions of Treasury bills. Besides the standard 91-day maturity, other tenors were introduced which included one month, six months and one year (and later nine months).[7] Besides boosting the primary market, these new measures also led to a sharp increase in turnover in the Treasury Bill secondary market.

The primary market has been underpinned by the government's commitment to issue Treasury bills on a weekly basis, including during periods when it has a strong liquidity position. The objective is to maintain an active market on an ongoing basis independently of the government's borrowing requirement. However, due to the small number of market players, secondary market trading tends to be relatively thin, equivalent to only 23% of GDP in 2001.

2.4 Inter-bank market in Maltese lira

Until 1994, the inter-bank market in Malta did not exist as the banks shied away from each other in respect of their funding requirements, relying instead on the Central bank's facilities. The introduction by the Central Bank of monetary operations in mid-1994 created a liquidity shortage in the money market which, in turn, encouraged the growth of the inter-bank market. By 1999, the volume of inter-bank deals reached €2.3 billion, equivalent to 66% of GDP although it then contracted substantially to 13% of GDP in 2001. Banks announce daily bid-offer quotations ranging from overnight to one year but most trading is concentrated in the overnight to 7-day category. Due to the small number of banks, the number of inter-bank deals is very limited, averaging only about five per week.

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[7] The new arrangement facilitated the *de facto* abolition of the Central Bank's advance facility to the government in 1996, albeit its *de jure* abolition was actually effected in January 2000.

3. The capital market in Malta

The commencement of trading on the Malta Stock Exchange in January 1992 gave a considerable boost to the capital market in Malta, widening the range of financial products available to Maltese savers and increasing the sources of finance available to borrowers.

3.1 Listings on the Malta Stock Exchange

The overall market capitalisation of all the securities listed on the Malta Stock Exchange (excluding collective investment schemes) rose by more than four-fold between 1995 and 2000, to reach €4.2 million, equivalent to 111% of GDP (Table 6). In part, this was due to an increase in the number of listings from 54 to 62 but the major cause was an increase of more than three-fold in the average value of listed equities. With equities subsequently losing ground, market capitalisation fell back to €3.9 billion by the end of 2001, equivalent to 96% of GDP.

The overall value of turnover on the Exchange (again excluding listed collective investment schemes) rose steadily up to 1999 when it reached €460 million or 13% of GDP. It fell sharply in subsequent years, no doubt conditioned by the pronounced decline in the share price index from its January 2000 peak. In relation to GDP, annual turnover has been hovering around one-tenth in recent years. Turnover as a proportion of market capitalisation is also around one-tenth, confirming that market-dealing is still very thin and relatively illiquid.

The number of investor accounts on the Central Securities Depository of the Exchange stood at 125,259 at the end of 2001. These accounts represent 56,239 individual holders spread across all the different types of listed securities (other than collective investment schemes). This level is equivalent to about 14% of the total population in Malta.

Securities listed on the Malta Stock Exchange (MSE) can only be traded through licensed stockbrokers. At present, there are 19 licensed stockbrokers, of whom one is the Central Bank Broker, two represent subsidiaries of the two large domestic banks, and the rest operate through investment services firms. The Central Bank Broker is authorised to deal only in

Table 6: Selected indicators of the capital market

Malta Stock Exchange	1995	1998	1999	2000	2001
Total listed securities					
Total listings	54	59	61	62	62
Total Market Capitalisation (MC) in EUR million	1,003	2,263	3,856	4,249	3,931
Total MC / GDP (%)	35.5	67.4	107.6	110.9	96.0
Total turnover in EUR million	102.8	306.2	460.1	365.8	423.4
Total turnover / GDP (%)	3.64	9.12	12.84	9.54	10.34
Total turnover / MC (%)	10.2	13.5	11.9	8.6	10.8
No of CSD accounts ('000)	77	102	98	110	125
Number of deals:					
Annual	2,500	8,500	16,839	17,057	9,526
Daily average	48	45	65	69	38
MSE share Index (1995=1000)	1000	1,288	3,342	3,376	2,200

Source: Central Bank of Malta
Note: The above exclude listed collective investment schemes and equities listed on the alternative companies list of the Malta Stock Exchange.

government securities and is the only broker who can trade as principal for his own account. The other stockbrokers can deal in all types of listed securities but cannot trade on their own account. They can only execute orders on behalf of clients. Thus, whereas the Central Bank Broker's dealing is quote-driven, the rest is order-driven. In effect, therefore, the Central Bank Broker is the only market maker in the market, servicing only government securities. No market makers are as yet in operation for the non-government securities listed on the Exchange, with the exception of collective investment schemes. Such collective investment schemes, though being listed on the Exchange, can be traded outside the Exchange and the managers of these schemes provide a market-making facility. These schemes are open-ended funds, continuously issuing new shares on demand and redeeming shares on buy-back.

3.2 Fixed income market

The fixed income market in Malta comprises government bonds and corporate bonds which collectively had a market capitalisation of €2.4 billion at the end of 2001, equivalent to 59% of GDP.

Malta government bonds represent the bulk of this amount, standing at €2.1 billion at the end of 2001. At this level, government bonds represented 54% of all the securities listed on the Exchange. During the 1990s, the government has been borrowing consistently and quite heavily from the domestic market to finance its recurring budget deficits. As a result, in relation to GDP, the market value of outstanding government bonds surged from 22% in 1995 to 52% in 2001. At the end of 2001, there were 37 different government bond issues outstanding (Table 7). The tenor of these bonds (on date of issue) ranges from 3 years to 20 years, with the non-bank public traditionally showing a marked preference for longer-dated bonds due to the higher coupon rate, while banks tend to prefer a more balanced spread. At the end of 2001, some 32% of outstanding government bonds was due to mature within 5 years, 54% within 6-15 years, and 14% over 15 years. The local deposit money banks held 49% of these bonds, collective investment schemes 4%, and the general public 46%. The Central Bank concurrently held 1% in order to be able to provide market-making facilities, given that no private market-makers were operating as yet.

Table 7: Selected indicators of the fixed income market

Listed fixed income securities	1995	1998	1999	2000	2001
Government bond secondary market					
Number of issues outstanding	45	46	46	41	37
Market Capitalisation (MC) in EUR million	625	1,529	1,846	1,823	2,133
MC / GDP (%)	22.2	45.6	51.5	47.6	52.1
Turnover in EUR million	57.4	254.5	122.8	154.9	333.6
Turnover / GDP (%)	2.0	7.6	3.4	4.0	8.1
Turnover / MC (%)	9.2	16.6	6.7	8.5	15.6
Corporate bonds					
Number of Listings	2	3	5	10	12
Market Capitalisation (MC) in EUR million	52	62	101	260	272
MC / GDP (%)	1.84	1.84	2.82	6.79	6.64
Turnover in EUR million	0.9	3.5	5.0	11.1	37.5
Turnover / GDP (%)	0.03	0.10	0.14	0.29	0.92
Turnover / MC (%)	1.7	5.6	5.0	4.3	13.8

Source: Central Bank of Malta

All government bonds have been issued at a fixed coupon. No floating rate notes or zero coupon bonds have been issued to date. At the end of 2001, the yield for Malta government securities stood at a spread over the peg currencies ranging from 88 basis points for the 5-year tenor to 124 basis points for the 20-year tenor. Notwithstanding that the Maltese government is likely to be able to borrow in the international capital market at a significantly narrower spread than this, the government has so far refrained from launching an international bond issue. Factors behind this strategy include the consistently brisk domestic demand for primary issues by the government, and the political commitment to maintain an active domestic primary market to the extent possible. Moreover, the government's annual borrowing requirement generally tends to be small in relation to the minimum size of a successful international bond issue.

Notwithstanding the apparent relative depth of the domestic government bond market (at 52% of GDP), turnover has tended to remain relatively thin, being less than 16% of market capitalisation. This reflects the tendency of a large proportion of bond holders to prefer to retain most of their holdings until maturity.

As regards corporate bonds, these have only been a relatively recent development. The number of listed corporate bonds has been edging up gradually, from 2 in 1995 to 12 in 2001. Market capitalisation, though growing, is still relatively modest, at €272 million or 7% of GDP in 2001. At this level, it represents 7% of total market capitalisation on the Exchange. The relatively low volume of outstanding corporate bonds suggests that the corporate sector so far has found it more convenient to tap alternative sources of funding, particularly from the local banks as well as overseas sources.

3.3 Stock market

Since the commencement of trading on the Malta Stock Exchange in 1992, the growth in the number of listed companies has been somewhat slow, with only 13 being listed at the end of 2001 (Table 8). Contributing factors to this slow growth include the small size of the Maltese economy, the traditional resistance of the bigger family-controlled concerns to go public, the relative ease of the larger firms to obtain bank credit, and the quite stringent listing

Table 8: Selected indicators of the stock market

Listed equities	1995	1998	1999	2000	2001
Equities					
Number of issues outstanding	7	9	8	11	13
Market Capitalisation (MC) in EUR million	326	672	1,909	2,166	1,526
MC / GDP (%)	11.6	20.0	53.3	56.5	37.3
Turnover in EUR million	44.5	48.2	332.3	199.8	52.3
Turnover / GDP (%)	1.6	1.4	9.3	5.2	1.3
Turnover / MC (%)	13.7	7.2	17.4	9.2	3.4
Listed Collective Investment Schemes					
Number of Primary Listings	2	12	19	30	51
Units (million)	n/a	25.4	52.1	120.9	126.0
Market Capitalisation in EUR million	5.00	255.25	548.01	802.24	515.48
Number of Secondary Listings	nil	85	99	270	262

Source: Central Bank of Malta
Note: Collective investment schemes are not included in the total market capitalisation of the stock market.

obligations introduced by the Exchange from its inception (in line with international best practice). Of the 13 listed companies, 5 represent privatised entities from the banking, telecommunications and insurance sectors. Whereas earlier privatisations were targeted largely at the general public, more recent IPOs are intended to forge new alliances with international strategic partners.

The growth in stock market capitalisation has been more remarkable, surging from €326 million at the end of 1995 to €2.2 billion in the first quarter of 2000. Besides new listings, the increase was fuelled by a three-fold hike in equity prices. In relation to GDP, stock market capitalisation rose from 12% in 1995 to 63% in early 2000. In subsequent months, however, equity prices trended sharply downwards, in the wake of a combination of domestic factors and international contagion. As a result, the market capitalisation of listed equities ended 2001 at €1.5 billion. This was equivalent to 37% of GDP, significantly below the euro area average. Three companies – all privatised entities – accounted for three-fourths of the entire market capitalisation of listed equities at the end of 2001.

The value of turnover in listed equities picked up strongly in the late 1990s, going from €44 million in 1995 to €332 million in 1999 when the market was dominated by extremely bullish sentiment. Notwithstanding this increased activity, the ratio of turnover to market capitalisation only reported a modest improvement, from 14% to 17% – which is very low by international standards. In the following two years, the volume of turnover decelerated sharply as investor interest, disillusioned by the collapse of equity prices, turned decisively in favour of fixed income products. As a result, by the end of 2001, equity turnover as a proportion of market capitalisation plummeted to 3%, highlighting the extremely thin trading conditions.

IV. The functioning of the financial sector in Malta

1. The monetary policy transmission mechanism

The Maltese economy is both small and extremely open. This is a major factor conditioning monetary policy strategy in Malta. Monetary policy in Malta is geared towards maintaining price stability by pegging the Maltese lira to a basket of currencies that broadly reflects the country's main trading patterns. The exchange rate peg has been in place since the establishment of the Central Bank of Malta in 1968, initially linked to sterling on account of historical and economic ties, and subsequently, in 1972, to a currency basket. Like many small open economies, Malta – whose GDP is roughly a half the combined total of exports and imports – selected the exchange rate as the nominal anchor to pursue the goal of price stability, as this directly links Malta's inflation to that prevailing in partner countries, which traditionally are low inflation countries.

In the past, strict controls on capital movements allowed the Maltese authorities to maintain the exchange rate peg while keeping nominal interest rates low and stable. The use of direct controls precluded the development of the normal channels of money transmission seen in a more liberal financial environment. Following the extensive liberalisation process in the financial sector and the use of more market oriented policy instruments in recent years, the money transmission mechanism in Malta is likely to have changed significantly. However, for various reasons, the effective impact of this transmission mechanism in Malta remains poorly understood and definitely needs to be assessed more thoroughly.

Some points, however, may be worth considering in this context. First, given the peg, the exchange rate channel of transmission does not normally operate in the Maltese case except when the authorities decide to devalue or revalue the currency. (The Maltese lira was only

devalued once, in response to the ERM crisis of autumn 1992. Whereas there have periodically been calls by Maltese exporters for a devaluation, the Central Bank has traditionally taken the view that for such an open economy as Malta, the import content of consumption, production and investment is so high that the potential benefits of devaluation are quickly lost because of the negative consequences of subsequent higher inflation.) In the case of Malta, it is estimated that in the event of a nominal devaluation, the real exchange rate index tends to revert back to its original level within two years.

Second, changes in official interest rates tend to be rapidly transmitted to the inter-bank market and to retail bank deposit and lending rates. But the impact of changes in interest rates on aggregate demand, supply and the balance of payments is still unknown. This is not surprising given the historical record of relatively stable nominal interest rates in Malta. In general, it appears that any sustainable pick up in industrial activity in Malta needs to be driven by supply-side measures, production rationalisation and restructuring to generate productivity gains, rather than by adjustments in monetary policy instruments.

Finally, the dominant role exercised by the banks and the level of development of financial markets indicate that the so-called "credit channel" is likely to be important. In other words, it is not only the level of long-term interest rates that influences investment spending, but also the banks' willingness to lend. Indeed, financial liberalisation may have been one factor behind the rapid growth in credit recorded during the mid-1990s. Borrowers, including households, that could have possibly been previously subject to some form of credit rationing due to the generally risk-averse nature of banks at that stage, tended to find access to finance easier as lending rates were liberalised and as the privatisation process spurred competition between formerly state-owned institutions.

2. The present state of the financial markets in Malta

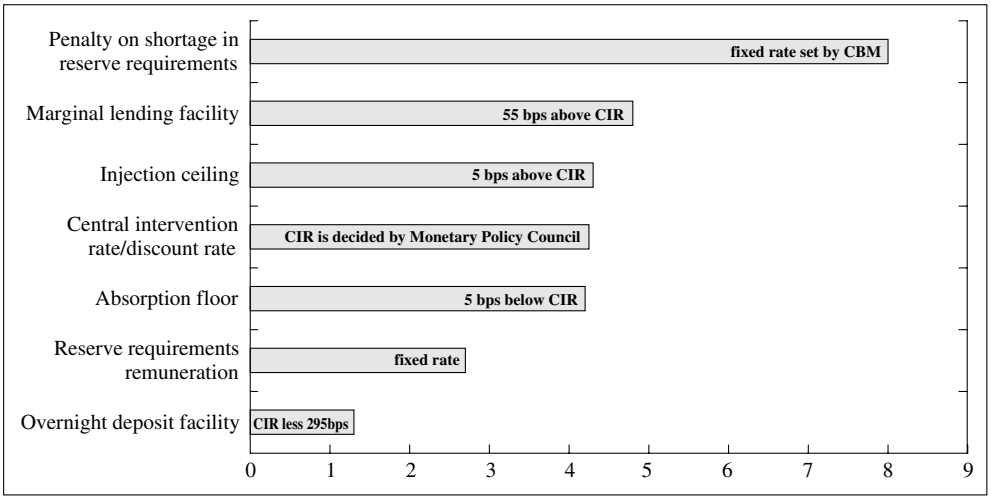
The 1990s have been a period of significant development and growth for the financial sector in Malta. The advent of a considerable number of investment services providers and new investment products has generally led to a marked shift in investor preference from fixed income to variable income products. More corporate bodies are tapping the capital market or overseas institutions for their financing needs. These trends would seem to suggest that the level of financial intermediation of the domestic banks, while remaining very strong, is tending to decline somewhat. On the other hand, banks have branched out into other spheres of financial services including insurance, stockbroking, fund management and other investment services. (Table 9 gives an overview of the financial market by asset type).

With regard to the Central Bank's monetary operations, an operational framework is firmly in place to enable the Bank execute its liquidity management operations effectively and to implement changes in the stance of monetary policy. Among the instruments at its disposal (Chart 1), the key element is the repo auction band which serves as the nominal anchor around which all money market rates are linked.

As regards the domestic financial markets, while the volume of activity has been generally growing, an underlying problem relates to the thinness of trading due to the small number of market participants. This at times leads to certain market imperfections, such as price rigidities and distortions as well as gaps in the yield curve. For instance, in the Treasury bill market, yields at times do not move in line with other money market rates, and the official interest rate pass-through tends to lag behind.

In the inter-bank market, the volume of trading is also constrained by the fact that deals are transacted on an unsecured basis and, therefore, are subject to the bilateral exposure limits set

Chart 1: Interest rate structure of monetary policy instruments
(as at end 2001; in percent)



Source: Central Bank of Malta
Note: CIR = Central intervention rate (set by central bank monetary policy council); bps = basis point.

by each bank. Such arrangements often give rise to significant market mismatches, with banks being unable to clear their long or short positions in the market and having to resort to the Central Bank's standing facilities. Efforts are being made to address this by promoting an inter-bank repo market through the introduction of a Master repurchase agreement which would provide a much safer trading environment for market participants. In this regard, it is to be noted, however, that the principle of set-off and netting under bankruptcy (which is essentially an Anglo-Saxon concept) is not legally enforceable under Maltese law (which is largely based on the Napoleonic Code). Draft legislation is currently being prepared to remedy this situation and come in line with international best practice with regard to netting.

As regards the securities market, an institutional gap that tends to contribute to thin trading is the lack of private market makers and primary dealers. In the case of government securities, the Central Bank has traditionally been providing this function in the secondary market. Up to the mid-1990s, the Central Bank was able to perform this role effectively by participating in primary market issues in order to top up its trading balances. The policy decision taken some years ago for the Bank to cease any form of participation in the government primary market, while strengthening credibility in the monetary policy function, weakened drastically the market making function. This is due to the fact that the larger part of persons investing in government securities in Malta tend to hold them till maturity, thus rendering it very difficult for the Bank to replenish its trading balances from the secondary market. The Central Bank has been consulting banks and stockbrokers with a view to facilitating the assumption of the market making function by the market. Three local banks have recently shown a very active interest in this regard, and thus it appears that private market making facilities are likely to be introduced in the near term, both for bonds and equities. Such a development should contribute to stimulate a pick-up in secondary market turnover and a more liquid market.

Another feature of the government bond market which needs to be addressed is the lack of depth of certain benchmark issues. As already indicated, the outstanding stock of government

bonds is distributed among 37 different issues, most of which are for very small amounts. There is thus considerable scope for rationalisation of the debt structure and consolidation of various issues (for instance under buyback and conversion programmes and stock switches into benchmark issues) so as to give greater depth and liquidity to the market. A step in this direction was made late in 2001 when the latest government primary issue included the launching of a further tranche of a fungible issue which was first issued in 2000.

Table 9: Total financial assets
(breakdown by type of financial instrument; in million)

Financial Instrument	1995		% of total excluding	2001		% of total excluding
	Lm	EUR	Lm Sicavs	Lm	EUR	Lm Sicavs
Resident bank deposits in Lm	1,197	2,663	53.7	2,066	5,161	45.6
Resident bank deposits in FC	156	347	7.0	285	712	6.3
Currency in circulation	352	783	15.8	419	1,047	9.3
Malta government stocks (MC)	281	625	12.6	853	2,131	18.8
Malta government treasury bills	71	158	3.2	160	401	3.5
Corporate bonds (MC)	23	51	1.0	108	270	2.4
Equities (MC)	146	325	6.6	610	1,524	13.5
Locally-based Sicavs (MC) of which:						
Foreign currency denominated	2	5	0.1	27	69	0.6
Lm denominated	-	-	-	179	447	
Total	2,228	4,958		4,708	11,761	
Total (excluding Lm denominated sicavs)	2,228	4,958	100	4,529	11,315	100

Source: Central Bank of Malta
Notes:
1) For the purpose of computing the % shares of the respective financial instruments, Lm-denominated SICAVs have been excluded from the total in order to avoid double counting.
2) MC = market Capitalisation, FC = foreign currency.

3. Exchange control liberalisation

The exchange control regime has been extensively eased during the 1990s. Virtually all current account restrictions have already been lifted, while the capital account is being liberalised through a three-year programme. By the end of 2002, this programme is scheduled to be completed except for short term capital flows and the purchase of secondary residences by non-residents which, because of their sensitive nature, need to be phased over a longer period to avoid potentially destabilising effects on such a small economy as Malta.

The on-going process of capital account liberalisation is no doubt increasingly subjecting the domestic financial sector to the full impact of globalisation and external competition. As the liberalisation of capital movements gathers momentum, this may lead to increased exposure to volatile capital flows, but the existence of a robust regulatory framework in line with European Union directives should limit the degree of risk to the financial system. Interest rates will also become more volatile, increasing risk, and, possibly, driving the development of more sophisticated hedging devices in response.

The annual limit on investment abroad by Maltese persons over 18 years has been raised stepwise from about €20,000 in 1999 to about €125,000 (equivalent to 1200% of per capita

GDP) on 1 January 2002, and various other capital account restrictions have been lifted. In the light of the much more liberal scenario, the Central Bank is committed to start focusing much more intensely on the importance of fostering external balance and on defending the exchange rate peg.

V. Trends in the financial sector in view of integration in EU

1. The degree of competition

The description of the Maltese financial sector given above suggests that although the degree of competition has increased, it remains low due to the small size of the economy and the structural nature of the sector. For example, banking continues to dominate finance, with two institutions accounting for almost all the banking sector's assets. Staffing levels in the banks also appear to be relatively high, which may indicate that the market is not as competitive as it is abroad.

Nevertheless, the on-going process of financial liberalisation and growing exposure to globalisation should inevitably increase the degree of competition in the Maltese financial sector. This process will impact on several factors.

For instance, in line with international trends, the banks are likely to lose further ground to other financial intermediaries, such as collective investment schemes, which offer alternatives to bank deposits. Prudential limits on large exposures and the need to reduce corporate debt levels may also prompt Maltese firms to issue capital market instruments to finance their operations, bypassing the banks in their role as intermediaries. Proposed reforms to the state pension system are also expected to offer opportunities for further development in the investment services sector.

Moreover, restrictions on the free movement of capital are being gradually removed in accordance with the Maltese authorities' commitment to remove virtually all exchange controls by the end of 2002. This is expected to intensify competitive pressures from abroad and could ensue in much more volatility in capital movements and interest rates.

As regards the structure of the banking sector, the intensification of competitive pressures in recent years has led to a significant consolidation process. In fact, the two larger banks over the past three years have wound up their merchant banking subsidiaries and integrated these functions within the parent company. It is envisaged that the same process will be applied to their offshore banking subsidiaries. Beyond these restructuring measures, however, it is doubtful whether additional consolidation or amalgamations would be called for – or indeed would be desirable – given the already very small number of domestic banks and the high degree of oligopolistic power already enjoyed by the larger banks.

2. Regulation and supervision

Until the end of 2001, the responsibility for regulating and supervising the financial system was divided between three agencies. The Central Bank of Malta was responsible for supervising banks and some non-bank financial institutions. The Malta Financial Service Centre, which was set up in 1994, supervised offshore banks, insurance companies and investment services firms. It was also responsible for company registration. Finally, the Malta Stock Exchange, which began operations in 1992, regulates the listed securities market.

As from 1 January 2002, however, the Central Bank shed its regulatory and supervisory responsibilities, which were transferred to the Malta Financial Services Centre. Under the

new regime, the Bank will retain overall responsibility for the stability of the financial system and will still be able to support individual banks as lender of last resort if necessary. Thus, the Bank will be able to focus its attention more closely on the conduct of monetary policy.

The regulatory set-up regarding listed securities is also expected to be reviewed during 2002. In fact, legislation is scheduled to be passed shortly whereby the responsibility for regulating stockbrokers and certain aspects of the securities market will be transferred from the Malta Stock Exchange to the Malta Financial Services Centre. Under such a scenario, the Malta Stock Exchange would focus exclusively on the operational side of providing an efficient trading platform and, to the extent that there would be interest from other parties to engage in such a service, the Exchange could become one recognised investment exchange, possibly among others. In this way, the Malta Financial Services Centre, as the sole regulatory body, would eventually be better placed to regulate financial services firms that increasingly compete across the traditional boundaries that used to define banking, insurance and investment services.

3. Exchange rate policy

The fixed peg exchange rate regime has historically served the Maltese economy well. On the basis of various considerations – including the size and degree of openness of the economy, the degree of labour mobility and nominal flexibility of wages and prices, the nature of the financial system, the level of reserves, and the degree of capital mobility – preliminary studies would seem to suggest that, of the various options regarding exchange rate regimes, the fixed peg appears to be the most indicated for Malta in the transition to EMU.

In this respect, one possibility could be that the commitment to a fixed rate could perhaps be increased even further by switching formally to a currency board (which in effect has been virtually the case in practice given the full reserve coverage of the Central Bank's demand liabilities to date). Generally speaking, one would expect a currency board arrangement to tend to reduce the possibility of speculative attacks (to the extent that the peg is sustainable) and would normally impose sound economic behaviour on the government. In the case of Malta, the Central Bank however currently feels that the appropriateness of a currency board regime still needs to be studied in more depth in order to come to a decision in this regard.

An issue which is much more clear is the objective to increase the euro's weighting in the Lm exchange rate basket in due course. A matter for consideration in this respect is whether the shift to a 100% link to the euro should be gradual or at one go. This choice would depend on the state of volatility in the international foreign exchange markets. If the markets are not unduly volatile, a one-time adjustment would appear feasible. On the other hand, if markets are expected to be turbulent, a gradual approach to a 100% link would perhaps be preferable because of the risk of possible wide misalignments in exchange rates.

Yet another issue, of course, relates to the exchange rate level at which to peg fully to the euro. From preliminary studies carried out by the Central Bank of Malta, it would appear that there are no grounds to suggest that there would be undue pressures to sustain the current exchange rate. Obviously, tests for exchange rate misalignment will have to be thoroughly undertaken prior to participation in ERM II in due course.

4. Independent monetary policy

From the legal perspective, the amendments that will be passed to the Central Bank of Malta Act within a few months should statutorily guarantee the independence of the Central Bank.

From a monetary transmission perspective, however, once the process of capital account liberalisation is fully completed, it will become even harder to pursue an independent monetary policy. Indeed, the interest rate channel as an autonomous means of affecting the real side of the economy, could become largely ineffective. Given the fixed exchange peg, under full capital account liberalisation, interest rate policy will need to be clearly focused on supporting the official reserves with a view to defending the peg and safeguarding the market's credibility in the sustainability of the exchange rate. Thus, under such a scenario, while interest rate changes would still have an effect on the real economy, the Central Bank would be unable to determine them autonomously.

5. Payments system

An amendment to the Central Bank of Malta Act is at present in the process of being discussed by Parliament. The amended Act would give the Bank the legal powers for the regulation and oversight of payments systems in Malta, in conformity with the objective of preventing systemic risk to the financial system. It would also provide protection for finality of payment and netting. Plans are in hand so that an upgraded and fully automated payment system (called the Maltese Real-Time Inter Bank Settlement System or MARIS) will be operational in mid-2002. The system will use SWIFT Fin Services for messaging. It is expected that MARIS will continue to settle all inter-bank Maltese liri transfers in respect of money market transactions, foreign exchange deals or other inter-bank settlements. Transactions involving sales and purchases of securities quoted on the Malta Stock Exchange will also be settled through the system. These developments should enable the local payments system infrastructure to move closer towards TARGET functionality in due course.

VI. Conclusion

The financial sector in Malta has undergone substantial change and development in recent years. The processes of financial deregulation and privatisation have facilitated a more proactive and innovative banking sector and more developed money and capital markets. The small number of key market players, however, has tended to restrain sufficient deepening of the market and turnover is still relatively thin. Full capital account liberalisation is likely to generate considerable competitive pressures. Besides challenges, however, this process will also present significant opportunities, which, if exploited well, should lead to higher efficiency and competitiveness. The results achieved so far should augur well for the future.

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Financial sector issues in Poland

Piotr Bednarski and Jacek Osiński

National Bank of Poland

I. Introduction[1]

Poland is the largest country in central Europe, with a population of 38.6 million and a GDP of €205 billion. Although Poland has, in absolute terms, the largest GDP in the region, it is by no means the wealthiest country. GDP per capita totals €440 per month, about 20% of the EU average at current exchange rates, and about 40% of the EU average in purchasing power parities.

Since the country adopted a new political system and market reforms in the early 1990s, the Polish financial sector, especially banking, has developed significantly. Under the centrally planned economy regime, the National Bank of Poland (NBP) had been a monobank that issued both paper and credit money, directly lending to state-owned enterprises.[2] At the outset of transition, the NBP was transformed into a modern central bank, in charge of monetary policy, payment systems and banking supervision functions.[3, 4] Lending to the real sector and individuals became a domain of commercial banks that started to develop rapidly after 1989. By end-2001, most of the 71 commercial banks were privately owned, controlled by major international banks, and the state owned only seven of them.

The development of capital markets was best reflected in the re-establishment and growth of the Warsaw Stock Exchange (WSE), which celebrated its tenth anniversary in 2001. The WSE has undergone substantial transformation in terms of size, technology, the variety of products, the number of listed companies, and capitalisation.

Since 1999 a new social security system, consisting of three pillars, has been in place. The first pillar is a mandatory pay-as-you-go scheme, supplemented by a second pillar, which is based on mandatory funding and a privately managed Open Pension Fund. The third pillar consists of voluntary employee pensions. Open Pension Funds created in recent years are widely expected to become an important driving force of capital markets in Poland.

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[1] The authors are grateful to all those who supported their work on this paper by contributing data, specialist advice and practical help. Particular thanks are due to Anna Trzecińska, Wojciech Kwaśniak, Paweł Wyczański, Marta Gołajewska, Piotr Domański, Anna Stepień and Anna Zajaczkowska on the staff of the National Bank of Poland. We are indebted to all of them for their patient and meticulous work, much of which was undertaken at short notice and under great pressure.

[2] Apart from the NBP, the state owned and controlled four other banks, which specialised in agriculture, domestic currency savings combined with financing the co-operative housing sector, retail foreign currency savings, and corporate foreign currency and trade. There were also approximately 1,700 small co-operative banks, mostly operating in rural areas and small towns. Under the new banking legislation of 1989, 400 branches of the NBP were reorganised into nine regional commercial banks and were slowly prepared for privatisation.

[3] In 1997 the supervisory function became the responsibility of the Commission for Banking Supervision, although the operation is ensured by the NBP staff.

[4] Poland's Constitution states that monetary policy is independently performed by the Monetary Policy Council, while the Act on the NBP stipulates that there shall be a Commission for Banking Supervision.

However, Poland is still developing its financial system, which needs more capital investments. Poland, with its relatively large population and potential for growth, is considered to be a lucrative long-term market where foreign strategic investors, mostly banks and insurance companies, can explore business opportunities.

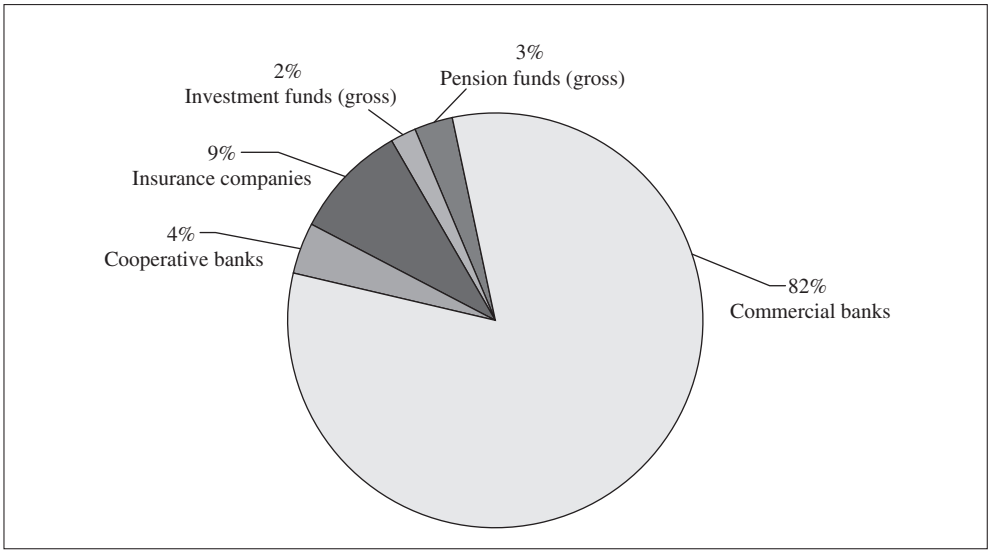
II. The structure of the financial sector

The financial sector in Poland is bank-driven. Banks are key agents of financial intermediation, providing most of the credit to the economy and channelling most of the population's savings (Chart 1). The role of capital markets is secondary, with the capitalisation of the Warsaw Stock Exchange amounting to only 14% of GDP (€29.3 billion)[5] as compared with total banking system assets amounting to 66% of GDP (€135.5 billion), both as at end-2001.

In relation to GDP, all segments of the financial sector are relatively small by EU standards, (Table 1). The insurance sector and pension funds are expected to gain increasing importance in the future due to the development of the pension system.

The assets of the financial sector have grown significantly over the last few years. This trend was impacted to a large extent by FDI inflows, mostly in the context of privatisation or the establishment of subsidiaries of foreign financial institutions.

Chart 1: Asset distribution of the financial sector in Poland
(end of 2001, %)



Sources: Pension Funds Supervisory Authority (UNFE), Polish Securities and Exchange Commission (KPWiG), National Bank of Poland, State Office for Insurance Supervision (PUNU), and own calculations. Leasing companies and credit agencies not shown.

[5] See: Warsaw Stock Exchange web site

Table 1: Size of the financial sector segments in relation to GDP
(end of 2001)

Segments	Size EUR million	Size in % of GDP
Commercial banks	129,43	63.1
Cooperative banks	6,107	3.0
SKOK (credit unions)	504	0.2
Brokerage houses [1)]	766	0.5
Investment funds (gross)	3,456	1.7
Pension funds (gross)	5,510	2.7
Insurance companies	13,328	6.5
Total assets	159,307	77.7

Sources: Polish Securities and Exchange Commission (KPWiG), Pension Funds Supervisory Authority (UNFE), National Bank of Poland, State Office for Insurance Supervision (PUNU), and own calculations. (EUR/PLN = 3.5219, GDP for 2001 = €205.1 billion)

[1)] This figure represents the estimated value of assets of brokerage houses that are separate from banks. However, the total amount of assets invested by clients through brokerage houses amounted to €8.9 billion by end-2001, of which €8.6 billion were shares listed on the Warsaw stock exchange, debt securities, and other financial instruments treated as off-balance sheet commitments of the brokerage houses.

III. Banking sector

1. Size and structure

At end-2001, the total number of commercial banks conducting operations in Poland stood at 71 (compared to 74 at end-2000), while the number of co-operative banks declined to 642 from 781 over the same period (Table 2). The number of both commercial and co-operative banks has been falling since 1993.

The decrease in the number of banks in recent years has been the result of consolidations, mergers, takeovers and liquidations. External factors such as mergers of foreign or regional banks have also affected the concentration of the Polish banking sector, leading to the merger of their subsidiaries operating in Poland.

While Poland's banking sector has grown substantially over the last ten years in terms of total assets, it remains relatively small compared to more developed countries of similar size and/or population. Total banking sector assets amount to only 66% of GDP, with total deposits equivalent to only 40% of GDP and lending to 26% of GDP. Given that deposits in, for example, Germany represent 60% of GDP and lending 120% of GDP, there is still enormous potential for growth in Poland. Even the largest banks in Poland are still small by international standards (only two banks have a total footing of over €20 billion), and the entire industry continues to be smaller than many large individual western European or US banks. Nonetheless, portrayed in absolute figures, the Polish banking sector is the largest of the former planned economies of central and eastern Europe.

Table 2: Number of banks

	1995	1996	1997	1998	1999	2000	2001
Commercial banks	81	81	83	83	77	74	71
Cooperative banks	151	1,394	1,295	1,189	781	680	642
All banks	1,591	1,475	1,378	1,272	858	754	713

Source: National Bank of Poland

Table 3: Total assets and capital base of banks
(end of 2001, EUR million)

	Commercial banks	Cooperative banks	Banking sector	Banking sector in % of GDP
Total assets	129,437	6,107	135,544	66
Total capital base (total core & supplementary capital)	11,336	547	11,883	6

Source: National Bank of Poland

Poland's banking sector is dominated by the commercial banks. While all of these hold a universal banking licence, they are not homogeneous and may be divided into several distinct categories by market segment and type of business conducted:

– Large commercial banks, mostly controlled by foreign banks, engaged in both corporate and retail business. This group includes a group of formerly state-owned banks (originally nine in total), which were hived off from the National Bank of Poland, privatised, and subsequently taken over by foreign strategic investors (e.g. Bank Zachodni-WBK SA, owned by the Irish group AIB, or PBK SA and BPH SA, both now controlled by Germany's Hypovereinsbank). These banks have established large financial groups, including various other financial institutions such as brokerage houses, investment funds, lease finance companies and asset management firms. Large, bank-driven financial groups are the dominant organisations on Poland's financial markets, accounting for the highest portion of total assets. Some of them also own pension funds or insurance companies.
– Medium-sized commercial banks, either partially or wholly owned by foreign investors. Some of these are 100% owned subsidiaries of global/regional banks. These banks are either universal in character or clearly specialised in a particular line of business. The former operate on both the retail and wholesale markets, servicing retail and corporate customers. The latter mostly focus on wholesale markets (primarily the interbank market), are active players in FX and derivatives trading, and service large corporate clients, multinational or local.
– Specialist banks, such as car finance banks (there are five of these), mostly offering loans for the purchase of cars, operating in the retail sector, and working closely with, or as subsidiaries of, car manufacturers or other industrial corporations. These banks access their funding either on the interbank market or in the form of direct equity injections from their owners. Their original narrow focus on car loans or household equipment loans is now being expanded to include other forms of lending. They have also been making attempts to diversify their sources of funding by developing a retail depositor base.
– Mortgage banks, of which there are only three currently in operation.[6] The portfolios of these institutions are relatively small, although they could expand substantially should interest rates continue to come down.
– Small and medium-sized banks associated with particular industries like sugar refining or with regional or municipal governments. These banks, often undercapitalised, are slowly diminishing in number due to takeovers, liquidations, mergers or even bankruptcies. This group also includes private banks or banks owned by particular companies and/or individuals. In most cases, these banks service both retail and corporate customers.

[6] Apart from the Banking Act, these banks are also governed by the Act on Mortgage Bonds and Mortgage Banks of August 29, 1997 (as published and amended in *Dziennik Ustaw* nos. 140/1997, item 940; 107/1998, item 669; 6/2000, item 70; and 60/2000, item 702).

In addition to commercial banks, co-operative banks represent a separate group, even if the difference between large co-operative banks and small/medium-sized commercial banks tends to be increasingly blurred. The history of these co-operatives dates back to the 19th century, and they have deep roots in Polish society, especially in small towns and rural areas. While co-operative banks outnumber the commercial banks, they are mostly very small, usually consisting of a few branches, and run an unsophisticated, traditional type of banking business. Their share in total banking assets is small, at only 4.5% and trending downwards. As Poland implements tighter capital standards in line with the EU capital directives, co-operative banks are tending to merge in order to meet the higher capital requirements they now face. At the end of 2001, 6.9% of the co-operative banks still failed to satisfy minimum capital requirements, compared with 22% at the end of 2000.

2. Ownership[7]

The ownership structure of the Polish banking system has changed significantly over the past ten years. The underlying trend has been the privatisation of state-owned banks, and this process has accelerated in the last three years. The decline in state ownership of banks is remarkable. In 1993, the state still owned – directly or indirectly – 29 banks, representing 80% of the assets and 77% of the capital of the Polish banking sector. In 2001, there were only 7 banks controlled by the state, representing 23.1% and 12.5%, respectively, of banking assets and total capital base.[8] Foreign strategic investors have acquired most of the share capital in the largest Polish banks. On 31 December 2001 the 48 banks with majority foreign equity had a total capital base and total assets (figures which attest to their share of the market for banking services) representing 80.2% and 69.2%, respectively, of the total capital base and the total assets of the Polish banking sector; this constituted a major increase on previous years.[9] These banks had also taken 63.9% of non-financial sector deposits and accounted for 71.3% of loans outstanding, less provisions.[10] While the sale of banks to foreign institutions has raised much-needed FDI for Poland, and usually resulted in an inflow of banking technology and expertise, this remains a politically sensitive issue, especially as 70% of the banking industry is now owned and influenced by foreign banks or corporations. In addition, there are a number of question marks as to the role of foreign-owned banks and their impact on the Polish economy.[11]

As the major foreign investors in Polish banking are renowned, highly-rated banks, which have been attracted to the Polish market by its high growth potential and foreign investors

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[7] Source of data: "Summary Evaluation of the Financial Situation of Polish Banks", quarterly published by the General Inspectorate of Banking Supervision of the National Bank of Poland, various issues.

[8] Total core and supplementary capital, prior to any regulatory deductions.

[9] For example, the corresponding figures at end-1993 stood at 2.2% and 2.6%, while at end-1999 they were 50.2% and 47.2%.

[10] Over the years 1993-2001, banks with majority foreign equity increased their share of the total assets of the banking sector by 66.6 points, of the total capital base by 78 points, of non-financial sector deposits by 61.8 points, and of outstanding loans less provisions by 68.6 points.

[11] Examples of the issues involved here are: How much of the decision-making powers of these banks will really remain in Poland? How will the lending and concentration limits of the parent bank, combined with stringent and often risk-averse lending criteria, be reconciled with lending to Polish SMEs, more risky by nature? How strong will the commitment of these companies be to supporting their Polish operations, their customers and the systemic stability of the Polish banking sector in case of a severe economic downturn?

come from several countries (no geographical concentrations), it is expected that they will contribute to systemic stability even in periods of downturn.[12]

3. Concentration and consolidation

Although there are still a large number of banks conducting business in Poland, the banking industry is relatively highly concentrated. By the end of 2001 the ten largest banks in Poland accounted for some 74.1% of total assets, 77.6% of deposits, and 71.6% of lending (gross). These percentages will probably rise in the future as the consolidation process accelerates even more over the years ahead.

The concentration of the banking sector, an ongoing trend in Poland, has been affected by takeovers of local Polish-owned banks by local subsidiaries of foreign banks, mergers and acquisitions abroad resulting in the local subsidiaries of international banks being amalgamated, higher capital requirements for co-operative banks, heightening competition, and pressure for rising cost efficiency.

The concentration of deposits at the large banks puts small and medium-sized institutions under a certain pressure; some of the latter have poorer ratings and limited access to market liquidity, and these might easily disappear should the market perception of them deteriorate.

4. Financial situation of the banking sector

4.1 Asset quality

The quality of banking assets has deteriorated since 2000, with lower quality assets increasing by 2.8% by end-2001, to 18.3% of total assets.[13] Decreased asset quality reflects the impact of macroeconomic factors, including the overall slowdown of the Polish economy, the growth of unemployment, and structural problems in certain industries currently being restructured (steel, coal). However, the figures on asset quality do not translate directly into a corresponding increase in credit risk, as the banks – subject to very conservative asset classification requirements[14] and regular on-site loan review by banking supervision – support their loans by taking suitable collateral and/or establishing specific provisions against loans classified as irregular. The volume of loan loss provisioning is in excess of that required.[15] Therefore, leaving aside certain smaller banks, the majority of the large banks,

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[12] Another aspect of the foreign control of the major banks in Poland relates to the policy of the Government, which decided that major foreign-owned banks (formerly Polish ones) should be quoted on the Warsaw Stock Exchange (WSE). In consequence, part of the equity in these banks is dispersed among smaller Polish investors. Also, the rigorous reporting requirements for listed companies, banks included, enhance the transparency of their finances. As a result of this Government policy, almost all the major banks operating in Poland, especially the foreign-owned ones, are quoted on the WSE, and these account for a substantial portion of market capitalisation – close to 30%. However, the free float of these banks is on average no greater than 15-25%.

[13] This figure represents claims on non-financial entities classified as irregular. The composition of irregular assets was the following: substandard – 4.7%, doubtful – 4.8%, and loss – 8.1%;

[14] Asset classification is based on two independent criteria: financial standing of the borrower and debt service history. Where borrowers service their debt, yet their financial standing shows signs of deterioration, the bank is still obliged to downgrade its classification and establish a specific provision.

[15] The ratio of specific provisions to irregular claims and off-balance-sheet commitments, as adjusted for the quality of collateral, was 102% which means that irregular claims were provisioned 2% in excess.

constituting the vast bulk of the banking sector as a whole, have remained relatively stable, even in a period of economic challenges.

4.2 Market risk

The most significant event for Poland's financial markets in the past period was the full float of the zloty on 12 April 2000. Both banks and their customers were thereby compelled to improve their management of FX risk and to hedge more effectively against it, which stimulated the development of the forward, futures and swap markets.[16]

The banks have shown a capacity to withstand the negative impact of higher market volatility and macroeconomic pressures, which can be traced to the following:[17]

– an upgraded risk management capacity resulting from considerable investment in MIS, IT and management processes,
– improved staff quality, which includes risk managers, middle and back office staff, and internal audit, and in the case of many foreign-owned banks also involves strict internal limits and owner oversight,
– improved and enhanced regulations and supervision, with more frequent and in-depth examinations of the trading area,
– the availability of hedging products, such as interest rate and currency swaps, FRAs, and FX options.

Foreign exchange risk as measured by the FX net open position is relatively low in Polish banks. In the last few years most of them held overall net positions that were no greater than 10% of their adjusted capital base (eligible capital). As of 31 December 2001 the majority of banks involved, at any material level in FX transactions, had open positions of 2% or less of eligible capital; 14 banks had positions of 2%-10%; six banks had open positions of 10-20%; and only six banks had positions in excess of 20%.

4.3 Liquidity

Market liquidity is relatively high in Poland, with an active interbank money market. The funding mix of most banks is based on retail deposits. The majority of banks fund their lending and investment activities from a relatively stable retail deposit base, with a high level of core deposits. Retail deposit funding, although subject to mounting competition, still has substantial growth capacity. In addition, the weak performance of capital markets (the bearish Warsaw Stock Exchange) has induced small investors to revert to traditional time deposits. In addition, the stability of the deposit base has been further reinforced.

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[16] The market risk position of Polish banks is stable, with a dominant role played by FX risk and a growing importance of interest rate risk (in both the banking and trading books). Since 1993, banks in Poland have been subject to stringent FX regulations that impose conservative net open position limits. The regulatory arrangements for FX have been modified and strengthened through the implementation as of 1 January 2002, of the Capital Adequacy Directive (CAD II and I) with respect to market risk. As a result, banks are required to hold additional capital directly against market risk (over and above their credit risk capital).

[17] *IMF* (2001) and Bednarski, P. (1999).

4.4 Earnings

The overall profitability of Polish banks is high by international standards, with average ROE of 12.91%, and ROA of 1.02% at 31 December 2001.[18] However, in recent months ROE has shown a tendency to decrease, while growth in ROA has been minimal. The pre-tax earnings and net earnings of the banking system in 2001 amounted to €1.8 billion and €1.3 billion, respectively. In 2001, net interest income (NII) dropped by 11.3% compared with end-2000, while the contribution of NII to net income from core operations again diminished, coming down 9.4 points to 51.5%. In 2001 the earnings and profitability of the banking sector weakened, mainly due to unfavourable economic conditions. One of the major contributing factors was an increase in loan loss provisioning related to the deterioration of asset quality (which does not necessarily mean that the loans in question are not being serviced). Had it not been for the loan loss provisions established, the earnings of the commercial banks would have been 70% higher.

The structure of earnings has been evolving in recent years, with interest income decreasing in relation to total assets, and the growth of non-interest income such as fees and FX gains. In the coming years, as a result of a probable further decrease in net interest margins, banks will move to more fee-based services and increase their intermediation to retail, SME, and other less banked segments. Banks also need to continue to invest heavily in IT and systems development to further improve their efficiency and risk management capabilities. These factors might strain the capital adequacy positions of some banks.

4.5 Capital

The capital position of Poland's banks has been improving steadily since 1993. The adjusted capital base (eligible capital)[19] of the banking sector totalled €10.724 billion as of 31 December 2001, which represented an increase of 34% and 1,013% over the year-end figures for December 2000 and 1993 respectively. The principal sources of capital growth have been either the retention of earnings (direct appropriations of retained earnings) or injections of new capital by strategic investors. Other factors behind this growth included increases in the authorised capital and a rise in the capital surplus due to mergers.

At the end of 2001, the overwhelming majority of the commercial banks (66 of them) were in compliance with the risk-based capital requirement (8% solvency ratio). Just three banks, implementing rehabilitation proceedings, failed to meet the required ratio. The capital base of the remaining banks was sufficient not only to cover their credit risk, but also their FX and other risks. The average risk-based capital reported by end-2001 by the commercial banks was 15.0%.

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[18] ROE – net earnings to average core capital; ROA – net earnings to average total assets.

[19] The adjusted capital base (eligible capital) represents the sum of core and supplementary capital less unabsorbed prior period losses, losses pending confirmation and current period loss, equity holdings (direct and indirect) in other financial institutions, any shortfall in specific provisions, Treasury stock, and from 2001 onwards, intangible assets (subject to phased deductions in line with an established schedule).

IV. Non-banking financial sector

1. Money market and foreign exchange market

1.1 Money market

The money market in Poland is relatively well developed, and there are several instruments used (Table 4), which will be described below:

Treasury bills

T-bills have been issued since 1991. The regular maturities are 13, 26 and 52 weeks. They are issued regularly (every Monday) and are available for all type of investors. The volume of the issues was decreasing until 2001, when the budget deficit doubled. Generally, there is an intention to use longer-term instruments to meet public sector borrowing requirements. Market liquidity is declining as the size of the market shrinks and more and more bills are held by the domestic non-banking sector (41% at the end of 2001) that treats T-bills as an investment rather than a trading instrument.

NBP bills

NBP bills have been issued since 1990. The regular maturity is 28 days. They are the main NBP instrument used in open market operations. The main NBP rate – the reference rate – is a minimum yield on 28-day bills. Since February 2002, auctions have been regular (every Friday); previously issues had been irregular. NBP bills are available only for domestic banks. The volume of the issues depends on the forecast of excess liquidity of the commercial banking sector in Poland. Market liquidity is increasing, contrary to T-bills. Banks are also using NBP bills in repo/SBB operations. The number of NBP bill-holders is around 38.

Table 4: Main characteristics of the money market

	Volume outstanding (nominal values, end-2001, in EUR million)	Gross average monthly turnover in 2001 (in EUR million)	Average spread in normal conditions in 2001 (bps)	Liquidity (ratio of average monthly turnover to volume outstanding or capitalization) in 2001
Treasury bills [1)]	9,999	1,647	15-20	0.2
NBP bills [1)]	4,052	6,176	15-20	1.2
Interbank depo.	6,285	169,807	20-30 (O/N)	27.0
FX swaps [2)]	58,417	137,244	20-30 (T/N)	2.0
Repo/SBB	-	22,786 [3)]	n.a.	n.a.
CP	3,644	-	n.a.	n.a.
CDs	363	-	n.a.	n.a.

Source: National Bank of Poland

1) Turnover figures relate only to outright sales/purchases; repos and sell-buy-backs (SBB) using these instruments are shown in a separate line.

2) To avoid double counting, the size of the market is computed based on the formula: swaps sold by Polish banks to residents + swaps sold to non-residents + swaps bought from non-residents.

3) Repo/SBB operations are counted four times.

Interbank deposits

A nationwide interbank deposits market emerged in 1993 after the consolidation of banks' accounts in NBP headquarters (regional markets have existed since 1989). At the end of 2001, 66.8% of deposits had a maturity of less than 2 months. The market is still growing although banks are increasingly using NBP bills or repo/SBB. There are still foreign exchange limits on the use of these instruments by non-resident banks, which will be removed in October 2002. Obligatory reserve paid on deposits taken by non-residents is also an obstacle. There are over 70 commercial banks in Poland participating in the market. The high liquidity ratio of the market reflects the large share of short-term operations. WIBOR rates are quoted for O/N, T/N, SW, 1-M, 3-M , 6-M, 9-M and 12-M deposits. There are longer-term deposits, but these are mainly between banks with capital relations.

FX swaps

The FX swap market emerged in 1999 after the zloty became convertible and is expanding rapidly. Its growth is being driven by four things: the multi-purpose nature of this instrument, the above-mentioned foreign exchange restrictions for non-resident banks, the lack of credit risk, and the falling liquidity of the T-bills market. The FX swap market is a basic market for short-term investments by non-residents ("carry trade strategy"), as well as a hedging vehicle. The share of operations of Polish banks with non-residents in 2001 was 68.5% of their total position in this market. The FX swap market is primarily a USD/PLN market (87.5% of overall contracts). There is no information on the number of participants. Three to five banks are market makers, while there are also active London-based participants (playing the role of swap houses). There are no exact data on the structure of maturities but generally they are up to 12 months.

Repo/Reverse Repo & Sell-buy-backs/Buy-sell-backs (SBB/BSB)

Banks mainly use T-bills and NBP bills for these types of operations. Treasury bonds are rarely used for this purpose due to the high costs related to depository system commissions. Transactions employing NBP bills are used for liquidity management by banks, while operations with non-banking entities using T-bills aim at attracting collateralised deposits. The use of SBB is a way of avoiding the obligatory reserve system. Some 80-90% of operations have less than ten days to maturity. There is no information on the number of participants and the share of non-resident participants. Interest rates on these types of operations are generally 100 bps below WIBOR rates.

Commercial paper (CP)

CP has been issued since 1991. The usual maturities are one, three and six months. Issues are carried out through lead-manager banks that also play the role of depositories, settlement agents and market-makers. The market is very fragmented and liquidity is scarce. There is no central depository, so it is impossible to estimate the number of CP holders. Some 26.7% of CP was held by banks, while 2.1% by non-residents. A lot of CP is in domestic insurance groups' portfolios.

Certificates of deposit (CDs)

The market for certificates of deposit (CDs) is very small. There are several reasons for this: the banking sector is generally overliquid; it is cheaper to use the interbank deposit market, while the FX swap market is more liquid; and CDs sold to non-banking investors are subjected to obligatory reserves. There is no secondary market. CDs are held mainly by corporations (42.7%) and insurance groups (7.4%). Non-residents are not present. There are no data on number of participants.

1.2 Foreign exchange market

In 2001 the daily average gross turnover in the FX market (zloty/FX transactions) was €3,254 million equivalent. The dominant currency was USD, accounting for over 67% of trade. The foreign exchange market in Poland is dominated by banks and London-based institutions. The share of turnover of Polish banks with non-residents in total turnover was around 52%. In 2001 FX market trades were heavily concentrated – 69% of turnover was carried out by the five most active domestic banks.

2. Fixed income market

The long-term fixed income market is totally dominated by Treasury bond issues. Bonds issued by commercial entities, local government bonds, NBP bonds or mortgage bonds are of much lesser importance (Table 5).

2.1 Treasury bonds

Treasury bonds have been issued since 1991. The first issue of fixed rate bonds took place in 1994. Currently, the Ministry of Finance issues two-, five- and ten-year fixed rate bonds, ten-year floating rate bonds for wholesale investors, three-year floating rate and five-year fixed rate bonds for retail investors as well as two- and four-year savings bonds. They are issued on a regular basis. The volume of the issues is increasing to meet borrowing requirements, while short-term securities issues are declining. The liquidity of the market is

Table 5: Long-term fixed income market: market capitalisation
(end of 2001, EUR million)

Instrument	Volume outstanding
Treasury bonds	39,987.8
– total marketable	36,779.2
– marketable – fixed rate	29,158.9
– marketable – floating rate	7,620.3
non-marketable	3,208.6
NBP bonds (non-marketable)	2,790.3
Local government bonds	244.1
Corporate bonds	715.5
Mortgage bonds	4.2

Source: National Bank of Poland

improving, although there are still some obstacles mainly related to the operating procedures of the National Depository of Securities. Among investors some 16% of marketable bonds were held by non-residents, 38% by domestic banks and 46% by the domestic non-banking sector. Due to the structure of accounts in the National Depository of Securities, it is impossible to estimate the number of T-bond holders. In 2001 the size of the marketable T-bonds market in relation to GDP was 17.9%.

3. Stock market

The first public issues took place in 1990. The Warsaw Stock Exchange (WSE) was created in 1991. In 2001 stock market capitalisation reached €29.3 or 14% of GDP. There are 246 companies listed, and gross average monthly turnover is €3.5 billion.

There are two trading centres – the Warsaw Stock Exchange (WSE) accounting for 99.8% of market capitalisation and CeTO (smaller companies, non-regulated).

In 2000 Polish private individuals accounted for 50% of the turnover in the equity market. Among institutional investors, the domestic share accounted for 22%, while non-residents accounted for 28%.

After 12 years of rebuilding a market-driven economy, the Polish capital markets play a limited role in the funding of the corporate sector. At the end of June 2001, the share of financial institutions in the WSE capitalisation stood at 38.4%, up from 29.1% a year earlier. Banks belong to the largest 20 companies listed on the WSE. Since March 2000, the main WSE index has fallen as a result of both internal factors (financial results of listed companies) and external factors (situation in the world's equities markets).

The current major problems of development of the Polish capital market include:

– Low capitalisation and low free float (< 30%)
– Free float is realised mostly (90%) by 20 listed companies represented in the main WIG 20 index
– Weak financial results of listed companies
– Expected taxation of capital market's instruments
– Weakness of the system of protection of minority shareholders' rights
– Weakness of corporate governance
– Strong competition of foreign capital markets (London, Euronext)
– Large offer of Treasury securities, creating competition for equity investments

Table 6: Shareholders' structure of the Warsaw Stock Exchange
(50 biggest corporations, December 2000)

Type of investors	Shares (%)
Free float	30
Investors holding 5% of shares and more, together with GDR investors	11
State treasury holdings	15
Strategic investors (large shareholders)	44

Source: National Bank of Poland

V. Functioning of the financial sector

1. Financial intermediation

The leading channels of finance for the economy in Poland are banks, international capital flows and, to a lesser degree, the securities market. Banks dominate in the provision of financial services, accounting for around 87% of the total assets of the financial sector as at mid-2001.

Foreign-owned companies or subsidiaries of international companies also access funding from their parents abroad (long-term borrowings, subordinated debt), from issues of short-term commercial papers or Eurobonds. Moreover, large Polish corporations, apart from using bank funding, issue debt securities locally or internationally. International debt issues increased more than fivefold in the period 1997-2000. Major investments in Poland, due to the relatively low capital base of Polish banks as measured by international standards, necessitate local or even international syndicated credit facilities. The total debt in USD of domestic enterprises came to €39.6 billion at the end of 2001.

On the other hand, Polish firms, both large and small, have issued relatively little short-term debt, like commercial paper or bonds. Thus, the short-term corporate bonds market is relatively underdeveloped and shallow. While large companies seek capital through banks and local or international capital markets, many Polish enterprises, especially SMEs, use retained earnings as a source of capital. Impediments to more dynamic growth of lending to this sector include relatively high real interest rates and insufficient financial information that can be generated at reasonable costs by SMEs for banks or capital markets.

The loans provided by banks to non-financial customers increased from 30% of total assets (net) in 1993 to 40% at the end of 2001. In the last two years, the level of bank intermediation, measured by lending[20] to non-financial entities and households, fluctuated around 26% of GDP, a level still low by international standards.[21] Corporate borrowings[22] at banks represented 23.1%[23] of GDP at year-end 2001, while household borrowing was equivalent to 7.5%. It is therefore clear that there is substantial room for growth in lending both to SMEs and consumers. Over the last two to three years, banks have begun to explore these lending opportunities intensively, and while lending to the corporate sector will probably continue to be the leading form of financial intermediation, retail lending is expected to expand more rapidly in the years ahead.

2. The role of the financial sector in the monetary transmission mechanism [24]

Along with experiences of other transition economies, the monetary transmission mechanism in Poland has been slow and weak. Different reasons made the transmission of monetary

[20] Mostly loans excluding the purchase by banks of corporate debt securities.

[21] By comparison banks' private sector claims in Germany, UK and Japan were above 120% of GDP by end-1998.

[22] Including corporate debt securities held by banks.

[23] According to data of the Department of Statistics of the National Bank of Poland, banks claims on non-financial entities amounted to €47.3 billion by end-2001. This figure does not show foreign debt of Polish enterprises.

[24] Lyziak T. (2001).

policy impulses in Poland ineffective, including specific features of the Polish banking sector and some behavioural factors, which are particularly important in transition economies and should be taken into consideration by monetary policy-makers. On the other hand the transmission mechanism is subject to changes and the picture drawn on the basis of different econometric models is not necessarily an accurate description of the transmission mechanism as perceived at this point of time.

As mentioned in the previous subsection, the structure of external financing sources for Polish enterprises, like in other transition economies in which financial markets are underdeveloped, comprise mostly banks as the major source of borrowed funds. The capital market is accessible to a very limited group of companies and does not play a key role in raising funds. Surveys carried out by the National Bank of Poland show that Polish enterprises are dependent on bank credit both for their current activity as well as for their investment activity. For instance, in 1998 over 77% of firms were entirely or almost entirely dependent on bank credit for current activity and over 81% for investment activity.

The other side of the problem is that internal financing (e.g. retained profits) prevails in Poland, so credit-driven expenditures account for a relatively small part of aggregate demand. The credit-to-GDP ratio is only 26%. Moreover, it should be noted that especially recently the sizeable disparity between domestic and foreign interest rates, together with a possible underestimation of the exchange rate risk, has heightened corporate interest in accessing foreign currency loans: the share of external debt of the non-government and non-banking sector in total bank credit to enterprises reached 20%.

Monetary policy impulses have been relatively ineffectively transmitted by commercial banks, mainly because of specific features of the Polish banking system, including: the excess liquidity problem, the ownership structure, characteristics of banks' balance sheets, and links between banks and borrowers making banks unwilling to cut their credit supply significantly.

The excess liquidity problem is defined as an excessive level of banks' holdings of central bank debt. The main source of liquidity excess, which has been a permanent phenomenon since 1994, was the increase in gross official reserves. In 1995-1998 the Polish economy experienced huge capital inflows, leading to the increase of gross official reserves by about USD 23 billion. These capital inflows were connected especially with state enterprises' privatisation, credits taken abroad by the public sector and direct investments. The excess liquidity problem made commercial banks remarkably less dependent on the central bank, which – instead of playing the role of lender of last resort – had to continuously absorb the excess liquidity from the market. This was reflected in the direction and size of open market operations as conducted in recent years in Poland.

With regard to factors that undermine the commercial banks' responsiveness to changes in the stance of monetary policy in Poland, we should mention also banks' balance sheet structures. Relatively large holdings of securities allow banks to implement buffer-stock behaviour that consists in selling securities or reducing their accumulation, instead of cutting the loans supply when monetary policy is tightened. There is statistical evidence that Treasury securities are much more responsive to changes in monetary policy than loans. Between 1996 and the beginning of 1998, when there was a strong monetary policy tightening, banks decreased treasury securities portfolios significantly in order to continue credit expansion. VAR models confirm the existence of buffer-stock behaviour. Buffer-stock behaviour suggests that banks are not willing to cut credit supply even if there is monetary policy tightening. This can arise because of specific features of the relationship between banks and borrowers, such as credit lines and privileged positions of "big" clients, which put

additional constraints on the monetary transmission mechanism in Poland. There is some evidence that both these features – at least to some extent – exist in Poland.

3. The impact of the ongoing liberalisation on capital movements of financial markets

3.1 Liberalisation of entry barriers to the financial sector

Entry barriers to the Polish financial sector (especially banking, investment and insurance) were lowered already at the beginning of the 1990s. As a result, the financial sector, being subject to strong market competition that has grown substantially in recent years to a level comparable to that in developed financial sectors of the European Union, is currently undergoing a consolidation and restructuring process, enhancing its efficiency and market penetration.

At the outset of economic transition, the National Bank of Poland and the Ministry of Finance assumed joint responsibility for licensing banks. Liberal licensing guidelines were instituted[25] with a view to demonopolising the banking sector, stimulating competition and increasing the quality and quantity of banking services. While in 1989, there were only eight banks licensed to conduct business in Poland, by 1992 there were 82 commercial banks.

FDI in the financial sector has been encouraged by the Polish authorities since 1989 and restrictions on capital inflows have been liberalised including greenfield foreign direct investment in banking. Foreign investors, mostly banks and insurance companies, participated in the privatisation process, purchasing, usually via non-public offers, major Polish financial institutions like banks or insurance firms controlled by the state. Foreign banks also participated in the restructuring of problem banks in the 1990s, taking control, injecting capital and reforming ailing institutions. The policy of the authorities has been to invite well-rated and renowned investors that can provide solid capital injection, appropriate expertise and support for banks controlled in Poland. In most cases, investments in subsidiaries rather than branches were encouraged, and as a result most of the non-residents in the banking sector chose to establish subsidiaries. In practice, however, part of the subsidiaries have already been operating like branches, focusing above all on sales, with decision-making powers being locally limited and part of risk management being located abroad.

The liberalisation of financial markets resulted not only in greater competition and more intense restructuring of the local banks. It also deepened liquidity of the market and indirectly promoted a whole range of new services and products that were offered by new entrants into the financial sector.

3.2 Liberalisation of the exchange rate regime and foreign exchange law

The development of financial markets in Poland was stimulated by the increased liberalisation of the exchange rate regime as well as by a gradual liberalisation of capital flow restrictions.

Currently, only restrictions (i.e. the need for a foreign exchange permit from the central bank) on some types of short-term capital flows remain: short-term deposits and credits, sale/purchase of some short-term securities, derivative operations in non-regulated markets.

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[25] For detailed analysis of the development of banking supervision infrastructure see: Bednarski, P. (1999).

As changes in the exchange rate regime were made gradually, it is difficult to identify their direct effects on financial market development. It is true that the growth in the FX options market was connected with the decision to make the zloty a freely floating currency. Even more visible were the effects of liberalising capital flows and of the decision to make the zloty externally convertible.

One can identify different ways in which the liberalisation of capital flows affected the development of financial markets in Poland. They were both positive and negative in nature. Positive impacts were:

– On the demand side, liberalisation increased the interest of non-residents in purchasing Polish securities, especially Treasuries, as well as equities. At the end of 2000 non-residents held some 18.9% of Treasury bonds, while in equity markets this figure amounted to 18.8%.
– Liberalisation also affected the supply side and let new instruments enter the domestic market; although, even when restrictions were in force, zloty instruments such as IRSs, NDFs, or FX options have been traded in London since 1995.
– Increasing competition from London-based entities stimulates the liquidity of zloty markets – some London-based banks are important market-makers in zloty instruments.

But the process of liberalisation also has negative side effects:

– Some market activities are moving to London.
– Some of the foreign banks with subsidiaries in Poland moved part of risk management and more sophisticated products to London.
– There is an "unfair" competition – the larger capital of non-resident players creates a situation of their dominance over domestic entities.
– Bigger influence of non-domestic factors on the behaviour of zloty financial markets leads to greater vulnerability of domestic asset prices to international developments (extreme case: contagion effect).

The decision to make the zloty externally convertible was an important milestone. The immediate effect was a dynamic development of the FX swap market – the prime short-term instrument for investment. Swaps are used to create synthetic deposits as there are still restrictions on investing in the short-term deposit market in Poland. Even after liberalisation of short-term capital flows, dramatic changes in the structure of markets are not expected as deposits acquired by Polish banks from non-residents are subject to obligatory reserve requirements (FX swaps are not). Another reason is that FX swaps are exposed to much lower credit risk compared with interbank deposits, and the existing swap market is more liquid than the interbank deposit market.

VI. Trends in the financial sector in the context of integration with the EU

The trends in the Polish financial sector are dependent on a number of factors, including the situation in the domestic and global economy, the fiscal and monetary policy mix, the strategy of the Government preparing for accession to the EU, and the strategy of the large foreign financial groups which own most of the financial institutions in Poland. The insurance, banking and pension fund sectors have clear potential for growth, mostly domestic. However, due to geographical proximity and past and present economic contacts and links to former Soviet Union republics, eastward expansion cannot be ruled out. Such directions would be mostly dependent on foreign owners of financial institutions in Poland.

In the analysis of trends in the financial sector, developments in the banking sector are of greatest importance, given its dominant position in the financial sector.

1. Privatisation and inward internationalisation

As noted earlier, the privatisation of the banking sector is a gradual process that started in the early 1990s and that has accelerated over the last two to three years. As already mentioned, in recent years Poland has proved to be an extremely open economy, and has absorbed substantial FDI within the banking sector. This trend has led to 68% of commercial banks and over 70% of banking assets being controlled by foreign investors at the end of 2001, which are very high figures by EU standards. Today, the majority of the banks and most banking assets are owned by international banks with high ratings and a solid financial position.

The most active investors in the Polish banking sector are from the EU countries (Table 7); this constitutes one of the economic factors integrating the Polish banking industry with that of the European Union, even prior to Poland's formal accession to the EU.

2. Consolidation

The entry of strategic investors from abroad has made the Polish banking sector increasingly competitive. With 71 commercial banks and 642 co-operative banks, Poland has too many small banks, and competition is increasingly compelling them to merge to survive. The industry is already fairly highly concentrated, as described earlier. However, even large banks are likely to consolidate further in the longer term, particularly if their foreign strategic investors are themselves involved in mergers.

The relative weight of non-interest income rose from less than 30% in 1997 to almost 50% in June 2001. Fee income, and also recently income from FX and derivatives trading, are contributing more and more to overall earnings.

Table 7: Share of commercial bank assets held by foreign investors in Poland
(30 June 2001)

Source of capital	Total assets of Polish banks controlled by foreign investors, EUR million	Share of total commercial bank assets held by foreign investors (%)	Authorised capital held by foreign parties, EUR million	Share in authorised capital of all commercial banks (%)
USA	10,662.1	10.4	289.6	14.5
Germany	12,068.5	11.8	377.0	18.9
The Netherlands	5,748.3	5.6	76.2	3.8
Ireland	5,644.5	5.5	173.4	8.7
France	2,162.6	2.1	128.3	6.4
Austria	7,344.7	7.2	104.6	5.2
Belgium	6,905.0	6.7	140.6	7.0
Portugal	4,631.9	4.5	100.9	5.0
Sweden	160.6	0.2	9.8	0.5
Italy	17,018.0	16.6	39.4	2.0
Denmark	119.9	0.1	10.7	0.5
Czech Republic	223.4	0.2	13.2	0.7
South Korea	665.4	0.6	26.4	1.3
Total	73,355.0	71.5	1,490.1	74.5

Source: National Bank of Poland

3. Preparations for EU membership

The ongoing efforts of Poland's government, central bank and financial services industry related to future membership of the EU involve not only a very advanced implementation of the EU acquis communautaire relating to free flow of capital and services, as well as to credit institutions or the insurance sector. They also involve measures to reinforce the stability and strengthen the capitalisation of the whole sector and to improve the quality of the legal, judicial and technological infrastructure. These endeavours aiming to improve the quality of the financial sector, its standards, transparency, and efficiency and wealth combined with substantial improvements in effective supervision of various segments of the financial market,[26] should result ultimately in meeting the Copenhagen criteria of broad economic and infrastructure integration.

An open attitude to inward FDI in the financial sector, coupled with substantial improvements in corporate governance, risk management practices and market transparency, will assist in the practical integration of Polish markets with those of the EU.[27] An enormous effort is today being undertaken in the financial services industry to reinforce capital positions, introduce organisational efficiencies and improve service quality, not to mention to upgrade the IT infrastructure. The results achieved are already apparent and will continue to be demonstrated through the growth of size and quality of financial intermediation and better public access to modern financial services. These improvements should help Poland's financial institutions operate in the European Union and contribute to financial stability in Europe.

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[26] *IMF (*2001).

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Romania's financial sector in transition and on the road to EU accession

Cristian Bichi and Dorina Antohi

National Bank of Romania

I. Introduction

Both empirical findings and theoretical studies indisputably show the positive link between the efficient functioning of the financial system and economic growth. The key role of financial development in the growth process derives from the fact that, by reducing information asymmetries and facilitating economic transactions, financial intermediaries "facilitate the allocation of resources over time and space".[1] Therefore, the transition process of the formerly centralised economies – including Romania – also sought to pay special attention to the reform of both the financial system and financial markets.

Initially, the reform of the Romanian financial system advanced only gradually, but the pace accelerated considerably from 1997 onwards. The measures adopted so far have mainly consisted in restructuring and privatisation of some state-owned banks, closing down insolvent private banks and investment funds, strengthening regulation and supervision of financial institutions, foreign exchange market liberalisation and adoption of full current account convertibility of the local currency.

Although these actions helped the financial system to recover, they were not able to root out the delays accumulated previously, the system's operation proving to be strongly conditioned by the implementation of reform in other economic sectors, including at the macroeconomic level. Under these conditions, the improvement in macroeconomic performance during the past two years (the acceleration of economic growth and, above all, the progress in disinflation) essentially contributed to the increase in financial markets' efficiency and to putting financial intermediation on an upward trend.

II. Institutional overview of the Romanian financial system

The financial system in Romania is composed of 41 banks, 925 credit co-operatives, 4,439 credit unions, 125 brokerage houses, 22 investment funds, 5 financial investment companies and 73 insurance companies (Table 1). There are also other financial institutions such as leasing companies and investment management companies. Two stock exchanges and a number of exchanges dealing in commodities and foreign currency forwards and futures also operate in Romania.

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[1] Khan and Senhadji (2000).

Table 1: Structure of the financial system
(as of end-2000)

	Number of institutions	Assets (in EUR million)	Share in assets (in percent)
Commercial banks	41	9,669.0	90.5
Credit cooperatives	925	n.a.	n.a.
Brokerage houses	125	10.70	0.10
Investment funds	22	17.70	0.17
Financial investment companies	5	474.50	4.44
Insurance companies	73	385.90	3.61
Credit unions	4,439	126.70	1.18
Total financial system	5,630	10,684.5	100

Source: NBR, NSEC and ISC data

The responsibility for the prudential supervision of the various components of the financial system is assigned to sector-specific institutions:
– The National Bank of Romania (NBR), the country's central bank, supervises the banks in accordance with the provisions of the 1998 Banking Act. However, the capital markets regulator supervises some of the securities activities of the banks. These activities must be conducted via a separate subsidiary of the bank. The central bank has also been given supervisory authority over the credit co-operatives and their central bodies through Emergency Ordinance No. 97/2000.[2]
– The National Securities and Exchange Commission (NSEC) is responsible for the supervision of the capital markets and their participants.[3]
– The insurance sector is supervised by the Insurance Supervision Commission (ISC), an autonomous entity established under the terms of Law No. 32/2000.[4]

III. Banking sector

The banking sector represents the most important financial intermediary in Romania with around 90.5% of the assets of the financial system at the end of 2000. The dominance of the banking sector is explained by the following factors: the relatively important position held by banks compared with other financial intermediaries during the central-planned economy period, the underdevelopment of capital markets and the high risks characteristic to the transition period that makes it difficult for enterprises to raise funds by directly taping the capital markets.

Following the establishment of a two-tier system in 1991, the Romanian banking system has expanded rapidly. The number of banks has increased from 12 entities existing at the date

[2] According to this Ordinance, the cooperative credit institutions have to be licensed by the NBR before being subject to specific prudential rules comparable with those imposed on banks. The entities which will not meet the licensing requirements established by NBR will be liquidated.

[3] Under the Law No. 52/1994, NSEC supervises public offers of securities, securities intermediaries, investments funds and their management companies, depositories, stock exchanges, external independent auditors and investment advisors, independent registries and commodities exchanges.

[4] ISC, which is the successor of a specialised department within the Ministry of Finance, has been granted licensing, de-licensing, regulatory and supervisory powers in regard of insurance, reinsurance, insurance-reinsurance companies, mutual insurance entities and insurance brokers.

Table 2: Number of banking entities
(1990-2001)

	1990	1994	1996	1998	1999	2000	2001
Number of banks	12	27	40	45	41	41	41
Romanian incorporated banks	7	20	31	36	34	33	33
Banks with majority public ownership of which:	5	7	7	7	4	4	3
– directly owned by the Ministry of Finance (state-owned)	5	1	1	1	1	1	1
– directly owned by APAPS [1] (state-controlled)	-	6	6	6	3	3	2
Private-sector banks, of which:	2	13	24	29	30	29	30
– with majority Romanian equity	2	8	14	13	11	8	6
– with majority foreign equity	-	5	10	16	19	21	24
Branches of foreign banks	5	7	9	9	7	8	8

Source: NBR
[1] APAPS – Authority for the Privatisation and the Administration of the State Participation.

of promulgation of the 1991 Banking Law to a peak of 45 entities as of December 1998; one year later, as the result of the consolidation process, the number of banks decreased to 41 and has remained stable in the last period (Table 2).

At present, the banking system is composed of two state-controlled banks (Romanian Commercial Bank and Eximbank), a state-owned bank (CEC), eight branches of foreign banks and 30 banks with private Romanian and/or foreign capital. The Savings Bank (CEC) continues to enjoy a special position within the domestic banking system, its share capital being directly owned by the Romanian State through the Ministry of Finance. It is also the only bank benefiting from a full deposit guarantee from the public authorities; all other banks participate in a limited deposit protection scheme, which is privately financed. The turning point as regards the ownership structure of the Romanian banking system was registered during the 1998-1999 period when the number of state banks decreased from 7 to 4. This contraction was the result of privatisation of two majority state-owned banks (Banc Post and Romanian Development Bank) and the closure of another, Bancorex. The sale of another large majority state-owned bank (Agricultural Bank) to strategic foreign investors in 2001[5] has also contributed to the further increase of the weight of the private sector in the Romanian banking system.

At the end of 2001, the two majority state-owned banks and the Savings Bank accounted for 41.8% of the total assets of the banking system. Foreign controlled banks and branches of foreign banks, attained a market share of 55.2%. The private banking sector accounted for 58.2% of the banking system assets (Table 3). The privatisation of Romanian Commercial Bank (BCR), which is planned for 2002, will represent another dramatic change in the ownership structure of the banking system, as it will bring the market share of private sector above 85%.

At the end of 2001, the total assets of the Romanian banking system amounted to €12,367.6 million (29.9% of GDP). These figures indicate that the sector is still small compared with other transition countries. One of the reasons explaining the lack of financial depth in Romania is the major restructuring of the banking system between 1998 and 2000, in

[5] On July 23, 2001, 98.8% of the share capital of Agricultural Bank passed into the hands of a consortium of foreign private investors (Raifeisen Zentral Bank and Romanian-American Investment Fund).

Table 3: Development and distribution of bank assets
(Share in total assets, end of period)

	1998	1999	2000	2001
Type of bank				
1. State-owned or majority state-owned, of which:	71.0	46.8	46.1	41.8
– Romanian Commercial Bank (BCR)	19.8	29.7	29.9	31.3
– Agricultural Bank	7.9	4.4	4.0	-
– Savings Bank (CEC)	9.1	10.0	9.8	8.6
– Eximbank	1.8	2.7	2.5	1.9
2. Domestic private	9.0	5.7	3.0	3
3. Foreign-controlled	14.3	40.5	43.1	47.3
4. Romanian legal entities (1+2+3)	94.3	92.9	92.2	92.1
5. Foreign branches	5.7	7.1	7.8	7.9
6. Total banking system	100	100	100	100
Banks with majority Romanian capital (1+2)	80.1	52.5	49.1	44.8
Foreign controlled and Foreign branches (3+5)	20.0	47.6	50.9	55.2

Source: NBR

particular the closure of Bancorex and the transfer of large pools of non-performing loans from Bancorex and Agricultural Bank to an asset management company-AVAB.

The significant increase in the registered capital of the banking system between December 2000 and December 2001 (+94.5% in nominal terms) is the result of the authorities' proactive policy in this respect. The additional amount invested in the registered capital of the banks operating in Romania reflects, inter alia, the recapitalisation with public funds of Agricultural Bank under its restructuring and privatisation process, as well as the finalisation of the first round of the across-the-board increase of the minimum registered capital of banking institutions mandated by NBR Rules No. 9/2000.

Table 4 shows the foreign equity participation in the share capital of Romanian banks, as of end 2001.

Table 4: Foreign equity participation in the share capital of banks
(End of 2001)

Country	Foreign equity participation	
	Percentage in the total private foreign share capital	Percentage in total share capital
Austria	39.5	21.7
Netherlands	15.1	8.3
Greece	11.1	6.1
U.S.A.	8.2	4.5
Turkey	7.5	4.1
France	6.3	3.5
Republic of Korea	4.0	2.2
Italy	2.0	1.1
United Kingdom	1.5	0.8
Monaco	1.0	0.6
Portugal	0.8	0.4
Other countries and EBRD	3.0	1.6
Total	100	54.9

Source: NBR, Trade Register

Table 5: Number of banking units and employees

	31.12.1999	31.12.2000
Average number of employees	50,784	44,802
Number of banking units	2,923	2,747
Number of inhabitants per banking unit	7,682	8,165
Number of inhabitants per bank employee	442	500
Number of employees per banking unit	17	16
Total assets per banking unit (EUR million)	3.15	3.52

Source: NBR and authors' estimates

Despite the increase in the number of banks, the banking sector remains highly concentrated, with 55.5% of banking assets held by the top three banks (Romanian Commercial Bank, Romanian Development Bank and Savings Bank-CEC) at the end of 2001.

The rapid expansion of the Romanian banking industry in the period that followed the creation of a two-tier system led to a rapid growth in the number of the bank employees and banking units. In the last two years, these evolutions were reversed (Table 5), reflecting the ongoing consolidation of the banking market and a tendency towards increased reliance on Internet banking and ATM's. By end-2000, the number of banking units operating in Romania decreased to 2,747, and the average number of bank employees decreased to 44,802.

One of the main problems faced by the Romanian banking system prior to 2000 was the high incidence of non-performing loans, despite successive rounds of cleaning up banks' balance-sheets. The problem of the bad loans was further complicated by inadequate provisions for most of the loan portfolio and unrealistic collateral valuation. The share of non-performing loans (loans included in the "doubtful" and "loss" categories) in total loans increased to a peak of 58.5% at the end of 1998 compared with around 44% in 1996 (Table 6).

The increase in bad loans was localised mainly in two state-owned banks (Bancorex and Agricultural Bank). In 1999 and 2000, the Romanian authorities took decisive measures in order to establish a healthy banking industry: Bancorex, previously the country' largest bank,

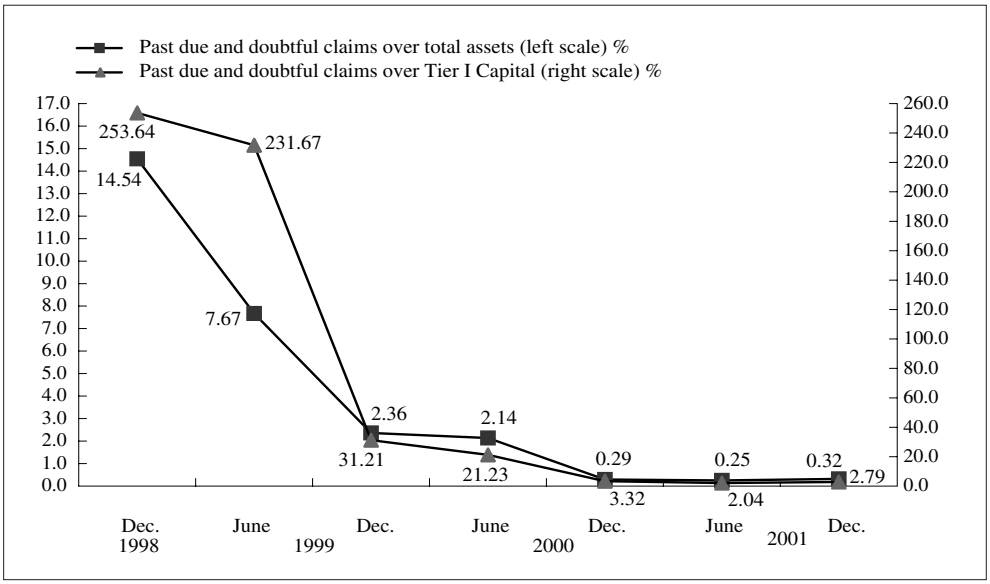
Table 6: Development of non-performing loans

(End of period, percent)

A. Non-adjusted						
	Total	Standard	Watch	Substandard	Doubtful	Loss
1996	100	11.1	27.7	18.2	10.7	32.9
1997	100	13.6	21.3	12.5	9.9	42.6
1998	100	12.5	15.8	13.2	7.7	50.8
1999	100	24.6	22.8	17.3	6.7	28.7
2000	100	93.6	1.2	1.4	0.7	3.1
2001	100	96.0	0.6	0.9	0.3	2.2
B. Adjusted						
	Total	Standard	Watch	Substandard	Doubtful	Loss
2000	100	92.8	0.3	1.7	0.7	3.9
2001	100	95.2	0.8	1.0	0.4	2.7

Source: NBR

Chart 1: Past due and doubtful claims over Tier I capital and total assets



was liquidated, a restructuring plan was initiated for Agricultural Bank to allow for its subsequent privatisation, an asset management agency (AVAB) was established to help recover bad loans from the banking system, and more stringent rules on loan classification and provisioning were introduced[6]. As a result of these measures, the quality of the loans portfolios of banks improved substantially. At the end of 2000, the share of non-performing loans in total loans decreased to 3.8%; this share was 2.5% at the end of 2001. The volume of past due and doubtful claims in the banking sector in relation with Tier I capital and total assets also decreased significantly (Chart 1).

Largely as a result of the restructuring of the state-owned banks, the capital ratios of the banking sector in Romania strengthened significantly since 1999. The most dramatic increase was in the capital adequacy ratio (CAR), from 17.9% in 1999 to 26.9% in December 2001; these levels exceed comfortably the 12% limit required by the solvency regulations currently in place. During the same period, the leverage ratio (Tier 1 Capital/Total Assets) also increased from 7.6% to 11.6%.

In light of the portfolio problems and the associated need for provisioning, profitability of the banking sector was week for a number of years. In 1999, the banking sector registered after-tax losses of ROL[7] 2,306.6 billion (€125.8 million). One year latter, the measures taken by the authorities to address the bad loan problem resulted in an aggregate after-tax profit amounting to ROL 3,200.3 billion (€132.7 million). Reflecting the improvement of the financial position of banks, at the end of 2000, the return on assets (ROA) and the return on

[6] The new rules (NBR Rules no. 2/2000) apply to all Romanian corporate banks. They deal not only with the classification of credits granted to non-bank customers like in the past, but they take into account also interbank credits and placements. The rules classify the credits and placements in five different risk categories (standard, watch, substandard, doubtful and loss) by applying simultaneously two criteria: the debt service and the initiation of legal procedures. In order to calculate the appropriate level of provisioning, the banks are required to use risk-adjusted values for their assets classified in the four risk categories.

[7] ROL = romanian leu.

equity (ROE) registered positive values of 1.5% and 12.5% respectively. In December 2001, these indicators amounted to 3.2% and 21.4%.

IV. Non-banking sector

1. Money market and foreign exchange market

1.1 Money market

Romanian money market functioning was characterised until 1999 by distortions that hampered fulfilment of its role as first link of the monetary policy transmission mechanism. However, during the last two years money market functioning improved substantially due to the decisive contribution of banking system restructuring, wider use of monetary policy market instruments, diversification of budget deficit financing sources (through the increase of the weight of external and non-bank domestic sources) and improvement of macroeconomic environment.

Money market segments and liquidity

The money market was initially limited to interbank deposits and investments in the primary market of T-bills but, during the last years, gained depth. At present, its main segments are the unsecured deposits, reverse transactions and outright sales and purchases of government securities. Interbank deposits continues to be the most widely used instrument (transactions volume amounts to 47.6% of GDP). This is in fact the only instrument quoted for maturities ranging from one day to 12 months (including through fixing). However, effective transactions are performed up to a maximum maturity of three months, the most frequent maturity being that of one day. Two weeks, one month and three month maturities are used almost exclusively by the central bank.

Repurchase agreements were first used officially by the NBR starting August 2000; they consist almost exclusively of reverse repo transactions carried out through auctions, with maturities ranging from one week to one month. Evaluation of banks-non-banking clients segment is difficult due to limited information regarding T-bills transactions (market statistics treat a reversible transaction as two separate outright operations). However, available information suggest that most of the transactions performed on the secondary market are reversible, the "buy and hold" approach being adopted rather by the clients that invest directly on the T-bills primary market. At present, there are no quotations for repo operations. The non-collateralised deposits segment continues to be the most liquid with the most frequent maturity used being one day. The market is thinner for the one-week maturity and the transactions with longer maturities are rather rare (excepting the sterilisation operations carried out by the central bank).

The low liquidity of over one week maturities is due mainly to the high volatility of interest rates; at present, its main sources are the characteristics of the minimum reserves mechanism (limited flexibility, i.e. daily reserves may not exceed by more than 10% the required level and the maintenance period is two weeks) and the volatility of the Treasury account (held at the central bank).

The only market that gained depth constantly is the T-bills market, the secondary market (comprising outright and reversible operations with national currency denominated T-bills) increasing by ten times its weight in GDP during the last four years (37.6% at the end of 2001), including those effects due to the operations performed by the monetary authority. In the last five years, the ratio primary market/secondary market climbed up from 1:0.3 to 1:5.9.

Money market efficiency

Assessed by the average bid-ask spread of market's participants of the most liquid instrument, interbank money market efficiency is relatively low. However, the gap between the monthly averaged BUBID-BUBOR[8] overnight quotations decreased almost continually in the last years (from 38.28 percentage points in 1999 to 7.8 percentage points in 2000 and to 7.1 percentage points in 2001). The high level of inflation rate, the presence of the two maintenance periods in one month within the minimum reserves mechanism and the particularities of the taxes and charges system (monthly VAT and excise tax payment at the end of the month; quarterly payment of the profit tax) are the main sources of the large gap between the two rates.

Market participants

The central bank holds an important position on the deposits market due to the excess liquidity sterilisation operations. As during the last years, the NBR was active almost exclusively in the case of the maximum maturities on the market, the deposits taken by NBR represented, as an average in 2001, about 19% of the transactions (compared to 28.2% in 1997) and 88.5% of the outstanding volume (compared to 37.1% in 1997). The 41 commercial banks operating at present on this market are to be joined in the future by the central houses of the credit co-operatives. Market concentration is still high especially on the supply side, five commercial banks offering about 50% of the marketed resources. On the demand side, excluding the central bank, concentration diminished significantly by the disappearance of the big banks with liquidity problems, a number of five banks taking about 40% of the interbank deposits.

NBR's position of major player is maintained also on the T-bills secondary market. Its operations consist mainly of reverse repo with maturities ranging from one week to one month with the weight reaching about 36%. The other participants are banks and their clients (mainly non-financial investors, but also insurance firms, securities companies and mutual funds).

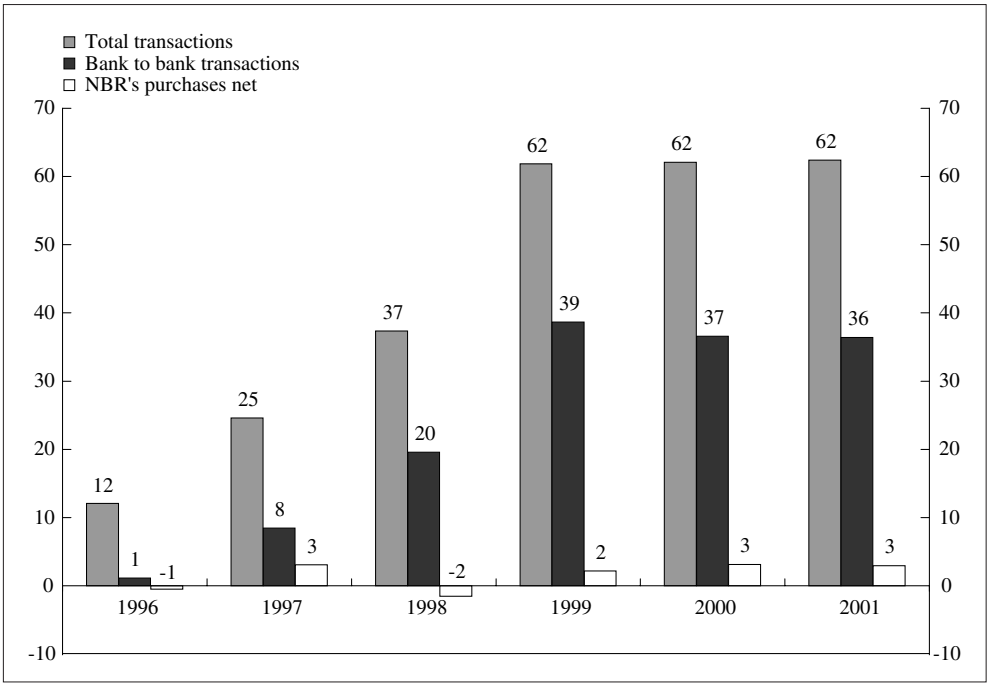
1.2 Foreign exchange market

The foreign exchange market consists of two main segments however unequally sized: the interbank market and the exchange bureaux market. In the first case, all banks are authorised (since 1997) to act as dealers. According to the regulations in force, authorised dealers on the interbank market have to display (bid/ask) indicative exchange rates, spot and forward rates for at least six currencies. Forward quotations are set for one-month, three-month, six-month, nine-month and 12-month maturities. The second segment of the currency market – the exchange bureaux – is much smaller. The parallel segments ("the black market") decreased and almost died out following the foreign exchange market and the exchange rate liberalisation in 1997.

On March 25th 1998, Romania notified the IMF's board of its acceptance of the obligations of Article VIII of the Articles of Agreement, implying the elimination of restrictions on

[8] BUBID = Bucharest Interbank Bid Rate; BUBOR = Bucharest Interbank Offered Rate. These rates are calculated and published daily at 11 AM by averaging selected 10 banks' quotations.

Chart 2: Foreign exchange interbank market turnover
(Ratio of total transactions to GDP)



Source: NBR

current account operations. This step brought about favourable conditions for the forex market to deepen at the level of both interbank market and exchange bureaux market.

Hence, even under the conditions of maintaining the restrictions on capital movements, in the past years, the depth of the foreign exchange interbank market has substantially increased (Chart 2), along with the efficiency of its operations: the average daily turnover rose from €30.2 million in 1997 to €108.9 million in 2001, while the bid-ask spread has fallen significantly. The relatively fierce competition posed by foreign banks on this market and the growth of capital inflows since 1997 have acted as an incentive on these developments. In addition, the segmentation of the currency market has diminished and its degree of integration increased.[9] Presently, the spread between the exchange rate of the exchange bureaux and the official rate (determined on the basis of quotations of ten banks) is averaged below 1.5%.[10]

As for the currencies traded, although the share of the euro has slightly increased, it remains far below to the share of USD transactions (about 75%). As a matter of fact, this structure represents one of the main reasons for maintaining the USD as the reference currency for the official exchange rate of the ROL. Under the managed float regime, the

[9] The concentration of the currency market is high, as the five most active banks accounted for more than 57% of turnover in 2001.

[10] Spot transactions accounted for more than 95% of total operations, while 1-month forward transactions (very low) prevailed; swap operations performed by the NBR are discontinuous and there is no information on swap operations performed by banks with other operators.

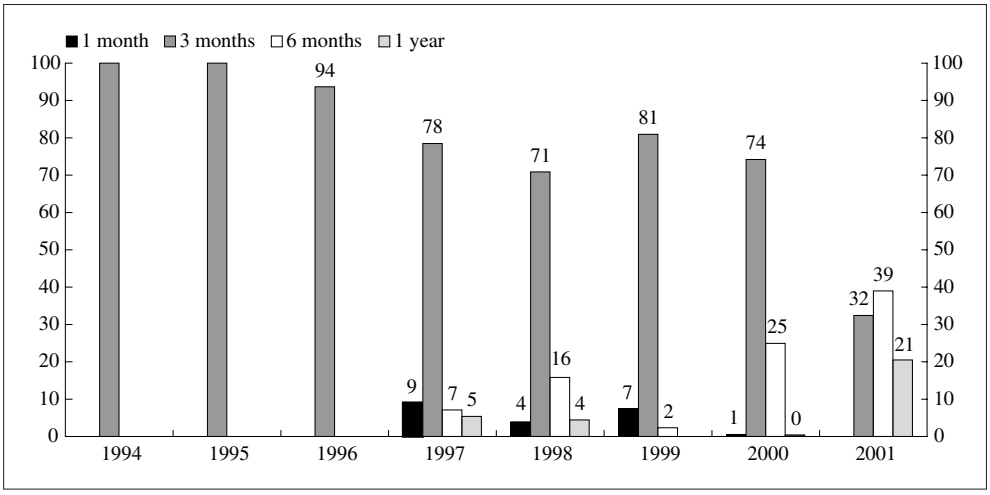
exchange rate is determined in the market as a result of the supply/demand ratio and the central bank only intervenes in order to avoid wide fluctuations. In the past years, due to the quasi-permanent foreign exchange surplus the NBR was compelled to intervene massively in the currency market in order to prevent a significant increase in real terms of the appreciation of ROL against USD, but also against EUR (as it occurred in 2000).

2. Fixed income market

The Romanian economic environment was not favourable to bond market development. The high degree of macroeconomic instability and uncertainty was the main obstacle for companies financing through bonds issuing. At the same time, the weak financial discipline (that allowed for the arrears accumulation) and, in certain periods of time, the access to subsidised loans diminished the interest of commercial companies in this type of instrument. Consequently, the overwhelming majority of traded instruments consist of Treasury Bills and Treasury Bonds issued both to finance the budget deficit and to restructure the banking system.

Resources necessary for financing the budget deficit were raised both in national currency and in foreign currency, the outstanding volume of T-bills, T-bonds and so called "Treasury Certificates" (non-marketable instrument dedicated exclusively to households, issued on tap with maturities of three and six months) representing between 2.8% of GDP in 1997 and 5.3% of GDP at the end of 2001, respectively. As these instruments were bearing fixed interest rates, the structure by maturity of the T-bills denominated in national currency reflected closely the evolution of inflation rate. Thus, if during 1994-1996 the only bills with greater than three months maturity were those issued in foreign currency (maximum maturity 18 months), the progress of disinflation process in the last three years allowed for the extension of maturities, through the increase of the weight held by the six months to one year maturities (Chart 3) also in the case of instruments denominated in national currency.

Chart 3: Maturity structure of treasury bills denominated in domestic currency
(Percent share in total issues)



Source: NBR

Government bonds in circulation consist mainly of instruments issued with a view to restructuring the banking system (mainly in 1997 and 1999, their weight in GDP amounting to 3.2% and 4.2%, respectively); these are variable interest rate bonds with maturities from two to five years.

National currency issuances for budget deficit financing were made through NBR (acting as agent), while the participants in the primary market were the commercial banks. Issuances in foreign currency were also made with some commercial banks acting as agents, the market participants being the same. Until the introduction of the new regulation (2002) the secondary market was exclusively an OTC type market, the only authorised intermediaries being the banks. The new regulation will allow, additionally, for the transacting at the Bucharest Stock Exchange (BSE) of some of the bonds and will enlarge the sphere of secondary market intermediaries to include also the securities companies.

3. Stock market

At present, two exchanges operate in Romania: the Bucharest Stock Exchange (BSE or BVB in Romanian) and the OTC market (RASDAQ). The BVB, established in 1994 with the support from the Romanian central bank, is modelled after the Alberta Stock Exchange of Canada. It is an intermediated exchange with 110 members (only brokerage houses members of the BVB Association) and 67 listed securities (end December 2001). Currently, stocks issued by private or state-owned companies represent the main products traded at BVB. Public offerings and initial public offerings are also executed through the stock exchange system. End-November 2001, two issues of municipal bonds started trading at the stock exchange. Additionally, corporate bonds, Treasury bonds and Treasury bills trading is available, but no such products are listed for the time being at the BSE. Trading at BSE is conducted electronically, with all securities dematerialised. The evolution of selected indicators regarding the activity of the BVB is presented in Table 7.

The over-the-counter exchange RASDAQ was created in 1996 to allow for the introduction in the capital markets of the shares of around 6,000 privatised companies, which resulted from the mass privatisation scheme.[11] The RASDAQ market has the technical ability to list all these companies on its system, but for many of such companies there is no trading. In this respect, it should be noted that in 2001 in the system were traded only 2,739 publicly

Table 7: Bucharest Stock Exchange: activity indicators

	1995	1996	1997	1998	1999	2000	2001
Number of listed companies	9	17	75	126	127	114	65
Market capitalization (EUR million)	78	48	575	360	315	392	1,381
Annual turnover (EUR million)	0.7	4.2	230.3	172.2	117.4	94.1	145.3
Turnover rate (%)	-	6.2	72.5	36.9	20.2	25.5	15.8
P/E ratio (whole market)	-	-	10.7	8.2	8.8	4.0	4.9
Price/nominal value ratio	-	-	-	0.4	0.6	0.4	0.5
Dividend yield (%)	-	-	-	10.7	7.8	7.5	6.7

Source: BSE Annual Report 2001, authors' calculations

[11] It is based on an automatic trading system, which is administered by a limited liability company (RASDAQ S.R.L) established by the Romanian Association of Securities Dealers. This system uses a customised version of the Portal program designed for the Nasdaq Stock Market in USA.

tradable securities. During the same year, 81 new companies were listed on the RASDAQ market, while 455 companies were de-listed. The market capitalisation at RASDAQ at the end of 2001 was around ROL 32,414 billion (2.8% of GDP), representing an increase of 60% over the previous year in ROL.

V. Functioning of the financial sector

1. General features

In Romania the reform of financial sector was too gradual, mostly in the first half of the transition period; it was seriously slowed down not only by the hyper-centralised and distorted economy inherited from the former regime, but also by the stop-and-go approaches of economic policies applied. Due to accrued setbacks of both reforms at microeconomic level and macroeconomic stabilisation, the major steps that have been taken during the last years towards consolidating the financial system could not eliminate the structural weaknesses and fragility that undermined the efficient functioning of the system.

These weaknesses were perpetuated during the transition by several adverse factors, including:

– rudimentary character of the financial system inherited from the former regime;
– slow pace of real economy restructuring and of privatisation (during year 2001, the private sector share of GDP was 67.1%) that paved the way to spreading and deepening financial indiscipline (increase of payment arrears) and delayed the establishment of a critical mass of sound companies able to function and finance themselves under market competition;
– persistence of high and volatile inflation, which perpetuated uncertainties, combined with long periods of economic decline;
– ambiguous ownership rights, legal framework instability, sometimes excessive taxation;
– inefficiency of the legal system warranting creditor's rights and of the bankruptcy institution as well as inadequate accounting practices;
– adverse influence of the instruments used in order to sterilise the foreign capital inflows;
– shortcomings of the regulation and supervision system of financial institutions and markets;
– delays in restructuring and privatisation of large state-owned banks which were placed under financial pressure while being used as instruments in attaining economic and social objectives.

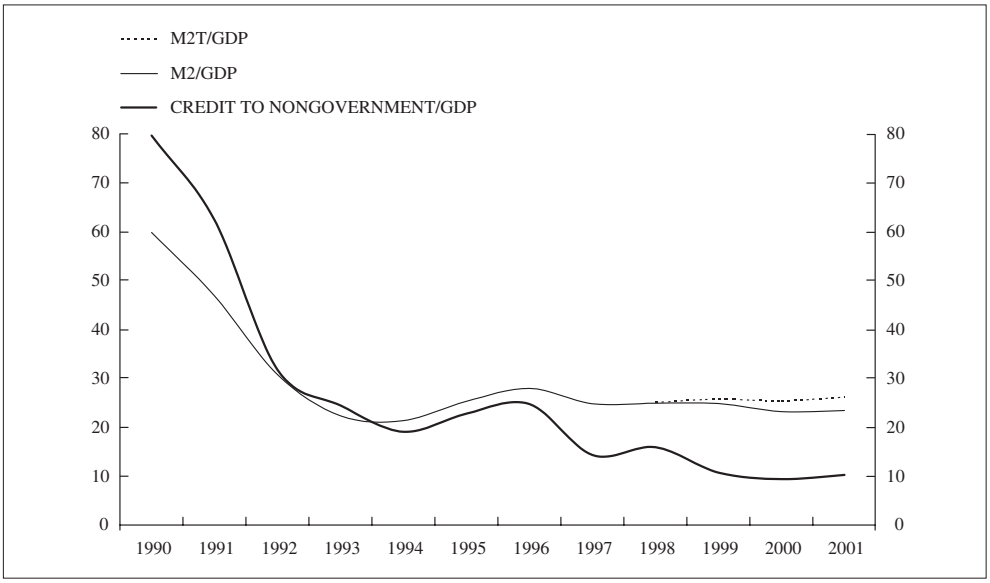
During the last 4-5 years, radical measures of structural reform were taken, such as: (i) foreign exchange market liberalisation, (ii) achieving full current account convertibility, (iii) dissolution by merging of the largest state-owned bank and privatisation of other three banks, (iv) applying bankruptcy proceedings on several banks and investment funds, (v) strengthening prudential regulation and supervision of financial institutions and markets. These measures created the premises for improving and strengthening the financial system.

However, though from institutions and regulations point of view the last years achievements preceded the similar developments in other economic sectors, as regard the functioning of the financial system, the progress was much slower. Thus, fulfilment of such tasks as financial intermediation and conveyor of monetary policy impulses that were incumbent upon the financial system were seriously undermined by some of its features:

– low financial depth of the economy (Chart 4), and low degree of diversification and sophistication of the financial instruments;
– segmentation, high concentration and low competition of the financial market;

– incipient stage of capital market development;
– low participation of foreign capital in financial transactions (capital control persists);
– prevalence of very short term financial instruments; the main exceptions are the T-bonds issued by the Ministry of Finance for bank restructuring and the T-bonds denominated in foreign currency;
– massive presence of the Treasury and the central bank on the money market (due to the need to sterilise foreign capital inflows);
– increased volatility of financial market instruments yield; volatility of the exchange rate of the ROL; high real positive rates of the money market instruments and large spread between lending and deposit interest rates in the banking system; prevalence of variable interest rates on the credit and deposit markets.

Chart 4: Financial depth
%; end of period



Source: NBR

Nonetheless, the picture improved substantially throughout 2001. During this year money market distortions lessened and the interest rate mechanism improved. At the same time, the integration between money and foreign exchange segments of the financial markets strengthened. Also, the segmentation of the money market – credit and bank deposits markets included – diminished. The T-bills secondary market faced a substantial progress, mainly regarding its volume, and is expected to further advance by the entry into force in 2002 of the new regulation on the T-bills operations. This year too, the average maturity of sterilisation instruments used by the central bank and of the T-bills increased and the volatility of money market interest rates curtailed. Financial depth has recovered.

Under these circumstances, the progress made towards macroeconomic stabilisation can be expected to give a new momentum to the development of the financial system, to alleviate or even eliminate the rudimentary and immature aspects of this important sector of the economy.

2. Financial intermediation

During the transition period, the Romanian economy underwent a severe demonetisation and disintermediation process. This process was noticed mainly at the level of the banking system that dominated the financial market. The loss in financial depth of the economy was reflected both by monetary aggregates (M2 weight in GDP dropped from 60% in 1990 to 23.2% in 2000) and, especially, by non-governmental credit (dropping from 79.7% in 1990 to 9.4% in 2000).

2.1 Money demand

Money demand deteriorated strongly in the first years of transition. After a relative recovery (in 1995-1996), it again contracted in 1997 and subsequently maintained a low and relatively unstable level. Persistence of high and volatile inflation and the economic decline (which only stopped in 2000) prevented the money demand recovery during the last years. On the background of uncertainties and relatively low credibility of economic policies, dissaving in ROL appeared along with increased dollarisation; the weight of foreign exchange deposits in M2 increased from 28.5% at the end of 1997 to 42.8% in December 2001, its surge being partially caused by the strong depreciation of the ROL. Denominated in US dollars, these deposits increased in the same period by 66.3%, while the ROL component of quasi money (household savings plus time deposits) diminished in real terms by 12% in the same period of time. Also, in the context of unpredictable future developments, the population preferred very short maturity saving instruments (mainly one month).

Beginning in 2000, money demand was also affected by the rapid increase in non-banking saving due to the introduction of a new financial instrument – T-bills in ROL and foreign currency – which were very attractive for the population (for the ROL denominated T-bills the interest rates are higher than those for bank deposits). In recent years, legal persons also invested more in T-bills (in ROL and in foreign currency). The weight of Government securities held by the non-banking sector in GDP increased from 0.9% in 1999 to 2.7% in 2001. Thus, expressed by the M2T/GDP ratio (M2 plus T-bills outside the banking system) demonetisation is less abrupt, showing in 2001 a slight reverse tendency. The money demand recovery was mainly supported by the disinflation process and economic growth picking up.

2.2 Banking credit evolution

During the transition period, banking credit and especially non-governmental credit declined more steeply than broad money. The most significant shrinkage in credit to non-government/ GDP ratio took place in 1999 and 2000, following severe restructuring measures. These included the bankruptcy of a large state bank, restructuring in view of privatisation of another state bank (both having suffered from state involvement in their lending policy until 1997), bankruptcy of several private banks and enforcing of new legislation on provisioning and bad loans treatment. These measures resulted in taking over by the agency specially created for this purpose of a large bulk of bad loans from the portfolios of the two state banks (these represented 4.2% of GDP in 1999, 0.1% in 2000 and 0.1% in 2001) and in the removal from the monetary survey of the balance sheets of the bankrupt banks. At the same time, in 2000 a large volume of overdue credits in the portfolios of all banks (about 1.4% of GDP) was covered by the use of provisions. Under these circumstances, the weight of overdue credits in the total non-government credit shrank from 32.2% in 1998 to 14.8% in 1999 and to 2.5% in December 2000.

Excluding the effects of restructuring applied to banks' portfolios, in the last years, the feeble lending process to non-government is attributable both to demand and supply factors. On the demand side, tightening of the monetary policy drove the interest rates to an almost prohibitive level for investors, the widespread financial indiscipline allowing economic agents to use arrears as an alternative to bank financing. On the supply side, on the background of instability and slow pace of reforms in the real sector, banks became more prudent and risk – adverse. This behaviour was enhanced by the limited capacity and experience of banks to enforce contracts and collect debts (until this approach was adopted, banks accumulated a serious ballast of bad loans). As a result, banks showed an increased reluctance to extend credit. This behaviour was possible due to gain alternatives offered by speculations on the foreign exchange market (until mid 1999) and especially by zero risk and highly remunerative investments in central bank and Treasury instruments (deposits and T-bills). The Treasury was highly dependent on banks resources especially in 1999 and 2000 (until mid 2000, T-bills offered higher yields than non-government credit).[12] Non-government credit represented, under these circumstances, only about 39% of the domestic assets of banks.

Lately, the containment of gains opportunities by banks from these alternative investments[13] gradually forced banks to focus on the credit market. At the same time, as the macroeconomic environment improved, the curtailment of interest rates (whose real positive margin still remained very high) stimulated the lending process both on the supply and demand side. Thus, during 2001, current non-government credit recovered, increasing by 20% in real terms (end of December, from one year earlier). To a large extent, this is granted in foreign currency, the weight of credits denominated in foreign currency in the total non-government credit settled, for the last four years, at around 50-65%. The structure by maturity of the extended credits is the consequence of the last years' evolutions. Thus, the predominance of the very short maturity of bank liabilities and the high macroeconomic instability restricted lending on medium and long term, banks preferring very short maturity.

3. Role of the financial sector in the monetary policy transmission mechanism

During transition process to the market economy, the financial system often distorted the impulses of the monetary policy conducted by the National Bank of Romania. Despite the fact that in the last years these distortions were partially alleviated, they continue to be an undermining cause for the effectiveness of the monetary policy. Thus, in the first half of the 12 years of transition, majority state owned banking system and government involvement in lending policy biased significantly the allocation of resources. Though in the mean time this structure improved, the relatively high degree of concentration of the banking system persisted and continued to be one of the determinants of the large spread between the lending and deposit interest rates.

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[12] Thus, the weight of banks' investments in these two instruments in the total domestic assets of the banking sector amounted in 1999-2000 a level of about 21%; including banks' reserves with the central bank (the ratio for minimum compulsory reserves to the ROL deposits increased at the end of 2000 to 30% while that to foreign exchange deposits was 20%), the weight of all these investments was 39-42%.

[13] The arbitrage on the foreign exchange market was limited by a quasi-permanent surplus during the last two years, while on the monetary and T-bills market the interest rate dropped considerably, especially due to the access, during this year, to a massive external financing of the deficit.

Government involvement in the lending process and the poor internal governance of banks (some state owned but also private owned banks) led before 1997 both to the building up of bad loans (that fuelled the large interest rates spread) and to a poor external governance; the latter undermined the restructuring process of the debtors (mainly state owned capital companies) perpetuating the inefficiency and losses in the economy.

These aspects were much alleviated after 1997 when reforms at microeconomic level were applied and macroeconomic policies tightened, but distortions in the interest rate channel and especially the credit channel remained.

As regards the interest rates channel, it proved to be relatively more efficient in mobilising savings. It was nonetheless undermined, by the lack of competition among saving oriented financial instruments and by the weak confidence in the banking system; thus, bank deposits elasticity to interest rates was relatively low. At the same time, its efficiency was diminished by the high costs imposed on banks by the active use of minimum reserves mechanism as a steady sterilisation instrument of the permanent surplus of liquidity in the system (in 1999, minimum reserves ration was increased on three occasions from 15% to 30%). In order to preserve their high profit margins, banks preferred to diminish the yields offered to deposits, resulting in a larger spread between the lending and deposit interest rates. At the same time, the high level of the required reserves – constrained by the daily 110% ceiling – and of the excess liquidity discouraged the interbank operations, leading to a shrinkage of the money market and implied that the role of interbank interest rates as resources' marginal cost diminished.

Under these circumstances, the most effective channel of the monetary policy was the exchange rate, inflation proving to be very sensitive to it. However, the decision to adopt an exchange rate regime which will favour the lessening of inflationary expectations and the enhancing of the disinflation process, was restricted during the last years, especially by the much too slow pace of reforms aimed at increasing the external competitiveness of the Romanian economy. Consequently, the exchange rate regime adopted so far (managed floating) was preferred in order to support (by NBR's interventions) a depreciation of the ROL closed to the inflation rate. The exchange rate impact on the general price level showed not only through the price of imported goods, but also through the automatic indexation of several prices in the economy. At the same time, expectations regarding the exchange rate had a major influence on prices, to the point that, during the last years, the ROL depreciation and associated expectations were among the main determinants of inflation. Moreover, the central bank's interventions on the foreign exchange market aimed to sustain the ROL depreciation were the main channel leading to the – some times inflationary – increase in the money supply. Added to the credit reduction, the development of this channel resulted in an asymmetric liquidity allocation in the economy.

In 2001, interbank market interest rates declined significantly and financial instrument maturity (especially of the central bank and the Treasury) could be increased, thus contributing also to the decrease in the money market interest rates volatility. Moreover, the lending-deposits spread started to decline, mainly due to the initiation of a gradual reduction of the minimum reserve requirement ratio (to 27% from July and to 25% from October). Therefore, the interest rates channel became more efficient (including on the segment central bank - banks), markets segmentation being attenuated. One of the consequences of these improvements but also of the progress towards macroeconomic stabilisation was the activation of the credit channel in 2001. The phenomenon can also be explained by the increase in the credit supplied by banks on the background of decreasing gains from non-risk investments (with NBR and in T-bills).

VI. Trends in the financial sector in view of integration in the EU

Romania is ready to implement the *acquis communautaire* in the financial field by the date of accession in the EU.

In the area of banking, new laws – including a Central Bank Law, a Banking Act and a Bank Insolvency Law – were passed in 1998. These laws have brought Romanian regulatory framework closer to the EC banking directive requirements and international standards and best practices.

On this basis, a number of secondary regulations have been and continue to be issued by the central bank to progressively tighten prudential rules and address existing regulatory gaps. As a result, the arrangements for licensing were strengthened, new higher minimum capital requirements were imposed and the total capital adequacy ratio was brought from 8 to 12%. Stricter loan classification and provisioning rules came into force in October 2000, two complex regulations regarding liquidity and foreign exchange risk were adopted during the first nine months of 2001 and progress was made on strengthening cross-sectoral supervisory co-operation. At the same time, the supervisory capacity, still in a development stage, was further improved.

In the near future, in order to bring the regulatory framework in full compliance with the EU directives, the Romanian authorities intend to make some revisions to the banking laws and to issue new rules. The existing domestic regulations on own funds, solvency and large exposures of banks will be amended during 2002-2003. The provisions regarding consolidated supervision of credit institutions, capital adequacy of credit institutions and transparency of banking conditions regarding cross-border financial transactions are not yet incorporated into Romanian legislation and regulations. They will be transposed by the end of 2003. The principles of the "single European passport" and the "home country control" will enter into force at the date of accession.

In order to harmonise national legislation in the field of deposit protection with EU *acquis,* the Romanian authorities have already prepared a number of amendments to the existing Ordinance on the Bank Deposit Guarantee Fund. The amendments provide for the extension of the scope of deposit guarantee to some categories of legal persons and allow for the gradual increase of the deposit insurance limit. As of January 2007, the guaranteed amount of deposits shall be €20,000 per depositor.

In the perspective of EU accession, Romanian authorities intend to take further steps to complete their restructuring and privatisation agenda. The reform process of the banking industry will continue with the planned privatisation of BCR by end-2002. Restructuring efforts have also started for Eximbank and Savings Bank. The first phase of the consolidation of co-operative credit institutions has been concluded recently, with 107 credit co-operatives being forced to exit the system due to non-compliance with the preliminary licensing requirements. The remaining 795 credit co-operatives, under BNR monitoring, will continue their reorganisation efforts, in order to adjust to the provisions of two emergency ordinances issued during 2000.

Romania is currently undergoing a payments systems reform, aiming at establishing a new interbank payments infrastructure. To this end, the Funds Transfer and Settlement National Company (TransFonD) was established. The company is owned by the central bank and 28 commercial banks. The NBR has a 33% equity stake, while the rest of the share capital is divided in equal parts among the participating banks. The efficiency of the payment system will be increased through the implementation of an electronic interbank payment system comprising three components: (1) a Real Time Gross Settlement (RTGS) subsystem for large

value payments; (2) an automated clearing house (ACH) for small value payments; and (3) a subsystem for Treasury bills clearing, settlement and custody. The provisions of the directives on cross-border credit transfers, settlement finality and electronic payment media have yet to be implemented in the national legislation. These directives will be transposed through the adoption of a special law and through changes in the central bank's rules by the end of 2004.

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Financial sector situation and development in the Slovak Republic

Juraj Janosik and Lubor Malina

National Bank of Slovakia

I. Structure of the domestic financial sector

1. Number and types of banking institutions

The banking sector of the Slovak Republic consists of 19 banks, two branches of foreign banks and ten representative offices of foreign banks (Table 1). Out of these 19 banks, two are state banking institutions, three are specialised banks (building societies), and six banks have been authorised to conduct mortgage operations. Three institutions have recently been involved in bankruptcy proceedings, and in August 2001, the National Bank of Slovakia (NBS) imposed forced administration on another bank. A new representative office of a foreign bank (Bank für Arbeit und Wirtschaft) was registered this year, and two foreign banks merged into one entity.

2. Ownership

State ownership

On the basis of the registered capital, state ownership accounts for 36.7% (of which 31.5% is direct ownership) of the total Slovakian banking sector. The remaining share (about two-thirds) is in private ownership. Of this private ownership, foreign investors account for 60.6%. In the light of ongoing privatisation, the share of foreign capital is expected to grow to 82.8% in the first quarter of 2002. In comparison with figures for 31 December 2000, the

Table 1: Banking sector – numbers of banks and branches

	2000		2001	
	30 June	31 Dec.	30 June	31 Dec.
Banks	22	21	21	19
Foreign bank branches	2	2	2	2
Foreign bank representative offices	11	10	10	10
Branches	290	291	293	302
Sub-branches	863	810	766	750
Branches in other countries	1	1	1	1
Sub-branches in other countries	1	1	1	1
Representative offices in other countries	6	7	5	4
Number of employees	22,785	22,332	21,924	21,265

Table 2: Concentration in the banking sector

Banking sector (excl. KOBL) [1]	Top-3 banks end-2000	Top-3 banks end-2001	Top-6 banks end-2000	Top-6 banks end-2001	Top-12 banks end-2000	Top-12 banks end-2001
Total assets (% of total assets)	55.4	54.6	70.2	70.5	89.7	90.7
Performing assets (% of total performing assets)	53.0	54.4	69.1	70.7	91.0	88.0
Earning assets (bad assets excluded and as % of total earning assets)	53.5	54.6	69.0	70.7	90.8	87.7
ROA (%)	2.3	1.4	2.2	1.3	2.1	1.2

Source: Bank of Slovakia
[1] KOBL is Slovakia's specialised consolidation bank (see text).

share of assets controlled by domestic entities, not including a specialised consolidation bank – Konsolidacná banka (KOBL) – which was liquidated on 31 January 2002, increased slightly from 10.64% to 11.12% as at December 2001, as a consequence of acquisitions and ongoing privatisation.

Private ownership

At the end of December 2001, the share of the domestic private sector in the subscribed equity capital of the banking sector was 6.4%. Foreign investors, including permanently provided funds to branch offices of foreign banks in Slovakia, held 60.6% of the total subscribed private equity capital of banks. Foreign capital included capital from Luxembourg (34.9%), Austria (27.9%), the Czech Republic (9.8%), the Netherlands (7.6%), Italy (5.9%), the United Kingdom (5.2%), the United States (4.7%), Germany (2.4%) and France (1.5%).

3. Concentration

Concentration in the Slovakian banking sector is broadly comparable with that in other transition countries. The three largest banks together hold about one-half of all banking sector assets; the ratio rises to 70% for the top six banks and almost 90% for the top 12 banks. Concentration ratios in terms of performing assets and profitability are broadly similar (Table 2).

4. Size of the banking sector

Assets

The total assets of the banking sector increased from €19.2 billion in December 2000 to €21.7 billion in December 2001. In June 2001, more than half of total assets (52.4%) were short-term assets (€10.5 billion), with the remaining part (46.7%) being medium or long-term assets. The structure at the end of 2001 was largely the same as in June 2001. In December 2001, the total volume of bank loans accounted for €8 billion, of which €6.55 billion consisted of koruna loans and €1.44 billion of loans in foreign currency.

Table 3: Key figures and results of the economic performance of the banking sector [1)]
(EUR million)

	2000		2001	
	30 June	31 Dec.	30 June	31 Dec.
Total assets	17.66	18.91	20.23	21.7
(in % of GDP)	87.8	94.0	96.3	96.2
Earning assets	15.32	16.77	18.22	19.87
Total interbank assets	6.47	27.86	6.49	7.15
Total foreign exchange assets	2.81	3.52	3.86	4.02
Securities	2.69	3.09	5.14	5.95
Claims on loans	8.45	8.36	6.88	7.19
of which: classified claims	1.55	1.28	1.21	0.94
Share of classified loans in total loans (in %)	18.35	15.32	17.56	13.08
Uncovered estimated loss	0.15	0.00	0.02	0.00

Source: Bank of Slovakia
[1)] Excluding the consolidation bank KOBL (see main text).

In comparison with the figures at end-2000 (€9.2 billion), portfolio loans decreased, partially owing to portfolio restructuring in the three largest banks.

With regard to the structure of koruna loans by sector, the share of loans in the entrepreneurial sector in December 2001 (74.5%) decreased by 10.6 percentage points in comparison with December 2000 (85.1%). In particular, the share of loans to private companies increased by 19.6 percentage points (from 35.7% to 55.3%), whereas the share of loans to companies under foreign control increased by 2.76 percentage points (from 8.3% to 11.06%). The volume of loans to public companies decreased by 19.5 percentage points (from 41.1% to 21.6%). The share of loans to households was 18.5% in December 2001 and 12.4% in December 2000, which is an increase of 6.1 percentage points.

Table 4: Banking sector liabilities
(EUR million)

	2000		2001	
	30 June	31 Dec.	30 June	31 Dec.
Provisions for loan losses	0.79	0.87	0.83	0.69
Legal reserves	0.32	0.12	0.11	0.09
Equity capital	1.11	1.06	0.98	0.92
Own funds	2.94	2.73	2.66	2.42
Total funds – banking sector (secondary funds)	2.41	2.8	2.66	3.61
Total funds – non-banking sector (primary funds)	12.39	13.52	14.79	15.46
of which: non-anonymous deposits	6.58	7.09	7.75	-
Current profit [1)]	0.09	0.36	0.22	0.25
Current loss [1)]	0.08	0.09	0.01	0.01
Net profit/loss [1)]	0.01	0.27	0.21	0.24
Cumulative profit/loss [1)]	-0.53	-0.24	0.08	0.2

Source: Bank of Slovakia
[1)] Excluding the consolidation bank KOBL (see main text).

As for the term structure of koruna loans, the share of short-term loans stayed at the same level in December 2001 as in December 2000 and reached 32.5%. The share of medium-term loans decreased by 6.6 percentage points (to 29%) in that period, and the share of long-term loans increased by 11.4 percentage points (to 38.5%). There is some positive development indicated by the increasing share of medium and long-term assets.

5. Capital adequacy, asset quality and profitability

Capital adequacy

Current regulation on capital adequacy sets a bottom limit for capital adequacy at 8%. Below is a table showing the frequency with which this regulation is met by the banking sector. For the purpose of comparison, the average value of the indicator for the whole banking sector is shown in the final column (Table 5).

As at 31 December 2001 there was no bank with a capital adequacy ratio below 8%. The only bank mentioned above (as at 30 June 2001) is actually involved in bankruptcy proceedings.

A significant problem in the Slovak banking sector concerns classified claims. A rise of their share in total claims has been caused by a transfer of a part of classified claims to the newly created consolidation agency – Slovenská konsolidacná a.s. (SKo). As part of the restructuring process, the transfer of classified claims was accomplished from three banks with a majority stake from the state into the specialised state banking institution KOBL and the consolidation agency SKo. The agency was established on 25 October 1999, with an initial stake of the Ministry of Finance of 24% and with KOBL Všeobecná úverová banka (VÚB) Slovenská sporitel'na (SLSP) and Investicná a rozvojová banka (IRB) each having a 19% stake. In the course of 2000 the shares of individual banks were gradually transferred to the state and the agency became a fully state-owned company. The life of the agency is estimated at three to five years and it should be closed upon the Slovak accession to the EU at the latest.

In total, about €2.57 billion in doubtful loans was transferred from individual banks to SKo and KOBL as part of the restructuring process and was replaced on the banks' balance sheets by government bonds issued in early 2001.

Profitability

Profitability indicators such as return on assets (ROA) and return on equity (ROE) in the

Table 5: Number of banks in selected capital adequacy intervals
(end of year)

Capital adequacy	up to 8 %	8-13 %	13-18 %	18-23 %	over 23 %	Sector average
1997	4	10	1	3	6	8.1
1998	4	9	4	3	4	6.7
1999	3	8	4	4	3	12.6
2000	1	9	4	1	4	13.0
2001	0	3	7	4	4	13.4

Source: Bank of Slovakia

banking sector show a significant improvement in the profitability of Slovakian banks over the past few years. The average return on assets for all banks rose from 0.6% in 1997 to 2.0% in 2000 and the return on equity rose from 9.1% to 23.2% over the same period. Still, institutions with weak profitability continue to exist. In 2000, six out of 22 reporting banks showed a return on equity below 3% and 11 banks showed a return on assets below 2%.

II. Money market

The Slovak interbank money market was established only gradually. In 1995, the BRIBOR (Bratislava Interbank Offered Rate) was established as the official listing of rates for deposits of up to three months. With the help of new instruments (NBS bills, repos) the NBS has become a key player on the market, capable of influencing the daily volume of liquidity, and temporarily also interest rates. The attempt of the NBS to turn to an indirect control of monetary variables within the scope of monetary instruments resulted in the removal of credit limits and direct instruments of control. With regard to indirect instruments, open market operations have begun to play a dominant role. In 2000, the NBS made important systemic changes to switch from a primarily direct management towards indirect management, i.e. using interest rates. The NBS established a marginal lending and marginal deposit facility, at which commercial banks operating on the local market can draw resources at a stated interest rate (against collateral) or deposit with the central bank, at a stated interest rate, their surplus resources. The interest rates on both facilities have constituted a corridor for the fluctuation of interest rates on the market. At the same time, regular weekly tender procedures replaced former ad hoc operations with commercial banks. The NBS maintained the possibility of performing quick tender operations, if necessary.

Finally, the NBS may issue bills to drain longer-term liquidity from the banking sector. The refinancing and sterilisation rates of overnight facilities of the NBS and the limit rate for repo tender became determining signals for the banking sector. This fact was substantiated by the establishment of the term “key interest rates”. After more than five years of existence of BRIBOR-based quotations of reference banks, it was possible to create a complete money market curve with standard maturities. Moreover, experience has shown that the entire interest rate curve is generally moving closely in line with changes in NBS policy rates. Therefore, a functioning money market has been established and the NBS has created the conditions for influencing monetary developments by changing its key interest rates.

During the year 2000, a remarkable liquidity surplus, together with macroeconomic stability, enabled a substantial reduction of interest rates. At the same time, even though financial trading from 1 to 14 days was still dominant and accounted for approximately 70% of turnover, listings were extended to 9 and 12-month instruments and led to a coverage of the whole yield curve.

III. Stock market

The establishment of the stock market in Slovakia was brought about by the first wave of voucher privatisation, with the subsequent formation of the Stock Exchange in March 1991. A consequence of this form of privatisation is that the number of shareholders is high, at present (according to estimates) around 3 million people (out of a total population of 5.4 million). Gradually, the institutional conditions necessary for the functioning of the capital market began to be created – a system for the registration of securities, organisers of the securities

market and a system for the settlement of trades. Jointly with this, institutional investors and securities dealers were established.

The organiser of the public stock market is the Bratislava Stock Exchange, which has 41 members (banks, securities dealers) with a classification of transactions on the listed securities market and the open market. Trading is carried out through the electronic stock exchange trading system, EBOS, which executes trade settlement. The central depository of securities is the Securities Centre of the Slovak Republic, established in December 1992 as a central register of issuers of book-entered securities. Supervision of the capital market is performed by the Financial Market Authority established in 2000, which is an operationally independent body with independent management and financed from the state budget. Up until its establishment, supervision of the capital market had been the responsibility of the Ministry of Finance.

The sole organiser of the secondary stock market in the Slovak Republic is the Bratislava Stock Exchange, which performs trading through an online system. The activity of this stock exchange is closely connected with the process of voucher privatisation. Gradually, majority shareholdings in individual companies began to be formed, which were initially distributed among thousands of shareholders. The acquisition of shares culminated in the years 1996/97, when turnover on the stock market reached its highest value so far, of annually approximately SKK 83.0 billion. Following this period the turnover on the stock market gradually decreased to SKK 25.0 billion in 2000. In 2001 the turnover on the stock market increased to SKK 45.8 billion. The decline in the significance of the stock market is due to majority shareholdings being achieved in most companies, a legislation that did not sufficiently protect minority shareholders, and to a loss of confidence by people in the capital market as a consequence of the poor economic results for the first wave of voucher privatisation.

IV. Bond market

The role of the agent in the management of state debt is carried out for the government of the Slovak Republic by the NBS. The NBS is thereby responsible for the technical organisation of the primary sale of T-bonds denominated in the Slovak currency and T-bills, their settlement and management of the central register of T-bills. Through a non-voting advisory role, it also participates in the process of determining the conditions of issues and the method of their sale. The primary market for government securities, which is organised by the NBS, is open to legal entities including non-residents. The sale of government securities is carried out through single price auctions.

There are currently 105 participants registered in the primary market, of which 21 are foreign legal entities. The rationale behind such a broad primary market has been to ensure sufficient demand, which a small number of investors would probably not be able to provide in the long term. The large number of participants, however, represents greater demands in terms of the organisation of the primary market and brings certain limitations (a more complicated on-line system application, a limited number of price offers). Currently, those investors most active in the primary market for T-bonds and T-bills take the form of a small group providing a significant share of the demand.[1] Despite the fact that T-bonds began to be

[1] In the year 2000, e.g. the five most active investors purchased 72.2% of T-bonds and 91% of T-bills. In the year 2001, e.g. the five most active investors purchased 71.1% of T-bonds and 80.1% of T-bills. This situation was the basis in 2001 of a discussion leading to the introduction of a system of primary dealers in government securities. Together with other tendencies this implies a move to a phase of higher quality in the development of the primary market, which will presumably also significantly influence secondary trading.

issued immediately following the founding of the Slovak Republic, the market was initially shallow as bonds were issued only for investment projects. Beginning in 1995, the market began to grow, as bonds were issued mainly for servicing long-term debt resulting from state budget deficits. An investor base was formed mainly from commercial banks.

The growth of yields was also partially caused by the introduction of a withholding tax on T-bond yields in 1997. The pressure for growth in yields culminated in the second half of 1998, when average yields from some auctions of one-year bonds reached up to 30% p.a. Some of the more significant changes have been a gradual raising of face values on the primary market up to the current SKK 1 million, a stabilising of interest payments at a yearly frequency and a limiting of the total volume and fixed interest rate. In this period, the sole issue of government bonds in the form of physical securities was launched, intended exclusively for private individuals, who, however, did not show great interest so that the issue of similar products has been discontinued.

The year 2000 was critical for the primary market in T-bonds. In 1995 5-year bonds were issued for the first time, later followed by 7-year and 10-year T-bonds, creating an important benchmark at the long end of the yield curve. The share of the previously common 1-year maturity fell below one-quarter. This situation was made possible by a significant fall in interest rates compared with previous years (in 1998 the average yield on the primary market was 23.9% p.a., whereas in 2000 this was 9.5% p.a. and in 2001 7.8% p.a.) and growing demand for T-bonds, also on the part of foreign investors.

In the first half of 2001 this decline came to a halt and yields on the primary market stabilised. A significant event was the issuing of 6 issues of T-bonds for the restructuring of the banking sector in a total amount of SKK 105.0 billion with maturities of 5, 7 and 10 years, with the issues in the maturities of 7 and 10 years having a floating rate. Tap issues started to be used, thereby enabling the creation of issues with a large total amount, in an effort to ensure a more liquid secondary market. The ownership of T-bonds has not changed significantly in the long term, the greatest share, of about 90%, being owned by domestic banks. From the beginning of 2000 the share of T-bonds owned by non-residents grew, and in the longer term is moving in the interval of 4-11%.

The state budget deficit was in the years 1995 to 1998 covered through issues of T-bills with shorter maturities being sold by auction. At the end of individual years the maturity was extended so that T-bills covered the year-end deficit of the state budget which would be transformed into T-bonds in the following year. The year 1997 can be considered as problematic. On the primary market significant growth in interest rates was recorded, which together with liquidity problems led to the frequent financing of the current account deficit by short-term purchases of T-bills by the NBS. This effort at dampening growth of interest rates continued until 1998. In 1999, this form of obtaining funds for covering the current account deficit of the state budget was gradually abandoned and since 1 May 2001, when an amendment to the NBS Act came into effect, direct loans from the NBS to the MoF have no longer been possible.

The development of average interest rates of T-bills on the primary market was rather volatile. In comparison with 1995, when these stood at 6.25%, they reached their highest average values in 1997 at 23.5%. The reason for this was primarily the significant lack of liquidity of the banking sector, caused by the intention of the MoF to tax income from government securities with retroactive effect. In the following year a change in this trend was recorded, and in 2001 average interest rates in this market stood at 7.7%.

Secondary trading in T-bills was used in particular for managing liquidity in the banking sector. Refinancing as well as sterilisation repo transactions were conducted by the NBS.

Secondary trades in T-bills were not common and in 2000 the volume traded was SKK 31.3 billion, which rose in 2001 to SKK 86.92 billion.

The secondary market in T-bonds is characterised by low turnover. In 1995 SKK 15 billion (1.7% of GDP) was traded on the bond market, of which government bonds accounted for 72.7%. A slight growth of trading occurred from 1995, in connection with the increasing amounts of issued T-bonds. T-bonds started to dominate the stock market from 1998 and at present account for up to 90% of the total of monthly turnover of the stock exchange. The majority of trades in T-bonds is created by direct transactions, which do not lead to price-formation. So as to improve liquidity of the anonymous price-forming market in T-bonds, the Stock Exchange in 1999 introduced a market maker system.

The euro is the main reference currency for the Slovak koruna, in the framework of a managed floating regime. The liquidity of the FX market improved substantially after 1995, when the NBS imposed a +/-0.25% spread on fixing trades (trades between the NBS and domestic commercial banks). From that time on, commercial banks were „forced“ to trade among each other and not via the NBS. Another boost for the liquidity of the FX market was the liberalisation of the FX regime of the Slovak koruna in the same year. As for instruments, spot transactions with Slovak koruna represent approximately 13.25% of total turnover, swap transactions represent 86.5% and forwards merely 0.25%.

The Slovak FX market is driven mainly by foreign participants whose share in total turnover reached 70.3% in 2001. After the upgrade of the Slovak Republic rating in autumn last year, even more foreign banks became active, and liquidity is steadily improving with the bid/ask spreads under normal circumstances being approximately 0.1%. Despite this, liquidity on the Slovak foreign exchange market is still relatively low even in comparison with neighbouring countries (Poland, Czech Republic, Hungary). In the period from January to July 2001 daily average turnover in the spot market was only USD 44 million. This also explains the relatively high sensitivity of the exchange rate to possible sudden inflows or outflows of foreign currency from the banking sector. An interesting point is that the bulk of turnover (of about 65%) of foreign exchange operations (spot, swap, forward) is carried out between domestic banks and banks abroad, rather than among domestic banks.

The Slovak Republic has followed a gradual financial liberalisation characterised by a liberalisation of long-term flows before short-term flows, and a preference for FDI rather than financial credits and other more volatile flows.

Since 1996 a number of measures have been undertaken to liberalise capital flows. Certain major liberalisation measures took effect already from 1 December 1996. Those affected outward FDI to the OECD countries, including real estate acquisitions by residents, outward financial credits with a maturity exceeding 5 years, inward financial credits with a maturity exceeding 3 years, as well as trade-linked credits to and from the residents of the OECD countries. At the same time, the limits on cash transfers by individuals for travel or other purposes were abolished.

On 1 April 1998, further liberalisation steps came into force comprising issues of foreign securities traded on domestic markets, or their introduction to domestic markets, if they were issued in an OECD member country and traded on a major foreign stock exchange, or issues of OECD T-bonds. The purchase and sale of the above-mentioned securities by residents were liberalised as well.

The amendment of the Foreign Exchange Act as of 1 January 2000 was a further step towards the liberalisation of capital flows. Changes concerned the acquisition of real estate in Slovakia which was indispensable as business premises by non-resident financial institutions (banks, insurance companies, collective investment companies and securities dealers). The

2000 liberalisation also covered the issue of debt securities abroad with a maturity of at least one year; operations with foreign securities in Slovakia liberalised for OECD member countries were also extended beyond OECD countries. At the same time, restrictions were abolished on the granting and accepting of financial credits with maturity of at least one year and the securing of non-residents' obligations with a maturity of at least one year.

Further changes towards capital account liberalisation came into effect on 1 January 2001 and related to granting and acceptance of financial credits, and securing of obligations of non-residents, both with a maturity under one year. Since then a non-resident based in an EU or OECD member country with an organisational unit established in Slovakia for the conduct of the economic activities has been allowed to acquire real estate in Slovakia, which is indispensable as operational premises for that organisational unit. The latest liberalisation steps were made in January 2002 and contained operations with securities which are not traded on a main foreign stock exchange.

Looking ahead, further liberalisation steps will include:

– 2003: liberalisation of financial derivatives
– 2004: abolition of the repatriation requirement, liberalisation of operations with deposit accounts by residents abroad and operations in foreign exchange.

By the beginning of 2004 the entire capital account of the Slovak Republic will be liberalised except the acquisition of real estate by non-residents in Slovakia. With effect from the date of Slovakia's accession to the EU, acquisition of ownership rights to real estate located in Slovakia by non-residents will be fully liberalised, except for real estate subject to a transitional period. Slovakia requests a 7-year transitional period from the date of the accession to the European Union for the acquisition of agricultural and forest land by non-residents in Slovakia.

V. Trends in the financial sector in view of the integration into the EU

The most frequently used payment medium in Slovakia is cash payments, but the use of electronic payment instruments (mostly payment cards) is rapidly increasing. Cheques are not in common use as a payment medium. The most frequently used means of non-cash payment are credit transfers, direct debits and payment cards.

All interbank payment transactions are carried out electronically. All commercial banks and the NBS are direct participants in the Slovak Interbank Payment System (SIPS). The SIPS is based on a single clearing centre. The final settlement of transactions is within the jurisdiction of the NBS, which operates as a settlement agent. The SIPS processes all domestic interbank large-value and retail payment transactions.

An RTGS system has not been established yet. Analysis of existing RTGS systems in EU countries was under process during the year 2000, and an internal proposal of the key functions of the future RTGS system is being prepared.

EU Directives (98/26/EC on settlement finality in payment and securities settlement systems, 97/5/EC on cross-border credit transfers, 2000/46/EC on the taking up, pursuit of and prudential supervision of the business of electronic money institutions) and Recommendation 97/489/EC concerning transactions by electronic payment instruments and, in particular, the relationship between issuer and holder will be implemented in Slovak legislation. By the end of June 2001 the analysis of the above-mentioned EU directives and recommendation was completed. The preparation of the draft legislation is under process.

The privatisation of the banking sector in the Slovak Republic is a substantial part of the financial sector restructuring programme as a whole. Besides the majority stake owned by the

state, which has represented 87.17% in SLSP and 94.5% in VÚB, a 70% stake owned by the state in IRB has been assigned for privatisation, which is now in the final stage of preparation. Privatisation of two smaller banks through the sale of major stakes to a strategic foreign investor should be accomplished by mid-2002.

The current steps concentrate on accentuating the significance of an independent central bank, including the corresponding rights. The wording of Article 56 of the Slovak Republic Constitution has been amended by the Constitution Act. The change, which came into effect on 1 July 2001, establishes the NBS as an independent central bank, and within the range of its competency the bank is authorised to issue generally binding regulations. The position of banking supervision has been modified by the adoption of the amendment to the National Bank of Slovakia Act, which referred to independent banking supervision in the first instance proceedings. This amendment has abolished the state surveillance of the MoF over banks. Further, the individual activities of banking supervision have been specified and ensured by the executive authority of the banking supervision.

In October 2001 the National Council of the Slovak Republic approved the new Act on Banks. The aim of this act is to harmonise the Slovak banking legislation with the corresponding EU regulations, taking into account recommendations of the World Bank and the International Monetary Fund, and strengthen the position of the NBS in banking supervision. The act also increases the responsibility of members of banks' supervision boards and bank statutory authorities with regard to unfavourable economic development in banks; defines a legislative framework for the banking supervision implementation on a consolidated basis; creates prerequisites for the prompt implementation of corrective measures concerning problematic banks; stipulates bank secrecy protection standards and the publishing of bank data; and amends the duties and competences of banks in their protection against illegitimate banking operations.

The structure and the functioning of the financial sector in Slovenia

Uroš Cufer, Janez Fabijan, Mojca Majic, Danica Prelovšek and Janko Tratnik*

Bank of Slovenia

I. Introduction

The most important part of the Slovenian financial system is the banking sector, which showed some positive trends in 2001. The money market has recently gained in importance, the most significant part being the interbank market. The primary securities market in Slovenia remains relatively underdeveloped and the issuers of debt securities are mostly banks. The Ljubljana Stock Exchange (LSE) represents the organised part of the secondary securities market.

Slovenia has recently removed almost all restrictions on capital flows, and is undertaking efforts to develop financial markets as well as to strengthen the interest rate transmission mechanism.

II. Banking sector

Slovenia's financial sector is dominated by the banking system that holds 62% of assets of the sector including the central bank (and 74% when the central bank is excluded) (Table 1). Of the other financial institutions, investment companies and insurance companies play an important role. Overall, financial assets amount to about 159% of GDP, of which banking sector assets represent 94% of GDP. Bank loans to customers amount to about 42% of GDP.

Table 1: Structure of the financial system
(end of 2001)

	Total assets (in EUR million)	Share (in %)	Share in GDP (in %)
Central bank	5,153	16.5	25.0
Banking sector	19,433	62.1	94.1
Other financial intermediaries	6,709	21.4	32.5
Authorised investment companies	2,475	7.9	12.0
Insurance companies	1,766	5.6	8.6
Others	2,467	7.9	11.9
Total	31,295	100.0	151.6

Source: Bank of Slovenia

* The paper was prepared by a group of authors including also the following staff members: Aleš Delakorda, Tomo Narat, Alenka Repovž, Irena Vodopivec Jean, Gordana Ilc Križaj, Cilka Ferjancic and Metka Prevc.

Overall, as indicated by a broad range of variables, the Slovenian banking system can be considered stable and sound. This is also reflected in a significant increase in deposits (especially long-term deposits) over 2001, which shows the increasing confidence of the general public in the banking system.

The number of banks declined from 25 to 21 during 2001, as four banks joined larger institutions. At end-2001, there were 21 operating banks in Slovenia, including four subsidiaries of foreign banks and one branch of a foreign bank. In addition, three savings banks and 45 savings and loan companies provided banking services.

Although the ratification of the Europe Agreement between the Republic of Slovenia and the European Union and the promulgation of the Banking Act have opened up the domestic banking environment, the number of foreign banking institutions has not significantly increased. Out of 21 banks in Slovenia, 7 banks are fully controlled by domestic shareholders and 5 are wholly owned or controlled by foreign shareholders. The remaining 9 banks are controlled by domestic owners. Foreign shareholders are mostly from Austria, France and Italy. Overall, foreigners hold about 15.4% of equity of Slovenia's banking sector (Table 2).

As regards ownership of banks in Slovenia, private shareholders prevail. The exceptions are the two largest banks, Nova Ljubljanska banka (hereinafter NLB) and Nova Kreditna banka Maribor (hereinafter NKBM), which came under state governance within the framework of the rehabilitation programme. In addition, 14.4% of Slovenska investicijska banka, and indirectly Poštna banka Slovenije are state-controlled banks. The first phase of the bank privatisation has already started. In the case of NLB, the Government of the Republic of Slovenia (RS) decided to sell 34% of NLB to the Belgian KBC Bank as the offer complies with the privatisation programme adopted in May 2001 and amended in December 2001. In the case of NKBM, the Government of the RS decided not to sell 65% of NKBM to any of the three bidders as their offers did not match the expectations of the Government as laid out in the privatisation programme adopted in May 2001.

Table 2: Ownership structure of the banking sector
(in %)

	end-2000	end-2001
Foreign ownership	12.0	15.4
State ownership	36.8	37.3
Other domestic ownership	51.2	47.3

Source: Bank of Slovenia

The main features of Slovenia's banking system over the past few years have been a stable market share of the largest banks and a relatively high concentration of banks. The largest Slovenian bank had a market share of almost 28% in terms of unconsolidated total assets at the end of 2000; after acquisition of three banks in 2001, which were members of the NLB banking group, this share increased to almost 35%. Should further acquisitions of three other banks currently members of the NLB banking group be approved and successful, the dominant role of the largest Slovenian bank will be even greater, with a market share of around 39%. At the end of 2001, the three largest Slovenian banks controlled 56% of the market, and the five largest banks had a 69% market share (Table 3).

The total assets of the three savings banks at the end of 2001 stood at €69 million, implying that their share in Slovenia's banking environment remains small at 0.4% of assets. Savings and loan undertakings have been given time until December 2004 to adapt to the

Table 3: Total assets and market shares of largest banks

Name	Total assets in EUR million		Nominal growth in %		Market share in %	
	2000 31 Dec.	2001 31 Dec.	2000/1999	2001/2000	2000 31 Dec.	2001 31 Dec.
NLB[1)]	4,344	6,179	22.1	48.9	28.8	34.6
NKBM	1,740	2,092	14.4	25.8	11.5	11.7
SKB banka	1,529	1,757	5.1	20.3	10.1	9.8
Abanka	889	1,153	26.0	35.7	5.9	6.5
Banka Koper	938	1,102	18.1	23.0	6.2	6.2
Banka Celje	876	1,023	18.9	22.3	5.8	5.7
Gorenjska banka	752	934	22.1	29.9	5.0	5.2
Aggregate total assets – top 7	11,068	14,240	17.9	34.7	73.3	79.9
Aggregate total assets – all banks	15,096	17,832	18.8	23.7	100.0	100.0

Source: Bank of Slovenia
1) Figures for 31 Dec. 2001 excluding the Italian branch of NLB.
Figures for 31 Dec. 2001 are not audited.

provisions of EU directives which govern credit institutions. Those which have not declared an intention to wind up businesses are obliged to comply with the provisions of the Banking Act. As for the future of the savings and loan companies, many of them did not meet the requirement of the Bank of Slovenia (BoS) to achieve at least half of the required nominal capital, i.e. SIT 110 million by 31 December 2001. Therefore, 14 of them joined the Association of Savings and Loan Undertakings while three transferred receivables and liabilities to another credit institution. In addition, one savings and loan undertaking went bankrupt and one commenced voluntary liquidation.

As of 31 December 2001, total assets of Slovenian banks amounted to €18 billion, 23.7% higher than one year earlier. On the liabilities side, deposits by the non-banking sector still dominate with 68.4% of liabilities (the largest portion represented by deposits from households – citizens and sole entrepreneurs – with a 41.7% share). There was some moderate growth of the share of liabilities arising from securities, but it remained small at 2.6%. The share of deposits by the banking sector remains stable at 11.3% of average liabilities. On the asset side, the share of lending to the non-banking sector was broadly stable at about 50%. The banks' earnings in the year 2001 totalled €69 million in profit before taxes including net revaluation income in the amount of €136 million, and the banks' gross income grew by 0.7% to €773 million in 2001. The return on average assets fell from 1.1% to 0.4% and the return on average equity fell from 11.3% to 4.8%. Net interest margins decreased from 4.5% to 3.6% in the year 2001.

III. Non-banking sector

1. Money market

In terms of market participants, instruments and market turnover, the money market is relatively small, but has recently strengthened. The most important participants are banks, the treasury, the pension fund and the health security fund. Market deals are usually based on bilateral agreements in the form of deposits or loans rather than securities-based repurchase agreements.

The interbank market is the most significant part of the money market. It has a sufficient degree of activity and is mainly devoted to the management of the liquidity needs of banks. Banks bilaterally trade their liquidity positions during and at the end of the business day. They mostly agree on overnight, call and very short-term loans without collateral. The data on interbank deals, including volumes and interest rates, are reported daily to the Bank of Slovenia (BoS). Banks used to report on deals with a maturity of up to 30 days, but since March 2002 they are obliged to report all deals. Transactions with a maturity of up to 30 days represent 64% of all interbank deposits (from 1 month to 3 months 29%, from 3 months to 1 year 6.5% and more than 1 year 0.5%). The interbank interest rate reflects the banks' liquidity situation and the distribution of excess reserves. Hence it is an important reference used as a monetary policy indicator.

Table 4: Interbank deposit market (deposits with a maturity up to 30 days)
(in EUR million or %)

	Average daily turnover (EUR million)	As % of banks reserves	Average interest rate (%)	Average outstanding amount (EUR million)	As % of banks reserves
1995	21.4	9.6	12.2	78.4	35.1
1996	22.6	9.6	14.0	67.1	28.5
1997	15.3	5.6	9.7	53.4	19.7
1998	19.7	5.9	7.5	54.9	16.5
1999	24.0	6.2	6.9	66.4	17.2
2000	27.5	7.1	7.0	75.3	19.5
2001	36.5	8.9	6.9	84.2	20.6

Source: Bank of Slovenia

At the beginning of 2002 banks started to quote the interbank deposit rates with different maturities (overnight, 1 week, 2 weeks, 2 months, 3 months, 6 months and 9 months) which are displayed on the website of the Slovenian Bankers Association. In the future those rates could be used as a reference in determining other rates.

On the secured part of the money market, transactions based on securities are very rare. Therefore, no records on actual deals exist. Repo transactions are of low importance. There are some trades, but they are regarded as sell-buy-back transactions or collateralised loans. In the last two years currency swaps have become more used among banks. In 2001 their average outstanding amount nearly tripled compared with the year 2000 and it represents 64% of the total turnover on the cash market.

The money market in a broader sense also includes the market for short-term securities. On this market treasury bills are the only tradable securities (until 2000 also BoS bills). Some commercial banks issue non-serial short-term securities (CDs) which are offered to their

customers, but are not intended for trading (the average outstanding amount of CDs in 2001 was €20.5 million).

The government started to issue treasury bills in May 1998. It started first with three-month bills and later added six, twelve and one-month bills. The bills are discounting, dematerialised securities sold on auctions through primary dealers. Three, six and twelve-month bills are listed on the Ljubljana Stock Exchange. Their turnover is very low, mainly due to inappropriate settlement (T+2; the same as for capital market transactions) and high trading/settlement costs. In general, the trading is also negligible, as "buy and hold" investors (mainly banks) are predominant.

In 2001 the BoS and the Treasury made an agreement to encourage the development of a secondary OTC market for treasury bills. The Central Securities Clearing Corporation, in co-operation with the BoS, introduced the possibility of settling OTC market transactions through DVP mechanisms, which was the basis for further actions to develop the market. In December 2001 the Treasury and the BoS introduced market makers for treasury bills. The BoS has prepared an infrastructure for collecting daily data on market makers' bids and offers, which are publicly presented on the BoS website. Due to this fact, banks started with trading on the OTC market (turnover in December 2001 alone was €19.6 million, more than the yearly turnover of treasury bills on the Stock Exchange).

For the further development of the money market the BoS will try to stimulate banks into using repo transactions. The development of the repo market will take place in two phases: first for the repo of short-term securities and then for the repo of long-term securities. At the beginning of 2002 the BoS excluded repos based on short-term government securities from the base of minimum reserve requirements. Simultaneously, the BoS is preparing a master agreement for repos of short-term securities which is expected to be accepted by banks by June 2002.

2. Foreign exchange market

The foreign exchange market in Slovenia is composed of spot and forward markets (transactions between banks, between banks and enterprises, between banks and non-residents and between banks and households; the central bank's operations are not included) and foreign currency exchange offices.

Table 5: Foreign exchange market and exchange offices
(in EUR million)

	FX (spot)			FX (forward)		Exchange offices	
Year	Rates	Turnover	Balance	Turnover	Balance	Turnover	Balance
1992	109.1	3,589	732	n.a.	n.a.	1,784	-142
1993	134.8	5,232	447	n.a.	n.a.	2,884	-54
1994	153.0	6,470	642	n.a.	n.a.	3,570	313
1995	154.1	8,115	263	n.a.	n.a.	3,905	-115
1996	169.8	8,920	259	n.a.	n.a.	4,119	79
1997	180.9	10,191	335	n.a.	n.a.	4,394	444
1998	186.6	10,881	17	n.a.	n.a.	4,139	200
1999	194.4	11,282	-255	n.a.	n.a.	3,874	-59
2000	206.3	14,151	222	1,243	-250	3,842	-46
2001	217.9	18,356	1,874	3,343	-991	4,205	243

Source: Bank of Slovenia

3. Capital markets

3.1 Central Securities Clearing Corporation

The Central Securities Clearing Corporation (KDD) was founded in 1994. It offers services of issuing, transfer, payment and record-keeping. Most of the existing securities and all of the privatisation shares are already in a book-entry form. At the end of December 2001 the KDD had on its books 1,033 securities issued by 885 issuers, including 915 shares and 118 bonds. The value of shares registered with the KDD at the end of December 2001 carried at market value amounted to €13.4 billion (64.8% of GDP), while the value of bonds was €2.6 billion (12.7% of GDP).

Non-financial companies are the most important issuers of shares (78% of the total shares value); they are followed by banks (15%) and other financial intermediaries (6%). Among shareholders, the government is leading (26%), followed by households (20%), non-financial companies (20%), other financial intermediaries (19%), foreign investors (10%) and banks (4%).

The major issuer of bonds is the government (77% of the total bonds value), followed by banks (13%) and non-financial companies (9%). Among bond holders, banks are in first place (47%), followed by insurance companies (20%), households (14%), the government (7%), non-financial companies (6%), other financial intermediaries (4%) and foreign investors (2%).

3.2 Primary securities market

The primary securities market in Slovenia remains relatively underdeveloped. In 2000, there were six initial public offerings (IPOs) – five bonds and one share issue – and their aggregate value was €57.6 million or 0.3% of GDP (government bonds are not included). In 2001 only one bond issue took place. The issuers of debt securities are mostly banks, which raise long-term funds that they lend on to companies. In the area of equity securities a number of problems have contained a rapid development: most shares stem from the privatisation process, the majority of companies display only low profitability and shares for many companies on the secondary market are trading below book values. The role of the primary securities market in the financing of companies in Slovenia is insignificant, hence companies finance themselves externally using bank loans.

3.3 Secondary securities market

The Ljubljana Stock Exchange (LSE) represents the organised part of the secondary securities market. Securities may be traded on the official market segment or on the free market segment. Shares and bonds are traded on both market segments, while shares of investment companies and short-term securities are traded on the free market segment only. Trades on each of the market segments are conducted only through an electronic trading system.

On the LSE 270 securities (194 shares and 76 bonds) issued by 220 issuers were traded at the end of December 2001. Total market capitalisation of securities amounted to €6.2 billion, or 30% of GDP. The total value of transactions on the LSE in 2001 amounted to €1.6 billion, or 8% of GDP. The highest share in total turnover was reached by shares (68%) followed by shares of authorised investment companies (16%) and bonds (15%).

Table 6: Turnover on the Ljubljana Stock Exchange by type of securities
(in EUR million and %)

Year	Total in EUR million	Total in % of GDP	Shares	%	AIC [1] shares	%	Bonds	%	Short-term securities	%
1992	129	1	3	2	-	-	78	60	49	38
1993	659	6	263	40	-	-	275	42	122	18
1994	741	6	350	47	-	-	217	29	174	23
1995	575	4	295	51	-	-	149	26	132	23
1996	513	3	396	77	-	-	78	15	40	8
1997	600	4	485	81	-	-	64	11	51	9
1998	931	5	718	77	54	6	118	13	40	4
1999	1,372	7	870	63	287	21	182	13	33	2
2000	1,315	7	709	54	315	24	275	21	16	1
2001	1,605	8	1,092	68	263	16	238	15	13	1

Source: Bank of Slovenia
[1] AIC – Authorised Investment Companies

Table 7: Number of issuers, securities and members of the Ljubljana Stock Exchange
(end of year)

	1996	1997	1998	1999	2000	2001
Issuers	66	112	154	209	224	220
Stocks	46	79	120	176	193	189
Bonds	20	33	34	33	31	31
Securities	82	129	173	236	266	270
Stocks	52	85	122	180	198	194
Privatisation stocks	29	61	73	115	132	128
Authorised investment comp. stocks	0	0	30	46	44	38
Non-privatisation stocks	23	24	19	19	22	28
Bonds	30	44	51	56	68	76
Members	45	42	38	35	34	31

Source: Bank of Slovenia

Table 8: Market capitalisation and turnover ratio of the Ljubljana Stock Exchange

Year	Total in EUR million	Total in % of GDP	Ratio	Shares	Ratio[1]	AIC[2] shares	Ratio	Bonds	Ratio
1992	279	3	0.253	21	0.108			258	0.265
1993	425	4	1.132	126	1.871			300	0.821
1994	487	4	1.143	178	1.930			309	0.689
1995	624	5	0.675	251	1.117			373	0.378
1996	1,010	7	0.453	713	0.537			298	0.253
1997	2,139	14	0.248	1,692	0.277			447	0.138
1998	3,759	22	0.234	2,557	0.277	435	0.122	768	0.152
1999	4,661	25	0.282	2,871	0.297	671	0.419	1,119	0.160
2000	5,382	28	0.234	3,334	0.206	843	0.363	1,206	0.221
2001	6,233	30	0.251	3,839	0.279	764	0.337	1,630	0.143

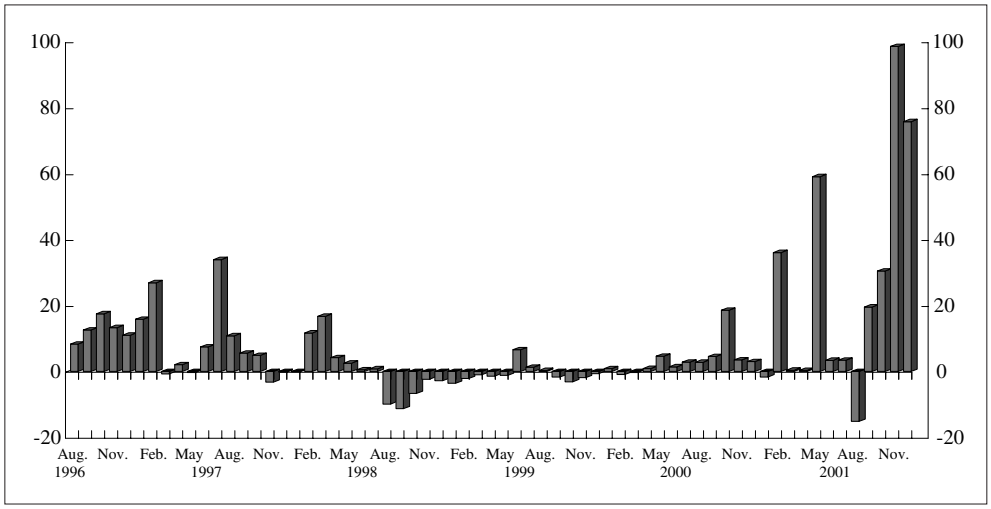
Source: Bank of Slovenia
[1] Ratio is calculated as turnover in a period divided by market capitalisation at the end of a period.
[2] AIC – Authorised Investment Companies

Trading on the LSE in 2000 and 2001 was characterised by takeovers and acquisitions, which resulted in a consolidation of the ownership of companies. The takeover activities were the most active in the retail and chemical sectors and in banking.

3.4 Foreign investments on the securities market

According to the Foreign Exchange Law, non-residents may purchase or sell securities in the Republic of Slovenia through an authorised participant in the securities market only. Since January 2002 non-residents have been able to purchase or sell securities on the capital and money market without any limitations. Investments in Slovenian securities made by non-residents were €313 million (1.5% of GDP) in 2001 and as much as 93% of this amount was traded outside the organised market.

Chart 1: Net purchases of shares from August 1996 to December 2001 by non-residents
(in EUR million)



Source: Bank of Slovenia

3.5 Domestic portfolio investments abroad

Investments in securities abroad by residents are free of any restrictions. Before September 1999 only banks were allowed to purchase securities abroad. According to the Foreign Exchange Law, residents may purchase and sell securities issued abroad through a domestic authorised participant in the securities market only. The residents investing in securities abroad are liable to deposit a written statement with the authorised participant in the securities market confirming that they are acquainted with all conditions of such a purchase. The authorised participants in the securities markets, insurance companies and banks are allowed to purchase securities abroad directly.

At the end of December 2001 residents held investments in securities issued abroad by non-residents of €314.2 million (83% in bonds) and investments in securities issued abroad by residents of €242.5 million (100% in eurobonds).

In the international financial markets Slovenia appears with some issues of securities. In 2001 two Global Depository Receipts programmes (issued by one company and one bank) were closed. At the end of 2001 there were seven eurobonds issued by the Republic of Slovenia. The aggregate value of eurobonds reached €2.35 billion (about 11% of Slovenia's GDP).

4. Other financial intermediaries

The total assets of non-monetary financial intermediaries amount to about 21% of total assets held by the whole Slovenian financial sector. At the end of 2001, the composition of non-monetary financial intermediaries included 35 authorised investment companies, 18 mutual funds, 15 insurance companies (among them 10 classical insurance companies, 2 re-insurance companies and 3 specialised public institutions). Authorised investment companies are special closed-end investment companies, which have collected vouchers from Slovenian citizens and are exchanging them for shares of privatised companies. The share of unused vouchers in authorised investment companies' assets was still 33% at the end of 2001. The problem of this "privatisation hole" will probably be solved with the sale of some state-owned companies.

IV. Functioning of the financial sector

1. Role of the financial sector in the monetary transmission mechanism

Slovenia is a small, open economy where the exchange rate plays a crucial role in defining the purchasing power of economic agents and the value of a relatively large part of their assets. Therefore, in examining the role of the financial sector in the monetary transmission mechanism, one should first check the functioning of the exchange rate channel in the transmission of monetary policy signals. As the majority of the financial market is formed by the banking sector, banks are at the centre of such an analysis. The importance of the stock market in the economy and in the monetary transmission is negligible. This is due to the voucher mode of privatisation, which was followed by a process of concentration of shares in the hands of only a few institutions and enterprises, while the majority of households and companies do not take part in trading. Therefore, the level of stock market capitalisation is relatively low, and a wealth channel, operating through the price of equities, does not exist.

Since the exchange rate is such an important price in a small open economy, the monetary authorities have been devoting a lot of attention to its movement, trying to maintain the managed floating system over time. In order to involve banks in co-operation in the formation of the exchange rate, commercial banks operate in the foreign exchange market under an agreement with the central bank. It enables them to make foreign exchange swaps with the central bank, while, on the other hand, they are obliged to maintain the exchange rate at the desired level in the period when central bank intervenes in the foreign exchange market. Therefore, the exchange rate is not exclusively determined in the market.

The transmission of monetary policy actions through the interest rate channel in the past has been empirically shown to be weak and slow. Its effectiveness has been diminished by economy-wide indexation, which was a consequence of the past high inflationary record. On the other hand, it has been a way to protect lenders against losing the value of their assets in the environment of relatively high inflation. The extensive use of indexation clauses in almost

every form of financial instrument – although the central bank has been actively involved in the process of de-indexation – has been significantly reducing the ability of economic agents to correctly understand the actual movement of interest rates.

The openness of the economy is mirrored in the ability of residents to borrow funds abroad, although this possibility has only been readily available since 1999. Because domestic banks are in certain cases not large enough and loans from abroad may be cheaper than domestic ones, the full effect of monetary policy actions is also decreased owing to the possibility of substituting between domestic and foreign loans.

Another factor that has suppressed the effectiveness of the interest rate channel, prohibiting commercial banks from freely determining interest rates in the market, has been the agreement on deposit interest rates, which was in force between 1995 and 1999. With this agreement, commercial banks committed themselves not to exceed the agreed maximum deposit rates in order to prevent free riding in the deposit market.

Since the banking system has been relatively closed and only recently opened to foreign banks, it may be assumed that the lack of competition in the past may have hindered a smoother operation of the monetary transmission mechanism. However, with the process of opening the financial sector, which will be accompanied by the privatisation of the two largest commercial banks comprising almost 47% of the total banking sector, competition is expected to increase, and this may also raise the effectiveness of the interest rate channel. It is also expected that the financial sector is going to widen with the process of pension reform, when households will start saving through specialised pension and insurance companies, which will actively participate in financial markets in the future.

V. Trends in the financial sector in view of integration with the EU

Slovenia has recently removed almost all restrictions on capital flows. The remaining restrictions and their liberalisation timetable are given in Table 9.

Slovenia is continuing its efforts to develop financial markets as well as the interest rate transmission mechanism. On the money market there is a significant development in that the BoS and the Ministry of Finance (MoF) have become more active in supporting the treasury bills market. Market makers were introduced and their quotations are publicly presented. For the further development, the BoS will try to stimulate banks into using repo transactions. The BoS is preparing a master agreement for repos of short-term securities, which is expected to be accepted by banks by June 2002. Also, swap transactions are becoming more significant. At the beginning of 2002 banks started to quote interbank deposit rates with different maturities and in the future those rates could be used as a reference in determining other rates. The MoF is expected to operate on the domestic money market with more instruments and to contribute to the further development of the market. The BoS will try to stimulate banks into using derivatives (interest rate swaps, futures rate agreements) for the purpose of hedging.

Table 9: Remaining capital movement restrictions and the timetable for their abolition as of 1 January 2002

Category of capital transaction	Regime for capital movements in Slovenia	Timetable for the abolition of capital movement restrictions
Portfolio investments by non-residents in securities in the Republic of Slovenia	No restrictions.	
Issue of foreign debt securities in the Republic of Slovenia	The issue of foreign debt securities in the Republic of Slovenia is subject to permission by the Ministry of Finance.	The obligation to obtain prior approval from the Minister of Finance will be abolished for issuers from EU Member States by 1 February 2003 at the latest.
Introduction of equity securities abroad	Residents that are not banks or savings banks must obtain permission to introduce equity securities abroad from the Security Market Agency following prior consent by the Minister of Finance. The Minister of Finance shall not grant his consent when a large extent of equity securities introduced abroad might jeopardise the stability of the Republic of Slovenia's capital or money markets or when the issuer intends to introduce abroad securities issued for activities that are subject to restrictions set out in the Foreign Exchange Act.	The requirement for obtaining prior consent by the Ministry of Finance will be removed by 1 February 2003 at the latest.
Portfolio investments by residents in the securities abroad	No restrictions.	
Current and deposit accounts of residents with financial institutions abroad	The following residents are allowed to maintain accounts abroad: banks and other legal persons, – residents (that are not legal persons) performing services in international transportation of goods and passengers, – natural persons with a permanent residence abroad who are temporarily residing in the Republic of Slovenia based on a valid resident visa or work permit for at least six months, – natural persons with a permanent residence in the Republic of Slovenia with a valid resident visa, business visa or working permit (for the time of visa validity). Other residents may maintain accounts abroad only with the approval of the Bank of Slovenia.	The Bank of Slovenia will remove restrictions on the opening of current and deposit accounts of residents with financial institutions abroad for other sectors (households) by the accession to the EU at the latest.

Source: Bank of Slovenia

VI. References

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Financial sector structure and functioning in accession countries

Workshop at the ECB – 24-25 October 2001

List of participants

EU accession countries' central banks

Bulgaria	
Mr. Victor Yotzov	Bulgarian National Bank
Cyprus	
Mr. Haralambos Akhniotis	Central Bank of Cyprus
Mr. Andreas Philippou	
Czech Republic	
Mr. Tomáš Kvapil	Czech National Bank
Mr. Petr Procházka	
Estonia	
Mr. Ilmar Lepik	Bank of Estonia
Mr. Jaak Tõrs	
Hungary	
Mr. Tamás Kálmán Magyar	National Bank of Hungary
Mr. László Harmati	
Latvia	
Mr. Ériks Ābolinš̌	Bank of Latvia
Ms. Jelena Zubkova	
Lithuania	
Mr. Raimondas Kuodis	The Bank of Lithuania
Mr. Tomas Garbaravicius	
Malta	
Mr. David Pullicino	Central Bank of Malta
Mr. René Saliba	
Poland	
Mr. Piotr Bednarski	National Bank of Poland
Mr. Jacek Osiński	
Romania	
Ms. Dorina Antohi	National Bank of Romania
Mr. Cristian Bichi	
Slovakia	
Mr. Lubor Malina	National Bank of Slovakia
Mr. Juraj Janosik	
Slovenia	
Mr. Uroš Čufer	Bank of Slovenia
Mr. Janez Fabijan	

Eurosystem participants

Austria	
Mr. Franz Nauschnigg	Oesterreichische Nationalbank
Belgium	
Ms. Janet Mitchell	National Bank of Belgium
Finland	
Mr. Iikka Korhonen	Suomen Pankki
France	
Mr. Philippe Bonzom	Banque de France
Germany	
Mr. Wolfgang Heislitz	Deutsche Bundesbank
Mr. Axel Jochem	
Greece	
Mr. Haralambos Voyatzis	Bank of Greece
Ireland	
Ms. Carina Harte	Central Bank of Ireland
Italy	
Mr. Luigi Concistrè	Banca d'Italia
Luxembourg	
Ms. Sandrine Scheller	Banque Centrale du Luxembourg
The Netherlands	
Mr. Bas Kiviet	De Nederlandsche Bank
Portugal	
Ms. Margarida Catalão Lopes	Banco de Portugal
Spain	
Ms. Alicia Garcia-Herrero	Banco de España
European Commission	
Mr. Siegfried Steinlein	
Mr. Denis Redonnet	
European Central Bank	
Mr. Tommaso Padoa-Schioppa	Ms. Conception Alonso
Mr. Pierre van der Haegen	Ms. Olga Arratibel
Mr. Jean-Michel Godeffroy	Mr. Giacomo Caviglia
Mr. Francesco Papadia	Mr. Gerhard Krause
Mr. Jesper Berg	Ms. Carolin Nerlich
Mr. Denis Blenck	Mr. Michele Ca'zorzi
Mr. Mauro Grande	Mr. Christian Fehlker
Mr. Christian Thimann	Mr. Sergio Grittini
	Mr. Mika Pösö

Exchange rates as of end December 2001

Bulgarian lev	1 EUR =	1.95	BGN	1 BGN	=	0.514	EUR
Cypriot pound	1 EUR =	0.57	CYP	1 CYP	=	1.740	EUR
Czech koruna	1 EUR =	32.53	CZK	1 CZK	=	0.031	EUR
Estonian kroon	1 EUR =	15.65	EEK	1 EEK	=	0.064	EUR
Hungarian forint	1 EUR =	247.31	HUF	100 HUF	=	0.405	EUR
Latvian lat	1 EUR =	0.56	LVL	1 LVL	=	1.788	EUR
Lithuanian litas	1 EUR =	3.57	LTL	1 LTL	=	0.280	EUR
Maltese lira	1 EUR =	0.40	MTL	1 MTL	=	2.485	EUR
Polish zloty	1 EUR =	3.59	PLN	1 PLN	=	0.279	EUR
Romanian leu	1 EUR =	28,150.28	ROL	1000 ROL	=	0.036	EUR
Slovakian koruna	1 EUR =	43.09	SKK	1 SKK	=	0.023	EUR
Slovenian tolar	1 EUR =	219.46	SIT	1 SIT	=	0.005	EUR

Source: ECB.